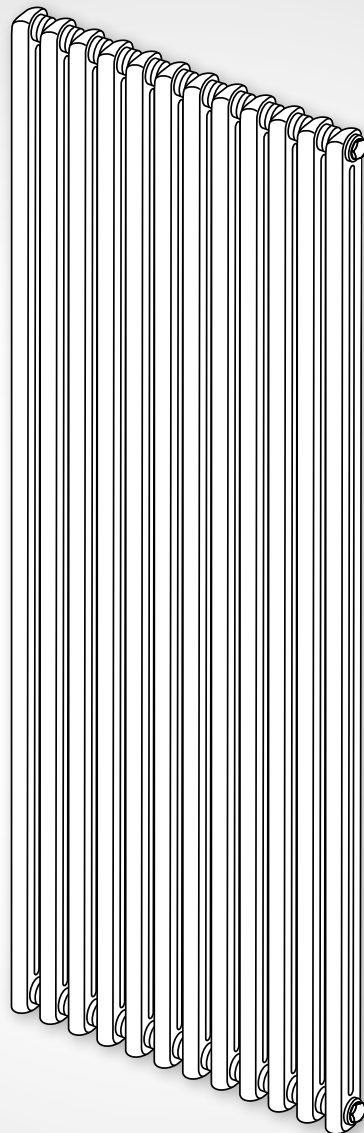


# Zehnder Charleston

Technik 2023





# Zehnder Charleston

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## **Technische Änderungen vorbehalten.**

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**Grössen, Masseneinheiten, Symbole nach EN 442-2**

| Symbol          | Einheit         | Bezeichnung                                    |
|-----------------|-----------------|------------------------------------------------|
| H               | mm              | Bauhöhe                                        |
| L               | mm              | Baulänge                                       |
| T               | mm              | Bautiefe                                       |
| H Lam.          | mm              | Lamellenhöhe                                   |
| N               | mm              | Nabenabstand                                   |
| A               | m <sup>2</sup>  | Oberfläche                                     |
| V               | dm <sup>3</sup> | Wasserinhalt                                   |
| M               | kg              | Leergewicht                                    |
| E               | –               | Anzahl Elemente                                |
| t <sub>1</sub>  | °C              | Vorlauftemperatur                              |
| t <sub>2</sub>  | °C              | Rücklauftemperatur                             |
| t <sub>r</sub>  | °C              | Raumlufttemperatur                             |
| t <sub>m</sub>  | °C              | Mittlere Wassertemperatur $\frac{t_1+t_2}{2}$  |
| ΔT              | K               | Übertemperatur t <sub>m</sub> – t <sub>r</sub> |
| Φ               | W               | Wärmeleistung                                  |
| Φ <sub>s</sub>  | W               | Normwärmeleistung                              |
| Φ <sub>L</sub>  | W               | Normwärmeleistung des Moduls                   |
| c <sub>p</sub>  | J/kg K          | Mittlere spezifische Wärmekapazität            |
| n               | –               | Heizkörper-Kennzahl, Exponent                  |
| s <sub>k</sub>  | %               | Strahlungsanteil                               |
| c <sub>K</sub>  | –               | Umrechnungsfaktor zu Φ <sub>s</sub>            |
| q <sub>m</sub>  | kg/h/(kg/s)     | Wasserstrom                                    |
| q <sub>ms</sub> | kg/h/(kg/s)     | Normwasserstrom                                |
| v               | m/s             | Geschwindigkeit                                |
| Δp              | kPa             | Druckverlust, Druckabfall                      |
| ζ               | –               | Widerstandsbeiwert                             |

Seit 1. Januar 1998 sind die neuen Europäischen Normen EN 442-1 bis EN 442-3 als Schweizer Normen SIA 384.501, SIA 384.502 und SIA 384.503 in Kraft getreten. Diese Empfehlung wurde von den meisten europäischen Ländern, so auch von der Schweiz angenommen.

Diese definiert das Prüfverfahren und die Messmethode in gleichgestalteten Prüflabors. Damit ersetzt eine einzige, europaweit gültige Messmethode die bisher von Land zu Land unterschiedlichen Messungen.

**Allgemein**

Die technischen Angaben wie Masse, Gewichte, Heizflächen beziehen sich jeweils auf die Standard-Ausführung der Produkte. Diese Angaben gelten strikte für Heizkörper mit einer Baulänge von 1000 mm bzw. pro Element. Bei anderen Baulängen ist der Einfluss der Kopfstücke, bzw. Sammelrohre zu berücksichtigen.

Die Wärmeleistung gilt bei gleichzeitigem Anschluss. Der Einfluss anderer Anschlussarten ist in der Fachliteratur beschrieben. Wir geben Ihnen im konkreten Fall gerne Auskunft.

**Wärmeleistung Φ**

Die Wärmeleistung eines Heizkörper-Modells ergibt sich aus der Norm-Kennlinie:

$\Phi = KM \cdot \Delta T^n$  wobei KM die Konstante für das Modell ist.

Gemäss der neuen Norm SIA 384.502 (EN442-2) errechnet sich die Übertemperatur aus dem arithmetischen Mittel zwischen Vorlauf- und Rücklauftemperatur sowie der Bezugs-Lufttemperatur.

$$\Delta T = \frac{t_1 + t_2}{2} - t_r$$

**Übertemperatur ΔT**

Die Wärmeleistung für andere Übertemperaturen ΔT als die Norm-Übertemperatur ΔT = 50 K kann somit aus der Gleichung

$$\Phi = \Phi_s \left( \frac{\Delta T}{50K} \right)^n \quad \text{ermittelt werden.}$$

**Beispiel für die Berechnung der Wärmeleistung**

$$\Phi_s = 459 \text{ W}$$

$$\text{Exponent } n = 1.24$$

$$t_1 = 60^\circ\text{C}$$

$$t_2 = 40^\circ\text{C}$$

$$t_r = 15^\circ\text{C}$$

$$\Delta T = \frac{60^\circ\text{C} + 40^\circ\text{C}}{2} - 15^\circ\text{C} = 35\text{K}$$

$$\Phi = 459 \text{ W} \left( \frac{35\text{K}}{50\text{K}} \right)^{1.24} = 459 \text{ W} \cdot 0.6426 = 295 \text{ W}$$

**Norm-Wasserstrom  $q_{ms}$** 

(Heizmittelstrom, Durchflussmenge, Massenstrom)

Der Norm-Wasserstrom  $q_{ms}$  eines Heizkörpers ergibt eine Temperaturspreizung von 10 K bei einer Vorlauftemperatur von 75 °C (Norm-Wärmeleistungs-Bedingungen).

$$\text{Es gilt } q_{ms} = \frac{\Phi}{c_p (t_1 - t_2)} \quad c_p \approx 4187 \frac{\text{J}}{\text{kg} \cdot \text{K}}$$

Der tatsächliche Wasserstrom  $q_m$  eines Heizkörpers kann bei anderen Vor- und Rücklauftemperaturen als 75/65 °C wesentlich vom Norm-Wasserstrom  $q_{ms}$  abweichen.

**Fall 1:**

Heizwand Zehnder Nova  
 $\Phi_s = 459 \text{ W}$   
 Modell NH42-1000  
 Temperaturen: 75/65/20 °C

$$q_{ms} = \frac{459}{4187 (75 - 65)} \quad q_{ms} 0.011 \text{ kg/s} \approx 39.5 \text{ kg/h}$$

**Fall 2:**

Heizwand Zehnder Nova  
 $\Phi_s = 239 \text{ W}$   
 Modell NH42-1000  
 Temperaturen: 55/40/18 °C

$$q_{ms} = \frac{239}{4187 (55 - 40)} \quad q_{ms} 0.0038 \text{ kg/s} \approx 13.7 \text{ kg/h}$$

Der tatsächliche Massenstrom  $q_m$  im Fall 2 beträgt also noch:

$$q_{ms} \text{ in } \% = \frac{q_m}{q_{ms}}$$

$$q_{ms} \text{ in } \% = \frac{13.7}{39.5}$$

$$q_{ms} \text{ in } \% = 35 \% \text{ von } q_{ms}$$

Minimum gemäss Tabelle: 20 %.

Der Fall 2 erfüllt die Vorgabe des minimalen Wasserstroms

**Mindest-Wasserstrom  $q_{m \min}$** 

Von uns durchgeführte Messreihen haben gezeigt, dass einzelne Heizkörper unterschiedlich auf Abweichungen vom Normwasserstrom  $q_{ms}$  reagieren und dass es bei Unterschreiten gewisser Mindest-Wasserströmen  $q_{m \min}$  schwierig wird, zuverlässige Angaben über die Wärmeleistung zu machen. Durch konstruktive Massnahmen kann oft der Betrieb auch mit kleineren Wasserströmen  $q_m$  ermöglicht werden.

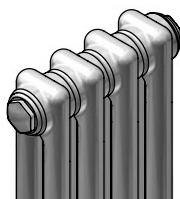
Wir stehen für Abklärungen im konkreten Fall gerne zur Verfügung: kritische Anwendungen können in unserem Labor überprüft werden. Die nachfolgende Tabelle gibt an, welche Wasserströme  $q_m$  in % des Normwasserstroms  $q_{ms}$  üblicherweise nicht unterschritten werden sollten:

| Heizkörper nach Mass                                                                                                                                                                                                                               | $q_{m \min}$ in %<br>von $q_{ms}$ |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Zehnder Nova – vertikale Modelle<br>Zehnder Nova Jet – vertikale Modelle<br>Zehnder Arteplano Classic – vertikale Modelle<br>Zehnder Radiapanel – vertikale Modelle<br>Zehnder Charleston<br>Zehnder Kleo – vertikale Modelle<br>Zehnder Excelsior | 17 %                              |
| Zehnder Radiapanel – horizontale Modelle<br>Zehnder Kleo – horizontale Modelle                                                                                                                                                                     | 27 %                              |
| Zehnder Nova – horizontale Modelle<br>Zehnder Nova Jet – horizontale Modelle<br>Zehnder Arteplano Classic – horizontale Modelle                                                                                                                    | 20 %                              |
| Zehnder Radiavector                                                                                                                                                                                                                                | 30 %                              |
| Design-Heizkörper für das Bad                                                                                                                                                                                                                      | $q_{m \min}$ in %<br>von $q_{ms}$ |
| Zehnder Alban, Chime, Fain, Flow Form, Forma<br>Spa, Nobis, Quaro Spa, Subway, Toga, Universal,<br>Yucca, Zeno, Zeno Wing                                                                                                                          | 27 %                              |
| Zehnder Metropolitan, Ribbon                                                                                                                                                                                                                       | 20 %                              |
| Zehnder Archibald, Arteplano Premium, Fina Lean<br>Bar, Folio, Vitalo                                                                                                                                                                              | 17 %                              |

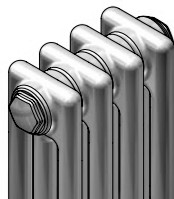
**ZROM**

Computerprogramm für die einfache und schnelle Auswahl von Heizkörpern, Unterflurkonvektoren und Deckenstrahlplatten. Suchfunktion über Leistung und/oder Dimension, mit Preisoptimierung, integriertem Online-Bestellmodus und Offertfunktion. Die optimierte und programmunterstützte Auswahl von Standard- oder Spezialanschlüssen, Zubehör, Farbe und weiteren Details ermöglicht eine exakte und schnelle Definition des gewünschten Heizkörpers.

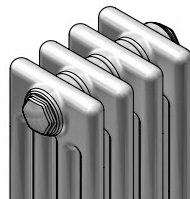
### Zehnder Charleston



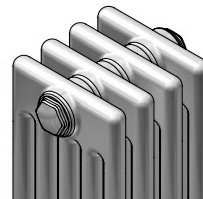
2-Säuler



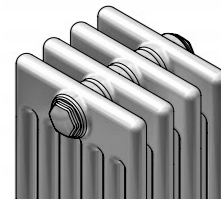
3-Säuler



4-Säuler



5-Säuler



6-Säuler

| Bauhöhe <sup>1)</sup><br>mm | Bautiefe mm |      |      |      |      |
|-----------------------------|-------------|------|------|------|------|
|                             | 62          | 100  | 136  | 173  | 210  |
| 260                         | 2026        | 3026 | 4026 | 5026 | 6026 |
| 300                         | 2030        | 3030 | 4030 | 5030 | 6030 |
| 350                         | 2035        | 3035 | 4035 | 5035 | 6035 |
| 400                         | 2040        | 3040 | 4040 | 5040 | 6040 |
| 450                         | 2045        | 3045 | 4045 | 5045 | 6045 |
| 500                         | 2050        | 3050 | 4050 | 5050 | 6050 |
| 550                         | 2055        | 3055 | 4055 | 5055 | 6055 |
| 600                         | 2060        | 3060 | 4060 | 5060 | 6060 |
| 750                         | 2075        | 3075 | 4075 | 5075 | 6075 |
| 900                         | 2090        | 3090 | 4090 | 5090 | 6090 |
| 1000                        | 2100        | 3100 | 4100 | 5100 | 6100 |
| 1100                        | 2110        | 3110 | 4110 | 5110 | 6110 |
| 1200                        | 2120        | 3120 | 4120 | 5120 | 6120 |
| 1500                        | 2150        | 3150 | 4150 | 5150 | 6150 |
| 1800                        | 2180        | 3180 | 4180 | 5180 | 6180 |
| 2000                        | 2200        | 3200 | 4200 | 5200 | 6200 |
| 2200                        | 2220        | 3220 | 4220 | 5220 | 6220 |
| 2500                        | 2250        | 3250 | 4250 | 5250 | 6250 |
| 2800                        | 2280        | 3280 | 4280 | 5280 | 6280 |
| 3000                        | 2300        | 3300 | 4300 | 5300 | 6300 |

<sup>1)</sup> Bei den hier genannten Werten handelt es sich um die sogenannte Nenn-Bauhöhe, die exakte Bauhöhe weicht bei 2-Säulern und teilweise auch bei den 3-Säulern um einige mm ab, grössere Bauhöhen über 3000 mm oder Zwischen-Bauhöhen auf Anfrage.

Maximale Heizkörper-Baulängen am Stück (je Block)

#### Zehnder Charleston

| Modell       | Bauhöhe mm |             |             |              |               |               |               |
|--------------|------------|-------------|-------------|--------------|---------------|---------------|---------------|
|              | 260 – 600  | > 600 – 750 | > 750 – 900 | > 900 – 1000 | > 1000 – 2000 | > 2000 – 2500 | > 2500 – 3000 |
| 2-, 3-Säuler | 64         | 64          | 64          | 64           | 22            | 22            | 22            |
| 4-Säuler     | 64         | 64          | 64          | 60           | 22            | 22            | 22            |
| 5-Säuler     | 64         | 64          | 50          | 50           | 22            | 22            | 17            |
| 6-Säuler     | 64         | 55          | 46          | 42           | 22            | 17            | 14            |

Bei Ausführung Completto max. empfohlene Durchflussmenge 250 kg/h

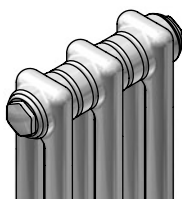
#### \* Bei der Completto-Ausführung Zehnder Charleston sowie Anschlüsse von/nach unten

| Modell       | Bauhöhe mm |             |             |              |               |               |               |
|--------------|------------|-------------|-------------|--------------|---------------|---------------|---------------|
|              | 260 – 600  | > 600 – 750 | > 750 – 900 | > 900 – 1000 | > 1000 – 2000 | > 2000 – 2500 | > 2500 – 3000 |
| 2-, 3-Säuler | 64         | 64          | 64          | 64           | 23            | 23            | 23            |
| 4-Säuler     | 64         | 64          | 64          | 60           | 23            | 23            | 23            |
| 5-Säuler     | 64         | 64          | 50          | 50           | 23            | 21            | 17            |
| 6-Säuler     | 64         | 55          | 46          | 42           | 21            | 17            | 14            |

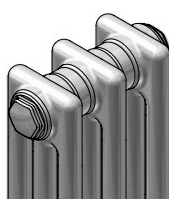
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**Zehnder Charleston Clinic**

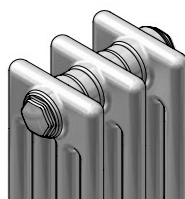

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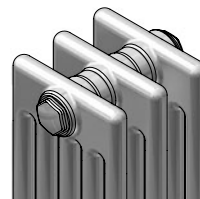
2-Säuler



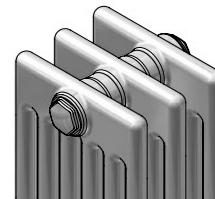
3-Säuler



4-Säuler



5-Säuler



6-Säuler

| Bauhöhe <sup>1)</sup><br>mm | Bautiefe mm |       |       |       |       |
|-----------------------------|-------------|-------|-------|-------|-------|
|                             | 62          | 100   | 136   | 173   | 210   |
| 260                         | K2026       | K3026 | K4026 | K5026 | K6026 |
| 300                         | K2030       | K3030 | K4030 | K5030 | K6030 |
| 350                         | K2035       | K3035 | K4035 | K5035 | K6035 |
| 400                         | K2040       | K3040 | K4040 | K5040 | K6040 |
| 450                         | K2045       | K3045 | K4045 | K5045 | K6045 |
| 500                         | K2050       | K3050 | K4050 | K5050 | K6050 |
| 550                         | K2055       | K3055 | K4055 | K5055 | K6055 |
| 600                         | K2060       | K3060 | K4060 | K5060 | K6060 |
| 750                         | K2075       | K3075 | K4075 | K5075 | K6075 |
| 900                         | K2090       | K3090 | K4090 | K5090 | K6090 |
| 1000                        | K2100       | K3100 | K4100 | K5100 | K6100 |
| 1100                        | K2110       | K3110 | K4110 | K5110 | K6110 |
| 1200                        | K2120       | K3120 | K4120 | K5120 | K6120 |
| 1500                        | K2150       | K3150 | K4150 | K5150 | K6150 |
| 1800                        | K2180       | K3180 | K4180 | K5180 | K6180 |
| 2000                        | K2200       | K3200 | K4200 | K5200 | K6200 |
| 2200                        | K2220       | K3220 | K4220 | K5220 | K6220 |
| 2500                        | K2250       | K3250 | K4250 | K5250 | K6250 |
| 2800                        | K2280       | K3280 | K4280 | K5280 | K6280 |
| 3000                        | K2300       | K3300 | K4300 | K5300 | K6300 |

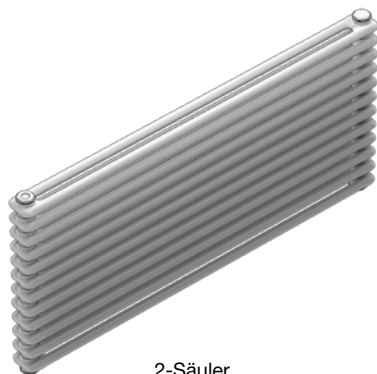
<sup>1)</sup> Bei den hier genannten Werten handelt es sich um die sogenannte Nenn-Bauhöhe, die exakte Bauhöhe weicht bei 2-Säulern und teilweise auch bei den 3-Säulern um einige mm ab, grössere Bauhöhen über 3000 mm oder Zwischen-Bauhöhen auf Anfrage.

**Maximale Heizkörper-Baulängen am Stück (je Block)**
**Zehnder Charleston Clinic**

| Modell           | Bauhöhe mm |              |
|------------------|------------|--------------|
|                  | 260 – 900  | > 900 – 3000 |
| 2-, 3-, 4-Säuler | 44         | 14           |
| 5-Säuler         | 35         | 12           |
| 6-Säuler         | 30         | 10           |

# Zehnder Charleston Turned

## Zehnder Charleston Turned



2-Säuler



3-Säuler

| Bauhöhe<br>mm | Baulänge <sup>1)</sup><br>mm | Bautiefe mm |          |
|---------------|------------------------------|-------------|----------|
|               |                              | 62          | 100      |
| 302           | 1500                         | T2150/6     | T3150/6  |
|               | 1800                         | T2180/6     | T3180/6  |
| 394           | 1500                         | T2150/8     | T3150/8  |
|               | 1800                         | T2180/8     | T3180/8  |
| 486           | 1500                         | T2150/10    | T3150/10 |
|               | 1800                         | T2180/10    | T3180/10 |
| 578           | 1500                         | T2150/12    | T3150/12 |
|               | 1800                         | T2180/12    | T3180/12 |

<sup>1)</sup> Die aufgelisteten Werte sind Nennmasse; die exakte Länge für 2-Säuler ist 8 mm kürzer

# Zehnder Charleston



Zehnder Charleston



Zehnder Charleston Clinic



Version Completo

## Produktbeschreibung

Zehnder Charleston – das Original unter den Röhrenradiatoren. Die heutige Produktfamilie umfasst neben der Standardausführung die besonders reinigungsfreundliche Ausführung Zehnder Charleston Clinic als Bank und Bad-Heizkörper.

Die Bauweise aus Einzelelementen eröffnet dem Mehrsäuler enorme Möglichkeiten für die Anpassung an bauliche Gegebenheiten in Neu- und Altbau. Zehnder Charleston wird heute in der Regel fertig lackiert nach Wunsch, an einem Stück und mit Anschlüssen nach Bestellvorgabe geliefert. Bei Überlängen oder auf Wunsch gelangt der Heizkörper auch in mehreren Teilen auf die Baustelle und wird vor Ort genippelt.

Zehnder Charleston wird den individuellen Erwartungen bei unterschiedlichsten Einsatzfällen gerecht und daher seit Jahrzehnten in allen Gebäudebereichen erfolgreich eingesetzt. Vom privaten Wohnungsbau über öffentliche Bauten, Schulen, Heime, Bürogebäude, Ladengeschäfte bis hin zu Werkstätten und Industriebauten.

Seine Vielseitigkeit und Variabilität sind es, die Charleston so vielfältige Auftritte verschaffen, kombiniert mit der Hygienischen Eignung (Zertifikat) und Reinigbarkeit, sicherungstechnischen Aspekten bei Montage und Einbau nach GUV, etc.

Sonderanfertigungen nach Absprache ergänzen das Angebotspaket.

## Technische Daten

- Stahl-Rundrohre Ø 25 mm, Kopfstück aus Stahlblech
- Baulänge des einzelnen Elements 46 mm
- Grundierung und Pulverbeschichtung
- Wärmeleistung geprüft nach EN 442; mit CE-Kennzeichnung
- Betriebstemperatur max. 120 °C
- Betriebsdruck max. 10 bar
- Prüfdruck 2 – 4-Säuler 15.6 bar  
5 – 6-Säuler 13.0 bar  
Completo 13.0 bar

## Möglichkeiten nach Mass

- Grosse Auswahl an Anschlussarten, auch mit integriertem Ventil
- Montage-Sets für alle Einsatzvarianten
- Sonderfarben und antimikrobielle Beschichtung
- Verzinkt und lackiert
- Energiesparender Strahlungsschirm für Vor-Fenster-Montage
- Sonderformen gewinkelt, gebogen, mit Handlauf etc.
- Hochdruckausführung bis max. 18 bar

## Vorteile

- Klassische Eleganz
- Unfallsicherheit
- Reinigung mit Zehnder Lammfell-Reinigungsbürste
- Einfach und ausbeheblicher: Montage mit Zehnder EasyFix
- Gelungener Anschluss mit Zehnder Vario
- Strahlungswärme mit Wohlfühlfaktor
- Energieeffizient für Einsatz in Niedertemperatursystemen
- Verpackung als Schutz bis Bauvollendung (Montageanleitung beiliegend)

## Lieferumfang der Standard-Ausführung

- Grundiert und lackiert RAL 9016
- Anschlüsse 4 x ½" Innengewinde stirnseitig, 1 Blindstopfen ½"
- Vollverpackung in Stretch-Folie und Kartonage
- Bauhöhen grösser 2200 mm mit werkseits eingeschweisster Stabilisierungsstrebe

## Lieferumfang der Completo-Ausführung

- Grundiert und lackiert RAL 9016
- Seitlich integrierter Ventilkörper, max. Durchflussmenge 250 kg/h
- Anschlüsse 2 x ½" Innengewinde von unten 50 mm
- Eingebaute Blindscheibe, 1 Entlüftungsventil ½"
- Vollverpackung in Stretch-Folie und Kartonage

# Zehnder Charleston Turned



Zehnder Charleston Turned

## Produktbeschreibung

Das Original unter den Röhren-Heizkörpern in neuem Look – Zehnder Charleston Turned überzeugt durch frisches Design und hohe Leistungsfähigkeit. Die um 90° gedrehte Silhouette gibt dem Heizkörper-Klassiker eine neue Richtung und verleiht Zehnder Charleston Turned das äusserst schlanke Design. Die besonders hohe Leistungsfähigkeit des Röhren-Heizkörpers verwandelt grosse Wohnräume in eine Wohlfühloase. Erhältlich in nahezu allen Farben und Oberflächen der Zehnder Farbkarte.

## Technische Daten

- Stahl-Rundrohre Ø 25 mm
- Baulänge des einzelnen Elements 46 mm
- Grundiert und lackiert RAL 9016
- Wärmeleistung geprüft nach EN 442; mit CE-Kennzeichnung
- Betriebstemperatur max. 110 °C
- Betriebsdruck max. 10 bar

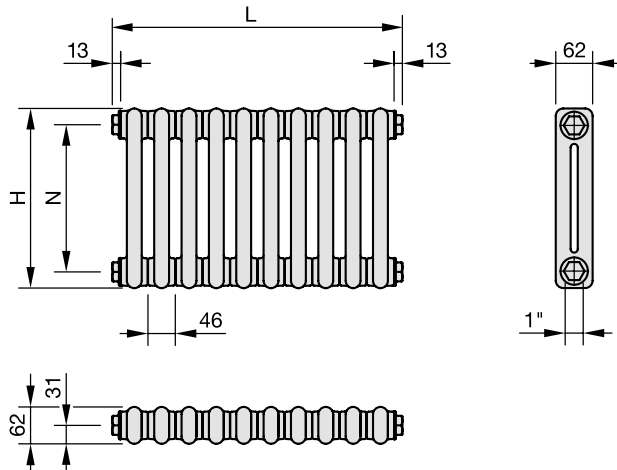
## Vorteile

- Innovatives Design durch um 90° gedrehte Silhouette
- Erhebliche Steigerung der Wärmeleistung durch optimales Durchströmungsverhalten der horizontalen Röhren-Anordnung
- Einfache Installation durch werkseitig angeschweisste Montagebügel in Heizkörper-Farbe
- Gleichbleibend schöne Optik ohne jegliche Verformung der Rohre dank werkseitig angeschweisster Mittelstrebe in Heizkörper-Farbe
- Vielfältige Einsatzmöglichkeit dank verschiedener Anschlüsse
- Hohe Wärmeleistung auch für Altbauten mit hoher Heizlast
- Lieferbar mit spezieller Oberflächenbeschichtung Zehnder Top-Care zur Abwehr der Vermehrung und Ausbreitung von Mikroorganismen
- Rückstandlose Laser-Schweisstechnologie LaZer made garantiert höchste Qualität, hochwertiges Design und zuverlässigen Betrieb der Heizungsanlage

## Lieferumfang der Standard-Ausführung

- Grundiert und lackiert RAL 9016
- Anschlüsse 3 x 1/2" Innengewinde für Vorlauf, Rücklauf und Entlüftung
- Entlüftungsventil 1/2" weiss beige packt
- Standardmässig angeschweisste Aufhängebügel und Stabilisierungsstrebe
- Vollverpackung in Stretch-Folie und Kartonage

## Modelle 2-Säuler



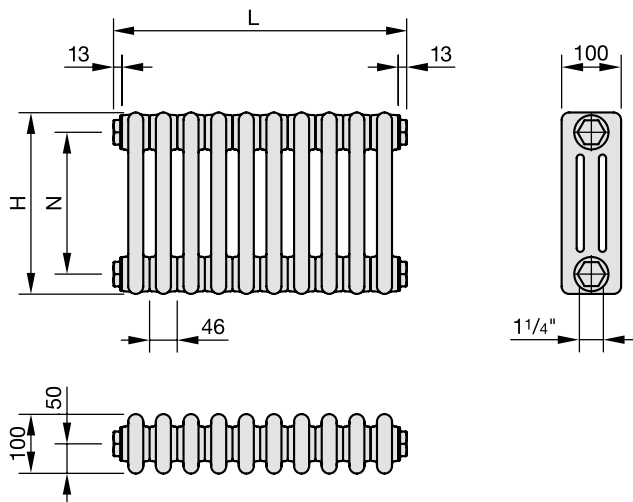
- H = Bauhöhe  
 L = Baulänge (inkl. Stopfen)  
 N = Nabenabstand  
 T = Bautiefe Heizkörper  
 A = Oberfläche  
 V = Wassereinhalt  
 M = Gewicht  
 $S_k$  = Strahlungsanteil  
 $q_{ms}$  = Normwasserstrom  
 n = Exponent  
 $\Phi_s$  = Norm-Wärmeleistung nach  
 EN 442 (75/65/20 °C)

Masse in mm

## Technische Daten pro Element

| Modell | H    | N<br>(mm) | T<br>(mm) | A<br>(m <sup>2</sup> ) | V<br>(dm <sup>3</sup> ) | M<br>(kg) | $S_k$<br>(%) | $q_{ms}$<br>(kg/h) | Exp.<br>(n) | $\Phi_s = \Delta T 50K$<br>EN 442<br>(Watt) |
|--------|------|-----------|-----------|------------------------|-------------------------|-----------|--------------|--------------------|-------------|---------------------------------------------|
| 2026   | 260  | 202       | 62        | 0,04                   | 0,3                     | 0,40      | 25           | 1,8                | 1,27        | 21,1                                        |
| 2030   | 292  | 234       | 62        | 0,04                   | 0,4                     | 0,44      | 25           | 2,0                | 1,27        | 23,6                                        |
| 2035   | 342  | 284       | 62        | 0,05                   | 0,4                     | 0,51      | 24           | 2,4                | 1,26        | 27,5                                        |
| 2040   | 392  | 334       | 62        | 0,06                   | 0,4                     | 0,55      | 25           | 2,7                | 1,26        | 31,2                                        |
| 2045   | 442  | 384       | 62        | 0,07                   | 0,5                     | 0,62      | 24           | 3,0                | 1,26        | 34,9                                        |
| 2050   | 492  | 434       | 62        | 0,07                   | 0,5                     | 0,69      | 23           | 3,3                | 1,25        | 38,4                                        |
| 2055   | 542  | 484       | 62        | 0,08                   | 0,6                     | 0,75      | 23           | 3,6                | 1,25        | 41,9                                        |
| 2060   | 592  | 534       | 62        | 0,09                   | 0,6                     | 0,82      | 23           | 3,9                | 1,25        | 45,3                                        |
| 2075   | 742  | 684       | 62        | 0,11                   | 0,7                     | 1,01      | 22           | 4,7                | 1,24        | 55,0                                        |
| 2090   | 892  | 834       | 62        | 0,14                   | 0,8                     | 1,21      | 22           | 5,5                | 1,23        | 63,9                                        |
| 2100   | 992  | 934       | 62        | 0,15                   | 0,9                     | 1,34      | 22           | 6,0                | 1,22        | 69,5                                        |
| 2110   | 1092 | 1034      | 62        | 0,17                   | 1,0                     | 1,47      | 22           | 6,4                | 1,21        | 74,7                                        |
| 2120   | 1192 | 1134      | 62        | 0,18                   | 1,1                     | 1,60      | 22           | 7,1                | 1,30        | 82,7                                        |
| 2150   | 1492 | 1434      | 62        | 0,23                   | 1,3                     | 2,00      | 23           | 8,9                | 1,29        | 104                                         |
| 2180   | 1792 | 1734      | 62        | 0,28                   | 1,5                     | 2,39      | 23           | 10,7               | 1,29        | 124                                         |
| 2200   | 1992 | 1934      | 62        | 0,31                   | 1,7                     | 2,65      | 23           | 11,9               | 1,28        | 138                                         |
| 2220   | 2192 | 2134      | 62        | 0,34                   | 1,9                     | 2,92      | 23           | 13,0               | 1,28        | 151                                         |
| 2250   | 2492 | 2434      | 62        | 0,39                   | 2,1                     | 3,31      | 23           | 14,7               | 1,28        | 171                                         |
| 2280   | 2792 | 2734      | 62        | 0,44                   | 2,4                     | 3,70      | 23           | 16,3               | 1,27        | 189                                         |
| 2300   | 2992 | 2934      | 62        | 0,47                   | 2,5                     | 3,97      | 23           | 17,3               | 1,27        | 201                                         |

## Modelle 3-Säuler



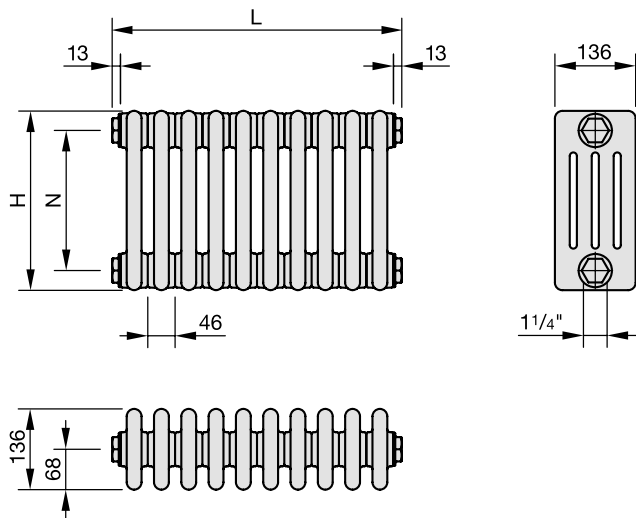
- H = Bauhöhe  
 L = Baulänge (inkl. Stopfen)  
 N = Nabenabstand  
 T = Bautiefe Heizkörper  
 A = Oberfläche  
 V = Wassereinhalt  
 M = Gewicht  
 $S_k$  = Strahlungsanteil  
 $q_{ms}$  = Normwasserstrom  
 n = Exponent  
 $\Phi_s$  = Norm-Wärmeleistung nach  
 EN 442 (75/65/20 °C)

Masse in mm

## Technische Daten pro Element

| Modell | H    | N<br>(mm) | T<br>(mm) | A<br>(m <sup>2</sup> ) | V<br>(dm <sup>3</sup> ) | M<br>(kg) | $S_k$<br>(%) | $q_{ms}$<br>(kg/h) | Exp.<br>(n) | $\Phi_L = \Delta T \text{ 50K}$<br>EN 442<br>(Watt) |
|--------|------|-----------|-----------|------------------------|-------------------------|-----------|--------------|--------------------|-------------|-----------------------------------------------------|
| 3026   | 260  | 194       | 100       | 0,06                   | 0,5                     | 0,56      | 21           | 2,4                | 1,28        | 27,9                                                |
| 3030   | 300  | 234       | 100       | 0,07                   | 0,6                     | 0,63      | 20           | 2,8                | 1,28        | 32,0                                                |
| 3035   | 350  | 284       | 100       | 0,08                   | 0,6                     | 0,73      | 20           | 3,2                | 1,28        | 37,0                                                |
| 3040   | 400  | 334       | 100       | 0,09                   | 0,7                     | 0,83      | 19           | 3,6                | 1,28        | 41,9                                                |
| 3045   | 450  | 384       | 100       | 0,10                   | 0,7                     | 0,93      | 19           | 4,0                | 1,27        | 46,8                                                |
| 3050   | 500  | 434       | 100       | 0,11                   | 0,8                     | 1,03      | 18           | 4,4                | 1,27        | 51,6                                                |
| 3055   | 550  | 484       | 100       | 0,12                   | 0,9                     | 1,13      | 18           | 4,8                | 1,27        | 56,3                                                |
| 3060   | 600  | 534       | 100       | 0,14                   | 0,9                     | 1,23      | 18           | 5,2                | 1,27        | 60,9                                                |
| 3075   | 750  | 684       | 100       | 0,17                   | 1,1                     | 1,52      | 18           | 6,4                | 1,26        | 74,3                                                |
| 3090   | 900  | 834       | 100       | 0,21                   | 1,3                     | 1,81      | 18           | 7,5                | 1,25        | 87,0                                                |
| 3100   | 1000 | 934       | 100       | 0,23                   | 1,4                     | 2,01      | 18           | 8,2                | 1,25        | 95,1                                                |
| 3110   | 1100 | 1034      | 100       | 0,25                   | 1,5                     | 2,21      | 18           | 8,9                | 1,25        | 103                                                 |
| 3120   | 1200 | 1134      | 100       | 0,28                   | 1,6                     | 2,40      | 18           | 9,9                | 1,31        | 115                                                 |
| 3150   | 1500 | 1434      | 100       | 0,35                   | 2,0                     | 2,99      | 18           | 12,0               | 1,31        | 140                                                 |
| 3180   | 1800 | 1734      | 100       | 0,42                   | 2,4                     | 3,58      | 18           | 14,3               | 1,32        | 166                                                 |
| 3200   | 2000 | 1934      | 100       | 0,47                   | 2,6                     | 3,97      | 18           | 15,7               | 1,32        | 183                                                 |
| 3220   | 2200 | 2134      | 100       | 0,51                   | 2,9                     | 4,36      | 18           | 17,2               | 1,32        | 200                                                 |
| 3250   | 2500 | 2434      | 100       | 0,58                   | 3,2                     | 4,95      | 18           | 19,4               | 1,32        | 225                                                 |
| 3280   | 2800 | 2734      | 100       | 0,65                   | 3,6                     | 5,54      | 18           | 21,6               | 1,33        | 251                                                 |
| 3300   | 3000 | 2934      | 100       | 0,70                   | 3,9                     | 5,93      | 18           | 23,1               | 1,33        | 269                                                 |

## Modelle 4-Säuler



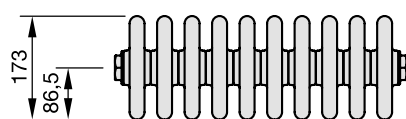
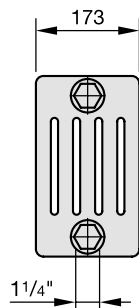
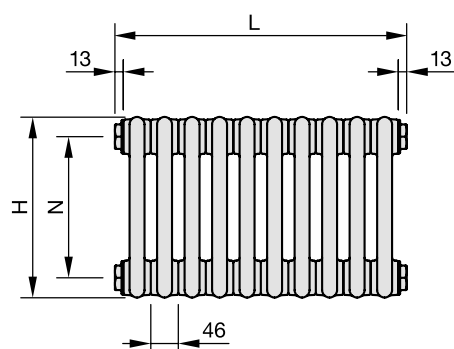
- H = Bauhöhe  
 L = Baulänge (inkl. Stopfen)  
 N = Nabenabstand  
 T = Bautiefe Heizkörper  
 A = Oberfläche  
 V = Wassereinhalt  
 M = Gewicht  
 $S_k$  = Strahlungsanteil  
 $q_{ms}$  = Normwasserstrom  
 n = Exponent  
 $\Phi_s$  = Norm-Wärmeleistung nach  
 EN 442 (75/65/20 °C)

Masse in mm

## Technische Daten pro Element

| Modell | H    | N<br>(mm) | T<br>(mm) | A<br>(m <sup>2</sup> ) | V<br>(dm <sup>3</sup> ) | M<br>(kg) | $S_k$<br>(%) | $q_{ms}$<br>(kg/h) | Exp.<br>(n) | $\Phi_L = \Delta T \text{ 50K}$<br>EN 442<br>(Watt) |
|--------|------|-----------|-----------|------------------------|-------------------------|-----------|--------------|--------------------|-------------|-----------------------------------------------------|
| 4026   | 260  | 194       | 136       | 0,08                   | 0,7                     | 0,77      | 18           | 3,1                | 1,28        | 36,5                                                |
| 4030   | 300  | 234       | 136       | 0,09                   | 0,7                     | 0,88      | 18           | 3,6                | 1,28        | 41,9                                                |
| 4035   | 350  | 284       | 136       | 0,11                   | 0,8                     | 1,01      | 17           | 4,2                | 1,28        | 48,5                                                |
| 4040   | 400  | 334       | 136       | 0,12                   | 0,9                     | 1,16      | 16           | 4,7                | 1,28        | 54,9                                                |
| 4045   | 450  | 384       | 136       | 0,14                   | 1,0                     | 1,29      | 16           | 5,3                | 1,27        | 61,3                                                |
| 4050   | 500  | 434       | 136       | 0,15                   | 1,0                     | 1,42      | 16           | 5,8                | 1,27        | 67,6                                                |
| 4055   | 550  | 484       | 136       | 0,17                   | 1,1                     | 1,55      | 16           | 6,3                | 1,27        | 73,7                                                |
| 4060   | 600  | 534       | 136       | 0,19                   | 1,2                     | 1,67      | 15           | 6,9                | 1,27        | 79,8                                                |
| 4075   | 750  | 684       | 136       | 0,23                   | 1,4                     | 2,06      | 15           | 8,4                | 1,26        | 97,4                                                |
| 4090   | 900  | 834       | 136       | 0,28                   | 1,7                     | 2,45      | 15           | 9,8                | 1,25        | 114                                                 |
| 4100   | 1000 | 934       | 136       | 0,31                   | 1,8                     | 2,70      | 15           | 10,8               | 1,25        | 125                                                 |
| 4110   | 1100 | 1034      | 136       | 0,34                   | 2,0                     | 2,96      | 15           | 11,6               | 1,25        | 135                                                 |
| 4120   | 1200 | 1134      | 136       | 0,37                   | 2,1                     | 3,22      | 15           | 12,6               | 1,31        | 147                                                 |
| 4150   | 1500 | 1434      | 136       | 0,47                   | 2,6                     | 3,99      | 15           | 15,5               | 1,31        | 180                                                 |
| 4180   | 1800 | 1734      | 136       | 0,56                   | 3,1                     | 4,76      | 15           | 18,3               | 1,32        | 213                                                 |
| 4200   | 2000 | 1934      | 136       | 0,63                   | 3,4                     | 5,28      | 15           | 20,1               | 1,32        | 234                                                 |
| 4220   | 2200 | 2134      | 136       | 0,69                   | 3,8                     | 5,79      | 15           | 22,0               | 1,32        | 256                                                 |
| 4250   | 2500 | 2434      | 136       | 0,78                   | 4,3                     | 5,56      | 15           | 24,9               | 1,32        | 289                                                 |
| 4280   | 2800 | 2734      | 136       | 0,88                   | 4,8                     | 7,33      | 15           | 27,8               | 1,33        | 323                                                 |
| 4300   | 3000 | 2934      | 136       | 0,94                   | 5,1                     | 7,85      | 15           | 29,7               | 1,33        | 345                                                 |

## Modelle 5-Säuler



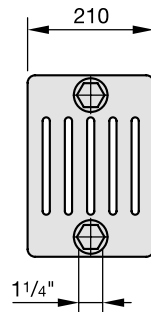
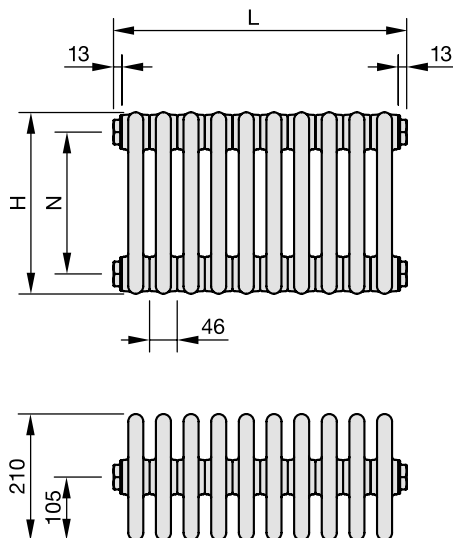
- H = Bauhöhe  
 L = Baulänge (inkl. Stopfen)  
 N = Nabenabstand  
 T = Bautiefe Heizkörper  
 A = Oberfläche  
 V = Wassereinhalt  
 M = Gewicht  
 $S_k$  = Strahlungsanteil  
 $q_{ms}$  = Normwasserstrom  
 n = Exponent  
 $\Phi_s$  = Norm-Wärmeleistung nach  
 EN 442 (75/65/20 °C)

Masse in mm

## Technische Daten pro Element

| Modell | H    | N<br>(mm) | T<br>(mm) | A<br>(m <sup>2</sup> ) | V<br>(dm <sup>3</sup> ) | M<br>(kg) | $S_k$<br>(%) | $q_{ms}$<br>(kg/h) | Exp.<br>(n) | $\Phi_L = \Delta T \text{ 50K}$<br>EN 442<br>(Watt) |
|--------|------|-----------|-----------|------------------------|-------------------------|-----------|--------------|--------------------|-------------|-----------------------------------------------------|
| 5026   | 260  | 194       | 173       | 0,10                   | 0,8                     | 0,88      | 17           | 3,9                | 1,28        | 45,1                                                |
| 5030   | 300  | 234       | 173       | 0,12                   | 0,9                     | 1,01      | 16           | 4,5                | 1,28        | 51,7                                                |
| 5035   | 350  | 284       | 173       | 0,13                   | 1,0                     | 1,18      | 15           | 5,2                | 1,28        | 59,9                                                |
| 5040   | 400  | 334       | 173       | 0,15                   | 1,1                     | 1,51      | 15           | 5,8                | 1,28        | 67,9                                                |
| 5045   | 450  | 384       | 173       | 0,17                   | 1,2                     | 1,67      | 14           | 6,5                | 1,27        | 75,8                                                |
| 5050   | 500  | 434       | 173       | 0,19                   | 1,3                     | 1,83      | 14           | 7,2                | 1,27        | 83,5                                                |
| 5055   | 550  | 484       | 173       | 0,20                   | 1,3                     | 2,00      | 14           | 7,8                | 1,27        | 91,1                                                |
| 5060   | 600  | 534       | 173       | 0,23                   | 1,5                     | 2,16      | 13           | 8,5                | 1,27        | 98,6                                                |
| 5075   | 750  | 684       | 173       | 0,29                   | 1,8                     | 2,65      | 13           | 10,3               | 1,26        | 120                                                 |
| 5090   | 900  | 834       | 173       | 0,35                   | 2,1                     | 3,14      | 13           | 12,1               | 1,25        | 141                                                 |
| 5100   | 1000 | 934       | 173       | 0,39                   | 2,3                     | 3,47      | 13           | 13,2               | 1,25        | 154                                                 |
| 5110   | 1100 | 1034      | 173       | 0,43                   | 2,5                     | 3,79      | 13           | 14,4               | 1,25        | 167                                                 |
| 5120   | 1200 | 1134      | 173       | 0,47                   | 2,7                     | 4,12      | 13           | 15,4               | 1,31        | 179                                                 |
| 5150   | 1500 | 1434      | 173       | 0,59                   | 3,3                     | 5,10      | 13           | 18,8               | 1,31        | 219                                                 |
| 5180   | 1800 | 1734      | 173       | 0,70                   | 3,9                     | 6,08      | 13           | 22,3               | 1,32        | 259                                                 |
| 5200   | 2000 | 1934      | 173       | 0,78                   | 4,3                     | 6,73      | 13           | 24,5               | 1,32        | 285                                                 |
| 5220   | 2200 | 2134      | 173       | 0,86                   | 4,7                     | 7,39      | 13           | 26,8               | 1,32        | 312                                                 |
| 5250   | 2500 | 2434      | 173       | 0,98                   | 5,3                     | 8,37      | 13           | 30,3               | 1,32        | 352                                                 |
| 5280   | 2800 | 2734      | 173       | 1,10                   | 5,9                     | 9,35      | 13           | 33,7               | 1,33        | 392                                                 |
| 5300   | 3000 | 2934      | 173       | 1,18                   | 6,4                     | 10,00     | 13           | 36,1               | 1,33        | 420                                                 |

## Modelle 6-Säuler



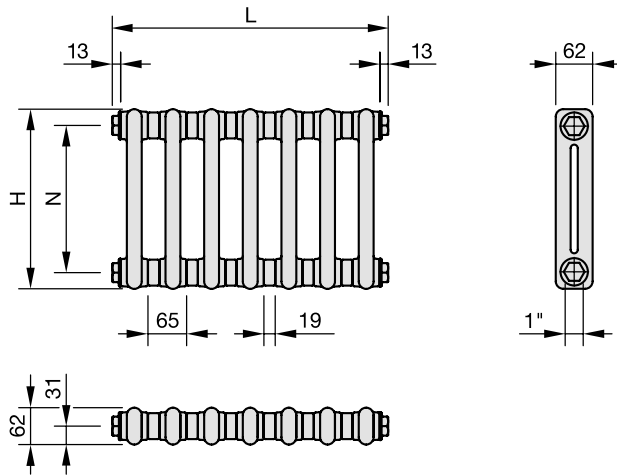
- H = Bauhöhe  
 L = Baulänge (inkl. Stopfen)  
 N = Nabenabstand  
 T = Bautiefe Heizkörper  
 A = Oberfläche  
 V = Wassereinhalt  
 M = Gewicht  
 $S_k$  = Strahlungsanteil  
 $q_{ms}$  = Normwasserstrom  
 n = Exponent  
 $\Phi_s$  = Norm-Wärmeleistung nach  
 EN 442 (75/65/20 °C)

Masse in mm

## Technische Daten pro Element

| Modell | H    | N<br>(mm) | T<br>(mm) | A<br>(m <sup>2</sup> ) | V<br>(dm <sup>3</sup> ) | M<br>(kg) | $S_k$<br>(%) | $q_{ms}$<br>(kg/h) | Exp.<br>(n) | $\Phi_L = \Delta T \text{ 50K}$<br>EN 442<br>(Watt) |
|--------|------|-----------|-----------|------------------------|-------------------------|-----------|--------------|--------------------|-------------|-----------------------------------------------------|
| 6026   | 260  | 194       | 210       | 0,12                   | 1,0                     | 1,26      | 18           | 4,6                | 1,28        | 53,5                                                |
| 6030   | 300  | 234       | 210       | 0,14                   | 1,1                     | 1,42      | 15           | 5,3                | 1,28        | 61,3                                                |
| 6035   | 350  | 284       | 210       | 0,16                   | 1,2                     | 1,62      | 14           | 6,1                | 1,28        | 71,0                                                |
| 6040   | 400  | 334       | 210       | 0,19                   | 1,3                     | 1,79      | 14           | 6,9                | 1,28        | 80,5                                                |
| 6045   | 450  | 384       | 210       | 0,21                   | 1,4                     | 1,99      | 13           | 7,7                | 1,27        | 89,8                                                |
| 6050   | 500  | 434       | 210       | 0,23                   | 1,5                     | 2,19      | 13           | 8,5                | 1,27        | 99,0                                                |
| 6055   | 550  | 484       | 210       | 0,26                   | 1,6                     | 2,38      | 12           | 9,3                | 1,27        | 108                                                 |
| 6060   | 600  | 534       | 210       | 0,28                   | 1,8                     | 2,58      | 12           | 10,1               | 1,27        | 117                                                 |
| 6075   | 750  | 684       | 210       | 0,35                   | 2,1                     | 3,17      | 12           | 12,3               | 1,26        | 143                                                 |
| 6090   | 900  | 834       | 210       | 0,42                   | 2,5                     | 3,76      | 12           | 14,4               | 1,25        | 167                                                 |
| 6100   | 1000 | 934       | 210       | 0,47                   | 2,7                     | 4,16      | 12           | 15,7               | 1,25        | 183                                                 |
| 6110   | 1100 | 1034      | 210       | 0,52                   | 3,0                     | 4,55      | 12           | 17,0               | 1,25        | 198                                                 |
| 6120   | 1200 | 1134      | 210       | 0,56                   | 3,2                     | 4,95      | 12           | 18,1               | 1,25        | 210                                                 |
| 6150   | 1500 | 1434      | 210       | 0,70                   | 4,0                     | 6,13      | 12           | 22,0               | 1,31        | 256                                                 |
| 6180   | 1800 | 1734      | 210       | 0,85                   | 4,7                     | 7,31      | 12           | 26,1               | 1,32        | 303                                                 |
| 6200   | 2000 | 1934      | 210       | 0,94                   | 5,2                     | 8,10      | 12           | 28,7               | 1,32        | 334                                                 |
| 6220   | 2200 | 2134      | 210       | 1,03                   | 5,6                     | 8,89      | 12           | 31,4               | 1,32        | 365                                                 |
| 6250   | 2500 | 2434      | 210       | 1,18                   | 6,3                     | 10,07     | 12           | 35,4               | 1,32        | 412                                                 |
| 6280   | 2800 | 2734      | 210       | 1,33                   | 7,0                     | 11,25     | 12           | 39,5               | 1,33        | 459                                                 |
| 6300   | 3000 | 2934      | 210       | 1,41                   | 7,5                     | 12,04     | 12           | 42,2               | 1,33        | 491                                                 |

## Modelle 2-Säuler Clinic



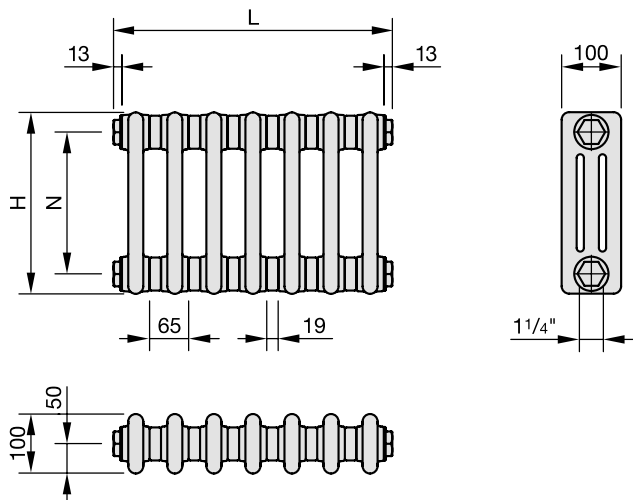
- H = Bauhöhe  
 L = Baulänge (inkl. Stopfen)  
 N = Nabenabstand  
 T = Bautiefe Heizkörper  
 A = Oberfläche  
 V = Wasserinhalt  
 M = Gewicht  
 $s_k$  = Strahlungsanteil  
 $q_{ms}$  = Normwasserstrom  
 n = Exponent  
 $\Phi_s$  = Norm-Wärmeleistung nach  
 EN 442 (75/65/20 °C)

Masse in mm

## Technische Daten pro Element

| Modell | H    | N<br>(mm) | T<br>(mm) | A<br>(m <sup>2</sup> ) | V<br>(dm <sup>3</sup> ) | M<br>(kg) | $s_k$<br>(%) | $q_{ms}$<br>(kg/h) | Exp.<br>(n) | $\Phi_s = \Delta T 50K$<br>EN 442<br>(Watt) |
|--------|------|-----------|-----------|------------------------|-------------------------|-----------|--------------|--------------------|-------------|---------------------------------------------|
| K2026  | 260  | 202       | 62        | 0,04                   | 0,4                     | 0,47      | 25           | 2,1                | 1,30        | 23,9                                        |
| K2030  | 292  | 234       | 62        | 0,05                   | 0,4                     | 0,51      | 25           | 2,3                | 1,30        | 26,5                                        |
| K2035  | 342  | 284       | 62        | 0,06                   | 0,4                     | 0,58      | 24           | 2,6                | 1,30        | 30,4                                        |
| K2040  | 392  | 334       | 62        | 0,07                   | 0,5                     | 0,62      | 25           | 2,9                | 1,30        | 34,2                                        |
| K2045  | 442  | 384       | 62        | 0,07                   | 0,5                     | 0,69      | 24           | 3,3                | 1,30        | 37,9                                        |
| K2050  | 492  | 434       | 62        | 0,08                   | 0,6                     | 0,75      | 23           | 3,6                | 1,30        | 41,6                                        |
| K2055  | 542  | 484       | 62        | 0,09                   | 0,6                     | 0,82      | 23           | 3,9                | 1,30        | 45,2                                        |
| K2060  | 592  | 534       | 62        | 0,10                   | 0,6                     | 0,88      | 23           | 4,2                | 1,30        | 48,8                                        |
| K2075  | 742  | 684       | 62        | 0,12                   | 0,8                     | 1,08      | 22           | 5,1                | 1,30        | 59,2                                        |
| K2090  | 892  | 834       | 62        | 0,14                   | 0,9                     | 1,28      | 22           | 6,0                | 1,30        | 69,4                                        |
| K2100  | 992  | 934       | 62        | 0,16                   | 1,0                     | 1,41      | 22           | 6,5                | 1,30        | 76,0                                        |
| K2110  | 1092 | 1034      | 62        | 0,18                   | 1,0                     | 1,54      | 22           | 7,1                | 1,30        | 82,6                                        |
| K2120  | 1192 | 1134      | 62        | 0,19                   | 1,1                     | 1,67      | 22           | 7,8                | 1,33        | 91,1                                        |
| K2150  | 1492 | 1434      | 62        | 0,24                   | 1,3                     | 2,07      | 23           | 9,9                | 1,33        | 115                                         |
| K2180  | 1792 | 1734      | 62        | 0,29                   | 1,6                     | 2,46      | 23           | 12,0               | 1,32        | 139                                         |
| K2200  | 1992 | 1934      | 62        | 0,32                   | 1,8                     | 2,72      | 23           | 13,4               | 1,32        | 156                                         |
| K2220  | 2192 | 2134      | 62        | 0,35                   | 1,9                     | 2,98      | 23           | 14,8               | 1,32        | 172                                         |
| K2250  | 2492 | 2434      | 62        | 0,40                   | 2,2                     | 3,38      | 23           | 16,8               | 1,32        | 195                                         |
| K2280  | 2792 | 2734      | 62        | 0,45                   | 2,4                     | 3,77      | 23           | 18,8               | 1,32        | 219                                         |
| K2300  | 2992 | 2934      | 62        | 0,48                   | 2,6                     | 4,03      | 23           | 20,2               | 1,31        | 235                                         |

## Modelle 3-Säuler Clinic



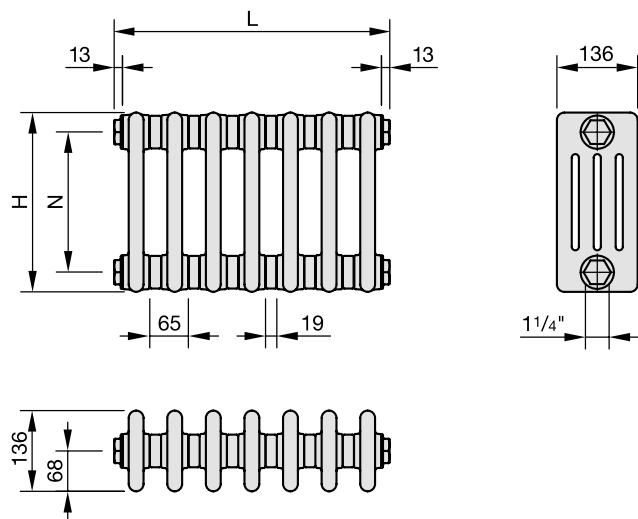
- H = Bauhöhe  
 L = Baulänge (inkl. Stopfen)  
 N = Nabenabstand  
 T = Bautiefe Heizkörper  
 A = Oberfläche  
 V = Wassereinhalt  
 M = Gewicht  
 $S_k$  = Strahlungsanteil  
 $q_{ms}$  = Normwasserstrom  
 n = Exponent  
 $\Phi_s$  = Norm-Wärmeleistung nach  
 EN 442 (75/65/20 °C)

Masse in mm

## Technische Daten pro Element

| Modell | H    | N<br>(mm) | T<br>(mm) | A<br>(m <sup>2</sup> ) | V<br>(dm <sup>3</sup> ) | M<br>(kg) | $S_k$<br>(%) | $q_{ms}$<br>(kg/h) | Exp.<br>(n) | $\Phi_s = \Delta T 50K$<br>EN 442<br>(Watt) |
|--------|------|-----------|-----------|------------------------|-------------------------|-----------|--------------|--------------------|-------------|---------------------------------------------|
| K3026  | 260  | 194       | 100       | 0,06                   | 0,6                     | 0,63      | 21           | 2,7                | 1,27        | 31,2                                        |
| K3030  | 300  | 234       | 100       | 0,07                   | 0,6                     | 0,71      | 20           | 3,0                | 1,27        | 35,4                                        |
| K3035  | 350  | 284       | 100       | 0,08                   | 0,7                     | 0,80      | 20           | 3,5                | 1,28        | 40,6                                        |
| K3040  | 400  | 334       | 100       | 0,10                   | 0,7                     | 0,91      | 19           | 3,9                | 1,28        | 45,7                                        |
| K3045  | 450  | 384       | 100       | 0,11                   | 0,8                     | 1,01      | 19           | 4,4                | 1,28        | 50,8                                        |
| K3050  | 500  | 434       | 100       | 0,12                   | 0,9                     | 1,10      | 18           | 4,8                | 1,28        | 55,9                                        |
| K3055  | 550  | 484       | 100       | 0,13                   | 0,9                     | 1,20      | 18           | 5,2                | 1,28        | 61,0                                        |
| K3060  | 600  | 534       | 100       | 0,14                   | 1,0                     | 1,30      | 18           | 5,7                | 1,28        | 66,0                                        |
| K3075  | 750  | 684       | 100       | 0,18                   | 1,2                     | 1,59      | 18           | 7,0                | 1,29        | 81,1                                        |
| K3090  | 900  | 834       | 100       | 0,21                   | 1,3                     | 1,89      | 18           | 8,3                | 1,29        | 96,3                                        |
| K3100  | 1000 | 934       | 100       | 0,24                   | 1,5                     | 2,08      | 18           | 9,2                | 1,29        | 107                                         |
| K3110  | 1100 | 1034      | 100       | 0,26                   | 1,6                     | 2,28      | 18           | 10,1               | 1,30        | 117                                         |
| K3120  | 1200 | 1134      | 100       | 0,29                   | 1,7                     | 2,48      | 18           | 10,9               | 1,31        | 127                                         |
| K3150  | 1500 | 1434      | 100       | 0,36                   | 2,0                     | 3,06      | 18           | 13,6               | 1,31        | 158                                         |
| K3180  | 1800 | 1734      | 100       | 0,43                   | 2,4                     | 3,65      | 18           | 16,3               | 1,31        | 189                                         |
| K3200  | 2000 | 1934      | 100       | 0,47                   | 2,6                     | 4,04      | 18           | 18,0               | 1,31        | 209                                         |
| K3220  | 2200 | 2134      | 100       | 0,52                   | 2,9                     | 4,44      | 18           | 19,7               | 1,31        | 229                                         |
| K3250  | 2500 | 2434      | 100       | 0,59                   | 3,3                     | 5,02      | 18           | 22,4               | 1,32        | 260                                         |
| K3280  | 2800 | 2734      | 100       | 0,66                   | 3,7                     | 5,61      | 18           | 24,9               | 1,32        | 290                                         |
| K3300  | 3000 | 2934      | 100       | 0,71                   | 4,0                     | 6,00      | 18           | 26,7               | 1,32        | 311                                         |

## Modelle 4-Säuler Clinic



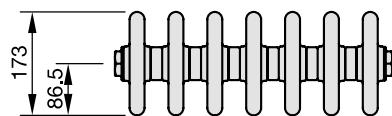
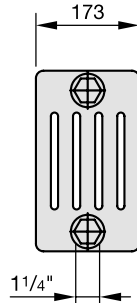
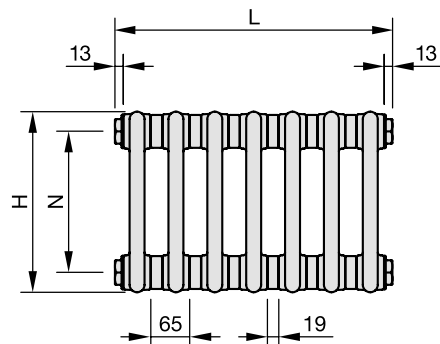
- H = Bauhöhe  
 L = Baulänge (inkl. Stopfen)  
 N = Nabenabstand  
 T = Bautiefe Heizkörper  
 A = Oberfläche  
 V = Wasserinhalt  
 M = Gewicht  
 $S_k$  = Strahlungsanteil  
 $q_{ms}$  = Normwasserstrom  
 n = Exponent  
 $\Phi_s$  = Norm-Wärmeleistung nach  
 EN 442 (75/65/20 °C)

Masse in mm

## Technische Daten pro Element

| Modell | H    | N<br>(mm) | T<br>(mm) | A<br>(m <sup>2</sup> ) | V<br>(dm <sup>3</sup> ) | M<br>(kg) | $S_k$<br>(%) | $q_{ms}$<br>(kg/h) | Exp.<br>(n) | $\Phi_L = \Delta T 50K$<br>EN 442<br>(Watt) |
|--------|------|-----------|-----------|------------------------|-------------------------|-----------|--------------|--------------------|-------------|---------------------------------------------|
| K4026  | 260  | 194       | 136       | 0,09                   | 0,7                     | 0,85      | 18           | 3,5                | 1,27        | 40,4                                        |
| K4030  | 300  | 234       | 136       | 0,10                   | 0,8                     | 0,95      | 18           | 3,9                | 1,27        | 45,8                                        |
| K4035  | 350  | 284       | 136       | 0,11                   | 0,9                     | 1,08      | 17           | 4,5                | 1,28        | 52,5                                        |
| K4040  | 400  | 334       | 136       | 0,13                   | 0,9                     | 1,23      | 16           | 5,1                | 1,28        | 59,2                                        |
| K4045  | 450  | 384       | 136       | 0,15                   | 1,0                     | 1,36      | 16           | 5,7                | 1,28        | 65,7                                        |
| K4050  | 500  | 434       | 136       | 0,16                   | 1,1                     | 1,49      | 16           | 6,2                | 1,28        | 72,3                                        |
| K4055  | 550  | 484       | 136       | 0,18                   | 1,2                     | 1,62      | 16           | 6,8                | 1,28        | 78,8                                        |
| K4060  | 600  | 534       | 136       | 0,19                   | 1,3                     | 1,75      | 15           | 7,3                | 1,28        | 85,4                                        |
| K4075  | 750  | 684       | 136       | 0,24                   | 1,5                     | 2,13      | 15           | 9,0                | 1,29        | 105                                         |
| K4090  | 900  | 834       | 136       | 0,29                   | 1,8                     | 2,52      | 15           | 10,8               | 1,29        | 125                                         |
| K4100  | 1000 | 934       | 136       | 0,32                   | 1,9                     | 2,78      | 15           | 11,9               | 1,29        | 138                                         |
| K4110  | 1100 | 1034      | 136       | 0,35                   | 2,1                     | 3,03      | 15           | 13,0               | 1,30        | 151                                         |
| K4120  | 1200 | 1134      | 136       | 0,38                   | 2,2                     | 3,29      | 15           | 14,2               | 1,31        | 165                                         |
| K4150  | 1500 | 1434      | 136       | 0,47                   | 2,7                     | 4,06      | 15           | 17,5               | 1,31        | 204                                         |
| K4180  | 1800 | 1734      | 136       | 0,57                   | 3,1                     | 4,83      | 15           | 21,0               | 1,31        | 244                                         |
| K4200  | 2000 | 1934      | 136       | 0,63                   | 3,4                     | 5,35      | 15           | 23,2               | 1,31        | 270                                         |
| K4220  | 2200 | 2134      | 136       | 0,70                   | 3,7                     | 5,86      | 15           | 25,5               | 1,31        | 296                                         |
| K4250  | 2500 | 2434      | 136       | 0,79                   | 4,3                     | 6,64      | 15           | 28,8               | 1,32        | 335                                         |
| K4280  | 2800 | 2734      | 136       | 0,87                   | 4,9                     | 7,41      | 15           | 32,2               | 1,32        | 375                                         |
| K4300  | 3000 | 2934      | 136       | 0,95                   | 5,4                     | 7,92      | 15           | 34,5               | 1,32        | 401                                         |

## Modelle 5-Säuler Clinic



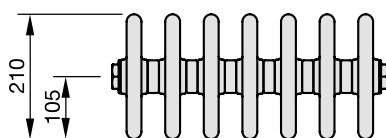
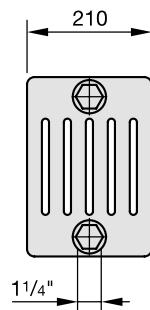
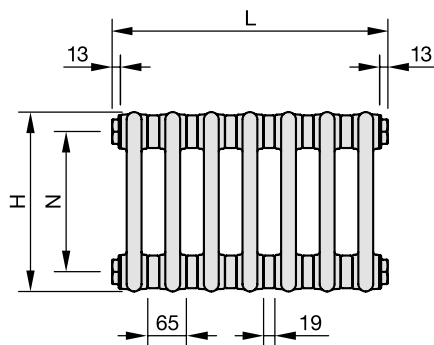
- H = Bauhöhe  
 L = Baulänge (inkl. Stopfen)  
 N = Nabenabstand  
 T = Bautiefe Heizkörper  
 A = Oberfläche  
 V = Wasserinhalt  
 M = Gewicht  
 $S_k$  = Strahlungsanteil  
 $q_{ms}$  = Normwasserstrom  
 n = Exponent  
 $\Phi_s$  = Norm-Wärmeleistung nach  
 EN 442 (75/65/20 °C)

Masse in mm

## Technische Daten pro Element

| Modell | H    | N<br>(mm) | T<br>(mm) | A<br>(m <sup>2</sup> ) | V<br>(dm <sup>3</sup> ) | M<br>(kg) | $S_k$<br>(%) | $q_{ms}$<br>(kg/h) | Exp.<br>(n) | $\Phi_s = \Delta T 50K$<br>EN 442<br>(Watt) |
|--------|------|-----------|-----------|------------------------|-------------------------|-----------|--------------|--------------------|-------------|---------------------------------------------|
| K5026  | 260  | 194       | 173       | 0,11                   | 0,9                     | 0,95      | 17           | 4,3                | 1,27        | 49,4                                        |
| K5030  | 300  | 234       | 173       | 0,12                   | 1,0                     | 1,08      | 16           | 4,8                | 1,27        | 56,0                                        |
| K5035  | 350  | 284       | 173       | 0,14                   | 1,1                     | 1,25      | 15           | 5,5                | 1,28        | 64,2                                        |
| K5040  | 400  | 334       | 173       | 0,16                   | 1,2                     | 1,58      | 15           | 6,2                | 1,28        | 72,3                                        |
| K5045  | 450  | 384       | 173       | 0,18                   | 1,3                     | 1,74      | 14           | 6,9                | 1,28        | 80,4                                        |
| K5050  | 500  | 434       | 173       | 0,20                   | 1,4                     | 1,91      | 14           | 7,6                | 1,28        | 88,4                                        |
| K5055  | 550  | 484       | 173       | 0,22                   | 1,5                     | 2,07      | 14           | 8,3                | 1,28        | 96,4                                        |
| K5060  | 600  | 534       | 173       | 0,24                   | 1,6                     | 2,23      | 13           | 8,9                | 1,28        | 104                                         |
| K5075  | 750  | 684       | 173       | 0,30                   | 1,9                     | 2,72      | 13           | 11,0               | 1,29        | 128                                         |
| K5090  | 900  | 834       | 173       | 0,36                   | 2,2                     | 3,21      | 13           | 13,1               | 1,29        | 152                                         |
| K5100  | 1000 | 934       | 173       | 0,40                   | 2,4                     | 3,54      | 13           | 14,4               | 1,29        | 168                                         |
| K5110  | 1100 | 1034      | 173       | 0,44                   | 2,6                     | 3,87      | 13           | 15,9               | 1,30        | 185                                         |
| K5120  | 1200 | 1134      | 173       | 0,48                   | 2,8                     | 4,19      | 13           | 17,3               | 1,31        | 201                                         |
| K5150  | 1500 | 1434      | 173       | 0,59                   | 3,3                     | 5,17      | 13           | 21,4               | 1,31        | 249                                         |
| K5180  | 1800 | 1734      | 173       | 0,71                   | 3,9                     | 6,15      | 13           | 25,5               | 1,31        | 297                                         |
| K5200  | 2000 | 1934      | 173       | 0,79                   | 4,3                     | 6,81      | 13           | 28,4               | 1,31        | 330                                         |
| K5220  | 2200 | 2134      | 173       | 0,87                   | 4,7                     | 7,46      | 13           | 31,1               | 1,31        | 362                                         |
| K5250  | 2500 | 2434      | 173       | 0,99                   | 5,4                     | 8,44      | 13           | 35,3               | 1,32        | 410                                         |
| K5280  | 2800 | 2734      | 173       | 1,11                   | 6,1                     | 9,42      | 13           | 39,4               | 1,32        | 458                                         |
| K5300  | 3000 | 2934      | 173       | 1,19                   | 6,6                     | 10,08     | 13           | 42,1               | 1,32        | 490                                         |

## Modelle 6-Säuler Clinic



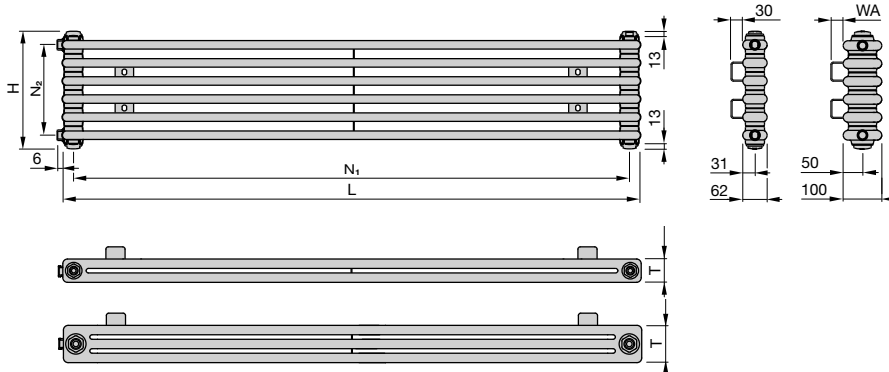
- H = Bauhöhe  
 L = Baulänge (inkl. Stopfen)  
 N = Nabenabstand  
 T = Bautiefe Heizkörper  
 A = Oberfläche  
 V = Wassereinhalt  
 M = Gewicht  
 $S_k$  = Strahlungsanteil  
 $q_{ms}$  = Normwasserstrom  
 n = Exponent  
 $\Phi_s$  = Norm-Wärmeleistung nach  
 EN 442 (75/65/20 °C)

Masse in mm

## Technische Daten pro Element

| Modell | H    | N<br>(mm) | T<br>(mm) | A<br>(m <sup>2</sup> ) | V<br>(dm <sup>3</sup> ) | M<br>(kg) | $S_k$<br>(%) | $q_{ms}$<br>(kg/h) | Exp.<br>(n) | $\Phi_s = \Delta T 50K$<br>EN 442<br>(Watt) |
|--------|------|-----------|-----------|------------------------|-------------------------|-----------|--------------|--------------------|-------------|---------------------------------------------|
| K6026  | 260  | 194       | 210       | 0,13                   | 1,0                     | 1,33      | 18           | 5,0                | 1,27        | 58,1                                        |
| K6030  | 300  | 234       | 210       | 0,15                   | 1,1                     | 1,49      | 15           | 5,7                | 1,27        | 65,9                                        |
| K6035  | 350  | 284       | 210       | 0,17                   | 1,3                     | 1,69      | 14           | 6,5                | 1,28        | 75,5                                        |
| K6040  | 400  | 334       | 210       | 0,19                   | 1,4                     | 1,87      | 14           | 7,3                | 1,28        | 85,1                                        |
| K6045  | 450  | 384       | 210       | 0,22                   | 1,5                     | 2,06      | 13           | 8,1                | 1,28        | 94,6                                        |
| K6050  | 500  | 434       | 210       | 0,24                   | 1,6                     | 2,26      | 13           | 8,9                | 1,28        | 104                                         |
| K6055  | 550  | 484       | 210       | 0,26                   | 1,8                     | 2,46      | 12           | 9,7                | 1,28        | 113                                         |
| K6060  | 600  | 534       | 210       | 0,29                   | 1,9                     | 2,65      | 12           | 10,6               | 1,28        | 123                                         |
| K6075  | 750  | 684       | 210       | 0,36                   | 2,2                     | 3,25      | 12           | 13,0               | 1,29        | 151                                         |
| K6090  | 900  | 834       | 210       | 0,43                   | 2,6                     | 3,84      | 12           | 15,4               | 1,29        | 179                                         |
| K6100  | 1000 | 934       | 210       | 0,48                   | 2,8                     | 4,23      | 12           | 17,0               | 1,29        | 198                                         |
| K6110  | 1100 | 1034      | 210       | 0,52                   | 3,1                     | 4,62      | 12           | 18,7               | 1,30        | 217                                         |
| K6120  | 1200 | 1134      | 210       | 0,57                   | 3,3                     | 5,02      | 12           | 20,3               | 1,31        | 236                                         |
| K6150  | 1500 | 1434      | 210       | 0,71                   | 4,0                     | 6,20      | 12           | 25,2               | 1,31        | 293                                         |
| K6180  | 1800 | 1734      | 210       | 0,85                   | 4,8                     | 7,38      | 12           | 30,0               | 1,31        | 349                                         |
| K6200  | 2000 | 1934      | 210       | 0,95                   | 5,2                     | 8,17      | 12           | 33,3               | 1,31        | 387                                         |
| K6220  | 2200 | 2134      | 210       | 1,04                   | 5,7                     | 8,96      | 12           | 36,5               | 1,31        | 425                                         |
| K6250  | 2500 | 2434      | 210       | 1,19                   | 6,4                     | 10,14     | 12           | 41,4               | 1,32        | 481                                         |
| K6280  | 2800 | 2734      | 210       | 1,34                   | 7,1                     | 11,32     | 12           | 46,2               | 1,32        | 537                                         |
| K6300  | 3000 | 2934      | 210       | 1,42                   | 7,6                     | 12,11     | 12           | 49,4               | 1,32        | 575                                         |

## Horizontale Modelle 2- und 3-Säuler



- H = Bauhöhe (inkl. Stopfen)  
 L = Baulänge  
 N<sub>1</sub> = Nabenabstand Anschlüsse nach unten  
 N<sub>2</sub> = Nabenabstand Anschlüsse seitlich  
 T = Bautiefe Heizkörper  
 A = Oberfläche  
 V = Wassereinhalt  
 M = Gewicht  
 q<sub>ms</sub> = Normwasserstrom  
 n = Exponent  
 Φ<sub>s</sub> = Norm-Wärmeleistung nach  
 EN 442 (75/65/20 °C)

Masse in mm

## Technische Daten pro Heizkörper

| Modell   | H   | L<br>(mm) | N <sub>1</sub><br>(mm) | N <sub>2</sub><br>(mm) | T<br>(mm) | A<br>(m <sup>2</sup> ) | V<br>(dm <sup>3</sup> ) | M<br>(kg) | q <sub>ms</sub><br>(kg/h) | Exp.<br>(n) | Φ <sub>L</sub> =ΔT 50K<br>EN 442<br>(Watt) |
|----------|-----|-----------|------------------------|------------------------|-----------|------------------------|-------------------------|-----------|---------------------------|-------------|--------------------------------------------|
| T2150/6  | 302 | 1492      | 1434                   | 234                    | 62        | 1,42                   | 7,8                     | 12,73     | 65,3                      | 1,23        | 759                                        |
| T2150/8  | 394 | 1492      | 1434                   | 326                    | 62        | 1,89                   | 10,4                    | 16,97     | 83,9                      | 1,25        | 975                                        |
| T2150/10 | 486 | 1492      | 1434                   | 418                    | 62        | 2,36                   | 13,0                    | 21,21     | 102,8                     | 1,26        | 1195                                       |
| T2150/12 | 578 | 1492      | 1434                   | 510                    | 62        | 2,83                   | 15,6                    | 25,45     | 122,2                     | 1,23        | 1420                                       |
| T2180/6  | 302 | 1792      | 1734                   | 234                    | 62        | 1,70                   | 9,0                     | 15,16     | 79,5                      | 1,22        | 924                                        |
| T2180/8  | 394 | 1792      | 1734                   | 326                    | 62        | 2,26                   | 12,0                    | 20,22     | 102,2                     | 1,24        | 1187                                       |
| T2180/10 | 486 | 1792      | 1734                   | 418                    | 62        | 2,83                   | 15,0                    | 25,27     | 125,1                     | 1,25        | 1454                                       |
| T2180/12 | 578 | 1792      | 1734                   | 510                    | 62        | 3,40                   | 18,0                    | 30,32     | 148,8                     | 1,26        | 1729                                       |
| T3150/6  | 302 | 1500      | 1434                   | 234                    | 100       | 2,11                   | 12,0                    | 19,66     | 88,8                      | 1,23        | 1032                                       |
| T3150/8  | 394 | 1500      | 1434                   | 326                    | 100       | 2,82                   | 16,0                    | 26,22     | 114,4                     | 1,25        | 1318                                       |
| T3150/10 | 486 | 1500      | 1434                   | 418                    | 100       | 3,52                   | 20,0                    | 32,77     | 137,5                     | 1,26        | 1598                                       |
| T3150/12 | 578 | 1500      | 1434                   | 510                    | 100       | 4,22                   | 24,0                    | 39,32     | 161,0                     | 1,26        | 1871                                       |
| T3180/6  | 302 | 1800      | 1734                   | 234                    | 100       | 2,53                   | 14,4                    | 23,45     | 108,0                     | 1,25        | 1255                                       |
| T3180/8  | 394 | 1800      | 1734                   | 326                    | 100       | 3,38                   | 19,2                    | 31,27     | 138,0                     | 1,27        | 1604                                       |
| T3180/10 | 486 | 1800      | 1734                   | 418                    | 100       | 4,22                   | 24,0                    | 39,09     | 167,3                     | 1,29        | 1944                                       |
| T3180/12 | 578 | 1800      | 1734                   | 510                    | 100       | 5,06                   | 28,8                    | 46,91     | 195,9                     | 1,26        | 2276                                       |

## Zehnder Charleston

| Anzahl<br>Elemente | Charleston<br>Länge<br>inkl. Stopfen = mm | Charleston Clinic<br>Länge<br>inkl. Stopfen = mm | Anzahl<br>Elemente | Charleston<br>Länge<br>inkl. Stopfen = mm | Charleston Clinic<br>Länge<br>inkl. Stopfen = mm |
|--------------------|-------------------------------------------|--------------------------------------------------|--------------------|-------------------------------------------|--------------------------------------------------|
| 1                  | 72                                        | 72                                               | 51                 | 2372                                      | 3322                                             |
| 2                  | 118                                       | 137                                              | 52                 | 2418                                      | 3387                                             |
| 3                  | 164                                       | 202                                              | 53                 | 2464                                      | 3452                                             |
| 4                  | 210                                       | 267                                              | 54                 | 2510                                      | 3517                                             |
| 5                  | 256                                       | 332                                              | 55                 | 2556                                      | 3582                                             |
| 6                  | 302                                       | 397                                              | 56                 | 2602                                      | 3647                                             |
| 7                  | 348                                       | 462                                              | 57                 | 2648                                      | 3712                                             |
| 8                  | 394                                       | 527                                              | 58                 | 2694                                      | 3777                                             |
| 9                  | 440                                       | 592                                              | 59                 | 2740                                      | 3842                                             |
| 10                 | 486                                       | 657                                              | 60                 | 2786                                      | 3907                                             |
| 11                 | 532                                       | 722                                              | 61                 | 2832                                      | 3972                                             |
| 12                 | 578                                       | 787                                              | 62                 | 2878                                      | 4037                                             |
| 13                 | 624                                       | 852                                              | 63                 | 2924                                      | 4102                                             |
| 14                 | 670                                       | 917                                              | 64                 | 2970                                      | 4167                                             |
| 15                 | 716                                       | 982                                              | 65                 | 3016                                      | 4232                                             |
| 16                 | 762                                       | 1047                                             | 66                 | 3062                                      | 4297                                             |
| 17                 | 808                                       | 1112                                             | 67                 | 3108                                      | 4362                                             |
| 18                 | 854                                       | 1177                                             | 68                 | 3154                                      | 4427                                             |
| 19                 | 900                                       | 1242                                             | 69                 | 3200                                      | 4492                                             |
| 20                 | 946                                       | 1307                                             | 70                 | 3246                                      | 4557                                             |
| 21                 | 992                                       | 1372                                             | 71                 | 3292                                      | 4622                                             |
| 22                 | 1038                                      | 1437                                             | 72                 | 3338                                      | 4687                                             |
| 23                 | 1084                                      | 1502                                             | 73                 | 3384                                      | 4752                                             |
| 24                 | 1130                                      | 1567                                             | 74                 | 3430                                      | 4817                                             |
| 25                 | 1176                                      | 1632                                             | 75                 | 3476                                      | 4882                                             |
| 26                 | 1222                                      | 1697                                             | 76                 | 3522                                      | 4947                                             |
| 27                 | 1268                                      | 1762                                             | 77                 | 3568                                      | 5012                                             |
| 28                 | 1314                                      | 1827                                             | 78                 | 3614                                      | 5077                                             |
| 29                 | 1360                                      | 1892                                             | 79                 | 3660                                      | 5142                                             |
| 30                 | 1406                                      | 1957                                             | 80                 | 3706                                      | 5207                                             |
| 31                 | 1452                                      | 2022                                             | 81                 | 3752                                      | 5272                                             |
| 32                 | 1498                                      | 2087                                             | 82                 | 3798                                      | 5337                                             |
| 33                 | 1544                                      | 2152                                             | 83                 | 3844                                      | 5402                                             |
| 34                 | 1590                                      | 2217                                             | 84                 | 3890                                      | 5467                                             |
| 35                 | 1636                                      | 2282                                             | 85                 | 3936                                      | 5532                                             |
| 36                 | 1682                                      | 2347                                             | 86                 | 3982                                      | 5597                                             |
| 37                 | 1728                                      | 2412                                             | 87                 | 4028                                      | 5662                                             |
| 38                 | 1774                                      | 2477                                             | 88                 | 4074                                      | 5727                                             |
| 39                 | 1820                                      | 2542                                             | 89                 | 4120                                      | 5792                                             |
| 40                 | 1866                                      | 2607                                             | 90                 | 4166                                      | 5857                                             |
| 41                 | 1912                                      | 2672                                             | 91                 | 4212                                      | 5922                                             |
| 42                 | 1958                                      | 2737                                             | 92                 | 4258                                      | 5987                                             |
| 43                 | 2004                                      | 2802                                             | 93                 | 4304                                      | 6052                                             |
| 44                 | 2050                                      | 2867                                             | 94                 | 4350                                      | 6117                                             |
| 45                 | 2096                                      | 2932                                             | 95                 | 4396                                      | 6182                                             |
| 46                 | 2142                                      | 2997                                             | 96                 | 4442                                      | 6247                                             |
| 47                 | 2188                                      | 3062                                             | 97                 | 4488                                      | 6312                                             |
| 48                 | 2234                                      | 3127                                             | 98                 | 4534                                      | 6377                                             |
| 49                 | 2280                                      | 3192                                             | 99                 | 4580                                      | 6442                                             |
| 50                 | 2326                                      | 3257                                             | 100                | 4626                                      | 6507                                             |

**Mindest-Wasserstrom  $q_{m \min}$** 

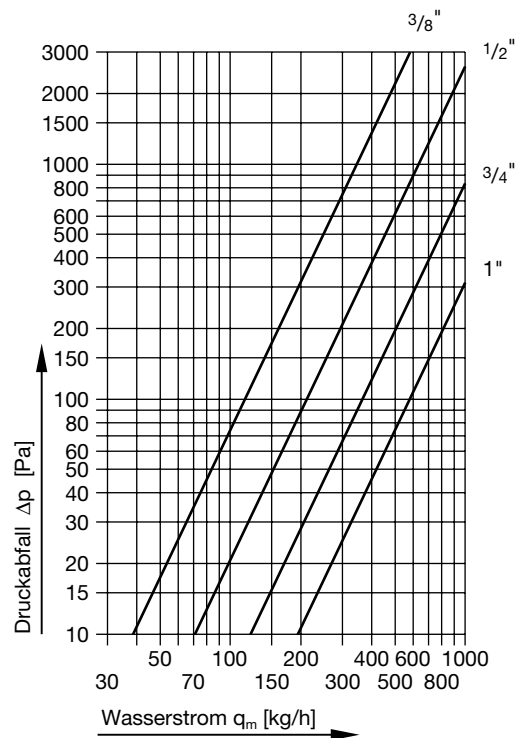
In den Tabellen mit den technischen Daten ist der Normwasserstrom  $q_{ms}$  pro Modell angegeben. Der effektive Wasserstrom  $q_m$  in % des Normwasserstroms  $q_{ms}$  sollte bei den Mehrsäulern 17 % üblicherweise nicht unterschreiten.

**Ein- und Austrittswiderstand**

Zeta-Wert  $\zeta = 2,5$  pro Heizkörper für Anschlussgrößen  $\frac{3}{8}$ " bis 1" und mit einer Wassergeschwindigkeit bis 1 m/s.

**Druckabfall  $\Delta p$** 

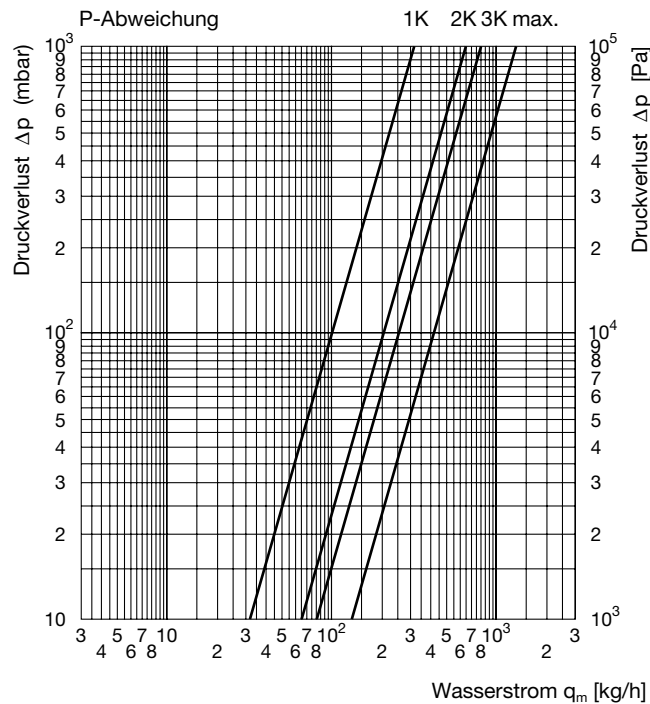
Der Druckabfall  $\Delta p$  pro Heizkörper inklusive Ventil, ist den folgenden Diagrammen zu entnehmen:



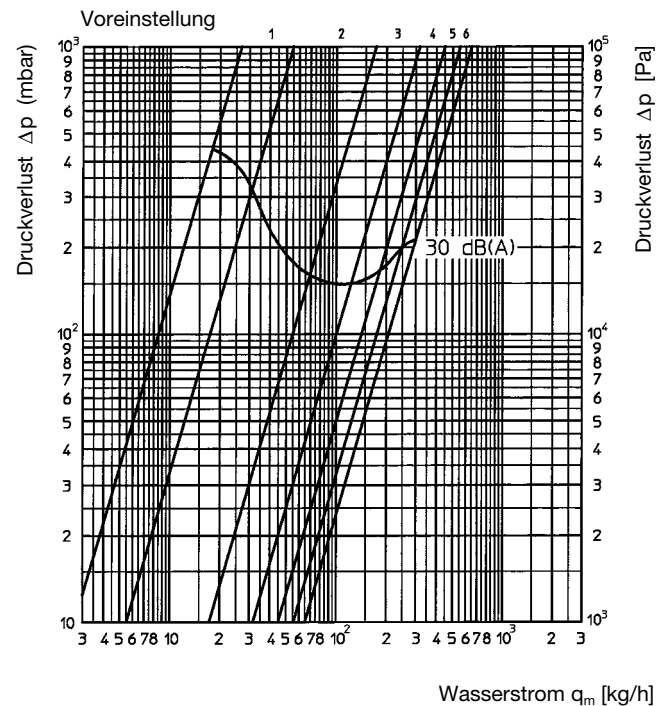
Zehnder Charleston, Zehnder Charleston Clinic:  
2 – 6 Säuler, gleich- oder wechselseitiger Anschluss

**Zehnder Complotto**

Ventil-Voreinstellung 6 (voll offen):



P-Abweichung von 2 K:



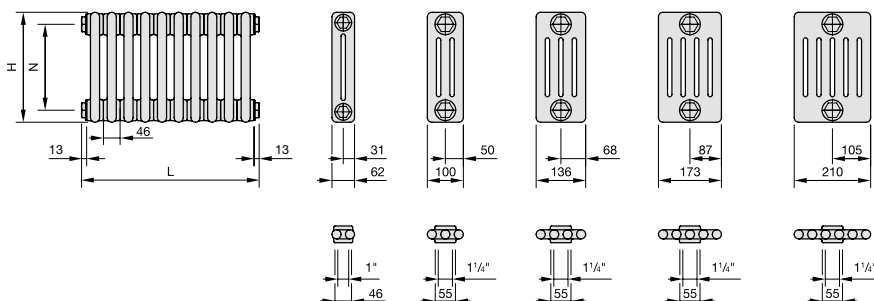
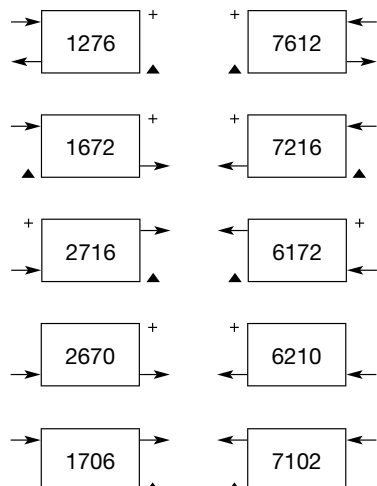
| VE | 1     | 2     | 3     | 4     | 5    | 6    |
|----|-------|-------|-------|-------|------|------|
| Kv | 0.055 | 0.170 | 0.313 | 0.446 | 0.56 | 0.65 |

Anschlussart

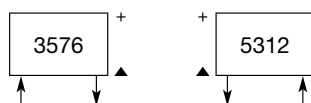
Masszeichnungen: Vorderansicht, Seitenansicht und Draufsicht

**Normalanschlüsse bei Zweirohrsystemen**

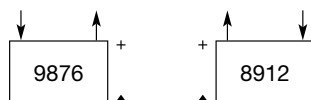
gleich- oder wechselseitig

**Normalanschlüsse bei Zweirohrsystemen, mit Mehrpreis**

von unten nach unten

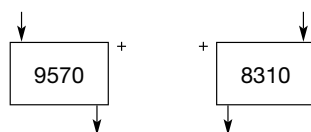


von oben nach oben



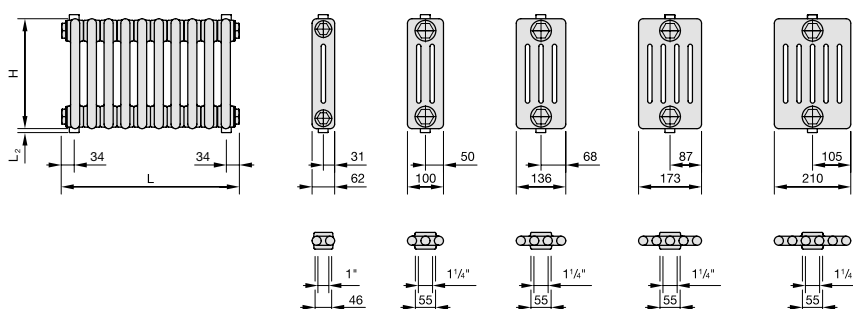
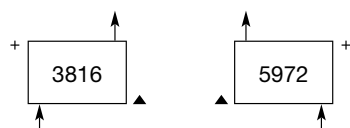
Empfehlung: mit Fernthermostat betreiben

von oben nach unten



Empfehlung: mit Fernthermostat betreiben

von unten nach oben



H = Bauhöhe

L = Baulänge (inkl. Stopfen)

N = Nabenabstand

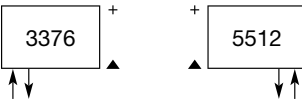
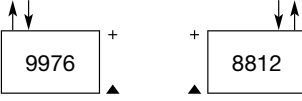
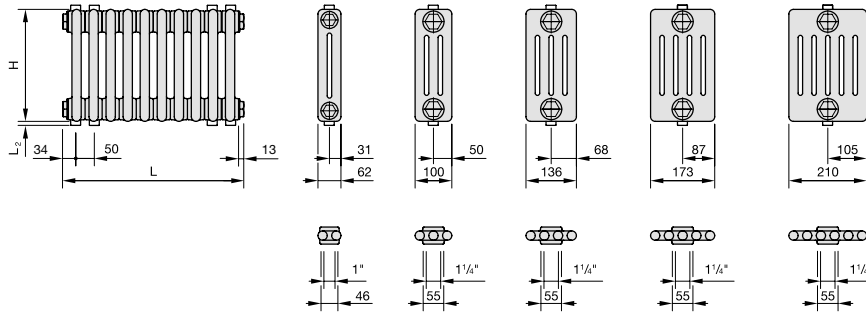
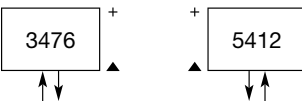
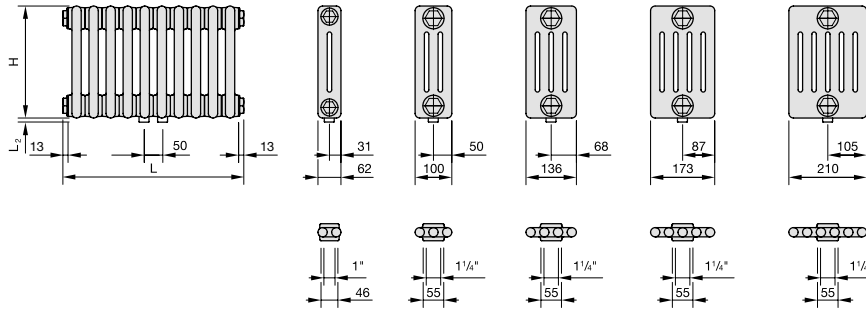
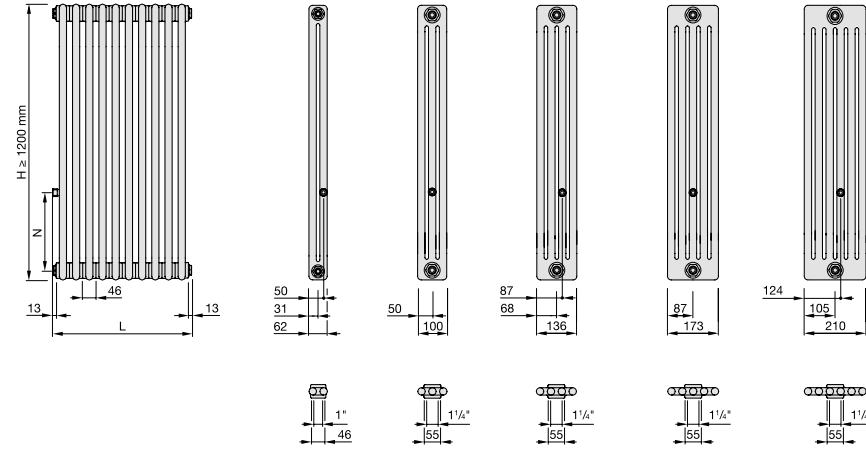
L<sub>2</sub> = Überstand Gewinde, 1/2" = 6, 3/8" = 12, 3/4" = 15

+ = Entlüftung

▲ = Entleerung

Masse in mm

<sup>1)</sup> Die angegebenen Masse gelten ebenfalls für Zehnder Charleston Clinic (ohne grafische Darstellung), sofern nicht anders vermerkt.

| Anschlussart                                                                                                                                                                                                                                                                                        | Masszeichnungen: Vorderansicht, Seitenansicht und Draufsicht                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Normalanschlüsse bei Zweirohrsystemen, mit Mehrpreis</b>                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                  |
| <p>von unten nach unten, seitlich 50 mm</p>  <p>von oben nach oben, seitlich</p>  <p>Empfehlung: mit Fernthermostat betreiben</p> |                                                                                                                                                       |
| <p>von unten nach unten, mittig 50 mm</p>                                                                                                                                                                          |  <p>Mittige Anordnung der Anschlussarmatur nur bei gerader Anzahl Elemente.<br/>Bei ungerader Elementanzahl: auf Rücklaufseite ein Element mehr.</p> |
| <p>Austauschmodell barrierefrei<br/>Anschluss seitlich,<br/>Nabenabstand bei Bestellung angeben</p>                                                                                                              |  <p>N = 500, 600, 619, 700, 800, 819, 900 mm<br/>Anschluss ab Bauhöhe ≥ 1200 mm möglich</p>                                                         |

H = Bauhöhe

L = Baulänge (inkl. Stopfen)

N = Nabenabstand

L<sub>2</sub> = Überstand Gewinde, 1/2" = 6, 3/8" = 12, 3/4" = 15

+ = Entlüftung

▲ = Entleerung

Masse in mm

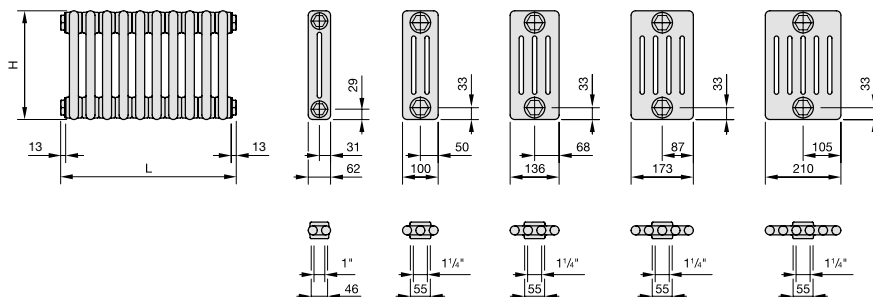
<sup>1)</sup> Die angegebenen Masse gelten ebenfalls für Zehnder Charleston Clinic (ohne grafische Darstellung), sofern nicht anders vermerkt.

Anschlussart

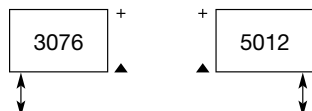
Masszeichnungen: Vorderansicht, Seitenansicht und Draufsicht

**Normalanschlüsse bei Einrohrsystemen, mit Mehrpreis**

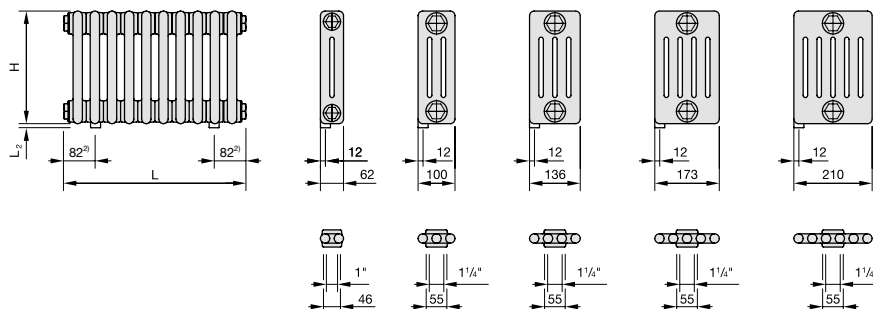
für Lansenventil horizontal



Ventil-Fabrikat bei Bestellung angeben.

für Lansenventil vertikal  
für TKM-Anschlüsse vertikal

| TKM-Ventil       |                                             |          |          |          |          |
|------------------|---------------------------------------------|----------|----------|----------|----------|
| Bauhöhe<br>in mm | max. Anzahl Elemente bei Einsatz TKM-Ventil |          |          |          |          |
|                  | 2-Säuler                                    | 3-Säuler | 4-Säuler | 5-Säuler | 6-Säuler |
| 260 – 600        | 40                                          | 33       | 27       | 25       | 25       |
| 700 – 850        | 36                                          | 30       | 24       | 22       | 22       |
| 900 – 1050       | 32                                          | 26       | 20       | 18       | 18       |
| 1100 – 1250      | 29                                          | 23       | 18       | 15       | 15       |
| 1300 – 1500      | 24                                          | 18       | 14       | 12       | 12       |
| 1550 – 1800      | 19                                          | 13       | 10       | 7        | 7        |
| 1850 – 2000      | 16                                          | 10       | 7        | 4        | 4        |



Ventil-Fabrikat bei Bestellung angeben.

H = Bauhöhe

L = Baulänge (inkl. Stopfen)

N = Nabenabstand

L<sub>2</sub> = Überstand Gewinde, 1/2" = 6, 3/8" = 12, 3/4" = 15  
TKM = 20 mm bis Dichtfläche

+ = Entlüftung

▲ = Entleerung

Masse in mm

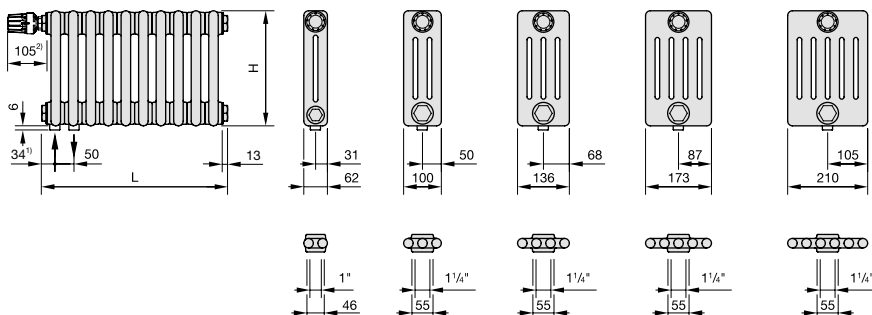
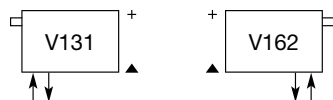
<sup>1)</sup> Die angegebenen Masse gelten ebenfalls für Zehnder Charleston Clinic (ohne grafische Darstellung), sofern nicht anders vermerkt.<sup>2)</sup> Bei Zehnder Charleston Clinic 101 mm

Anschlussart

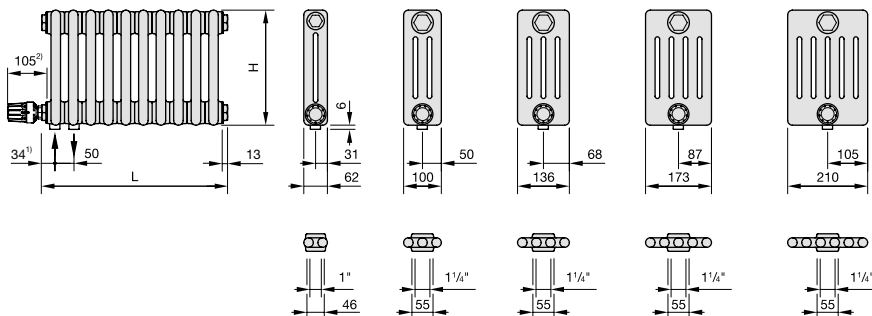
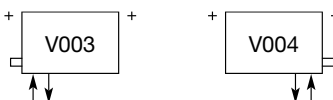
Masszeichnungen: Vorderansicht, Seitenansicht und Draufsicht

**Complettoanschluss mit integriertem Ventil, mit Mehrpreis**

Ventil oben, Anschluss seitlich 50 mm



Ventil unten, Anschluss seitlich 50 mm



Verminderte Wärmeleistung des ersten Elements wegen unzureichender Zirkulation

H = Bauhöhe

L = Baulänge (inkl. Stopfen)

N = Nabenabstand

L<sub>2</sub> = Überstand Gewinde, 1/2" = 6, 3/8" = 12, 3/4" = 15

+ = Entlüftung

▲ = Entleerung

Masse in mm

**Ventilkenndaten:**

Spezialreguliertventil OV 1" (für 2-Säuler) bzw. OV 5/4" (für 3- bis 6-Säuler) wird werkseits eingebaut. Max. empfohlene Durchflussmenge 250 kg/h.

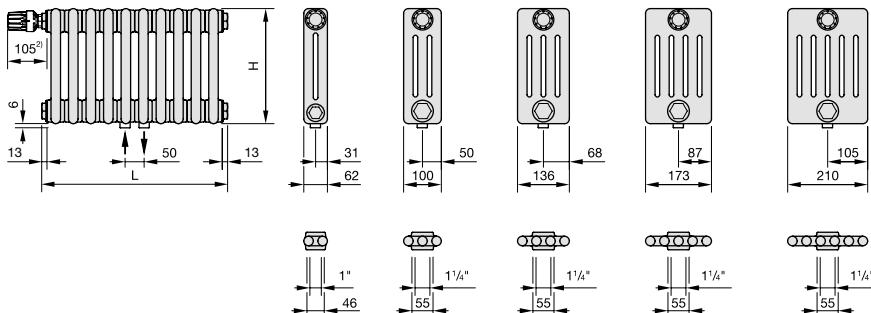
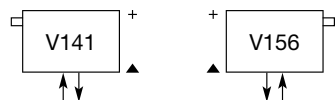
<sup>1)</sup> Bei Zehnder Charleston Clinic 44 mm<sup>2)</sup> Nur gültig für Zehnder Thermostat LH2

Anschlussart

Masszeichnungen: Vorderansicht, Seitenansicht und Draufsicht

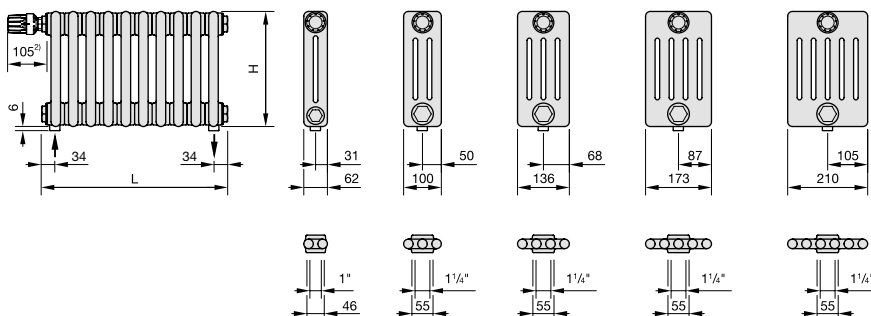
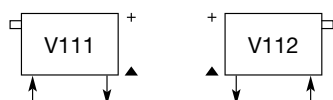
**Complettoanschluss mit integriertem Ventil, mit Mehrpreis**

Ventil oben, Anschluss mittig 50 mm



Mittiger Anschluss nur bei gerader Elementenanzahl möglich.  
Bei ungerader Elementenanzahl: auf Rücklaufseite ein Element mehr.

Ventil oben, Anschluss von unten nach unten



H = Bauhöhe  
L = Baulänge (inkl. Stopfen)  
N = Nabenabstand  
L<sub>2</sub> = Überstand Gewinde, 1/2" = 6, 3/8" = 12, 3/4" = 15  
+ = Entlüftung  
▲ = Entleerung

Masse in mm

**Ventilkenndaten:**

Spezialreguliertventil OV 1" (für 2-Säuler) bzw. OV 5/4" (für 3- bis 6-Säuler) wird werkseits eingebaut. Max. empfohlene Durchflussmenge 250 kg/h.

<sup>2)</sup> Nur gültig für Zehnder Thermostat LH2

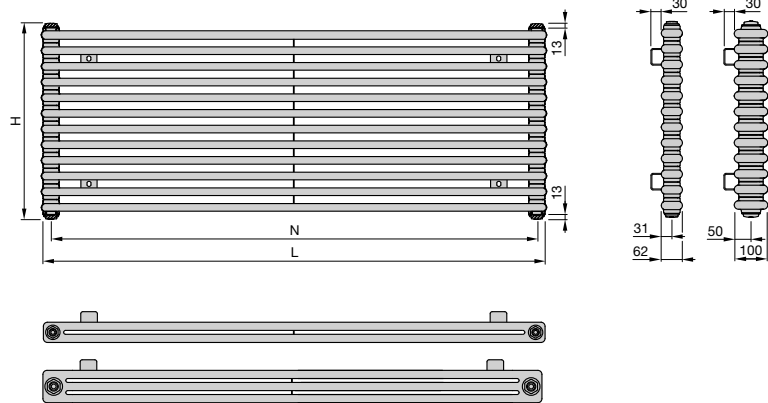
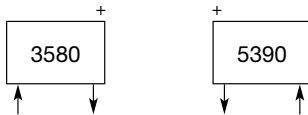
## Zehnder Charleston Turned

Anschlussart

Masszeichnungen: Vorderansicht, Seitenansicht und Draufsicht

**Normalanschlüsse bei Zweirohrsystemen**

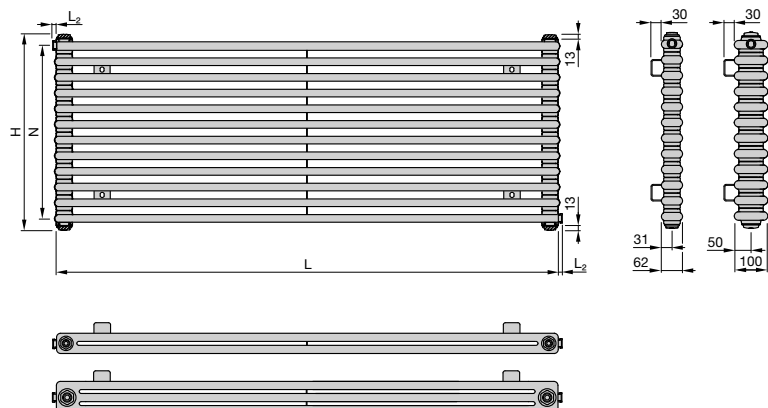
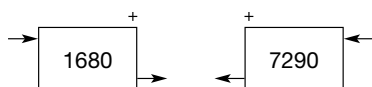
von unten nach unten

**Normalanschlüsse bei Zweirohrsystemen, mit Mehrpreis**

gleichseitig



wechselseitig



H = Bauhöhe (inkl. Stopfen)

L = Baulänge

N = Nabenabstand

 $L_2$  = Überstand Gewinde, 1280/7690 = 5 mm, 1680/7290 = 15 mm

+ = Entlüftung

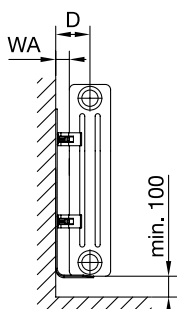
Masse in mm

mit Zehnder Easy Fix

Ausführung standard, weiss

| Abbildung | Skizze<br>Seitenansicht | Modell    |                  |                    |                    |
|-----------|-------------------------|-----------|------------------|--------------------|--------------------|
|           |                         | Anwendung | Abstand WA<br>mm | Konsolen<br>im Set | Bestell-Nr.<br>Set |

Befestigungsdetails für Zubehörset SMB (Zuordnung für Zehnder Charleston Clinic siehe Seite 32)

**Set SMB 30-75**

|            |        |
|------------|--------|
| Abstand D: |        |
| 2-Säuler   | 66 mm  |
| 3-Säuler   | 85 mm  |
| 4-Säuler   | 103 mm |
| 5-Säuler   | 122 mm |
| 6-Säuler   | 140 mm |

**H = 260 – 299**

alle Modelle

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 22  | 35 | 2 x SMB2T | 173 511 |
| L = 23 – 39 |    | 3 x SMB2T | 173 611 |
| L = 40 – 50 |    | 4 x SMB2T | 173 711 |
| L = 51 – 60 |    | 5 x SMB2T | 173 811 |

**H = 300 – 369**

alle Modelle

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 22  | 35 | 2 x SMB30 | 173 521 |
| L = 23 – 39 |    | 3 x SMB30 | 173 621 |
| L = 40 – 50 |    | 4 x SMB30 | 173 721 |
| L = 51 – 60 |    | 5 x SMB30 | 173 821 |

**H = 370 – 484**

alle Modelle

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 22  | 35 | 2 x SMB40 | 173 531 |
| L = 23 – 39 |    | 3 x SMB40 | 173 631 |
| L = 40 – 50 |    | 4 x SMB40 | 173 731 |
| L = 51 – 60 |    | 5 x SMB40 | 173 831 |

**H = 485 – 679**

alle Modelle

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 22  | 35 | 2 x SMB50 | 173 541 |
| L = 23 – 39 |    | 3 x SMB50 | 173 641 |
| L = 40 – 50 |    | 4 x SMB50 | 173 741 |
| L = 51 – 60 |    | 5 x SMB50 | 173 841 |

**H = 680 – 1000**

2- bis 4-Säuler

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 22  | 35 | 2 x SMB75 | 173 551 |
| L = 23 – 39 |    | 3 x SMB75 | 173 651 |
| L = 40 – 55 |    | 4 x SMB75 | 173 751 |
| L = 56 – 65 |    | 5 x SMB75 | 173 851 |

5- bis 6-Säuler

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 15  | 35 | 2 x SMB75 | 173 551 |
| L = 16 – 29 |    | 3 x SMB75 | 173 651 |
| L = 30 – 42 |    | 4 x SMB75 | 173 751 |
| L = 43 – 55 |    | 5 x SMB75 | 173 851 |

**H = 1001 – 1500**

2- bis 4-Säuler

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 15  | 35 | 2 x SMB2T | 173 511 |
| L = 16 – 30 |    | 3 x SMB2T | 173 611 |
| L = 31 – 45 |    | 4 x SMB2T | 173 711 |
| L = 46 – 60 |    | 5 x SMB2T | 173 811 |

5- bis 6-Säuler

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 10  | 35 | 2 x SMB2T | 173 511 |
| L = 11 – 20 |    | 3 x SMB2T | 173 611 |
| L = 21 – 30 |    | 4 x SMB2T | 173 711 |
| L = 31 – 40 |    | 5 x SMB2T | 173 811 |

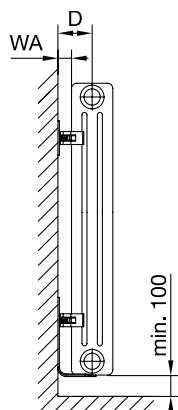
**H = 1501 – 2200**

2- bis 4-Säuler

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 11  | 35 | 2 x SMB2T | 173 511 |
| L = 12 – 21 |    | 3 x SMB2T | 173 611 |
| L = 22 – 31 |    | 4 x SMB2T | 173 711 |
| L = 32 – 41 |    | 5 x SMB2T | 173 811 |

5- bis 6-Säuler

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 10  | 35 | 2 x SMB2T | 173 511 |
| L = 11 – 16 |    | 3 x SMB2T | 173 611 |
| L = 17 – 21 |    | 4 x SMB2T | 173 711 |
| L = 22 – 27 |    | 5 x SMB2T | 173 811 |

**Set SMB 2T**

|            |        |
|------------|--------|
| Abstand D: |        |
| 2-Säuler   | 66 mm  |
| 3-Säuler   | 85 mm  |
| 4-Säuler   | 103 mm |
| 5-Säuler   | 122 mm |
| 6-Säuler   | 140 mm |

H = Bauhöhe des Heizkörpers in mm

L = Baulänge des Heizkörpers in Elementen

D = Mass Wand bis Mitte Anschluss

Ausführung standard, weiss

| Abbildung | Skizze<br>Seitenansicht | Modell <sup>1)</sup> |                  |                    |                    |
|-----------|-------------------------|----------------------|------------------|--------------------|--------------------|
|           |                         | Anwendung            | Abstand WA<br>mm | Konsolen<br>im Set | Bestell-Nr.<br>Set |

Zubehörsets BH, CVD1

Abstand D:

|          |        |
|----------|--------|
| 2-Säuler | 74 mm  |
| 3-Säuler | 93 mm  |
| 4-Säuler | 111 mm |
| 5-Säuler | 130 mm |
| 6-Säuler | 148 mm |

| alle Modelle                                            |    |                 |         |  |
|---------------------------------------------------------|----|-----------------|---------|--|
| Bauhöhe 260 – 1000 mm mit Sicherungsfeder <sup>2)</sup> |    |                 |         |  |
| L = 4 – 20 El.                                          | 43 | 4 x BH + CVD 1  | 774 411 |  |
| L = 21 – 40 El.                                         |    | 6 x BH + CVD 1  | 774 611 |  |
| L = 41 – 60 El.                                         |    | 8 x BH + CVD 1  | 774 811 |  |
| Bauhöhe 1100–1500 mm mit Sicherungsfeder                |    |                 |         |  |
| L = 4 – 20 El.                                          | 43 | 4 x BH + CVD 1  | 774 411 |  |
| L = 21 – 40 El.                                         |    | 6 x BH + CVD 1  | 774 811 |  |
| L = 41 – 60 El.                                         |    | 8 x BH + CVD 1  | 774 911 |  |
| 2- bis 5-Säuler                                         |    |                 |         |  |
| Bauhöhe 1600–2200 mm mit Sicherungsfeder                |    |                 |         |  |
| L = 4 – 10 El.                                          | 43 | 4 x BH + CVD 1  | 774 411 |  |
| L = 11 – 20 El.                                         |    | 6 x BH + CVD 1  | 774 611 |  |
| L = 21 – 30 El.                                         |    | 8 x BH + CVD 1  | 774 811 |  |
| L = 31 – 40 El.                                         |    | 10 x BH + CVD 1 | 774 911 |  |
| 6-Säuler                                                |    |                 |         |  |
| Bauhöhe 1600–2200 mm mit Sicherungsfeder                |    |                 |         |  |
| L = 4 – 10 El.                                          | 43 | 4 x BH + CVD 1  | 774 411 |  |
| L = 11 – 20 El.                                         |    | 8 x BH + CVD 1  | 774 811 |  |
| L = 21 – 30 El.                                         |    | 10 x BH + CVD 1 | 774 911 |  |
| L = 31 – 40 El.                                         |    | 14 x BH + CVD 1 | –       |  |

L = Baulänge des Heizkörpers in Elementen

D = Mass Wand bis Mitte Anschluss

<sup>1)</sup> Bei grösseren Modellen oder Baulängen ist auf eine maximale Belastung je Halter + Konsole von max. 50 kg zu achten.<sup>2)</sup> Bei Bauhöhen < 245 mm versetzte Montage notwendig.

## Ausführung horizontal

| Abbildung | Ausführung | Modell <sup>1)</sup> |                          |                      |
|-----------|------------|----------------------|--------------------------|----------------------|
|           |            | Anwendung            | Konsolen<br>Anzahl + Typ | Bestell-Nr.<br>Stück |

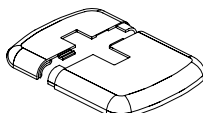
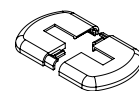
Befestigungsmöglichkeiten mit Zubehör (Zuordnung für Zehnder Charleston Clinic siehe Seite 34)

|                                                                                                                               |                                                                                             |                                                                               |                                                           |                                           |
|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------|
| <b>Wandkonsole AK</b><br>                    | für regulierbaren Wandabstand, kurze und lange Ausführung möglich, Standard: kurz, RAL 9016 | alle Modelle                                                                  |                                                           |                                           |
|                                                                                                                               |                                                                                             | Bauhöhen 260 – 1000 mm                                                        |                                                           |                                           |
|                                                                                                                               |                                                                                             | L = 4 – 20 El.<br>L = 21 – 40 El.<br>L = 41 – 60 El.                          | 4 x BH + AK 1<br>6 x BH + AK 1<br>8 x BH + AK 1           | Halter BH:<br>774 001                     |
|                                                                                                                               |                                                                                             | Bauhöhen 1100 – 1500 mm                                                       |                                                           |                                           |
|                                                                                                                               |                                                                                             | L = 4 – 20 El.<br>L = 21 – 40 El.<br>L = 41 – 60 El.                          | 4 x BH + AK 1<br>8 x BH + AK 1<br>10 x BH + AK 1          | Konsole AK 1:<br>796 011                  |
| <b>Bohrkonsole BKF</b><br>                   | zum Einschlagen, unterschiedliche Längen möglich, Standard: 150 mm, verzinkt                | alle Modelle                                                                  |                                                           |                                           |
|                                                                                                                               |                                                                                             | Bauhöhen 260 – 1000 mm                                                        |                                                           |                                           |
|                                                                                                                               |                                                                                             | L = 4 – 20 El.<br>L = 21 – 40 El.<br>L = 41 – 60 El.                          | 4 x BH + BKF 150<br>6 x BH + BKF 150<br>8 x BH + BKF 150  | Halter BH:<br>774 001                     |
|                                                                                                                               |                                                                                             | Bauhöhen 1100 – 1500 mm                                                       |                                                           |                                           |
|                                                                                                                               |                                                                                             | L = 4 – 20 El.<br>L = 21 – 40 El.<br>L = 41 – 60 El.                          | 4 x BH + BKF 150<br>8 x BH + BKF 150<br>10 x BH + BKF 150 | Konsole BKF 150:<br>768 022               |
| <b>Fusskonsole HFK</b><br>                 | zum Anschrauben auf Roh- oder Fertigboden, mit Schalldämmteil, Standard: RAL 9016           | alle Modelle                                                                  |                                                           |                                           |
|                                                                                                                               |                                                                                             | Bauhöhen 260 – 600 mm                                                         |                                                           |                                           |
|                                                                                                                               |                                                                                             | L = 4 – 20 El.<br>L = 21 – 40 El.<br>L = 41 – 60 El.<br>L = 61 – 80 El.       | 2 x HFK<br>3 x HFK<br>4 x HFK<br>5 x HFK                  | nach Höhe, siehe Preisliste               |
|                                                                                                                               |                                                                                             | <b>Fusskonsole angeschweisst</b>                                              |                                                           |                                           |
|                                                                                                                               |                                                                                             | max. Konstruktionshöhe 600 mm, im Farbton des Heizkörpers                     |                                                           |                                           |
|                                            | Höhenverstellbar oder fix für Montage auf Roh- oder Fertigfussboden geeignet                | 120 – 170 mm verstellbar<br>170 – 350 mm verstellbar<br>nach Mass verstellbar | Anzahl Konsolen = Befestigungsachsen am Heizkörper        |                                           |
|                                                                                                                               |                                                                                             | 150 mm fix<br>nach Mass fix                                                   |                                                           |                                           |
|                                                                                                                               |                                                                                             |                                                                               |                                                           |                                           |
| <b>Abdeckkappe</b><br>                     | Durchmesser 106 mm, für Rundrohre fix Ø 30 mm, für Rundrohre verstellbar Ø 25 mm            |                                                                               |                                                           |                                           |
|                                                                                                                               |                                                                                             | für Fusskonsole fix                                                           |                                                           | RAL 9016: 753 041<br>Sonderfarbe: 753 049 |
|                                                                                                                               |                                                                                             | für Fusskonsole verstellbar                                                   |                                                           | RAL 9016 753 031<br>Sonderfarbe: 753 039  |
|                                                                                                                               |                                                                                             |                                                                               |                                                           |                                           |
| <b>Doppelfusskonsole angeschweisst</b><br> | Fix für Montage auf Fertigfussboden geeignet                                                | 3- bis 6-Säuler                                                               |                                                           |                                           |
|                                                                                                                               |                                                                                             | max. Konstruktionshöhe 600 mm, im Farbton des Heizkörpers                     |                                                           |                                           |
|                                                                                                                               |                                                                                             | 75 mm fix<br>100 mm fix<br>150 mm fix                                         | Anzahl Konsolen = Befestigungsachsen am Heizkörper        |                                           |
|                                                                                                                               |                                                                                             |                                                                               |                                                           |                                           |

L = Baulänge des Heizkörpers in mm

<sup>1)</sup> Bei grösseren Modellen oder Baulängen ist auf eine maximale Belastung je Achse von 100 kg und je Halter + Konsole von 50 kg zu achten.

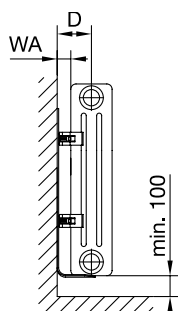
## Ausführung horizontal

| Abbildung                                                                                                        | Ausführung                                                                                                                                             | Modell <sup>1)</sup>  |                                                    |                      |
|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------|----------------------|
|                                                                                                                  |                                                                                                                                                        | Anwendung             | Konsolen<br>Anzahl + Typ                           | Bestell-Nr.<br>Stück |
|                                                                                                                  |                                                                                                                                                        |                       |                                                    |                      |
| <b>Standkonsole STF 2</b><br>  | Die benötigte Abmessung der Standkonsole richtet sich nach der Summe von Fussbodenaufbau, Bodenabstand und Bauhöhe des Heizkörpers, Standard: RAL 9016 | 2-Säuler              |                                                    |                      |
|                                                                                                                  |                                                                                                                                                        | Bauhöhen 260 – 600 mm |                                                    |                      |
|                                                                                                                  |                                                                                                                                                        | 360 mm                | Anzahl Konsolen = Befestigungsachsen am Heizkörper | 719 011              |
|                                                                                                                  |                                                                                                                                                        | 410 mm                |                                                    | 719 021              |
|                                                                                                                  |                                                                                                                                                        | 460 mm                |                                                    | 719 031              |
|                                                                                                                  |                                                                                                                                                        | 510 mm                |                                                    | 719 041              |
|                                                                                                                  |                                                                                                                                                        | 560 mm                |                                                    | 719 051              |
|                                                                                                                  |                                                                                                                                                        | 610 mm                |                                                    | 719 061              |
|                                                                                                                  |                                                                                                                                                        | 660 mm                |                                                    | 719 071              |
|                                                                                                                  |                                                                                                                                                        | 710 mm                |                                                    | 719 081              |
|                                                                                                                  |                                                                                                                                                        | 760 mm                |                                                    | 719 091              |
|                                                                                                                  |                                                                                                                                                        | 810 mm                |                                                    | 719 101              |
|                                                                                                                  |                                                                                                                                                        | 860 mm                |                                                    | 719 111              |
|                                                                                                                  |                                                                                                                                                        | 910 mm                |                                                    | 719 121              |
|                                                                                                                  |                                                                                                                                                        | 960 mm                |                                                    | 719 131              |
|                                                                                                                  |                                                                                                                                                        | 1010 mm               |                                                    | 719 141              |
|                                                                                                                  |                                                                                                                                                        | 1060 mm               |                                                    | 719 151              |
|                                                                                                                  |                                                                                                                                                        | 1110 mm               |                                                    | 719 161              |
|                                                                                                                  |                                                                                                                                                        | 1160 mm               |                                                    | 719 171              |
| <b>Standkonsole STF 3</b><br> | Die benötigte Abmessung der Standkonsole richtet sich nach der Summe von Fussbodenaufbau, Bodenabstand und Bauhöhe des Heizkörpers, Standard: RAL 9016 | 3- bis 6-Säuler       |                                                    |                      |
|                                                                                                                  |                                                                                                                                                        | Bauhöhen 260 – 600 mm |                                                    |                      |
|                                                                                                                  |                                                                                                                                                        | 360 mm                | Anzahl Konsolen = Befestigungsachsen am Heizkörper | 721 011              |
|                                                                                                                  |                                                                                                                                                        | 410 mm                |                                                    | 721 021              |
|                                                                                                                  |                                                                                                                                                        | 460 mm                |                                                    | 721 031              |
|                                                                                                                  |                                                                                                                                                        | 510 mm                |                                                    | 721 041              |
|                                                                                                                  |                                                                                                                                                        | 560 mm                |                                                    | 721 051              |
|                                                                                                                  |                                                                                                                                                        | 610 mm                |                                                    | 721 061              |
|                                                                                                                  |                                                                                                                                                        | 660 mm                |                                                    | 721 071              |
|                                                                                                                  |                                                                                                                                                        | 710 mm                |                                                    | 721 081              |
|                                                                                                                  |                                                                                                                                                        | 760 mm                |                                                    | 721 091              |
|                                                                                                                  |                                                                                                                                                        | 810 mm                |                                                    | 721 101              |
|                                                                                                                  |                                                                                                                                                        | 860 mm                |                                                    | 721 111              |
|                                                                                                                  |                                                                                                                                                        | 910 mm                |                                                    | 721 121              |
|                                                                                                                  |                                                                                                                                                        | 960 mm                |                                                    | 721 131              |
|                                                                                                                  |                                                                                                                                                        | 1010 mm               |                                                    | 721 141              |
|                                                                                                                  |                                                                                                                                                        | 1060 mm               |                                                    | 721 151              |
|                                                                                                                  |                                                                                                                                                        | 1110 mm               |                                                    | 721 161              |
|                                                                                                                  |                                                                                                                                                        | 1160 mm               |                                                    | 721 171              |
| <b>Abdeckkappe AD1</b><br>    | für Fussplatte zu Standkonsole STF, nachträglich montierbar, Standard: RAL 9016                                                                        |                       |                                                    |                      |
|                                                                                                                  |                                                                                                                                                        | 138 x 115 mm          |                                                    | 703 000              |
|                                                                                                                  |                                                                                                                                                        |                       |                                                    |                      |
| <b>Abdeckkappe AR</b><br>     | für Rechteckrohr zu Standkonsole STF, Standard: RAL 9016                                                                                               |                       |                                                    |                      |
|                                                                                                                  |                                                                                                                                                        | 72 x 52 mm            |                                                    | 704 000              |
|                                                                                                                  |                                                                                                                                                        |                       |                                                    |                      |

Ausführung standard, weiss

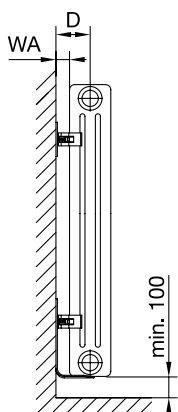
| Abbildung | Skizze<br>Seitenansicht | Modell    |                  |                    |                    |
|-----------|-------------------------|-----------|------------------|--------------------|--------------------|
|           |                         | Anwendung | Abstand WA<br>mm | Konsolen<br>im Set | Bestell-Nr.<br>Set |

Befestigungsdetails für Zubehörset SMB

**Set SMB 30-75**

Abstand D:

|          |        |
|----------|--------|
| 2-Säuler | 66 mm  |
| 3-Säuler | 85 mm  |
| 4-Säuler | 103 mm |
| 5-Säuler | 122 mm |
| 6-Säuler | 140 mm |

**Set SMB 30-75**

Abstand D:

|          |        |
|----------|--------|
| 2-Säuler | 66 mm  |
| 3-Säuler | 85 mm  |
| 4-Säuler | 103 mm |
| 5-Säuler | 122 mm |
| 6-Säuler | 140 mm |

**H = 260 – 299**

alle Modelle

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 16  | 35 | 2 x SMB2T | 173 511 |
| L = 17 – 27 |    | 3 x SMB2T | 173 611 |
| L = 28 – 40 |    | 4 x SMB2T | 173 711 |
| L = 41 – 55 |    | 5 x SMB2T | 173 811 |

**H = 300 – 369**

alle Modelle

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 16  | 35 | 2 x SMB30 | 173 521 |
| L = 17 – 27 |    | 3 x SMB30 | 173 621 |
| L = 28 – 40 |    | 4 x SMB30 | 173 721 |
| L = 41 – 55 |    | 5 x SMB30 | 173 821 |

**H = 370 – 484**

alle Modelle

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 16  | 35 | 2 x SMB40 | 173 531 |
| L = 17 – 27 |    | 3 x SMB40 | 173 631 |
| L = 28 – 40 |    | 4 x SMB40 | 173 731 |
| L = 41 – 55 |    | 5 x SMB40 | 173 831 |

**H = 485 – 679**

alle Modelle

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 16  | 35 | 2 x SMB50 | 173 541 |
| L = 17 – 27 |    | 3 x SMB50 | 173 641 |
| L = 28 – 40 |    | 4 x SMB50 | 173 741 |
| L = 41 – 55 |    | 5 x SMB50 | 173 841 |

**H = 680 – 1000**

alle Modelle

|             |  |           |         |
|-------------|--|-----------|---------|
| L = 4 – 14  |  | 2 x SMB75 | 173 551 |
| L = 15 – 27 |  | 3 x SMB75 | 173 651 |
| L = 28 – 40 |  | 4 x SMB75 | 173 751 |
| L = 41 – 55 |  | 5 x SMB75 | 173 851 |

**H = 1001 – 1500**

2- bis 4-Säuler

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 14  | 35 | 2 x SMB2T | 173 511 |
| L = 15 – 27 |    | 3 x SMB2T | 173 611 |
| L = 28 – 40 |    | 4 x SMB2T | 173 711 |
| L = 41 – 55 |    | 5 x SMB2T | 173 811 |

5- bis 6-Säuler

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 10  | 35 | 2 x SMB2T | 173 511 |
| L = 11 – 20 |    | 3 x SMB2T | 173 611 |
| L = 21 – 30 |    | 4 x SMB2T | 173 711 |
| L = 31 – 40 |    | 5 x SMB2T | 173 811 |

**H = 1501 – 2200**

2- bis 4-Säuler

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 11  | 35 | 2 x SMB2T | 173 511 |
| L = 12 – 21 |    | 3 x SMB2T | 173 611 |
| L = 22 – 31 |    | 4 x SMB2T | 173 711 |
| L = 32 – 41 |    | 5 x SMB2T | 173 811 |

5- bis 6-Säuler

|             |    |           |         |
|-------------|----|-----------|---------|
| L = 4 – 8   | 35 | 2 x SMB2T | 173 511 |
| L = 9 – 15  |    | 3 x SMB2T | 173 611 |
| L = 16 – 22 |    | 4 x SMB2T | 173 711 |
| L = 23 – 29 |    | 5 x SMB2T | 173 811 |

H = Bauhöhe des Heizkörpers in mm

L = Baulänge des Heizkörpers in Elementen

D = Mass Wand bis Mitte Anschluss

## Ausführung mit vergrössertem Elementabstand

| Abbildung | Skizze<br>Seitenansicht | Modell <sup>1)</sup> |                  |                    |                    |
|-----------|-------------------------|----------------------|------------------|--------------------|--------------------|
|           |                         | Anwendung            | Abstand WA<br>mm | Konsolen<br>im Set | Bestell-Nr.<br>Set |

## Zubehörsets BHK, CVD1

Abstand D:

|          |        |
|----------|--------|
| 2-Säuler | 70 mm  |
| 3-Säuler | 89 mm  |
| 4-Säuler | 107 mm |
| 5-Säuler | 126 mm |
| 6-Säuler | 144 mm |

| alle Modelle                               |    |                  |         |  |
|--------------------------------------------|----|------------------|---------|--|
| Bauhöhe 260 – 1500 mm mit Sicherungsfeder  |    |                  |         |  |
| L = 4 – 15 El.                             | 39 | 4 x BHK + CVD 1  | 775 411 |  |
| L = 16 – 30 El.                            |    | 6 x BHK + CVD 1  | 775 611 |  |
| L = 31 – 44 El.                            |    | 8 x BHK + CVD 1  | 775 811 |  |
| 2- bis 5-Säuler                            |    |                  |         |  |
| Bauhöhe 1600 – 2200 mm mit Sicherungsfeder |    |                  |         |  |
| L = 4 – 15 El.                             | 39 | 4 x BHK + CVD 1  | 775 411 |  |
| L = 16 – 23 El.                            |    | 6 x BHK + CVD 1  | 775 611 |  |
| L = 24 – 30 El.                            |    | 8 x BHK + CVD 1  | 775 811 |  |
| L = 31 – 36 El.                            |    | 10 x BHK + CVD 1 | 775 911 |  |
| 6-Säuler                                   |    |                  |         |  |
| Bauhöhe 1600 – 2200 mm mit Sicherungsfeder |    |                  |         |  |
| L = 4 – 7 El.                              | 39 | 4 x BHK + CVD 1  | 775 411 |  |
| L = 8 – 15 El.                             |    | 6 x BHK + CVD 1  | 775 611 |  |
| L = 16 – 23 El.                            |    | 8 x BHK + CVD 1  | 775 811 |  |
| L = 24 – 30 El.                            |    | 10 x BHK + CVD 1 | 775 911 |  |
| L = 31 – 36 El.                            |    | 12 x BHK + CVD 1 | –       |  |

L = Baulänge des Heizkörpers in Elementen

D = Mass Wand bis Mitte Anschluss

<sup>1)</sup> Bei grösseren Modellen oder Baulängen ist auf eine maximale Belastung je Halter + Konsole von 50 kg zu achten.<sup>2)</sup> Bei Bauhöhen < 245 mm versetzte Montage notwendig.

## Ausführung mit vergrössertem Elementabstand

| Abbildung | Ausführung | Modell <sup>1)</sup> |                          |                      |
|-----------|------------|----------------------|--------------------------|----------------------|
|           |            | Anwendung            | Konsolen<br>Anzahl + Typ | Bestell-Nr.<br>Stück |

## Weitere Befestigungsmöglichkeiten mit Zubehör

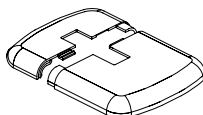
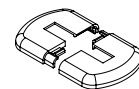
|                                                                                     |                                                                                             |                                                                               |                                                          |                                           |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------|
|    | für regulierbaren Wandabstand, kurze und lange Ausführung möglich, Standard: kurz, RAL 9016 | alle Modelle                                                                  |                                                          |                                           |
|                                                                                     |                                                                                             | Bauhöhe 260 – 1500 mm <sup>2)</sup>                                           |                                                          |                                           |
|                                                                                     |                                                                                             | L = 4 – 15 El.<br>L = 16 – 30 El.<br>L = 31 – 44 El.                          | 4 x BHK + AK 1<br>6 x BHK + AK 1<br>8 x BHK + AK 1       | Halter BHK:<br>775 011                    |
|                                                                                     |                                                                                             | 2- bis 5-Säuler                                                               |                                                          |                                           |
|                                                                                     |                                                                                             | Bauhöhe 1600 – 2200 mm                                                        |                                                          |                                           |
|   | zum Einschlagen, unterschiedliche Längen möglich, Standard: 150 mm, verzinkt                | alle Modelle                                                                  |                                                          |                                           |
|                                                                                     |                                                                                             | Bauhöhe 260 – 1500 mm <sup>2)</sup>                                           |                                                          |                                           |
|                                                                                     |                                                                                             | L = 4 – 15 El.<br>L = 16 – 30 El.<br>L = 31 – 44 El.                          | 4 x BHK + BKF150<br>6 x BHK + BKF150<br>8 x BHK + BKF150 | Halter BHK:<br>775 011                    |
|                                                                                     |                                                                                             | 2- bis 5-Säuler                                                               |                                                          |                                           |
|                                                                                     |                                                                                             | Bauhöhe 1600 – 2200 mm                                                        |                                                          |                                           |
|  | zum Anschrauben auf Roh- oder Fertigboden, mit Schalldämmteil, Standard: RAL 9016           | alle Modelle                                                                  |                                                          |                                           |
|                                                                                     |                                                                                             | Bauhöhen 260 – 600 mm                                                         |                                                          |                                           |
|                                                                                     |                                                                                             | L = 4 – 15 El.<br>L = 16 – 23 El.<br>L = 24 – 30 El.<br>L = 31 – 36 El.       | 2 x HFK<br>3 x HFK<br>4 x HFK<br>5 x HFK                 | nach Höhe, siehe Preisliste               |
|                                                                                     |                                                                                             |                                                                               |                                                          |                                           |
|                                                                                     |                                                                                             |                                                                               |                                                          |                                           |
| Fusskonsole angeschweisst                                                           |                                                                                             |                                                                               |                                                          |                                           |
|  | Durchmesser 106 mm, für Rundrohre fix Ø 30 mm, für Rundrohre verstellbar Ø 25 mm            | max. Bauhöhe 600 mm, im Farbton des Heizkörpers                               |                                                          |                                           |
|                                                                                     |                                                                                             | 120 – 170 mm verstellbar<br>170 – 350 mm verstellbar<br>nach Mass verstellbar | Anzahl Konsolen = Befestigungsachsen am Heizkörper       |                                           |
|                                                                                     |                                                                                             | 150 mm fix<br>nach Mass fix                                                   |                                                          |                                           |
|                                                                                     |                                                                                             |                                                                               |                                                          |                                           |
|                                                                                     |                                                                                             |                                                                               |                                                          |                                           |
|                                                                                     |                                                                                             | für Fusskonsole fix                                                           |                                                          | RAL 9016: 753 041<br>Sonderfarbe: 753 049 |
|                                                                                     |                                                                                             | für Fusskonsole verstellbar                                                   |                                                          | RAL 9016 753 031<br>Sonderfarbe: 753 039  |

L = Baulänge des Heizkörpers in Elementen  
D = Mass Wand bis Mitte Anschluss

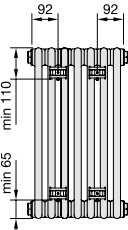
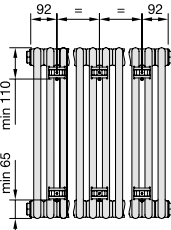
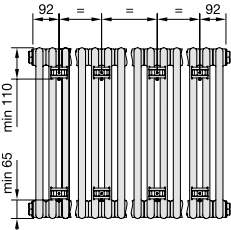
<sup>1)</sup> Bei grösseren Modellen oder Baulängen ist auf eine maximale Belastung je Befestigungsachse von max. 100 kg bzw. je Halter + Konsole von 50 kg zu achten.

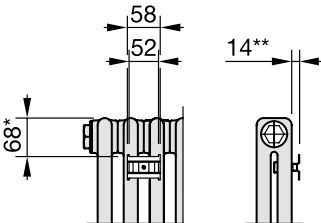
<sup>2)</sup> Bei Bauhöhen < 245 mm versetzte Montage notwendig.

## Ausführung horizontal

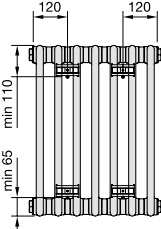
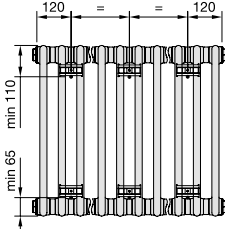
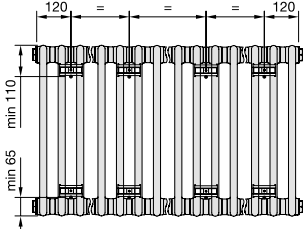
| Abbildung                                                                                                        | Ausführung                                                                                                                                                | Modell <sup>1)</sup>  |                                                          |                      |
|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------|----------------------|
|                                                                                                                  |                                                                                                                                                           | Anwendung             | Konsolen<br>Anzahl + Typ                                 | Bestell-Nr.<br>Stück |
|                                                                                                                  |                                                                                                                                                           |                       |                                                          |                      |
| <b>Standkonsole STF 2</b><br>  | Die benötigte Abmessung der Standkonsole richtet sich nach der Summe von Fussbodenaufbau, Bodenabstand und Bauhöhe des Heizkörpers,<br>Standard: RAL 9016 | 2-Säuler              |                                                          |                      |
|                                                                                                                  |                                                                                                                                                           | Bauhöhen 260 – 600 mm |                                                          |                      |
|                                                                                                                  |                                                                                                                                                           | 360 mm                | Anzahl Konsolen =<br>Befestigungsachsen<br>am Heizkörper | 605 011              |
|                                                                                                                  |                                                                                                                                                           | 410 mm                |                                                          | 605 021              |
|                                                                                                                  |                                                                                                                                                           | 460 mm                |                                                          | 605 031              |
|                                                                                                                  |                                                                                                                                                           | 510 mm                |                                                          | 605 041              |
|                                                                                                                  |                                                                                                                                                           | 560 mm                |                                                          | 605 051              |
|                                                                                                                  |                                                                                                                                                           | 610 mm                |                                                          | 605 061              |
|                                                                                                                  |                                                                                                                                                           | 660 mm                |                                                          | 605 071              |
|                                                                                                                  |                                                                                                                                                           | 710 mm                |                                                          | 605 081              |
|                                                                                                                  |                                                                                                                                                           | 760 mm                |                                                          | 605 091              |
|                                                                                                                  |                                                                                                                                                           | 810 mm                |                                                          | 605 101              |
|                                                                                                                  |                                                                                                                                                           | 860 mm                |                                                          | 605 111              |
|                                                                                                                  |                                                                                                                                                           | 910 mm                |                                                          | 605 121              |
|                                                                                                                  |                                                                                                                                                           | 960 mm                |                                                          | 605 131              |
|                                                                                                                  |                                                                                                                                                           | 1010 mm               |                                                          | 605 141              |
|                                                                                                                  |                                                                                                                                                           | 1060 mm               |                                                          | 605 151              |
|                                                                                                                  |                                                                                                                                                           | 1110 mm               |                                                          | 605 161              |
|                                                                                                                  |                                                                                                                                                           | 1160 mm               |                                                          | 605 171              |
| <b>Standkonsole STF 3</b><br> | Die benötigte Abmessung der Standkonsole richtet sich nach der Summe von Fussbodenaufbau, Bodenabstand und Bauhöhe des Heizkörpers,<br>Standard: RAL 9016 | 3- bis 6-Säuler       |                                                          |                      |
|                                                                                                                  |                                                                                                                                                           | Bauhöhen 260 – 600 mm |                                                          |                      |
|                                                                                                                  |                                                                                                                                                           | 360 mm                | Anzahl Konsolen =<br>Befestigungsachsen<br>am Heizkörper | 609 011              |
|                                                                                                                  |                                                                                                                                                           | 410 mm                |                                                          | 609 021              |
|                                                                                                                  |                                                                                                                                                           | 460 mm                |                                                          | 609 031              |
|                                                                                                                  |                                                                                                                                                           | 510 mm                |                                                          | 609 041              |
|                                                                                                                  |                                                                                                                                                           | 560 mm                |                                                          | 609 051              |
|                                                                                                                  |                                                                                                                                                           | 610 mm                |                                                          | 609 061              |
|                                                                                                                  |                                                                                                                                                           | 660 mm                |                                                          | 609 071              |
|                                                                                                                  |                                                                                                                                                           | 710 mm                |                                                          | 609 081              |
|                                                                                                                  |                                                                                                                                                           | 760 mm                |                                                          | 609 091              |
|                                                                                                                  |                                                                                                                                                           | 810 mm                |                                                          | 609 101              |
|                                                                                                                  |                                                                                                                                                           | 860 mm                |                                                          | 609 111              |
|                                                                                                                  |                                                                                                                                                           | 910 mm                |                                                          | 609 121              |
|                                                                                                                  |                                                                                                                                                           | 960 mm                |                                                          | 609 131              |
|                                                                                                                  |                                                                                                                                                           | 1010 mm               |                                                          | 609 141              |
|                                                                                                                  |                                                                                                                                                           | 1060 mm               |                                                          | 609 151              |
|                                                                                                                  |                                                                                                                                                           | 1110 mm               |                                                          | 609 161              |
|                                                                                                                  |                                                                                                                                                           | 1160 mm               |                                                          | 609 171              |
| <b>Abdeckkappe AD1</b><br>    | für Fussplatte zu Standkonsole STF,<br>nachträglich montierbar,<br>Standard: RAL 9016                                                                     |                       |                                                          |                      |
|                                                                                                                  |                                                                                                                                                           | 138 x 115 mm          |                                                          | 703 000              |
|                                                                                                                  |                                                                                                                                                           |                       |                                                          |                      |
| <b>Abdeckkappe AR</b><br>     | für Rechteckrohr zu Standkonsole STF,<br>Standard: RAL 9016                                                                                               |                       |                                                          |                      |
|                                                                                                                  |                                                                                                                                                           | 72 x 52 mm            |                                                          | 704 000              |
|                                                                                                                  |                                                                                                                                                           |                       |                                                          |                      |

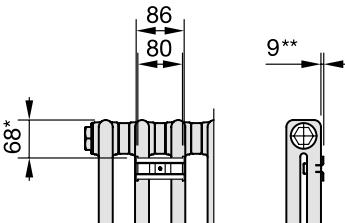
Ausführung Charleston, Massangaben für die Bohrungen im Einsatz von CVD Konsolen (oberes Bohrloch)

| Anzahl Befestigungen                                                              | 2 Achsen / 4 Konsolen                                                             | 3 Achsen / 6 Konsolen                                                              | 4 Achsen / 8 Konsolen                                                               |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| Detail Aufhängung                                                                 |                                                                                   |                                                                                    |                                                                                     |



Ausführung Charleston Clinic, Massangaben für die Bohrungen im Einsatz von CVD Konsolen (oberes Bohrloch)

| Anzahl Befestigungen                                                                | 2 Achsen / 4 Konsolen                                                               | 3 Achsen / 6 Konsolen                                                                | 4 Achsen / 8 Konsolen                                                                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |
| Detail Aufhängung                                                                   |                                                                                     |                                                                                      |                                                                                       |

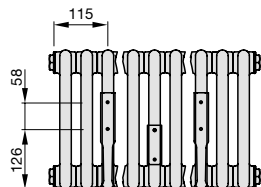
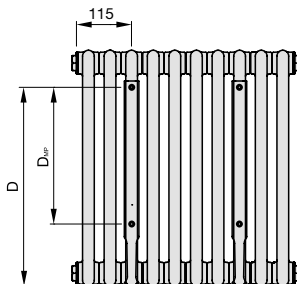
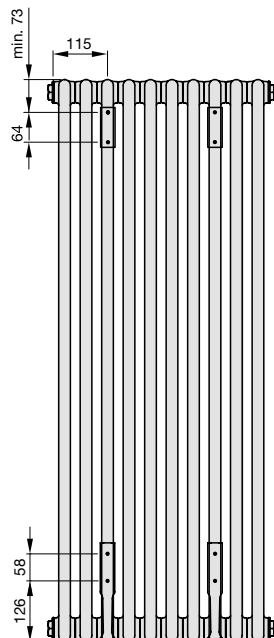


Anzahl Befestigungsachsen richtet sich nach Baulänge Heizkörper, siehe Seite 24 ff.  
Bei Montage mit 3 Befestigungsachsen und ungerader Elementanzahl ist die mittlere Konsole 23 mm versetzt (bei Ausführung Clinic 33 mm)

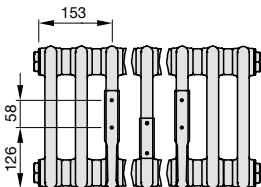
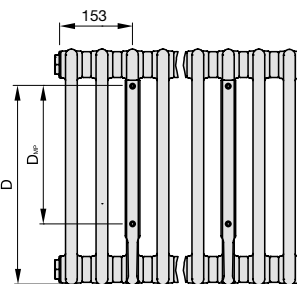
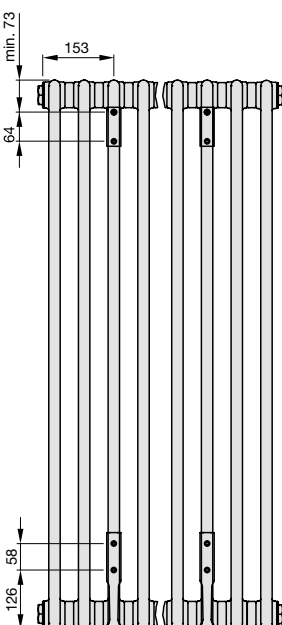
- = Lage der Bohrung
- L = Baulänge
- H = Bauhöhe
- \* = kleinstes mögliches Mass
- \*\* = Vorderkante Halter bis Heizkörper

Masse in mm

## Ausführung Charleston, Massangaben für die Bohrungen bei Einsatz von Easy Fix Konsolen

| für Bauhöhe<br>mm                                                                 | SMB2T<br>H = 260 – 299                                                            | SMB 30-75<br>H = 300 – 1000                                                                                                                                                                                                                                                                                                                                         | SMB 2T<br>H > 1001 – 3000 |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------|---|-----------|-----|-----|-----------|-----|-----|-----------|-----|-----|------------|-----|-----|--------------------------------------------------------------------------------------|
|  |  |  <table><tr><th>H</th><th>D<sub>MP</sub></th><th>D</th></tr><tr><td>300 – 369</td><td>135</td><td>241</td></tr><tr><td>370 – 484</td><td>205</td><td>311</td></tr><tr><td>485 – 679</td><td>310</td><td>416</td></tr><tr><td>680 – 1000</td><td>519</td><td>625</td></tr></table> | H                         | D <sub>MP</sub> | D | 300 – 369 | 135 | 241 | 370 – 484 | 205 | 311 | 485 – 679 | 310 | 416 | 680 – 1000 | 519 | 625 |  |
| H                                                                                 | D <sub>MP</sub>                                                                   | D                                                                                                                                                                                                                                                                                                                                                                   |                           |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                      |
| 300 – 369                                                                         | 135                                                                               | 241                                                                                                                                                                                                                                                                                                                                                                 |                           |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                      |
| 370 – 484                                                                         | 205                                                                               | 311                                                                                                                                                                                                                                                                                                                                                                 |                           |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                      |
| 485 – 679                                                                         | 310                                                                               | 416                                                                                                                                                                                                                                                                                                                                                                 |                           |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                      |
| 680 – 1000                                                                        | 519                                                                               | 625                                                                                                                                                                                                                                                                                                                                                                 |                           |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                      |

## Ausführung Charleston Clinic, Massangaben für die Bohrungen bei Einsatz von Easy Fix Konsolen

| für Bauhöhe<br>mm                                                                   | SMB2T<br>H = 260 – 299                                                              | SMB 30–75<br>H = 300 – 1000                                                                                                                                                                                                                                                                                                                                           | SMB2T<br>H > 1001 – 3000 |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------|---|-----------|-----|-----|-----------|-----|-----|-----------|-----|-----|------------|-----|-----|---------------------------------------------------------------------------------------|
|  |  |  <table><tr><th>H</th><th>D<sub>MP</sub></th><th>D</th></tr><tr><td>300 – 369</td><td>135</td><td>241</td></tr><tr><td>370 – 484</td><td>205</td><td>311</td></tr><tr><td>485 – 679</td><td>310</td><td>416</td></tr><tr><td>680 – 1000</td><td>519</td><td>625</td></tr></table> | H                        | D <sub>MP</sub> | D | 300 – 369 | 135 | 241 | 370 – 484 | 205 | 311 | 485 – 679 | 310 | 416 | 680 – 1000 | 519 | 625 |  |
| H                                                                                   | D <sub>MP</sub>                                                                     | D                                                                                                                                                                                                                                                                                                                                                                     |                          |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                       |
| 300 – 369                                                                           | 135                                                                                 | 241                                                                                                                                                                                                                                                                                                                                                                   |                          |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                       |
| 370 – 484                                                                           | 205                                                                                 | 311                                                                                                                                                                                                                                                                                                                                                                   |                          |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                       |
| 485 – 679                                                                           | 310                                                                                 | 416                                                                                                                                                                                                                                                                                                                                                                   |                          |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                       |
| 680 – 1000                                                                          | 519                                                                                 | 625                                                                                                                                                                                                                                                                                                                                                                   |                          |                 |   |           |     |     |           |     |     |           |     |     |            |     |     |                                                                                       |

H = Bauhöhe Heizkörper

Masse in mm

• = Lage der Bohrung

D = Masse von Unterkante Heizkörper bis oberes Bohrloch

D<sub>MP</sub> = Abstand Bohrlöcher

# Zehnder Charleston, Zehnder Charleston Clinic

## Hochdruckausführung max. 18 bar (nicht bei Completto-Ausführung)

mit angeschweissten Stopfen:

mit angeschweissten Stopfen und Zuganker

bei Heizkörpern aus mehreren Blöcken zusätzlich je geschweisste Nippelstelle

## Einsatzrohr

Bei gleichseitig angeschlossenen Zehnder Charleston wird werkseits ab folgenden Elementzahlen bzw. Baulängen ein Vorlauf-Einsatzrohr auf  $\frac{2}{3}$  der Heizkörperlänge eingebaut, um die Einhaltung der im Katalog angegebenen Wärmeleistungen zu garantieren.

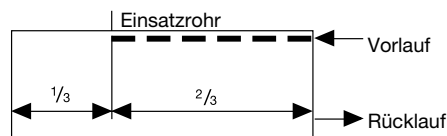
2-Säuler ab 87 Glieder = Baulänge 4002 mm

3-Säuler ab 85 Glieder = Baulänge 3910 mm

4-Säuler ab 81 Glieder = Baulänge 3726 mm

5-Säuler ab 71 Glieder = Baulänge 3266 mm

6-Säuler ab 55 Glieder = Baulänge 2530 mm



**Zwischen-Bauhöhen** Abrechnung nach nächstgrösserer Katalog-Bauhöhe plus zusätzlicher Mehrpreis gem. Preisliste

**Ausführungen gewinkelt oder gebogen** (siehe Seite 33)

**Ausführungen über Bauhöhe 3000 mm**

**Aufhängebügel angeschweisst**

## Werkseitig genippelte Heizkörper in Überlänge

Heizkörper in Baulängen oberhalb der auf Seite 4 genannten max. Elementzahl können in Teilblöcken geliefert und müssen bauseits zusammengeknüpft werden. Die passenden Nippel (für 2-Säuler 1"; für 3- bis 6-Säuler  $\frac{1}{4}$ ")

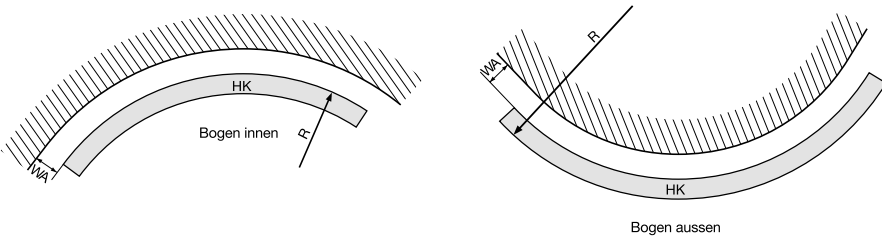
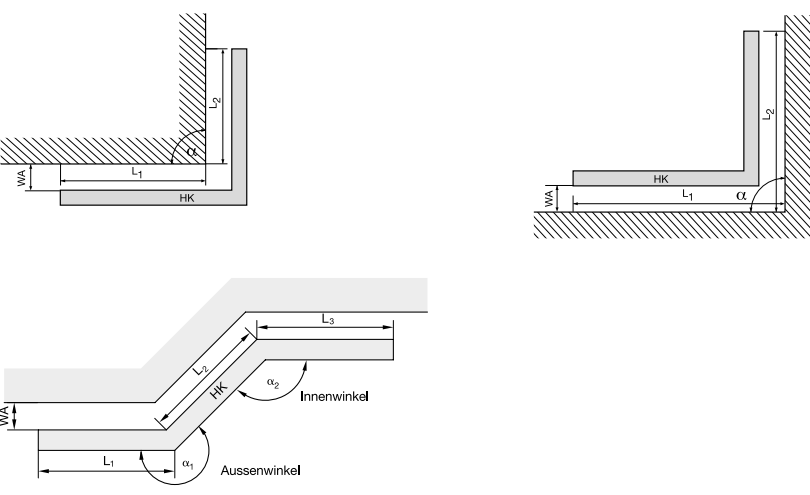
werden kostenlos mitgeliefert. Als Dichtungen dürfen nur die ebenfalls mitgelieferten Hartfaserdichtungen eingesetzt werden, Anzugsmoment ca. 215 Nm. Ausführung Completto mit Ventileinbau unten kann bei Überlänge nur werkseits genippelt werden, bauseits nicht möglich

## Galvanische Verzinkung (Maximale Abmessungen 3000 x 850 x 450 mm)

Verzinkung mit anschliessender Thermo-Lackierung

## Completto-Ausführung

mit Ventileinsätzen für Klemmverschluss (Danfoss-Thermostat) statt M 30 x 1,5 Gewindeanschluss

| Gebogene Ausführung                                                                                                                                                                                                                                                                                   |                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Ausführung                                                                                                                                                                                                                                                                                            | Skizze / Schablone                                                                  |
| <p>Zehnder Charleston sind mit folgenden minimalen äusseren Krümmungsradien lieferbar:</p> <p>2-Säuler: 400 mm<br/> 3-Säuler: 650 mm<br/> 4-Säuler: 750 mm<br/> 5-Säuler: 900 mm<br/> 6-Säuler: 1000 mm</p> <p>Bei Zehnder Charleston Completto werden die ersten drei Elemente nicht mitgebogen.</p> |   |
| Gewinkelte Ausführung                                                                                                                                                                                                                                                                                 |                                                                                     |
| <p>Sonderausführung gewinkelt lieferbar von 90° bis 179°. Bei Preisanfrage Massskizze mit folgenden Angaben beifügen.<br/> Masse L1, L2, L3 in mm,<br/> Winkel <math>\alpha_1</math>, <math>\alpha_2</math> in Grad.<br/> Bei Bestellung stabile Schablone zur Verfügung stellen.</p>                 |  |

Bei Bestellung oder Preisanfragen von gebogenen und gewinkelten Heizkörpern bitte Schablone oder Massskizze mit allen in den Skizzen angegebenen Massen beilegen.

HK = Heizkörper  
WA = Wandabstand  
R = Radius  
 $\alpha_1$ ,  $\alpha_2$  = Winkel (°)  
L1, L2, L3 = Längen

Masse in mm

## Zehnder Charleston

Die Zehnder Mehrsäuler sind besonders vielfältig.  
Rufen Sie uns an, wir beraten Sie gerne.

Gebogene Ausführung



Zehnder Charleston Mirror



Spezialanfertigung zum Kreis

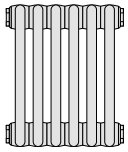
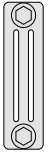
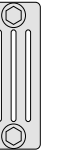
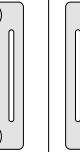
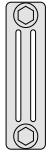
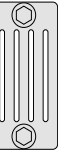
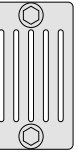


Bankausführung



## Zehnder Charleston

$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

| Bauhöhe 260 – 300 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                      |  |  |  |  |  |  |  |  |  |  |
| Modell               | 2026                                                                              | 3026                                                                              | 4026                                                                              | 5026                                                                              | 6026                                                                              | 2030                                                                              | 3030                                                                                | 4030                                                                                | 5030                                                                                | 6030                                                                                |
| H mm                 | 260                                                                               | 260                                                                               | 260                                                                               | 260                                                                               | 260                                                                               | 292                                                                               | 300                                                                                 | 300                                                                                 | 300                                                                                 | 300                                                                                 |
| T mm                 | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                 | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                  | 46                                                                                  | 46                                                                                  | 46                                                                                  |
| A m²                 | 0.04                                                                              | 0.06                                                                              | 0.08                                                                              | 0.1                                                                               | 0.12                                                                              | 0.04                                                                              | 0.07                                                                                | 0.09                                                                                | 0.12                                                                                | 0.14                                                                                |
| V dm³                | 0.3                                                                               | 0.5                                                                               | 0.7                                                                               | 0.8                                                                               | 1                                                                                 | 0.4                                                                               | 0.6                                                                                 | 0.7                                                                                 | 0.9                                                                                 | 1.1                                                                                 |
| M kg                 | 0.4                                                                               | 0.7                                                                               | 1                                                                                 | 1.2                                                                               | 1.4                                                                               | 0.5                                                                               | 0.8                                                                                 | 1.1                                                                                 | 1.3                                                                                 | 1.6                                                                                 |
| s <sub>k</sub> %     | 25                                                                                | 21                                                                                | 18                                                                                | 17                                                                                | 18                                                                                | 25                                                                                | 20                                                                                  | 18                                                                                  | 16                                                                                  | 15                                                                                  |
| q <sub>ms</sub> kg/h | 1.8                                                                               | 2.4                                                                               | 3.1                                                                               | 3.9                                                                               | 4.6                                                                               | 2.0                                                                               | 2.8                                                                                 | 3.6                                                                                 | 4.5                                                                                 | 5.3                                                                                 |
| Exp. n               | 1.27                                                                              | 1.28                                                                              | 1.28                                                                              | 1.28                                                                              | 1.28                                                                              | 1.27                                                                              | 1.28                                                                                | 1.28                                                                                | 1.28                                                                                | 1.28                                                                                |
| Δ TK                 | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                   | 26.6                                                                              | 35.2                                                                              | 46.1                                                                              | 57.0                                                                              | 67.6                                                                              | 29.7                                                                              | 40.4                                                                                | 52.9                                                                                | 65.3                                                                                | 77.4                                                                                |
| 55                   | 23.8                                                                              | 31.5                                                                              | 41.2                                                                              | 51.0                                                                              | 60.4                                                                              | 26.6                                                                              | 36.2                                                                                | 47.3                                                                                | 58.4                                                                                | 69.3                                                                                |
| 50                   | 21.1                                                                              | 27.9                                                                              | 36.5                                                                              | 45.1                                                                              | 53.5                                                                              | 23.6                                                                              | 32.0                                                                                | 41.9                                                                                | 51.7                                                                                | 61.3                                                                                |
| 49                   | 20.6                                                                              | 27.2                                                                              | 35.6                                                                              | 43.9                                                                              | 52.1                                                                              | 23.0                                                                              | 31.2                                                                                | 40.8                                                                                | 50.4                                                                                | 59.7                                                                                |
| 48                   | 20.0                                                                              | 26.5                                                                              | 34.6                                                                              | 42.8                                                                              | 50.8                                                                              | 22.4                                                                              | 30.4                                                                                | 39.8                                                                                | 49.1                                                                                | 58.2                                                                                |
| 47                   | 19.5                                                                              | 25.8                                                                              | 33.7                                                                              | 41.7                                                                              | 49.4                                                                              | 21.8                                                                              | 29.6                                                                                | 38.7                                                                                | 47.8                                                                                | 56.6                                                                                |
| 46                   | 19.0                                                                              | 25.1                                                                              | 32.8                                                                              | 40.5                                                                              | 48.1                                                                              | 21.2                                                                              | 28.8                                                                                | 37.7                                                                                | 46.5                                                                                | 55.1                                                                                |
| 45                   | 18.5                                                                              | 24.4                                                                              | 31.9                                                                              | 39.4                                                                              | 46.8                                                                              | 20.6                                                                              | 28.0                                                                                | 36.6                                                                                | 45.2                                                                                | 53.6                                                                                |
| 44                   | 17.9                                                                              | 23.7                                                                              | 31.0                                                                              | 38.3                                                                              | 45.4                                                                              | 20.1                                                                              | 27.2                                                                                | 35.6                                                                                | 43.9                                                                                | 52.0                                                                                |
| 43                   | 17.4                                                                              | 23.0                                                                              | 30.1                                                                              | 37.2                                                                              | 44.1                                                                              | 19.5                                                                              | 26.4                                                                                | 34.5                                                                                | 42.6                                                                                | 50.5                                                                                |
| 42                   | 16.9                                                                              | 22.3                                                                              | 29.2                                                                              | 36.1                                                                              | 42.8                                                                              | 18.9                                                                              | 25.6                                                                                | 33.5                                                                                | 41.4                                                                                | 49.0                                                                                |
| 41                   | 16.4                                                                              | 21.6                                                                              | 28.3                                                                              | 35.0                                                                              | 41.5                                                                              | 18.3                                                                              | 24.8                                                                                | 32.5                                                                                | 40.1                                                                                | 47.5                                                                                |
| 40                   | 15.9                                                                              | 21.0                                                                              | 27.4                                                                              | 33.9                                                                              | 40.2                                                                              | 17.8                                                                              | 24.0                                                                                | 31.5                                                                                | 38.9                                                                                | 46.1                                                                                |
| 39                   | 15.4                                                                              | 20.3                                                                              | 26.6                                                                              | 32.8                                                                              | 38.9                                                                              | 17.2                                                                              | 23.3                                                                                | 30.5                                                                                | 37.6                                                                                | 44.6                                                                                |
| 38                   | 14.9                                                                              | 19.6                                                                              | 25.7                                                                              | 31.7                                                                              | 37.7                                                                              | 16.7                                                                              | 22.5                                                                                | 29.5                                                                                | 36.4                                                                                | 43.1                                                                                |
| 37                   | 14.4                                                                              | 19.0                                                                              | 24.8                                                                              | 30.7                                                                              | 36.4                                                                              | 16.1                                                                              | 21.8                                                                                | 28.5                                                                                | 35.2                                                                                | 41.7                                                                                |
| 36                   | 13.9                                                                              | 18.3                                                                              | 24.0                                                                              | 29.6                                                                              | 35.1                                                                              | 15.5                                                                              | 21.0                                                                                | 27.5                                                                                | 34.0                                                                                | 40.3                                                                                |
| 35                   | 13.4                                                                              | 17.7                                                                              | 23.1                                                                              | 28.6                                                                              | 33.9                                                                              | 15.0                                                                              | 20.3                                                                                | 26.5                                                                                | 32.8                                                                                | 38.8                                                                                |
| 34                   | 12.9                                                                              | 17.0                                                                              | 22.3                                                                              | 27.5                                                                              | 32.7                                                                              | 14.5                                                                              | 19.5                                                                                | 25.6                                                                                | 31.6                                                                                | 37.4                                                                                |
| 33                   | 12.4                                                                              | 16.4                                                                              | 21.4                                                                              | 26.5                                                                              | 31.4                                                                              | 13.9                                                                              | 18.8                                                                                | 24.6                                                                                | 30.4                                                                                | 36.0                                                                                |
| 32                   | 12.0                                                                              | 15.8                                                                              | 20.6                                                                              | 25.5                                                                              | 30.2                                                                              | 13.4                                                                              | 18.1                                                                                | 23.7                                                                                | 29.2                                                                                | 34.6                                                                                |
| 31                   | 11.5                                                                              | 15.1                                                                              | 19.8                                                                              | 24.5                                                                              | 29.0                                                                              | 12.9                                                                              | 17.4                                                                                | 22.7                                                                                | 28.0                                                                                | 33.2                                                                                |
| 30                   | 11.0                                                                              | 14.5                                                                              | 19.0                                                                              | 23.5                                                                              | 27.8                                                                              | 12.3                                                                              | 16.6                                                                                | 21.8                                                                                | 26.9                                                                                | 31.9                                                                                |
| 29                   | 10.6                                                                              | 13.9                                                                              | 18.2                                                                              | 22.5                                                                              | 26.6                                                                              | 11.8                                                                              | 15.9                                                                                | 20.9                                                                                | 25.7                                                                                | 30.5                                                                                |
| 28                   | 10.1                                                                              | 13.3                                                                              | 17.4                                                                              | 21.5                                                                              | 25.5                                                                              | 11.3                                                                              | 15.2                                                                                | 19.9                                                                                | 24.6                                                                                | 29.2                                                                                |
| 27                   | 9.6                                                                               | 12.7                                                                              | 16.6                                                                              | 20.5                                                                              | 24.3                                                                              | 10.8                                                                              | 14.5                                                                                | 19.0                                                                                | 23.5                                                                                | 27.9                                                                                |
| 26                   | 9.2                                                                               | 12.1                                                                              | 15.8                                                                              | 19.5                                                                              | 23.2                                                                              | 10.3                                                                              | 13.9                                                                                | 18.1                                                                                | 22.4                                                                                | 26.5                                                                                |
| 25                   | 8.7                                                                               | 11.5                                                                              | 15.0                                                                              | 18.6                                                                              | 22.0                                                                              | 9.8                                                                               | 13.2                                                                                | 17.3                                                                                | 21.3                                                                                | 25.2                                                                                |
| 24                   | 8.3                                                                               | 10.9                                                                              | 14.3                                                                              | 17.6                                                                              | 20.9                                                                              | 9.3                                                                               | 12.5                                                                                | 16.4                                                                                | 20.2                                                                                | 24.0                                                                                |
| 23                   | 7.9                                                                               | 10.3                                                                              | 13.5                                                                              | 16.7                                                                              | 19.8                                                                              | 8.8                                                                               | 11.8                                                                                | 15.5                                                                                | 19.1                                                                                | 22.7                                                                                |
| 22                   | 7.4                                                                               | 9.8                                                                               | 12.8                                                                              | 15.8                                                                              | 18.7                                                                              | 8.3                                                                               | 11.2                                                                                | 14.6                                                                                | 18.1                                                                                | 21.4                                                                                |
| 21                   | 7.0                                                                               | 9.2                                                                               | 12.0                                                                              | 14.9                                                                              | 17.6                                                                              | 7.8                                                                               | 10.5                                                                                | 13.8                                                                                | 17.0                                                                                | 20.2                                                                                |
| 20                   | 6.6                                                                               | 8.6                                                                               | 11.3                                                                              | 14.0                                                                              | 16.6                                                                              | 7.4                                                                               | 9.9                                                                                 | 13.0                                                                                | 16.0                                                                                | 19.0                                                                                |
| 18                   | 5.8                                                                               | 7.5                                                                               | 9.9                                                                               | 12.2                                                                              | 14.5                                                                              | 6.4                                                                               | 8.7                                                                                 | 11.3                                                                                | 14.0                                                                                | 16.6                                                                                |
| 16                   | 5.0                                                                               | 6.5                                                                               | 8.5                                                                               | 10.5                                                                              | 12.4                                                                              | 5.6                                                                               | 7.4                                                                                 | 9.7                                                                                 | 12.0                                                                                | 14.3                                                                                |
| 14                   | 4.2                                                                               | 5.5                                                                               | 7.2                                                                               | 8.8                                                                               | 10.5                                                                              | 4.7                                                                               | 6.3                                                                                 | 8.2                                                                                 | 10.1                                                                                | 12.0                                                                                |
| 12                   | 3.4                                                                               | 4.5                                                                               | 5.9                                                                               | 7.3                                                                               | 8.6                                                                               | 3.9                                                                               | 5.2                                                                                 | 6.7                                                                                 | 8.3                                                                                 | 9.9                                                                                 |
| 10                   | 2.7                                                                               | 3.6                                                                               | 4.7                                                                               | 5.7                                                                               | 6.8                                                                               | 3.1                                                                               | 4.1                                                                                 | 5.3                                                                                 | 6.6                                                                                 | 7.8                                                                                 |

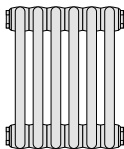
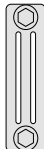
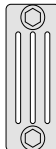
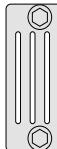
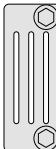
# Zehnder Charleston

 $\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$ 

| Bauhöhe 342 – 400 mm |      |      |      |      |      |      |      |      |      |       |
|----------------------|------|------|------|------|------|------|------|------|------|-------|
|                      |      |      |      |      |      |      |      |      |      |       |
| Modell               | 2035 | 3035 | 4035 | 5035 | 6035 | 2040 | 3040 | 4040 | 5040 | 6040  |
| H mm                 | 342  | 350  | 350  | 350  | 350  | 392  | 400  | 400  | 400  | 400   |
| T mm                 | 62   | 100  | 136  | 173  | 210  | 62   | 100  | 136  | 173  | 210   |
| X mm                 | 46   | 46   | 46   | 46   | 46   | 46   | 46   | 46   | 46   | 46    |
| A m²                 | 0.05 | 0.08 | 0.11 | 0.13 | 0.16 | 0.06 | 0.09 | 0.12 | 0.15 | 0.19  |
| V dm³                | 0.4  | 0.6  | 0.8  | 1    | 1.2  | 0.4  | 0.7  | 0.9  | 1.1  | 1.3   |
| M kg                 | 0.6  | 0.9  | 1.3  | 1.5  | 1.8  | 0.6  | 1    | 1.3  | 1.7  | 2.0   |
| s <sub>k</sub> %     | 24   | 20   | 17   | 15   | 14   | 25   | 19   | 16   | 15   | 14    |
| q <sub>ms</sub> kg/h | 2.4  | 3.2  | 4.2  | 5.2  | 6.1  | 2.7  | 3.6  | 4.7  | 5.8  | 6.9   |
| Exp. n               | 1.26 | 1.28 | 1.28 | 1.28 | 1.28 | 1.26 | 1.28 | 1.28 | 1.28 | 1.28  |
| Δ TK                 | Watt | Watt | Watt | Watt | Watt | Watt | Watt | Watt | Watt | Watt  |
| 60                   | 34.6 | 46.7 | 61.2 | 75.6 | 89.7 | 39.3 | 52.9 | 69.3 | 85.7 | 101.7 |
| 55                   | 31.0 | 41.8 | 54.8 | 67.7 | 80.2 | 35.2 | 47.3 | 62.0 | 76.7 | 90.9  |
| 50                   | 27.5 | 37.0 | 48.5 | 59.9 | 71.0 | 31.2 | 41.9 | 54.9 | 67.9 | 80.5  |
| 49                   | 26.8 | 36.1 | 47.3 | 58.4 | 69.2 | 30.4 | 40.8 | 53.5 | 66.2 | 78.4  |
| 48                   | 26.1 | 35.1 | 46.0 | 56.9 | 67.4 | 29.6 | 39.8 | 52.1 | 64.4 | 76.4  |
| 47                   | 25.4 | 34.2 | 44.8 | 55.3 | 65.6 | 28.9 | 38.7 | 50.7 | 62.7 | 74.4  |
| 46                   | 24.8 | 33.3 | 43.6 | 53.8 | 63.8 | 28.1 | 37.7 | 49.3 | 61.0 | 72.4  |
| 45                   | 24.1 | 32.3 | 42.4 | 52.3 | 62.0 | 27.3 | 36.6 | 48.0 | 59.3 | 70.3  |
| 44                   | 23.4 | 31.4 | 41.2 | 50.9 | 60.3 | 26.6 | 35.6 | 46.6 | 57.7 | 68.3  |
| 43                   | 22.7 | 30.5 | 40.0 | 49.4 | 58.5 | 25.8 | 34.5 | 45.3 | 56.0 | 66.4  |
| 42                   | 22.1 | 29.6 | 38.8 | 47.9 | 56.8 | 25.0 | 33.5 | 43.9 | 54.3 | 64.4  |
| 41                   | 21.4 | 28.7 | 37.6 | 46.5 | 55.1 | 24.3 | 32.5 | 42.6 | 52.7 | 62.4  |
| 40                   | 20.8 | 27.8 | 36.4 | 45.0 | 53.4 | 23.6 | 31.5 | 41.3 | 51.0 | 60.5  |
| 39                   | 20.1 | 26.9 | 35.3 | 43.6 | 51.7 | 22.8 | 30.5 | 39.9 | 49.4 | 58.6  |
| 38                   | 19.5 | 26.0 | 34.1 | 42.2 | 50.0 | 22.1 | 29.5 | 38.6 | 47.8 | 56.7  |
| 37                   | 18.8 | 25.2 | 33.0 | 40.7 | 48.3 | 21.3 | 28.5 | 37.3 | 46.2 | 54.8  |
| 36                   | 18.2 | 24.3 | 31.9 | 39.3 | 46.6 | 20.6 | 27.5 | 36.1 | 44.6 | 52.9  |
| 35                   | 17.5 | 23.4 | 30.7 | 37.9 | 45.0 | 19.9 | 26.5 | 34.8 | 43.0 | 51.0  |
| 34                   | 16.9 | 22.6 | 29.6 | 36.6 | 43.3 | 19.2 | 25.6 | 33.5 | 41.4 | 49.1  |
| 33                   | 16.3 | 21.7 | 28.5 | 35.2 | 41.7 | 18.5 | 24.6 | 32.3 | 39.9 | 47.3  |
| 32                   | 15.7 | 20.9 | 27.4 | 33.8 | 40.1 | 17.8 | 23.7 | 31.0 | 38.4 | 45.5  |
| 31                   | 15.1 | 20.1 | 26.3 | 32.5 | 38.5 | 17.1 | 22.7 | 29.8 | 36.8 | 43.7  |
| 30                   | 14.4 | 19.2 | 25.2 | 31.2 | 36.9 | 16.4 | 21.8 | 28.5 | 35.3 | 41.9  |
| 29                   | 13.8 | 18.4 | 24.2 | 29.8 | 35.4 | 15.7 | 20.9 | 27.3 | 33.8 | 40.1  |
| 28                   | 13.2 | 17.6 | 23.1 | 28.5 | 33.8 | 15.0 | 19.9 | 26.1 | 32.3 | 38.3  |
| 27                   | 12.7 | 16.8 | 22.0 | 27.2 | 32.3 | 14.4 | 19.0 | 24.9 | 30.9 | 36.6  |
| 26                   | 12.1 | 16.0 | 21.0 | 25.9 | 30.7 | 13.7 | 18.1 | 23.8 | 29.4 | 34.9  |
| 25                   | 11.5 | 15.2 | 20.0 | 24.7 | 29.2 | 13.0 | 17.3 | 22.6 | 28.0 | 33.1  |
| 24                   | 10.9 | 14.5 | 19.0 | 23.4 | 27.7 | 12.4 | 16.4 | 21.5 | 26.5 | 31.5  |
| 23                   | 10.3 | 13.7 | 18.0 | 22.2 | 26.3 | 11.7 | 15.5 | 20.3 | 25.1 | 29.8  |
| 22                   | 9.8  | 12.9 | 17.0 | 20.9 | 24.8 | 11.1 | 14.6 | 19.2 | 23.7 | 28.1  |
| 21                   | 9.2  | 12.2 | 16.0 | 19.7 | 23.4 | 10.5 | 13.8 | 18.1 | 22.4 | 26.5  |
| 20                   | 8.7  | 11.5 | 15.0 | 18.5 | 22.0 | 9.8  | 13.0 | 17.0 | 21.0 | 24.9  |
| 18                   | 7.6  | 10.0 | 13.1 | 16.2 | 19.2 | 8.6  | 11.3 | 14.8 | 18.4 | 21.8  |
| 16                   | 6.5  | 8.6  | 11.3 | 13.9 | 16.5 | 7.4  | 9.7  | 12.8 | 15.8 | 18.7  |
| 14                   | 5.5  | 7.3  | 9.5  | 11.7 | 13.9 | 6.3  | 8.2  | 10.8 | 13.3 | 15.8  |
| 12                   | 4.6  | 6.0  | 7.8  | 9.6  | 11.4 | 5.2  | 6.7  | 8.8  | 10.9 | 13.0  |
| 10                   | 3.6  | 4.7  | 6.2  | 7.6  | 9.0  | 4.1  | 5.3  | 7.0  | 8.7  | 10.3  |

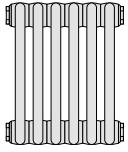
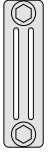
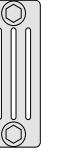
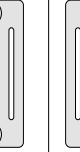
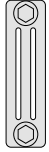
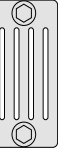
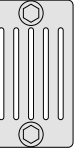
## Zehnder Charleston

 $\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$ 

| Bauhöhe 442 – 500 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                      |  |  |  |  |  |  |  |  |  |  |
| Modell               | 2045                                                                              | 3045                                                                              | 4045                                                                              | 5045                                                                              | 6045                                                                              | 2050                                                                              | 3050                                                                                | 4050                                                                                | 5050                                                                                | 6050                                                                                |
| H mm                 | 442                                                                               | 450                                                                               | 450                                                                               | 450                                                                               | 450                                                                               | 492                                                                               | 500                                                                                 | 500                                                                                 | 500                                                                                 | 500                                                                                 |
| T mm                 | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                 | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                  | 46                                                                                  | 46                                                                                  | 46                                                                                  |
| A m²                 | 0.07                                                                              | 0.1                                                                               | 0.14                                                                              | 0.17                                                                              | 0.21                                                                              | 0.07                                                                              | 0.11                                                                                | 0.15                                                                                | 0.19                                                                                | 0.23                                                                                |
| V dm³                | 0.5                                                                               | 0.7                                                                               | 1                                                                                 | 1.2                                                                               | 1.4                                                                               | 0.5                                                                               | 0.8                                                                                 | 1                                                                                   | 1.3                                                                                 | 1.5                                                                                 |
| M kg                 | 0.7                                                                               | 1.1                                                                               | 1.5                                                                               | 1.9                                                                               | 2.2                                                                               | 0.8                                                                               | 1.2                                                                                 | 1.6                                                                                 | 2.1                                                                                 | 2.4                                                                                 |
| s <sub>k</sub> %     | 24                                                                                | 19                                                                                | 16                                                                                | 14                                                                                | 13                                                                                | 23                                                                                | 18                                                                                  | 16                                                                                  | 14                                                                                  | 13                                                                                  |
| q <sub>ms</sub> kg/h | 3.0                                                                               | 4.0                                                                               | 5.3                                                                               | 6.5                                                                               | 7.7                                                                               | 3.3                                                                               | 4.4                                                                                 | 5.8                                                                                 | 7.2                                                                                 | 8.5                                                                                 |
| Exp. n               | 1.26                                                                              | 1.27                                                                              | 1.27                                                                              | 1.27                                                                              | 1.27                                                                              | 1.25                                                                              | 1.27                                                                                | 1.27                                                                                | 1.27                                                                                | 1.27                                                                                |
| Δ TK                 | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                   | 43.9                                                                              | 59.0                                                                              | 77.3                                                                              | 95.5                                                                              | 113.2                                                                             | 48.2                                                                              | 65.0                                                                                | 85.2                                                                                | 105.3                                                                               | 124.8                                                                               |
| 55                   | 39.4                                                                              | 52.8                                                                              | 69.2                                                                              | 85.6                                                                              | 101.4                                                                             | 43.3                                                                              | 58.2                                                                                | 76.3                                                                                | 94.2                                                                                | 111.7                                                                               |
| 50                   | 34.9                                                                              | 46.8                                                                              | 61.3                                                                              | 75.8                                                                              | 89.8                                                                              | 38.4                                                                              | 51.6                                                                                | 67.6                                                                                | 83.5                                                                                | 99.0                                                                                |
| 49                   | 34.0                                                                              | 45.6                                                                              | 59.7                                                                              | 73.9                                                                              | 87.5                                                                              | 37.4                                                                              | 50.3                                                                                | 65.9                                                                                | 81.4                                                                                | 96.5                                                                                |
| 48                   | 33.2                                                                              | 44.4                                                                              | 58.2                                                                              | 72.0                                                                              | 85.3                                                                              | 36.5                                                                              | 49.0                                                                                | 64.2                                                                                | 79.3                                                                                | 94.0                                                                                |
| 47                   | 32.3                                                                              | 43.3                                                                              | 56.7                                                                              | 70.1                                                                              | 83.0                                                                              | 35.5                                                                              | 47.7                                                                                | 62.5                                                                                | 77.2                                                                                | 91.5                                                                                |
| 46                   | 31.4                                                                              | 42.1                                                                              | 55.1                                                                              | 68.2                                                                              | 80.8                                                                              | 34.6                                                                              | 46.4                                                                                | 60.8                                                                                | 75.1                                                                                | 89.1                                                                                |
| 45                   | 30.6                                                                              | 40.9                                                                              | 53.6                                                                              | 66.3                                                                              | 78.6                                                                              | 33.7                                                                              | 45.1                                                                                | 59.1                                                                                | 73.0                                                                                | 86.6                                                                                |
| 44                   | 29.7                                                                              | 39.8                                                                              | 52.1                                                                              | 64.4                                                                              | 76.3                                                                              | 32.7                                                                              | 43.9                                                                                | 57.5                                                                                | 71.0                                                                                | 84.2                                                                                |
| 43                   | 28.9                                                                              | 38.6                                                                              | 50.6                                                                              | 62.6                                                                              | 74.1                                                                              | 31.8                                                                              | 42.6                                                                                | 55.8                                                                                | 68.9                                                                                | 81.7                                                                                |
| 42                   | 28.0                                                                              | 37.5                                                                              | 49.1                                                                              | 60.7                                                                              | 72.0                                                                              | 30.9                                                                              | 41.4                                                                                | 54.2                                                                                | 66.9                                                                                | 79.3                                                                                |
| 41                   | 27.2                                                                              | 36.4                                                                              | 47.6                                                                              | 58.9                                                                              | 69.8                                                                              | 30.0                                                                              | 40.1                                                                                | 52.5                                                                                | 64.9                                                                                | 76.9                                                                                |
| 40                   | 26.3                                                                              | 35.3                                                                              | 46.2                                                                              | 57.1                                                                              | 67.6                                                                              | 29.1                                                                              | 38.9                                                                                | 50.9                                                                                | 62.9                                                                                | 74.6                                                                                |
| 39                   | 25.5                                                                              | 34.1                                                                              | 44.7                                                                              | 55.3                                                                              | 65.5                                                                              | 28.1                                                                              | 37.6                                                                                | 49.3                                                                                | 60.9                                                                                | 72.2                                                                                |
| 38                   | 24.7                                                                              | 33.0                                                                              | 43.3                                                                              | 53.5                                                                              | 63.4                                                                              | 27.2                                                                              | 36.4                                                                                | 47.7                                                                                | 58.9                                                                                | 69.9                                                                                |
| 37                   | 23.9                                                                              | 31.9                                                                              | 41.8                                                                              | 51.7                                                                              | 61.3                                                                              | 26.4                                                                              | 35.2                                                                                | 46.1                                                                                | 57.0                                                                                | 67.5                                                                                |
| 36                   | 23.1                                                                              | 30.8                                                                              | 40.4                                                                              | 49.9                                                                              | 59.2                                                                              | 25.5                                                                              | 34.0                                                                                | 44.5                                                                                | 55.0                                                                                | 65.2                                                                                |
| 35                   | 22.3                                                                              | 29.8                                                                              | 39.0                                                                              | 48.2                                                                              | 57.1                                                                              | 24.6                                                                              | 32.8                                                                                | 43.0                                                                                | 53.1                                                                                | 62.9                                                                                |
| 34                   | 21.5                                                                              | 28.7                                                                              | 37.6                                                                              | 46.4                                                                              | 55.0                                                                              | 23.7                                                                              | 31.6                                                                                | 41.4                                                                                | 51.2                                                                                | 60.7                                                                                |
| 33                   | 20.7                                                                              | 27.6                                                                              | 36.2                                                                              | 44.7                                                                              | 53.0                                                                              | 22.8                                                                              | 30.4                                                                                | 39.9                                                                                | 49.3                                                                                | 58.4                                                                                |
| 32                   | 19.9                                                                              | 26.6                                                                              | 34.8                                                                              | 43.0                                                                              | 50.9                                                                              | 22.0                                                                              | 29.3                                                                                | 38.4                                                                                | 47.4                                                                                | 56.2                                                                                |
| 31                   | 19.1                                                                              | 25.5                                                                              | 33.4                                                                              | 41.3                                                                              | 48.9                                                                              | 21.1                                                                              | 28.1                                                                                | 36.8                                                                                | 45.5                                                                                | 53.9                                                                                |
| 30                   | 18.3                                                                              | 24.5                                                                              | 32.0                                                                              | 39.6                                                                              | 46.9                                                                              | 20.3                                                                              | 27.0                                                                                | 35.3                                                                                | 43.6                                                                                | 51.7                                                                                |
| 29                   | 17.6                                                                              | 23.4                                                                              | 30.7                                                                              | 38.0                                                                              | 45.0                                                                              | 19.4                                                                              | 25.8                                                                                | 33.8                                                                                | 41.8                                                                                | 49.6                                                                                |
| 28                   | 16.8                                                                              | 22.4                                                                              | 29.4                                                                              | 36.3                                                                              | 43.0                                                                              | 18.6                                                                              | 24.7                                                                                | 32.4                                                                                | 40.0                                                                                | 47.4                                                                                |
| 27                   | 16.1                                                                              | 21.4                                                                              | 28.0                                                                              | 34.7                                                                              | 41.1                                                                              | 17.8                                                                              | 23.6                                                                                | 30.9                                                                                | 38.2                                                                                | 45.3                                                                                |
| 26                   | 15.3                                                                              | 20.4                                                                              | 26.7                                                                              | 33.0                                                                              | 39.1                                                                              | 17.0                                                                              | 22.5                                                                                | 29.5                                                                                | 36.4                                                                                | 43.1                                                                                |
| 25                   | 14.6                                                                              | 19.4                                                                              | 25.4                                                                              | 31.4                                                                              | 37.2                                                                              | 16.1                                                                              | 21.4                                                                                | 28.0                                                                                | 34.6                                                                                | 41.1                                                                                |
| 24                   | 13.8                                                                              | 18.4                                                                              | 24.1                                                                              | 29.8                                                                              | 35.4                                                                              | 15.3                                                                              | 20.3                                                                                | 26.6                                                                                | 32.9                                                                                | 39.0                                                                                |
| 23                   | 13.1                                                                              | 17.5                                                                              | 22.9                                                                              | 28.3                                                                              | 33.5                                                                              | 14.5                                                                              | 19.2                                                                                | 25.2                                                                                | 31.1                                                                                | 36.9                                                                                |
| 22                   | 12.4                                                                              | 16.5                                                                              | 21.6                                                                              | 26.7                                                                              | 31.7                                                                              | 13.8                                                                              | 18.2                                                                                | 23.8                                                                                | 29.4                                                                                | 34.9                                                                                |
| 21                   | 11.7                                                                              | 15.6                                                                              | 20.4                                                                              | 25.2                                                                              | 29.8                                                                              | 13.0                                                                              | 17.1                                                                                | 22.5                                                                                | 27.7                                                                                | 32.9                                                                                |
| 20                   | 11.0                                                                              | 14.6                                                                              | 19.1                                                                              | 23.7                                                                              | 28.0                                                                              | 12.2                                                                              | 16.1                                                                                | 21.1                                                                                | 26.1                                                                                | 30.9                                                                                |
| 18                   | 9.6                                                                               | 12.8                                                                              | 16.7                                                                              | 20.7                                                                              | 24.5                                                                              | 10.7                                                                              | 14.1                                                                                | 18.5                                                                                | 22.8                                                                                | 27.0                                                                                |
| 16                   | 8.3                                                                               | 11.0                                                                              | 14.4                                                                              | 17.8                                                                              | 21.1                                                                              | 9.2                                                                               | 12.1                                                                                | 15.9                                                                                | 19.6                                                                                | 23.3                                                                                |
| 14                   | 7.0                                                                               | 9.3                                                                               | 12.2                                                                              | 15.1                                                                              | 17.8                                                                              | 7.8                                                                               | 10.2                                                                                | 13.4                                                                                | 16.6                                                                                | 19.7                                                                                |
| 12                   | 5.8                                                                               | 7.6                                                                               | 10.0                                                                              | 12.4                                                                              | 14.7                                                                              | 6.5                                                                               | 8.4                                                                                 | 11.0                                                                                | 13.6                                                                                | 16.2                                                                                |
| 10                   | 4.6                                                                               | 6.1                                                                               | 7.9                                                                               | 9.8                                                                               | 11.6                                                                              | 5.1                                                                               | 6.7                                                                                 | 8.8                                                                                 | 10.8                                                                                | 12.8                                                                                |

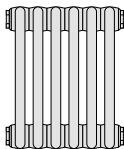
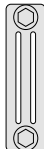
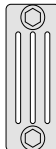
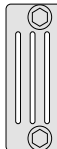
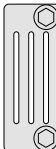
## Zehnder Charleston

$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

| Bauhöhe 542 – 600 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                      |  |  |  |  |  |  |  |  |  |  |
| Modell               | 2055                                                                              | 3055                                                                              | 4055                                                                              | 5055                                                                              | 6055                                                                              | 2060                                                                              | 3060                                                                                | 4060                                                                                | 5060                                                                                | 6060                                                                                |
| H mm                 | 542                                                                               | 550                                                                               | 550                                                                               | 550                                                                               | 550                                                                               | 592                                                                               | 600                                                                                 | 600                                                                                 | 600                                                                                 | 600                                                                                 |
| T mm                 | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                 | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                  | 46                                                                                  | 46                                                                                  | 46                                                                                  |
| A m²                 | 0.08                                                                              | 0.12                                                                              | 0.17                                                                              | 0.21                                                                              | 0.26                                                                              | 0.09                                                                              | 0.14                                                                                | 0.19                                                                                | 0.23                                                                                | 0.28                                                                                |
| V dm³                | 0.6                                                                               | 0.9                                                                               | 1.1                                                                               | 1.4                                                                               | 1.6                                                                               | 0.6                                                                               | 0.9                                                                                 | 1.2                                                                                 | 1.5                                                                                 | 1.8                                                                                 |
| M kg                 | 0.9                                                                               | 1.3                                                                               | 1.8                                                                               | 2.2                                                                               | 2.7                                                                               | 1                                                                                 | 1.4                                                                                 | 2                                                                                   | 2.4                                                                                 | 2.9                                                                                 |
| s <sub>k</sub> %     | 23                                                                                | 18                                                                                | 16                                                                                | 14                                                                                | 12                                                                                | 23                                                                                | 18                                                                                  | 15                                                                                  | 13                                                                                  | 12                                                                                  |
| q <sub>ms</sub> kg/h | 3.6                                                                               | 4.8                                                                               | 6.3                                                                               | 7.8                                                                               | 9.3                                                                               | 3.9                                                                               | 5.2                                                                                 | 6.9                                                                                 | 8.5                                                                                 | 10.1                                                                                |
| Exp. n               | 1.25                                                                              | 1.27                                                                              | 1.27                                                                              | 1.27                                                                              | 1.27                                                                              | 1.25                                                                              | 1.27                                                                                | 1.27                                                                                | 1.27                                                                                | 1.27                                                                                |
| Δ TK                 | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                   | 52.6                                                                              | 71.0                                                                              | 92.9                                                                              | 114.8                                                                             | 136.1                                                                             | 56.9                                                                              | 76.8                                                                                | 100.6                                                                               | 124.3                                                                               | 147.5                                                                               |
| 55                   | 47.2                                                                              | 63.5                                                                              | 83.2                                                                              | 102.8                                                                             | 121.9                                                                             | 51.0                                                                              | 68.7                                                                                | 90.1                                                                                | 111.3                                                                               | 132.1                                                                               |
| 50                   | 41.9                                                                              | 56.3                                                                              | 73.7                                                                              | 91.1                                                                              | 108.0                                                                             | 45.3                                                                              | 60.9                                                                                | 79.8                                                                                | 98.6                                                                                | 117.0                                                                               |
| 49                   | 40.9                                                                              | 54.9                                                                              | 71.8                                                                              | 88.8                                                                              | 105.3                                                                             | 44.2                                                                              | 59.4                                                                                | 77.8                                                                                | 96.1                                                                                | 114.0                                                                               |
| 48                   | 39.8                                                                              | 53.5                                                                              | 70.0                                                                              | 86.5                                                                              | 102.5                                                                             | 43.0                                                                              | 57.8                                                                                | 75.8                                                                                | 93.6                                                                                | 111.1                                                                               |
| 47                   | 38.8                                                                              | 52.0                                                                              | 68.1                                                                              | 84.2                                                                              | 99.8                                                                              | 41.9                                                                              | 56.3                                                                                | 73.8                                                                                | 91.1                                                                                | 108.2                                                                               |
| 46                   | 37.8                                                                              | 50.6                                                                              | 66.3                                                                              | 81.9                                                                              | 97.1                                                                              | 40.8                                                                              | 54.8                                                                                | 71.8                                                                                | 88.7                                                                                | 105.2                                                                               |
| 45                   | 36.7                                                                              | 49.2                                                                              | 64.5                                                                              | 79.7                                                                              | 94.5                                                                              | 39.7                                                                              | 53.3                                                                                | 69.8                                                                                | 86.3                                                                                | 102.3                                                                               |
| 44                   | 35.7                                                                              | 47.9                                                                              | 62.7                                                                              | 77.4                                                                              | 91.8                                                                              | 38.6                                                                              | 51.8                                                                                | 67.8                                                                                | 83.8                                                                                | 99.5                                                                                |
| 43                   | 34.7                                                                              | 46.5                                                                              | 60.9                                                                              | 75.2                                                                              | 89.2                                                                              | 37.5                                                                              | 50.3                                                                                | 65.9                                                                                | 81.4                                                                                | 96.6                                                                                |
| 42                   | 33.7                                                                              | 45.1                                                                              | 59.1                                                                              | 73.0                                                                              | 86.5                                                                              | 36.4                                                                              | 48.8                                                                                | 63.9                                                                                | 79.0                                                                                | 93.8                                                                                |
| 41                   | 32.7                                                                              | 43.8                                                                              | 57.3                                                                              | 70.8                                                                              | 83.9                                                                              | 35.3                                                                              | 47.3                                                                                | 62.0                                                                                | 76.6                                                                                | 90.9                                                                                |
| 40                   | 31.7                                                                              | 42.4                                                                              | 55.5                                                                              | 68.6                                                                              | 81.3                                                                              | 34.3                                                                              | 45.9                                                                                | 60.1                                                                                | 74.3                                                                                | 88.1                                                                                |
| 39                   | 30.7                                                                              | 41.1                                                                              | 53.8                                                                              | 66.4                                                                              | 78.8                                                                              | 33.2                                                                              | 44.4                                                                                | 58.2                                                                                | 71.9                                                                                | 85.3                                                                                |
| 38                   | 29.7                                                                              | 39.7                                                                              | 52.0                                                                              | 64.3                                                                              | 76.2                                                                              | 32.1                                                                              | 43.0                                                                                | 56.3                                                                                | 69.6                                                                                | 82.6                                                                                |
| 37                   | 28.8                                                                              | 38.4                                                                              | 50.3                                                                              | 62.2                                                                              | 73.7                                                                              | 31.1                                                                              | 41.5                                                                                | 54.4                                                                                | 67.3                                                                                | 79.8                                                                                |
| 36                   | 27.8                                                                              | 37.1                                                                              | 48.6                                                                              | 60.0                                                                              | 71.2                                                                              | 30.0                                                                              | 40.1                                                                                | 52.6                                                                                | 65.0                                                                                | 77.1                                                                                |
| 35                   | 26.8                                                                              | 35.8                                                                              | 46.9                                                                              | 57.9                                                                              | 68.7                                                                              | 29.0                                                                              | 38.7                                                                                | 50.7                                                                                | 62.7                                                                                | 74.4                                                                                |
| 34                   | 25.9                                                                              | 34.5                                                                              | 45.2                                                                              | 55.8                                                                              | 66.2                                                                              | 28.0                                                                              | 37.3                                                                                | 48.9                                                                                | 60.4                                                                                | 71.7                                                                                |
| 33                   | 24.9                                                                              | 33.2                                                                              | 43.5                                                                              | 53.7                                                                              | 63.7                                                                              | 26.9                                                                              | 35.9                                                                                | 47.1                                                                                | 58.2                                                                                | 69.0                                                                                |
| 32                   | 24.0                                                                              | 31.9                                                                              | 41.8                                                                              | 51.7                                                                              | 61.3                                                                              | 25.9                                                                              | 34.6                                                                                | 45.3                                                                                | 55.9                                                                                | 66.4                                                                                |
| 31                   | 23.1                                                                              | 30.7                                                                              | 40.2                                                                              | 49.6                                                                              | 58.9                                                                              | 24.9                                                                              | 33.2                                                                                | 43.5                                                                                | 53.7                                                                                | 63.8                                                                                |
| 30                   | 22.1                                                                              | 29.4                                                                              | 38.5                                                                              | 47.6                                                                              | 56.5                                                                              | 23.9                                                                              | 31.8                                                                                | 41.7                                                                                | 51.5                                                                                | 61.2                                                                                |
| 29                   | 21.2                                                                              | 28.2                                                                              | 36.9                                                                              | 45.6                                                                              | 54.1                                                                              | 22.9                                                                              | 30.5                                                                                | 40.0                                                                                | 49.4                                                                                | 58.6                                                                                |
| 28                   | 20.3                                                                              | 27.0                                                                              | 35.3                                                                              | 43.6                                                                              | 51.7                                                                              | 21.9                                                                              | 29.2                                                                                | 38.2                                                                                | 47.2                                                                                | 56.0                                                                                |
| 27                   | 19.4                                                                              | 25.7                                                                              | 33.7                                                                              | 41.7                                                                              | 49.4                                                                              | 21.0                                                                              | 27.8                                                                                | 36.5                                                                                | 45.1                                                                                | 53.5                                                                                |
| 26                   | 18.5                                                                              | 24.5                                                                              | 32.1                                                                              | 39.7                                                                              | 47.1                                                                              | 20.0                                                                              | 26.5                                                                                | 34.8                                                                                | 43.0                                                                                | 51.0                                                                                |
| 25                   | 17.6                                                                              | 23.3                                                                              | 30.6                                                                              | 37.8                                                                              | 44.8                                                                              | 19.0                                                                              | 25.3                                                                                | 33.1                                                                                | 40.9                                                                                | 48.5                                                                                |
| 24                   | 16.7                                                                              | 22.2                                                                              | 29.0                                                                              | 35.9                                                                              | 42.5                                                                              | 18.1                                                                              | 24.0                                                                                | 31.4                                                                                | 38.8                                                                                | 46.1                                                                                |
| 23                   | 15.9                                                                              | 21.0                                                                              | 27.5                                                                              | 34.0                                                                              | 40.3                                                                              | 17.2                                                                              | 22.7                                                                                | 29.8                                                                                | 36.8                                                                                | 43.6                                                                                |
| 22                   | 15.0                                                                              | 19.8                                                                              | 26.0                                                                              | 32.1                                                                              | 38.1                                                                              | 16.2                                                                              | 21.5                                                                                | 28.1                                                                                | 34.8                                                                                | 41.2                                                                                |
| 21                   | 14.2                                                                              | 18.7                                                                              | 24.5                                                                              | 30.3                                                                              | 35.9                                                                              | 15.3                                                                              | 20.2                                                                                | 26.5                                                                                | 32.8                                                                                | 38.9                                                                                |
| 20                   | 13.3                                                                              | 17.6                                                                              | 23.0                                                                              | 28.5                                                                              | 33.7                                                                              | 14.4                                                                              | 19.0                                                                                | 24.9                                                                                | 30.8                                                                                | 36.5                                                                                |
| 18                   | 11.7                                                                              | 15.4                                                                              | 20.1                                                                              | 24.9                                                                              | 29.5                                                                              | 12.6                                                                              | 16.6                                                                                | 21.8                                                                                | 26.9                                                                                | 32.0                                                                                |
| 16                   | 10.1                                                                              | 13.2                                                                              | 17.3                                                                              | 21.4                                                                              | 25.4                                                                              | 10.9                                                                              | 14.3                                                                                | 18.8                                                                                | 23.2                                                                                | 27.5                                                                                |
| 14                   | 8.5                                                                               | 11.2                                                                              | 14.6                                                                              | 18.1                                                                              | 21.4                                                                              | 9.2                                                                               | 12.1                                                                                | 15.8                                                                                | 19.6                                                                                | 23.2                                                                                |
| 12                   | 7.0                                                                               | 9.2                                                                               | 12.0                                                                              | 14.9                                                                              | 17.6                                                                              | 7.6                                                                               | 9.9                                                                                 | 13.0                                                                                | 16.1                                                                                | 19.1                                                                                |
| 10                   | 5.6                                                                               | 7.3                                                                               | 9.5                                                                               | 11.8                                                                              | 14.0                                                                              | 6.1                                                                               | 7.9                                                                                 | 10.3                                                                                | 12.8                                                                                | 15.2                                                                                |

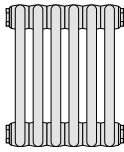
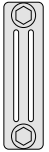
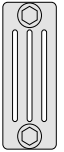
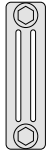
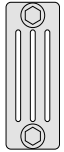
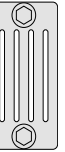
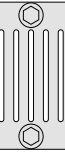
## Zehnder Charleston

$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

| Bauhöhe 742 – 900 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                      |  |  |  |  |  |  |  |  |  |  |
| Modell               | 2075                                                                              | 3075                                                                              | 4075                                                                              | 5075                                                                              | 6075                                                                              | 2090                                                                              | 3090                                                                                | 4090                                                                                | 5090                                                                                | 6090                                                                                |
| H mm                 | 742                                                                               | 750                                                                               | 750                                                                               | 750                                                                               | 750                                                                               | 892                                                                               | 900                                                                                 | 900                                                                                 | 900                                                                                 | 900                                                                                 |
| T mm                 | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                 | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                  | 46                                                                                  | 46                                                                                  | 46                                                                                  |
| A m²                 | 0.11                                                                              | 0.17                                                                              | 0.23                                                                              | 0.29                                                                              | 0.35                                                                              | 0.14                                                                              | 0.21                                                                                | 0.28                                                                                | 0.35                                                                                | 0.42                                                                                |
| V dm³                | 0.7                                                                               | 1.1                                                                               | 1.4                                                                               | 1.8                                                                               | 2.1                                                                               | 0.8                                                                               | 1.3                                                                                 | 1.7                                                                                 | 2.1                                                                                 | 2.5                                                                                 |
| M kg                 | 1.2                                                                               | 1.7                                                                               | 2.4                                                                               | 3                                                                                 | 3.6                                                                               | 1.4                                                                               | 2                                                                                   | 2.8                                                                                 | 3.5                                                                                 | 4.2                                                                                 |
| s <sub>k</sub> %     | 22                                                                                | 18                                                                                | 15                                                                                | 13                                                                                | 12                                                                                | 22                                                                                | 18                                                                                  | 15                                                                                  | 13                                                                                  | 12                                                                                  |
| q <sub>ms</sub> kg/h | 4.7                                                                               | 6.4                                                                               | 8.4                                                                               | 10.3                                                                              | 12.3                                                                              | 5.5                                                                               | 7.5                                                                                 | 9.8                                                                                 | 12.1                                                                                | 14.4                                                                                |
| Exp. n               | 1.24                                                                              | 1.26                                                                              | 1.26                                                                              | 1.26                                                                              | 1.26                                                                              | 1.23                                                                              | 1.25                                                                                | 1.25                                                                                | 1.25                                                                                | 1.25                                                                                |
| Δ TK                 | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                   | 69.0                                                                              | 93.5                                                                              | 122.6                                                                             | 151.0                                                                             | 179.9                                                                             | 80.0                                                                              | 109.3                                                                               | 143.2                                                                               | 177.1                                                                               | 209.7                                                                               |
| 55                   | 61.9                                                                              | 83.8                                                                              | 109.8                                                                             | 135.3                                                                             | 161.2                                                                             | 71.8                                                                              | 98.0                                                                                | 128.4                                                                               | 158.8                                                                               | 188.1                                                                               |
| 50                   | 55.0                                                                              | 74.3                                                                              | 97.4                                                                              | 120.0                                                                             | 143.0                                                                             | 63.9                                                                              | 87.0                                                                                | 114.0                                                                               | 141.0                                                                               | 167.0                                                                               |
| 49                   | 53.6                                                                              | 72.4                                                                              | 95.0                                                                              | 117.0                                                                             | 139.4                                                                             | 62.3                                                                              | 84.8                                                                                | 111.2                                                                               | 137.5                                                                               | 162.8                                                                               |
| 48                   | 52.3                                                                              | 70.6                                                                              | 92.5                                                                              | 114.0                                                                             | 135.8                                                                             | 60.8                                                                              | 82.7                                                                                | 108.3                                                                               | 134.0                                                                               | 158.7                                                                               |
| 47                   | 50.9                                                                              | 68.7                                                                              | 90.1                                                                              | 111.0                                                                             | 132.3                                                                             | 59.2                                                                              | 80.5                                                                                | 105.5                                                                               | 130.5                                                                               | 154.6                                                                               |
| 46                   | 49.6                                                                              | 66.9                                                                              | 87.7                                                                              | 108.0                                                                             | 128.7                                                                             | 57.7                                                                              | 78.4                                                                                | 102.7                                                                               | 127.0                                                                               | 150.5                                                                               |
| 45                   | 48.3                                                                              | 65.1                                                                              | 85.3                                                                              | 105.1                                                                             | 125.2                                                                             | 56.1                                                                              | 76.3                                                                                | 99.9                                                                                | 123.6                                                                               | 146.4                                                                               |
| 44                   | 46.9                                                                              | 63.2                                                                              | 82.9                                                                              | 102.1                                                                             | 121.7                                                                             | 54.6                                                                              | 74.2                                                                                | 97.2                                                                                | 120.2                                                                               | 142.3                                                                               |
| 43                   | 45.6                                                                              | 61.4                                                                              | 80.5                                                                              | 99.2                                                                              | 118.3                                                                             | 53.1                                                                              | 72.1                                                                                | 94.4                                                                                | 116.8                                                                               | 138.3                                                                               |
| 42                   | 44.3                                                                              | 59.6                                                                              | 78.2                                                                              | 96.3                                                                              | 114.8                                                                             | 51.6                                                                              | 70.0                                                                                | 91.7                                                                                | 113.4                                                                               | 134.3                                                                               |
| 41                   | 43.0                                                                              | 57.9                                                                              | 75.9                                                                              | 93.5                                                                              | 111.4                                                                             | 50.1                                                                              | 67.9                                                                                | 89.0                                                                                | 110.0                                                                               | 130.3                                                                               |
| 40                   | 41.7                                                                              | 56.1                                                                              | 73.5                                                                              | 90.6                                                                              | 108.0                                                                             | 48.6                                                                              | 65.8                                                                                | 86.3                                                                                | 106.7                                                                               | 126.4                                                                               |
| 39                   | 40.4                                                                              | 54.3                                                                              | 71.2                                                                              | 87.7                                                                              | 104.6                                                                             | 47.1                                                                              | 63.8                                                                                | 83.6                                                                                | 103.4                                                                               | 122.4                                                                               |
| 38                   | 39.1                                                                              | 52.6                                                                              | 68.9                                                                              | 84.9                                                                              | 101.2                                                                             | 45.6                                                                              | 61.7                                                                                | 80.9                                                                                | 100.1                                                                               | 118.5                                                                               |
| 37                   | 37.9                                                                              | 50.8                                                                              | 66.6                                                                              | 82.1                                                                              | 97.9                                                                              | 44.1                                                                              | 59.7                                                                                | 78.2                                                                                | 96.8                                                                                | 114.6                                                                               |
| 36                   | 36.6                                                                              | 49.1                                                                              | 64.4                                                                              | 79.3                                                                              | 94.5                                                                              | 42.7                                                                              | 57.7                                                                                | 75.6                                                                                | 93.5                                                                                | 110.8                                                                               |
| 35                   | 35.3                                                                              | 47.4                                                                              | 62.1                                                                              | 76.6                                                                              | 91.2                                                                              | 41.2                                                                              | 55.7                                                                                | 73.0                                                                                | 90.3                                                                                | 106.9                                                                               |
| 34                   | 34.1                                                                              | 45.7                                                                              | 59.9                                                                              | 73.8                                                                              | 88.0                                                                              | 39.8                                                                              | 53.7                                                                                | 70.4                                                                                | 87.1                                                                                | 103.1                                                                               |
| 33                   | 32.9                                                                              | 44.0                                                                              | 57.7                                                                              | 71.1                                                                              | 84.7                                                                              | 38.3                                                                              | 51.8                                                                                | 67.8                                                                                | 83.9                                                                                | 99.3                                                                                |
| 32                   | 31.6                                                                              | 42.3                                                                              | 55.5                                                                              | 68.4                                                                              | 81.5                                                                              | 36.9                                                                              | 49.8                                                                                | 65.3                                                                                | 80.7                                                                                | 95.6                                                                                |
| 31                   | 30.4                                                                              | 40.7                                                                              | 53.3                                                                              | 65.7                                                                              | 78.3                                                                              | 35.5                                                                              | 47.9                                                                                | 62.7                                                                                | 77.6                                                                                | 91.9                                                                                |
| 30                   | 29.2                                                                              | 39.0                                                                              | 51.2                                                                              | 63.0                                                                              | 75.1                                                                              | 34.1                                                                              | 45.9                                                                                | 60.2                                                                                | 74.5                                                                                | 88.2                                                                                |
| 29                   | 28.0                                                                              | 37.4                                                                              | 49.0                                                                              | 60.4                                                                              | 72.0                                                                              | 32.7                                                                              | 44.0                                                                                | 57.7                                                                                | 71.4                                                                                | 84.5                                                                                |
| 28                   | 26.8                                                                              | 35.8                                                                              | 46.9                                                                              | 57.8                                                                              | 68.9                                                                              | 31.3                                                                              | 42.1                                                                                | 55.2                                                                                | 68.3                                                                                | 80.9                                                                                |
| 27                   | 25.6                                                                              | 34.2                                                                              | 44.8                                                                              | 55.2                                                                              | 65.8                                                                              | 29.9                                                                              | 40.3                                                                                | 52.8                                                                                | 65.3                                                                                | 77.3                                                                                |
| 26                   | 24.4                                                                              | 32.6                                                                              | 42.7                                                                              | 52.6                                                                              | 62.7                                                                              | 28.6                                                                              | 38.4                                                                                | 50.3                                                                                | 62.3                                                                                | 73.7                                                                                |
| 25                   | 23.3                                                                              | 31.0                                                                              | 40.7                                                                              | 50.1                                                                              | 59.7                                                                              | 27.2                                                                              | 36.6                                                                                | 47.9                                                                                | 59.3                                                                                | 70.2                                                                                |
| 24                   | 22.1                                                                              | 29.5                                                                              | 38.6                                                                              | 47.6                                                                              | 56.7                                                                              | 25.9                                                                              | 34.8                                                                                | 45.5                                                                                | 56.3                                                                                | 66.7                                                                                |
| 23                   | 21.0                                                                              | 27.9                                                                              | 36.6                                                                              | 45.1                                                                              | 53.8                                                                              | 24.6                                                                              | 33.0                                                                                | 43.2                                                                                | 53.4                                                                                | 63.3                                                                                |
| 22                   | 19.9                                                                              | 26.4                                                                              | 34.6                                                                              | 42.7                                                                              | 50.8                                                                              | 23.3                                                                              | 31.2                                                                                | 40.9                                                                                | 50.5                                                                                | 59.8                                                                                |
| 21                   | 18.8                                                                              | 24.9                                                                              | 32.6                                                                              | 40.2                                                                              | 47.9                                                                              | 22.0                                                                              | 29.4                                                                                | 38.5                                                                                | 47.7                                                                                | 56.5                                                                                |
| 20                   | 17.7                                                                              | 23.4                                                                              | 30.7                                                                              | 37.8                                                                              | 45.1                                                                              | 20.7                                                                              | 27.7                                                                                | 36.3                                                                                | 44.9                                                                                | 53.1                                                                                |
| 18                   | 15.5                                                                              | 20.5                                                                              | 26.9                                                                              | 33.1                                                                              | 39.5                                                                              | 18.2                                                                              | 24.3                                                                                | 31.8                                                                                | 39.3                                                                                | 46.6                                                                                |
| 16                   | 13.4                                                                              | 17.7                                                                              | 23.2                                                                              | 28.6                                                                              | 34.0                                                                              | 15.7                                                                              | 20.9                                                                                | 27.4                                                                                | 33.9                                                                                | 40.2                                                                                |
| 14                   | 11.3                                                                              | 14.9                                                                              | 19.6                                                                              | 24.1                                                                              | 28.8                                                                              | 13.4                                                                              | 17.7                                                                                | 23.2                                                                                | 28.7                                                                                | 34.0                                                                                |
| 12                   | 9.4                                                                               | 12.3                                                                              | 16.1                                                                              | 19.9                                                                              | 23.7                                                                              | 11.0                                                                              | 14.6                                                                                | 19.2                                                                                | 23.7                                                                                | 28.1                                                                                |
| 10                   | 7.5                                                                               | 9.8                                                                               | 12.8                                                                              | 15.8                                                                              | 18.8                                                                              | 8.8                                                                               | 11.6                                                                                | 15.2                                                                                | 18.9                                                                                | 22.3                                                                                |

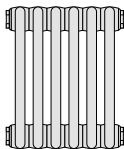
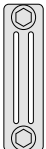
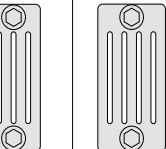
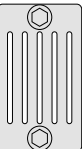
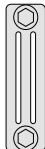
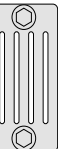
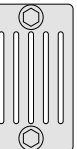
## Zehnder Charleston

$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

| Bauhöhe 992 – 1100 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                       |  |  |  |  |  |  |  |  |  |  |
| Modell                | 2100                                                                              | 3100                                                                              | 4100                                                                              | 5100                                                                              | 6100                                                                              | 2110                                                                              | 3110                                                                                | 4110                                                                                | 5110                                                                                | 6110                                                                                |
| H mm                  | 992                                                                               | 1000                                                                              | 1000                                                                              | 1000                                                                              | 1000                                                                              | 1092                                                                              | 1100                                                                                | 1100                                                                                | 1100                                                                                | 1100                                                                                |
| T mm                  | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                  | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                  | 46                                                                                  | 46                                                                                  | 46                                                                                  |
| A m²                  | 0.15                                                                              | 0.23                                                                              | 0.31                                                                              | 0.39                                                                              | 0.47                                                                              | 0.17                                                                              | 0.25                                                                                | 0.34                                                                                | 0.43                                                                                | 0.52                                                                                |
| V dm³                 | 0.9                                                                               | 1.4                                                                               | 1.8                                                                               | 2.3                                                                               | 2.7                                                                               | 1                                                                                 | 1.5                                                                                 | 2                                                                                   | 2.5                                                                                 | 3                                                                                   |
| M kg                  | 1.5                                                                               | 2.3                                                                               | 3.1                                                                               | 3.9                                                                               | 4.7                                                                               | 1.6                                                                               | 2.4                                                                                 | 3.4                                                                                 | 4.4                                                                                 | 5.1                                                                                 |
| s <sub>k</sub> %      | 22                                                                                | 18                                                                                | 15                                                                                | 13                                                                                | 12                                                                                | 22                                                                                | 18                                                                                  | 15                                                                                  | 13                                                                                  | 12                                                                                  |
| q <sub>ms</sub> kg/h  | 6.0                                                                               | 8.2                                                                               | 10.8                                                                              | 13.2                                                                              | 15.7                                                                              | 6.4                                                                               | 8.9                                                                                 | 11.6                                                                                | 14.4                                                                                | 17.0                                                                                |
| Exp. n                | 1.22                                                                              | 1.25                                                                              | 1.25                                                                              | 1.25                                                                              | 1.25                                                                              | 1.21                                                                              | 1.25                                                                                | 1.25                                                                                | 1.25                                                                                | 1.25                                                                                |
| Δ TK                  | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                    | 86.8                                                                              | 119.4                                                                             | 157.0                                                                             | 193.4                                                                             | 229.8                                                                             | 93.1                                                                              | 129.4                                                                               | 169.6                                                                               | 209.7                                                                               | 248.7                                                                               |
| 55                    | 78.1                                                                              | 107.1                                                                             | 140.8                                                                             | 173.5                                                                             | 206.2                                                                             | 83.8                                                                              | 116.0                                                                               | 152.1                                                                               | 188.1                                                                               | 223.1                                                                               |
| 50                    | 69.5                                                                              | 95.1                                                                              | 125.0                                                                             | 154.0                                                                             | 183.0                                                                             | 74.7                                                                              | 103.0                                                                               | 135.0                                                                               | 167.0                                                                               | 198.0                                                                               |
| 49                    | 67.8                                                                              | 92.7                                                                              | 121.9                                                                             | 150.2                                                                             | 178.4                                                                             | 72.9                                                                              | 100.4                                                                               | 131.6                                                                               | 162.8                                                                               | 193.1                                                                               |
| 48                    | 66.1                                                                              | 90.4                                                                              | 118.8                                                                             | 146.3                                                                             | 173.9                                                                             | 71.1                                                                              | 97.9                                                                                | 128.3                                                                               | 158.7                                                                               | 188.2                                                                               |
| 47                    | 64.4                                                                              | 88.0                                                                              | 115.7                                                                             | 142.5                                                                             | 169.4                                                                             | 69.3                                                                              | 95.3                                                                                | 125.0                                                                               | 154.6                                                                               | 183.3                                                                               |
| 46                    | 62.8                                                                              | 85.7                                                                              | 112.6                                                                             | 138.8                                                                             | 164.9                                                                             | 67.5                                                                              | 92.8                                                                                | 121.6                                                                               | 150.5                                                                               | 178.4                                                                               |
| 45                    | 61.1                                                                              | 83.4                                                                              | 109.6                                                                             | 135.0                                                                             | 160.4                                                                             | 65.8                                                                              | 90.3                                                                                | 118.3                                                                               | 146.4                                                                               | 173.6                                                                               |
| 44                    | 59.5                                                                              | 81.1                                                                              | 106.5                                                                             | 131.3                                                                             | 156.0                                                                             | 64.0                                                                              | 87.8                                                                                | 115.1                                                                               | 142.3                                                                               | 168.8                                                                               |
| 43                    | 57.8                                                                              | 78.8                                                                              | 103.5                                                                             | 127.5                                                                             | 151.6                                                                             | 62.2                                                                              | 85.3                                                                                | 111.8                                                                               | 138.3                                                                               | 164.0                                                                               |
| 42                    | 56.2                                                                              | 76.5                                                                              | 100.5                                                                             | 123.8                                                                             | 147.2                                                                             | 60.5                                                                              | 82.8                                                                                | 108.6                                                                               | 134.3                                                                               | 159.2                                                                               |
| 41                    | 54.6                                                                              | 74.2                                                                              | 97.5                                                                              | 120.2                                                                             | 142.8                                                                             | 58.8                                                                              | 80.4                                                                                | 105.3                                                                               | 130.3                                                                               | 154.5                                                                               |
| 40                    | 52.9                                                                              | 72.0                                                                              | 94.6                                                                              | 116.5                                                                             | 138.5                                                                             | 57.0                                                                              | 77.9                                                                                | 102.1                                                                               | 126.4                                                                               | 149.8                                                                               |
| 39                    | 51.3                                                                              | 69.7                                                                              | 91.6                                                                              | 112.9                                                                             | 134.1                                                                             | 55.3                                                                              | 75.5                                                                                | 99.0                                                                                | 122.4                                                                               | 145.1                                                                               |
| 38                    | 49.7                                                                              | 67.5                                                                              | 88.7                                                                              | 109.3                                                                             | 129.9                                                                             | 53.6                                                                              | 73.1                                                                                | 95.8                                                                                | 118.5                                                                               | 140.5                                                                               |
| 37                    | 48.1                                                                              | 65.3                                                                              | 85.8                                                                              | 105.7                                                                             | 125.6                                                                             | 51.9                                                                              | 70.7                                                                                | 92.7                                                                                | 114.6                                                                               | 135.9                                                                               |
| 36                    | 46.6                                                                              | 63.1                                                                              | 82.9                                                                              | 102.1                                                                             | 121.4                                                                             | 50.2                                                                              | 68.3                                                                                | 89.5                                                                                | 110.8                                                                               | 131.3                                                                               |
| 35                    | 45.0                                                                              | 60.9                                                                              | 80.0                                                                              | 98.6                                                                              | 117.2                                                                             | 48.5                                                                              | 65.9                                                                                | 86.4                                                                                | 106.9                                                                               | 126.8                                                                               |
| 34                    | 43.4                                                                              | 58.7                                                                              | 77.2                                                                              | 95.1                                                                              | 113.0                                                                             | 46.8                                                                              | 63.6                                                                                | 83.4                                                                                | 103.1                                                                               | 122.3                                                                               |
| 33                    | 41.9                                                                              | 56.6                                                                              | 74.4                                                                              | 91.6                                                                              | 108.9                                                                             | 45.2                                                                              | 61.3                                                                                | 80.3                                                                                | 99.3                                                                                | 117.8                                                                               |
| 32                    | 40.3                                                                              | 54.4                                                                              | 71.6                                                                              | 88.2                                                                              | 104.8                                                                             | 43.5                                                                              | 59.0                                                                                | 77.3                                                                                | 95.6                                                                                | 113.3                                                                               |
| 31                    | 38.8                                                                              | 52.3                                                                              | 68.8                                                                              | 84.7                                                                              | 100.7                                                                             | 41.9                                                                              | 56.7                                                                                | 74.3                                                                                | 91.9                                                                                | 108.9                                                                               |
| 30                    | 37.3                                                                              | 50.2                                                                              | 66.0                                                                              | 81.3                                                                              | 96.6                                                                              | 40.3                                                                              | 54.4                                                                                | 71.3                                                                                | 88.2                                                                                | 104.6                                                                               |
| 29                    | 35.8                                                                              | 48.1                                                                              | 63.3                                                                              | 77.9                                                                              | 92.6                                                                              | 38.6                                                                              | 52.1                                                                                | 68.3                                                                                | 84.5                                                                                | 100.2                                                                               |
| 28                    | 34.3                                                                              | 46.1                                                                              | 60.6                                                                              | 74.6                                                                              | 88.7                                                                              | 37.0                                                                              | 49.9                                                                                | 65.4                                                                                | 80.9                                                                                | 95.9                                                                                |
| 27                    | 32.8                                                                              | 44.0                                                                              | 57.9                                                                              | 71.3                                                                              | 84.7                                                                              | 35.4                                                                              | 47.7                                                                                | 62.5                                                                                | 77.3                                                                                | 91.7                                                                                |
| 26                    | 31.3                                                                              | 42.0                                                                              | 55.2                                                                              | 68.0                                                                              | 80.8                                                                              | 33.9                                                                              | 45.5                                                                                | 59.6                                                                                | 73.7                                                                                | 87.4                                                                                |
| 25                    | 29.8                                                                              | 40.0                                                                              | 52.6                                                                              | 64.7                                                                              | 76.9                                                                              | 32.3                                                                              | 43.3                                                                                | 56.8                                                                                | 70.2                                                                                | 83.2                                                                                |
| 24                    | 28.4                                                                              | 38.0                                                                              | 49.9                                                                              | 61.5                                                                              | 73.1                                                                              | 30.7                                                                              | 41.2                                                                                | 53.9                                                                                | 66.7                                                                                | 79.1                                                                                |
| 23                    | 26.9                                                                              | 36.0                                                                              | 47.4                                                                              | 58.3                                                                              | 69.3                                                                              | 29.2                                                                              | 39.0                                                                                | 51.1                                                                                | 63.3                                                                                | 75.0                                                                                |
| 22                    | 25.5                                                                              | 34.1                                                                              | 44.8                                                                              | 55.2                                                                              | 65.6                                                                              | 27.7                                                                              | 36.9                                                                                | 48.4                                                                                | 59.8                                                                                | 71.0                                                                                |
| 21                    | 24.1                                                                              | 32.2                                                                              | 42.3                                                                              | 52.1                                                                              | 61.9                                                                              | 26.1                                                                              | 34.8                                                                                | 45.6                                                                                | 56.5                                                                                | 66.9                                                                                |
| 20                    | 22.7                                                                              | 30.3                                                                              | 39.8                                                                              | 49.0                                                                              | 58.2                                                                              | 24.6                                                                              | 32.8                                                                                | 42.9                                                                                | 53.1                                                                                | 63.0                                                                                |
| 18                    | 20.0                                                                              | 26.5                                                                              | 34.9                                                                              | 42.9                                                                              | 51.0                                                                              | 21.7                                                                              | 28.7                                                                                | 37.6                                                                                | 46.6                                                                                | 55.2                                                                                |
| 16                    | 17.3                                                                              | 22.9                                                                              | 30.1                                                                              | 37.1                                                                              | 44.0                                                                              | 18.8                                                                              | 24.8                                                                                | 32.5                                                                                | 40.2                                                                                | 47.7                                                                                |
| 14                    | 14.7                                                                              | 19.4                                                                              | 25.5                                                                              | 31.4                                                                              | 37.3                                                                              | 16.0                                                                              | 21.0                                                                                | 27.5                                                                                | 34.0                                                                                | 40.3                                                                                |
| 12                    | 12.2                                                                              | 16.0                                                                              | 21.0                                                                              | 25.9                                                                              | 30.7                                                                              | 13.3                                                                              | 17.3                                                                                | 22.7                                                                                | 28.1                                                                                | 33.3                                                                                |
| 10                    | 9.8                                                                               | 12.7                                                                              | 16.7                                                                              | 20.6                                                                              | 24.5                                                                              | 10.7                                                                              | 13.8                                                                                | 18.1                                                                                | 22.3                                                                                | 26.5                                                                                |

## Zehnder Charleston

$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

| Bauhöhe 1192 – 1500 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                        |  |  |  |  |  |  |  |  |  |  |
| Modell                 | 2120                                                                              | 3120                                                                              | 4120                                                                              | 5120                                                                              | 6120                                                                              | 2150                                                                              | 3150                                                                                | 4150                                                                                | 5150                                                                                | 6150                                                                                |
| H mm                   | 1192                                                                              | 1200                                                                              | 1200                                                                              | 1200                                                                              | 1200                                                                              | 1492                                                                              | 1500                                                                                | 1500                                                                                | 1500                                                                                | 1500                                                                                |
| T mm                   | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                   | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                  | 46                                                                                  | 46                                                                                  | 46                                                                                  |
| A m²                   | 0.18                                                                              | 0.28                                                                              | 0.37                                                                              | 0.47                                                                              | 0.56                                                                              | 0.23                                                                              | 0.35                                                                                | 0.47                                                                                | 0.59                                                                                | 0.7                                                                                 |
| V dm³                  | 1.1                                                                               | 1.6                                                                               | 2.1                                                                               | 2.7                                                                               | 3.2                                                                               | 1.3                                                                               | 2                                                                                   | 2.6                                                                                 | 3.3                                                                                 | 4                                                                                   |
| M kg                   | 1.8                                                                               | 2.7                                                                               | 3.7                                                                               | 4.6                                                                               | 5.6                                                                               | 2.3                                                                               | 3.3                                                                                 | 4.6                                                                                 | 5.7                                                                                 | 7.1                                                                                 |
| s <sub>k</sub> %       | 22                                                                                | 18                                                                                | 15                                                                                | 13                                                                                | 12                                                                                | 23                                                                                | 18                                                                                  | 15                                                                                  | 13                                                                                  | 12                                                                                  |
| q <sub>ms</sub> kg/h   | 7.1                                                                               | 9.9                                                                               | 12.6                                                                              | 15.4                                                                              | 18.1                                                                              | 8.9                                                                               | 12.0                                                                                | 15.5                                                                                | 18.8                                                                                | 22.0                                                                                |
| Exp. n                 | 1.30                                                                              | 1.31                                                                              | 1.31                                                                              | 1.31                                                                              | 1.31                                                                              | 1.29                                                                              | 1.31                                                                                | 1.31                                                                                | 1.31                                                                                | 1.31                                                                                |
| Δ TK                   | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                     | 104.8                                                                             | 146.0                                                                             | 186.7                                                                             | 227.3                                                                             | 266.7                                                                             | 131.6                                                                             | 177.8                                                                               | 228.6                                                                               | 278.1                                                                               | 325.1                                                                               |
| 55                     | 93.6                                                                              | 130.3                                                                             | 166.5                                                                             | 202.8                                                                             | 237.9                                                                             | 117.6                                                                             | 158.6                                                                               | 203.9                                                                               | 248.1                                                                               | 290.0                                                                               |
| 50                     | 82.7                                                                              | 115.0                                                                             | 147.0                                                                             | 179.0                                                                             | 210.0                                                                             | 104.0                                                                             | 140.0                                                                               | 180.0                                                                               | 219.0                                                                               | 256.0                                                                               |
| 49                     | 80.6                                                                              | 112.0                                                                             | 143.2                                                                             | 174.3                                                                             | 204.5                                                                             | 101.3                                                                             | 136.3                                                                               | 175.3                                                                               | 213.3                                                                               | 249.3                                                                               |
| 48                     | 78.4                                                                              | 109.0                                                                             | 139.3                                                                             | 169.7                                                                             | 199.1                                                                             | 98.7                                                                              | 132.7                                                                               | 170.6                                                                               | 207.6                                                                               | 242.7                                                                               |
| 47                     | 76.3                                                                              | 106.0                                                                             | 135.6                                                                             | 165.1                                                                             | 193.6                                                                             | 96.0                                                                              | 129.1                                                                               | 166.0                                                                               | 201.9                                                                               | 236.1                                                                               |
| 46                     | 74.2                                                                              | 103.1                                                                             | 131.8                                                                             | 160.5                                                                             | 188.3                                                                             | 93.4                                                                              | 125.5                                                                               | 161.4                                                                               | 196.3                                                                               | 229.5                                                                               |
| 45                     | 72.1                                                                              | 100.2                                                                             | 128.0                                                                             | 155.9                                                                             | 182.9                                                                             | 90.8                                                                              | 122.0                                                                               | 156.8                                                                               | 190.8                                                                               | 223.0                                                                               |
| 44                     | 70.0                                                                              | 97.3                                                                              | 124.3                                                                             | 151.4                                                                             | 177.6                                                                             | 88.2                                                                              | 118.4                                                                               | 152.2                                                                               | 185.2                                                                               | 216.5                                                                               |
| 43                     | 68.0                                                                              | 94.4                                                                              | 120.6                                                                             | 146.9                                                                             | 172.4                                                                             | 85.6                                                                              | 114.9                                                                               | 147.7                                                                               | 179.7                                                                               | 210.1                                                                               |
| 42                     | 65.9                                                                              | 91.5                                                                              | 117.0                                                                             | 142.4                                                                             | 167.1                                                                             | 83.1                                                                              | 111.4                                                                               | 143.2                                                                               | 174.3                                                                               | 203.7                                                                               |
| 41                     | 63.9                                                                              | 88.7                                                                              | 113.3                                                                             | 138.0                                                                             | 161.9                                                                             | 80.5                                                                              | 108.0                                                                               | 138.8                                                                               | 168.9                                                                               | 197.4                                                                               |
| 40                     | 61.9                                                                              | 85.9                                                                              | 109.7                                                                             | 133.6                                                                             | 156.8                                                                             | 78.0                                                                              | 104.5                                                                               | 134.4                                                                               | 163.5                                                                               | 191.1                                                                               |
| 39                     | 59.9                                                                              | 83.1                                                                              | 106.2                                                                             | 129.3                                                                             | 151.7                                                                             | 75.5                                                                              | 101.1                                                                               | 130.0                                                                               | 158.2                                                                               | 184.9                                                                               |
| 38                     | 57.9                                                                              | 80.3                                                                              | 102.6                                                                             | 124.9                                                                             | 146.6                                                                             | 73.0                                                                              | 97.7                                                                                | 125.6                                                                               | 152.9                                                                               | 178.7                                                                               |
| 37                     | 55.9                                                                              | 77.5                                                                              | 99.1                                                                              | 120.7                                                                             | 141.6                                                                             | 70.5                                                                              | 94.4                                                                                | 121.3                                                                               | 147.6                                                                               | 172.6                                                                               |
| 36                     | 54.0                                                                              | 74.8                                                                              | 95.6                                                                              | 116.4                                                                             | 136.6                                                                             | 68.1                                                                              | 91.0                                                                                | 117.1                                                                               | 142.4                                                                               | 166.5                                                                               |
| 35                     | 52.0                                                                              | 72.1                                                                              | 92.1                                                                              | 112.2                                                                             | 131.6                                                                             | 65.6                                                                              | 87.7                                                                                | 112.8                                                                               | 137.3                                                                               | 160.4                                                                               |
| 34                     | 50.1                                                                              | 69.4                                                                              | 88.7                                                                              | 108.0                                                                             | 126.7                                                                             | 63.2                                                                              | 84.5                                                                                | 108.6                                                                               | 132.1                                                                               | 154.5                                                                               |
| 33                     | 48.2                                                                              | 66.7                                                                              | 85.3                                                                              | 103.9                                                                             | 121.8                                                                             | 60.8                                                                              | 81.2                                                                                | 104.4                                                                               | 127.1                                                                               | 148.5                                                                               |
| 32                     | 46.3                                                                              | 64.1                                                                              | 81.9                                                                              | 99.8                                                                              | 117.0                                                                             | 58.5                                                                              | 78.0                                                                                | 100.3                                                                               | 122.1                                                                               | 142.7                                                                               |
| 31                     | 44.4                                                                              | 61.5                                                                              | 78.6                                                                              | 95.7                                                                              | 112.3                                                                             | 56.1                                                                              | 74.8                                                                                | 96.2                                                                                | 117.1                                                                               | 136.9                                                                               |
| 30                     | 42.6                                                                              | 58.9                                                                              | 75.3                                                                              | 91.7                                                                              | 107.5                                                                             | 53.8                                                                              | 71.7                                                                                | 92.2                                                                                | 112.2                                                                               | 131.1                                                                               |
| 29                     | 40.7                                                                              | 56.3                                                                              | 72.0                                                                              | 87.7                                                                              | 102.9                                                                             | 51.5                                                                              | 68.6                                                                                | 88.2                                                                                | 107.3                                                                               | 125.4                                                                               |
| 28                     | 38.9                                                                              | 53.8                                                                              | 68.8                                                                              | 83.7                                                                              | 98.3                                                                              | 49.2                                                                              | 65.5                                                                                | 84.2                                                                                | 102.5                                                                               | 119.8                                                                               |
| 27                     | 37.1                                                                              | 51.3                                                                              | 65.6                                                                              | 79.9                                                                              | 93.7                                                                              | 47.0                                                                              | 62.5                                                                                | 80.3                                                                                | 97.7                                                                                | 114.2                                                                               |
| 26                     | 35.3                                                                              | 48.8                                                                              | 62.4                                                                              | 76.0                                                                              | 89.2                                                                              | 44.7                                                                              | 59.4                                                                                | 76.4                                                                                | 93.0                                                                                | 108.7                                                                               |
| 25                     | 33.6                                                                              | 46.4                                                                              | 59.3                                                                              | 72.2                                                                              | 84.7                                                                              | 42.5                                                                              | 56.5                                                                                | 72.6                                                                                | 88.3                                                                                | 103.3                                                                               |
| 24                     | 31.9                                                                              | 44.0                                                                              | 56.2                                                                              | 68.4                                                                              | 80.3                                                                              | 40.3                                                                              | 53.5                                                                                | 68.8                                                                                | 83.7                                                                                | 97.9                                                                                |
| 23                     | 30.1                                                                              | 41.6                                                                              | 53.2                                                                              | 64.7                                                                              | 75.9                                                                              | 38.2                                                                              | 50.6                                                                                | 65.1                                                                                | 79.2                                                                                | 92.6                                                                                |
| 22                     | 28.4                                                                              | 39.2                                                                              | 50.1                                                                              | 61.1                                                                              | 71.6                                                                              | 36.1                                                                              | 47.8                                                                                | 61.4                                                                                | 74.7                                                                                | 87.3                                                                                |
| 21                     | 26.8                                                                              | 36.9                                                                              | 47.2                                                                              | 57.5                                                                              | 67.4                                                                              | 34.0                                                                              | 44.9                                                                                | 57.8                                                                                | 70.3                                                                                | 82.2                                                                                |
| 20                     | 25.1                                                                              | 34.6                                                                              | 44.3                                                                              | 53.9                                                                              | 63.2                                                                              | 31.9                                                                              | 42.2                                                                                | 54.2                                                                                | 65.9                                                                                | 77.1                                                                                |
| 18                     | 21.9                                                                              | 30.2                                                                              | 38.6                                                                              | 46.9                                                                              | 55.1                                                                              | 27.8                                                                              | 36.7                                                                                | 47.2                                                                                | 57.4                                                                                | 67.1                                                                                |
| 16                     | 18.8                                                                              | 25.8                                                                              | 33.0                                                                              | 40.2                                                                              | 47.2                                                                              | 23.9                                                                              | 31.5                                                                                | 40.5                                                                                | 49.2                                                                                | 57.5                                                                                |
| 14                     | 15.8                                                                              | 21.7                                                                              | 27.7                                                                              | 33.8                                                                              | 39.6                                                                              | 20.1                                                                              | 26.4                                                                                | 34.0                                                                                | 41.3                                                                                | 48.3                                                                                |
| 12                     | 12.9                                                                              | 17.7                                                                              | 22.7                                                                              | 27.6                                                                              | 32.4                                                                              | 16.5                                                                              | 21.6                                                                                | 27.8                                                                                | 33.8                                                                                | 39.5                                                                                |
| 10                     | 10.2                                                                              | 14.0                                                                              | 17.9                                                                              | 21.7                                                                              | 25.5                                                                              | 13.0                                                                              | 17.0                                                                                | 21.9                                                                                | 26.6                                                                                | 31.1                                                                                |

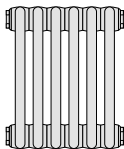
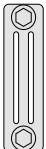
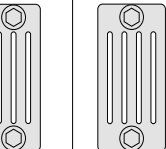
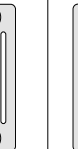
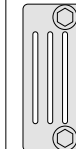
# Zehnder Charleston

 $\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$ 

| Bauhöhe 1792 – 2000 mm |       |       |       |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                        |       |       |       |       |       |       |       |       |       |       |
| Modell                 | 2180  | 3180  | 4180  | 5180  | 6180  | 2200  | 3200  | 4200  | 5200  | 6200  |
| H mm                   | 1792  | 1800  | 1800  | 1800  | 1800  | 1992  | 2000  | 2000  | 2000  | 2000  |
| T mm                   | 62    | 100   | 136   | 173   | 210   | 62    | 100   | 136   | 173   | 210   |
| X mm                   | 46    | 46    | 46    | 46    | 46    | 46    | 46    | 46    | 46    | 46    |
| A m²                   | 0.28  | 0.42  | 0.56  | 0.7   | 0.85  | 0.31  | 0.47  | 0.63  | 0.78  | 0.94  |
| V dm³                  | 1.5   | 2.4   | 3.1   | 3.9   | 4.7   | 1.7   | 2.6   | 3.4   | 4.3   | 5.2   |
| M kg                   | 2.7   | 4.1   | 5.4   | 6.7   | 8     | 2.9   | 4.6   | 6.3   | 7.8   | 9.5   |
| s <sub>k</sub> %       | 23    | 18    | 15    | 13    | 12    | 23    | 18    | 15    | 13    | 12    |
| q <sub>ms</sub> kg/h   | 10.7  | 14.3  | 18.3  | 22.3  | 26.1  | 11.9  | 15.7  | 20.1  | 24.5  | 28.7  |
| Exp. n                 | 1.29  | 1.32  | 1.32  | 1.32  | 1.32  | 1.28  | 1.32  | 1.32  | 1.32  | 1.32  |
| Δ TK                   | Watt  | Watt  | Watt  | Watt  | Watt  | Watt  | Watt  | Watt  | Watt  | Watt  |
| 60                     | 156.9 | 211.2 | 271.0 | 329.5 | 385.4 | 174.3 | 232.8 | 297.7 | 362.5 | 424.9 |
| 55                     | 140.2 | 188.3 | 241.6 | 293.7 | 343.6 | 155.9 | 207.5 | 265.4 | 323.2 | 378.8 |
| 50                     | 124.0 | 166.0 | 213.0 | 259.0 | 303.0 | 138.0 | 183.0 | 234.0 | 285.0 | 334.0 |
| 49                     | 120.8 | 161.6 | 207.4 | 252.2 | 295.0 | 134.5 | 178.2 | 227.8 | 277.5 | 325.2 |
| 48                     | 117.6 | 157.3 | 201.8 | 245.4 | 287.1 | 131.0 | 173.4 | 221.7 | 270.0 | 316.5 |
| 47                     | 114.5 | 153.0 | 196.3 | 238.7 | 279.2 | 127.5 | 168.6 | 215.6 | 262.6 | 307.8 |
| 46                     | 111.4 | 148.7 | 190.8 | 232.0 | 271.4 | 124.0 | 163.9 | 209.6 | 255.3 | 299.2 |
| 45                     | 108.2 | 144.4 | 185.3 | 225.4 | 263.7 | 120.6 | 159.2 | 203.6 | 248.0 | 290.6 |
| 44                     | 105.1 | 140.2 | 179.9 | 218.8 | 256.0 | 117.2 | 154.6 | 197.7 | 240.7 | 282.1 |
| 43                     | 102.1 | 136.0 | 174.5 | 212.2 | 248.3 | 113.8 | 150.0 | 191.8 | 233.6 | 273.7 |
| 42                     | 99.0  | 131.9 | 169.2 | 205.8 | 240.7 | 110.4 | 145.4 | 185.9 | 226.4 | 265.3 |
| 41                     | 96.0  | 127.7 | 163.9 | 199.3 | 233.2 | 107.0 | 140.8 | 180.1 | 219.3 | 257.0 |
| 40                     | 93.0  | 123.6 | 158.7 | 192.9 | 225.7 | 103.7 | 136.3 | 174.3 | 212.3 | 248.8 |
| 39                     | 90.0  | 119.6 | 153.4 | 186.6 | 218.3 | 100.4 | 131.8 | 168.6 | 205.3 | 240.6 |
| 38                     | 87.0  | 115.6 | 148.3 | 180.3 | 210.9 | 97.1  | 127.4 | 162.9 | 198.4 | 232.5 |
| 37                     | 84.1  | 111.6 | 143.1 | 174.1 | 203.6 | 93.9  | 123.0 | 157.3 | 191.5 | 224.5 |
| 36                     | 81.2  | 107.6 | 138.1 | 167.9 | 196.4 | 90.6  | 118.6 | 151.7 | 184.7 | 216.5 |
| 35                     | 78.3  | 103.7 | 133.0 | 161.7 | 189.2 | 87.4  | 114.3 | 146.1 | 178.0 | 208.6 |
| 34                     | 75.4  | 99.8  | 128.0 | 155.7 | 182.1 | 84.2  | 110.0 | 140.6 | 171.3 | 200.8 |
| 33                     | 72.5  | 95.9  | 123.1 | 149.7 | 175.1 | 81.1  | 105.7 | 135.2 | 164.7 | 193.0 |
| 32                     | 69.7  | 92.1  | 118.2 | 143.7 | 168.1 | 77.9  | 101.5 | 129.8 | 158.1 | 185.3 |
| 31                     | 66.9  | 88.3  | 113.3 | 137.8 | 161.2 | 74.8  | 97.4  | 124.5 | 151.6 | 177.7 |
| 30                     | 64.2  | 84.6  | 108.5 | 132.0 | 154.4 | 71.8  | 93.2  | 119.2 | 145.2 | 170.2 |
| 29                     | 61.4  | 80.9  | 103.8 | 126.2 | 147.6 | 68.7  | 89.2  | 114.0 | 138.9 | 162.7 |
| 28                     | 58.7  | 77.2  | 99.1  | 120.5 | 140.9 | 65.7  | 85.1  | 108.8 | 132.6 | 155.4 |
| 27                     | 56.0  | 73.6  | 94.4  | 114.8 | 134.3 | 62.7  | 81.1  | 103.7 | 126.4 | 148.1 |
| 26                     | 53.3  | 70.0  | 89.8  | 109.3 | 127.8 | 59.8  | 77.2  | 98.7  | 120.2 | 140.9 |
| 25                     | 50.7  | 66.5  | 85.3  | 103.7 | 121.4 | 56.8  | 73.3  | 93.7  | 114.2 | 133.8 |
| 24                     | 48.1  | 63.0  | 80.8  | 98.3  | 115.0 | 53.9  | 69.5  | 88.8  | 108.2 | 126.8 |
| 23                     | 45.5  | 59.6  | 76.4  | 92.9  | 108.7 | 51.1  | 65.7  | 84.0  | 102.3 | 119.8 |
| 22                     | 43.0  | 56.2  | 72.1  | 87.6  | 102.5 | 48.3  | 61.9  | 79.2  | 96.4  | 113.0 |
| 21                     | 40.5  | 52.8  | 67.8  | 82.4  | 96.4  | 45.5  | 58.2  | 74.5  | 90.7  | 106.3 |
| 20                     | 38.0  | 49.5  | 63.5  | 77.3  | 90.4  | 42.7  | 54.6  | 69.8  | 85.0  | 99.6  |
| 18                     | 33.2  | 43.1  | 55.3  | 67.2  | 78.7  | 37.3  | 47.5  | 60.7  | 74.0  | 86.7  |
| 16                     | 28.5  | 36.9  | 47.3  | 57.6  | 67.3  | 32.1  | 40.7  | 52.0  | 63.3  | 74.2  |
| 14                     | 24.0  | 30.9  | 39.7  | 48.3  | 56.5  | 27.1  | 34.1  | 43.6  | 53.1  | 62.2  |
| 12                     | 19.7  | 25.2  | 32.4  | 39.4  | 46.1  | 22.2  | 27.8  | 35.6  | 43.3  | 50.8  |
| 10                     | 15.6  | 19.8  | 25.5  | 30.9  | 36.2  | 17.6  | 21.9  | 28.0  | 34.1  | 39.9  |

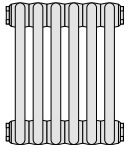
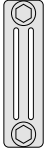
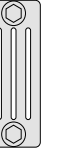
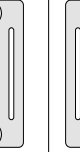
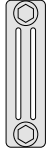
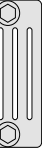
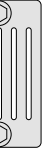
## Zehnder Charleston

$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

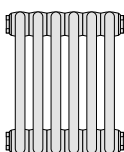
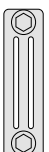
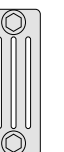
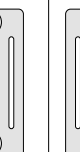
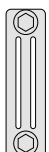
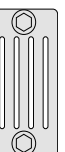
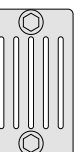
| Bauhöhe 2192 – 2500 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                        |  |  |  |  |  |  |  |  |  |  |
| Modell                 | 2220                                                                              | 3220                                                                              | 4220                                                                              | 5220                                                                              | 6220                                                                              | 2250                                                                              | 3250                                                                                | 4250                                                                                | 5250                                                                                | 6250                                                                                |
| H mm                   | 2192                                                                              | 2200                                                                              | 2200                                                                              | 2200                                                                              | 2200                                                                              | 2492                                                                              | 2500                                                                                | 2500                                                                                | 2500                                                                                | 2500                                                                                |
| T mm                   | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                   | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                  | 46                                                                                  | 46                                                                                  | 46                                                                                  |
| A m²                   | 0.34                                                                              | 0.51                                                                              | 0.69                                                                              | 0.86                                                                              | 1.03                                                                              | 0.39                                                                              | 0.58                                                                                | 0.78                                                                                | 0.98                                                                                | 1.18                                                                                |
| V dm³                  | 1.9                                                                               | 2.9                                                                               | 3.8                                                                               | 4.7                                                                               | 5.6                                                                               | 2.1                                                                               | 3.2                                                                                 | 4.3                                                                                 | 5.3                                                                                 | 6.3                                                                                 |
| M kg                   | 3.2                                                                               | 4.9                                                                               | 6.7                                                                               | 8.3                                                                               | 9.9                                                                               | 3.6                                                                               | 5.5                                                                                 | 7.6                                                                                 | 9.3                                                                                 | 11.8                                                                                |
| s <sub>k</sub> %       | 23                                                                                | 18                                                                                | 15                                                                                | 13                                                                                | 12                                                                                | 23                                                                                | 18                                                                                  | 15                                                                                  | 13                                                                                  | 12                                                                                  |
| q <sub>ms</sub> kg/h   | 13.0                                                                              | 17.2                                                                              | 22.0                                                                              | 26.8                                                                              | 31.4                                                                              | 14.7                                                                              | 19.4                                                                                | 24.9                                                                                | 30.3                                                                                | 35.4                                                                                |
| Exp. n                 | 1.28                                                                              | 1.32                                                                              | 1.32                                                                              | 1.32                                                                              | 1.32                                                                              | 1.28                                                                              | 1.32                                                                                | 1.32                                                                                | 1.32                                                                                | 1.32                                                                                |
| Δ TK                   | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                     | 190.7                                                                             | 254.4                                                                             | 325.7                                                                             | 396.9                                                                             | 464.3                                                                             | 215.9                                                                             | 286.2                                                                               | 367.6                                                                               | 447.8                                                                               | 524.1                                                                               |
| 55                     | 170.6                                                                             | 226.8                                                                             | 290.3                                                                             | 353.8                                                                             | 413.9                                                                             | 193.2                                                                             | 255.2                                                                               | 327.7                                                                               | 399.2                                                                               | 467.2                                                                               |
| 50                     | 151.0                                                                             | 200.0                                                                             | 256.0                                                                             | 312.0                                                                             | 365.0                                                                             | 171.0                                                                             | 225.0                                                                               | 289.0                                                                               | 352.0                                                                               | 412.0                                                                               |
| 49                     | 147.1                                                                             | 194.7                                                                             | 249.3                                                                             | 303.8                                                                             | 355.4                                                                             | 166.6                                                                             | 219.1                                                                               | 281.4                                                                               | 342.7                                                                               | 401.2                                                                               |
| 48                     | 143.3                                                                             | 189.5                                                                             | 242.6                                                                             | 295.6                                                                             | 345.9                                                                             | 162.3                                                                             | 213.2                                                                               | 273.8                                                                               | 333.5                                                                               | 390.4                                                                               |
| 47                     | 139.5                                                                             | 184.3                                                                             | 235.9                                                                             | 287.5                                                                             | 336.4                                                                             | 158.0                                                                             | 207.4                                                                               | 266.3                                                                               | 324.4                                                                               | 379.7                                                                               |
| 46                     | 135.7                                                                             | 179.2                                                                             | 229.3                                                                             | 279.5                                                                             | 327.0                                                                             | 153.7                                                                             | 201.5                                                                               | 258.9                                                                               | 315.3                                                                               | 369.1                                                                               |
| 45                     | 131.9                                                                             | 174.0                                                                             | 222.8                                                                             | 271.5                                                                             | 317.6                                                                             | 149.4                                                                             | 195.8                                                                               | 251.5                                                                               | 306.3                                                                               | 358.5                                                                               |
| 44                     | 128.2                                                                             | 168.9                                                                             | 216.3                                                                             | 263.6                                                                             | 308.3                                                                             | 145.2                                                                             | 190.1                                                                               | 244.1                                                                               | 297.3                                                                               | 348.0                                                                               |
| 43                     | 124.5                                                                             | 163.9                                                                             | 209.8                                                                             | 255.7                                                                             | 299.1                                                                             | 141.0                                                                             | 184.4                                                                               | 236.8                                                                               | 288.5                                                                               | 337.6                                                                               |
| 42                     | 120.8                                                                             | 158.9                                                                             | 203.4                                                                             | 247.9                                                                             | 290.0                                                                             | 136.8                                                                             | 178.7                                                                               | 229.6                                                                               | 279.6                                                                               | 327.3                                                                               |
| 41                     | 117.1                                                                             | 153.9                                                                             | 197.0                                                                             | 240.1                                                                             | 280.9                                                                             | 132.6                                                                             | 173.1                                                                               | 222.4                                                                               | 270.9                                                                               | 317.1                                                                               |
| 40                     | 113.5                                                                             | 149.0                                                                             | 190.7                                                                             | 232.4                                                                             | 271.9                                                                             | 128.5                                                                             | 167.6                                                                               | 215.3                                                                               | 262.2                                                                               | 306.9                                                                               |
| 39                     | 109.9                                                                             | 144.1                                                                             | 184.4                                                                             | 224.8                                                                             | 262.9                                                                             | 124.4                                                                             | 162.1                                                                               | 208.2                                                                               | 253.6                                                                               | 296.8                                                                               |
| 38                     | 106.3                                                                             | 139.2                                                                             | 178.2                                                                             | 217.2                                                                             | 254.1                                                                             | 120.3                                                                             | 156.6                                                                               | 201.2                                                                               | 245.0                                                                               | 286.8                                                                               |
| 37                     | 102.7                                                                             | 134.4                                                                             | 172.0                                                                             | 209.7                                                                             | 245.3                                                                             | 116.3                                                                             | 151.2                                                                               | 194.2                                                                               | 236.6                                                                               | 276.9                                                                               |
| 36                     | 99.2                                                                              | 129.6                                                                             | 165.9                                                                             | 202.2                                                                             | 236.6                                                                             | 112.3                                                                             | 145.8                                                                               | 187.3                                                                               | 228.2                                                                               | 267.0                                                                               |
| 35                     | 95.7                                                                              | 124.9                                                                             | 159.9                                                                             | 194.8                                                                             | 227.9                                                                             | 108.3                                                                             | 140.5                                                                               | 180.5                                                                               | 219.8                                                                               | 257.3                                                                               |
| 34                     | 92.2                                                                              | 120.2                                                                             | 153.9                                                                             | 187.5                                                                             | 219.4                                                                             | 104.4                                                                             | 135.2                                                                               | 173.7                                                                               | 211.6                                                                               | 247.6                                                                               |
| 33                     | 88.7                                                                              | 115.6                                                                             | 147.9                                                                             | 180.3                                                                             | 210.9                                                                             | 100.5                                                                             | 130.0                                                                               | 167.0                                                                               | 203.4                                                                               | 238.1                                                                               |
| 32                     | 85.3                                                                              | 111.0                                                                             | 142.0                                                                             | 173.1                                                                             | 202.5                                                                             | 96.6                                                                              | 124.8                                                                               | 160.3                                                                               | 195.3                                                                               | 228.6                                                                               |
| 31                     | 81.9                                                                              | 106.4                                                                             | 136.2                                                                             | 166.0                                                                             | 194.2                                                                             | 92.7                                                                              | 119.7                                                                               | 153.8                                                                               | 187.3                                                                               | 219.2                                                                               |
| 30                     | 78.5                                                                              | 101.9                                                                             | 130.4                                                                             | 159.0                                                                             | 186.0                                                                             | 88.9                                                                              | 114.6                                                                               | 147.3                                                                               | 179.4                                                                               | 209.9                                                                               |
| 29                     | 75.2                                                                              | 97.4                                                                              | 124.7                                                                             | 152.0                                                                             | 177.8                                                                             | 85.1                                                                              | 109.6                                                                               | 140.8                                                                               | 171.5                                                                               | 200.7                                                                               |
| 28                     | 71.9                                                                              | 93.0                                                                              | 119.1                                                                             | 145.1                                                                             | 169.8                                                                             | 81.4                                                                              | 104.7                                                                               | 134.4                                                                               | 163.7                                                                               | 191.6                                                                               |
| 27                     | 68.6                                                                              | 88.7                                                                              | 113.5                                                                             | 138.3                                                                             | 161.8                                                                             | 77.7                                                                              | 99.8                                                                                | 128.1                                                                               | 156.1                                                                               | 182.7                                                                               |
| 26                     | 65.4                                                                              | 84.4                                                                              | 108.0                                                                             | 131.6                                                                             | 154.0                                                                             | 74.0                                                                              | 94.9                                                                                | 121.9                                                                               | 148.5                                                                               | 173.8                                                                               |
| 25                     | 62.2                                                                              | 80.1                                                                              | 102.5                                                                             | 125.0                                                                             | 146.2                                                                             | 70.4                                                                              | 90.1                                                                                | 115.8                                                                               | 141.0                                                                               | 165.0                                                                               |
| 24                     | 59.0                                                                              | 75.9                                                                              | 97.2                                                                              | 118.4                                                                             | 138.5                                                                             | 66.8                                                                              | 85.4                                                                                | 109.7                                                                               | 133.6                                                                               | 156.4                                                                               |
| 23                     | 55.9                                                                              | 71.8                                                                              | 91.9                                                                              | 111.9                                                                             | 131.0                                                                             | 63.3                                                                              | 80.7                                                                                | 103.7                                                                               | 126.3                                                                               | 147.8                                                                               |
| 22                     | 52.8                                                                              | 67.7                                                                              | 86.6                                                                              | 105.6                                                                             | 123.5                                                                             | 59.8                                                                              | 76.1                                                                                | 97.8                                                                                | 119.1                                                                               | 139.4                                                                               |
| 21                     | 49.7                                                                              | 63.6                                                                              | 81.5                                                                              | 99.3                                                                              | 116.1                                                                             | 56.3                                                                              | 71.6                                                                                | 92.0                                                                                | 112.0                                                                               | 131.1                                                                               |
| 20                     | 46.7                                                                              | 59.7                                                                              | 76.4                                                                              | 93.1                                                                              | 108.9                                                                             | 52.9                                                                              | 67.1                                                                                | 86.2                                                                                | 105.0                                                                               | 122.9                                                                               |
| 18                     | 40.8                                                                              | 51.9                                                                              | 66.5                                                                              | 81.0                                                                              | 94.8                                                                              | 46.2                                                                              | 58.4                                                                                | 75.0                                                                                | 91.4                                                                                | 107.0                                                                               |
| 16                     | 35.1                                                                              | 44.4                                                                              | 56.9                                                                              | 69.3                                                                              | 81.1                                                                              | 39.8                                                                              | 50.0                                                                                | 64.2                                                                                | 78.2                                                                                | 91.6                                                                                |
| 14                     | 29.6                                                                              | 37.3                                                                              | 47.7                                                                              | 58.1                                                                              | 68.0                                                                              | 33.5                                                                              | 41.9                                                                                | 53.8                                                                                | 65.6                                                                                | 76.8                                                                                |
| 12                     | 24.3                                                                              | 30.4                                                                              | 38.9                                                                              | 47.4                                                                              | 55.5                                                                              | 27.5                                                                              | 34.2                                                                                | 43.9                                                                                | 53.5                                                                                | 62.6                                                                                |
| 10                     | 19.2                                                                              | 23.9                                                                              | 30.6                                                                              | 37.3                                                                              | 43.6                                                                              | 21.8                                                                              | 26.9                                                                                | 34.5                                                                                | 42.1                                                                                | 49.2                                                                                |

## Zehnder Charleston

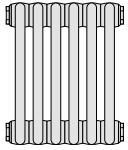
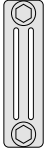
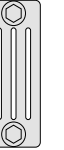
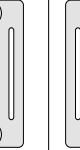
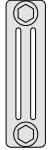
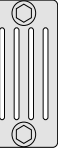
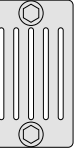
$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

| Bauhöhe 2792 – 3000 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                        |  |  |  |  |  |  |  |  |  |  |
| Modell                 | 2280                                                                              | 3280                                                                              | 4280                                                                              | 5280                                                                              | 6280                                                                              | 2300                                                                              | 3300                                                                                | 4300                                                                                | 5300                                                                                | 6300                                                                                |
| H mm                   | 2792                                                                              | 2800                                                                              | 2800                                                                              | 2800                                                                              | 2800                                                                              | 2992                                                                              | 3000                                                                                | 3000                                                                                | 3000                                                                                | 3000                                                                                |
| T mm                   | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                   | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                | 46                                                                                  | 46                                                                                  | 46                                                                                  | 46                                                                                  |
| A m²                   | 0.44                                                                              | 0.65                                                                              | 0.88                                                                              | 1.1                                                                               | 1.33                                                                              | 0.47                                                                              | 0.7                                                                                 | 0.94                                                                                | 1.18                                                                                | 1.41                                                                                |
| V dm³                  | 2.4                                                                               | 3.6                                                                               | 4.8                                                                               | 5.9                                                                               | 7                                                                                 | 2.5                                                                               | 3.9                                                                                 | 5.1                                                                                 | 6.4                                                                                 | 7.5                                                                                 |
| M kg                   | 4.1                                                                               | 6.1                                                                               | 8.4                                                                               | 10.5                                                                              | 13                                                                                | 4.4                                                                               | 6.6                                                                                 | 9                                                                                   | 11.1                                                                                | 13.4                                                                                |
| s <sub>k</sub> %       | 23                                                                                | 18                                                                                | 15                                                                                | 13                                                                                | 12                                                                                | 23                                                                                | 18                                                                                  | 15                                                                                  | 13                                                                                  | 12                                                                                  |
| q <sub>ms</sub> kg/h   | 16.3                                                                              | 21.6                                                                              | 27.8                                                                              | 33.7                                                                              | 39.5                                                                              | 17.3                                                                              | 23.1                                                                                | 29.7                                                                                | 36.1                                                                                | 42.2                                                                                |
| Exp. n                 | 1.27                                                                              | 1.33                                                                              | 1.33                                                                              | 1.33                                                                              | 1.33                                                                              | 1.27                                                                              | 1.33                                                                                | 1.33                                                                                | 1.33                                                                                | 1.33                                                                                |
| Δ TK                   | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                     | 238.2                                                                             | 319.9                                                                             | 411.6                                                                             | 499.6                                                                             | 585.0                                                                             | 253.4                                                                             | 342.8                                                                               | 439.7                                                                               | 535.3                                                                               | 625.7                                                                               |
| 55                     | 213.3                                                                             | 284.9                                                                             | 366.7                                                                             | 445.0                                                                             | 521.0                                                                             | 226.9                                                                             | 305.4                                                                               | 391.6                                                                               | 476.8                                                                               | 557.4                                                                               |
| 50                     | 189.0                                                                             | 251.0                                                                             | 323.0                                                                             | 392.0                                                                             | 459.0                                                                             | 201.0                                                                             | 269.0                                                                               | 345.0                                                                               | 420.0                                                                               | 491.0                                                                               |
| 49                     | 184.2                                                                             | 244.3                                                                             | 314.4                                                                             | 381.6                                                                             | 446.8                                                                             | 195.9                                                                             | 261.9                                                                               | 335.9                                                                               | 408.9                                                                               | 478.0                                                                               |
| 48                     | 179.5                                                                             | 237.7                                                                             | 305.9                                                                             | 371.3                                                                             | 434.7                                                                             | 190.8                                                                             | 254.8                                                                               | 326.8                                                                               | 397.8                                                                               | 465.1                                                                               |
| 47                     | 174.7                                                                             | 231.2                                                                             | 297.5                                                                             | 361.0                                                                             | 422.7                                                                             | 185.8                                                                             | 247.7                                                                               | 317.7                                                                               | 386.8                                                                               | 452.2                                                                               |
| 46                     | 170.0                                                                             | 224.7                                                                             | 289.1                                                                             | 350.9                                                                             | 410.8                                                                             | 180.8                                                                             | 240.8                                                                               | 308.8                                                                               | 375.9                                                                               | 439.5                                                                               |
| 45                     | 165.3                                                                             | 218.2                                                                             | 280.8                                                                             | 340.7                                                                             | 399.0                                                                             | 175.8                                                                             | 233.8                                                                               | 299.9                                                                               | 365.1                                                                               | 426.8                                                                               |
| 44                     | 160.7                                                                             | 211.8                                                                             | 272.5                                                                             | 330.7                                                                             | 387.2                                                                             | 170.9                                                                             | 226.9                                                                               | 291.1                                                                               | 354.3                                                                               | 414.2                                                                               |
| 43                     | 156.1                                                                             | 205.4                                                                             | 264.3                                                                             | 320.8                                                                             | 375.6                                                                             | 166.0                                                                             | 220.1                                                                               | 282.3                                                                               | 343.7                                                                               | 401.8                                                                               |
| 42                     | 151.5                                                                             | 199.1                                                                             | 256.1                                                                             | 310.9                                                                             | 364.0                                                                             | 161.1                                                                             | 213.3                                                                               | 273.6                                                                               | 333.1                                                                               | 389.4                                                                               |
| 41                     | 146.9                                                                             | 192.8                                                                             | 248.1                                                                             | 301.1                                                                             | 352.5                                                                             | 156.2                                                                             | 206.6                                                                               | 265.0                                                                               | 322.6                                                                               | 377.1                                                                               |
| 40                     | 142.4                                                                             | 186.5                                                                             | 240.1                                                                             | 291.3                                                                             | 341.1                                                                             | 151.4                                                                             | 199.9                                                                               | 256.4                                                                               | 312.1                                                                               | 364.9                                                                               |
| 39                     | 137.9                                                                             | 180.4                                                                             | 232.1                                                                             | 281.7                                                                             | 329.8                                                                             | 146.6                                                                             | 193.3                                                                               | 247.9                                                                               | 301.8                                                                               | 352.8                                                                               |
| 38                     | 133.4                                                                             | 174.2                                                                             | 224.2                                                                             | 272.1                                                                             | 318.6                                                                             | 141.8                                                                             | 186.7                                                                               | 239.5                                                                               | 291.6                                                                               | 340.9                                                                               |
| 37                     | 128.9                                                                             | 168.2                                                                             | 216.4                                                                             | 262.6                                                                             | 307.5                                                                             | 137.1                                                                             | 180.2                                                                               | 231.2                                                                               | 281.4                                                                               | 329.0                                                                               |
| 36                     | 124.5                                                                             | 162.2                                                                             | 208.7                                                                             | 253.2                                                                             | 296.5                                                                             | 132.4                                                                             | 173.8                                                                               | 222.9                                                                               | 271.3                                                                               | 317.2                                                                               |
| 35                     | 120.2                                                                             | 156.2                                                                             | 201.0                                                                             | 243.9                                                                             | 285.6                                                                             | 127.8                                                                             | 167.4                                                                               | 214.7                                                                               | 261.4                                                                               | 305.5                                                                               |
| 34                     | 115.8                                                                             | 150.3                                                                             | 193.4                                                                             | 234.7                                                                             | 274.8                                                                             | 123.2                                                                             | 161.1                                                                               | 206.6                                                                               | 251.5                                                                               | 294.0                                                                               |
| 33                     | 111.5                                                                             | 144.4                                                                             | 185.9                                                                             | 225.6                                                                             | 264.1                                                                             | 118.6                                                                             | 154.8                                                                               | 198.5                                                                               | 241.7                                                                               | 282.5                                                                               |
| 32                     | 107.2                                                                             | 138.6                                                                             | 178.4                                                                             | 216.5                                                                             | 253.5                                                                             | 114.0                                                                             | 148.6                                                                               | 190.6                                                                               | 232.0                                                                               | 271.2                                                                               |
| 31                     | 103.0                                                                             | 132.9                                                                             | 171.0                                                                             | 207.6                                                                             | 243.0                                                                             | 109.5                                                                             | 142.4                                                                               | 182.7                                                                               | 222.4                                                                               | 260.0                                                                               |
| 30                     | 98.8                                                                              | 127.2                                                                             | 163.7                                                                             | 198.7                                                                             | 232.7                                                                             | 105.1                                                                             | 136.4                                                                               | 174.9                                                                               | 212.9                                                                               | 248.9                                                                               |
| 29                     | 94.6                                                                              | 121.6                                                                             | 156.5                                                                             | 190.0                                                                             | 222.4                                                                             | 100.6                                                                             | 130.4                                                                               | 167.2                                                                               | 203.5                                                                               | 237.9                                                                               |
| 28                     | 90.5                                                                              | 116.1                                                                             | 149.4                                                                             | 181.3                                                                             | 212.3                                                                             | 96.2                                                                              | 124.4                                                                               | 159.6                                                                               | 194.2                                                                               | 227.1                                                                               |
| 27                     | 86.4                                                                              | 110.6                                                                             | 142.3                                                                             | 172.7                                                                             | 202.3                                                                             | 91.9                                                                              | 118.5                                                                               | 152.0                                                                               | 185.1                                                                               | 216.4                                                                               |
| 26                     | 82.4                                                                              | 105.2                                                                             | 135.4                                                                             | 164.3                                                                             | 192.4                                                                             | 87.6                                                                              | 112.7                                                                               | 144.6                                                                               | 176.0                                                                               | 205.8                                                                               |
| 25                     | 78.4                                                                              | 99.8                                                                              | 128.5                                                                             | 155.9                                                                             | 182.6                                                                             | 83.3                                                                              | 107.0                                                                               | 137.2                                                                               | 167.1                                                                               | 195.3                                                                               |
| 24                     | 74.4                                                                              | 94.6                                                                              | 121.7                                                                             | 147.7                                                                             | 172.9                                                                             | 79.1                                                                              | 101.3                                                                               | 130.0                                                                               | 158.2                                                                               | 185.0                                                                               |
| 23                     | 70.5                                                                              | 89.4                                                                              | 115.0                                                                             | 139.6                                                                             | 163.4                                                                             | 75.0                                                                              | 95.8                                                                                | 122.8                                                                               | 149.5                                                                               | 174.8                                                                               |
| 22                     | 66.6                                                                              | 84.2                                                                              | 108.4                                                                             | 131.5                                                                             | 154.0                                                                             | 70.9                                                                              | 90.3                                                                                | 115.8                                                                               | 140.9                                                                               | 164.8                                                                               |
| 21                     | 62.8                                                                              | 79.2                                                                              | 101.9                                                                             | 123.7                                                                             | 144.8                                                                             | 66.8                                                                              | 84.9                                                                                | 108.8                                                                               | 132.5                                                                               | 154.9                                                                               |
| 20                     | 59.0                                                                              | 74.2                                                                              | 95.5                                                                              | 115.9                                                                             | 135.7                                                                             | 62.8                                                                              | 79.5                                                                                | 102.0                                                                               | 124.2                                                                               | 145.2                                                                               |
| 18                     | 51.6                                                                              | 64.5                                                                              | 83.0                                                                              | 100.7                                                                             | 117.9                                                                             | 54.9                                                                              | 69.1                                                                                | 88.7                                                                                | 107.9                                                                               | 126.2                                                                               |
| 16                     | 44.5                                                                              | 55.1                                                                              | 71.0                                                                              | 86.1                                                                              | 100.8                                                                             | 47.3                                                                              | 59.1                                                                                | 75.8                                                                                | 92.3                                                                                | 107.9                                                                               |
| 14                     | 37.5                                                                              | 46.2                                                                              | 59.4                                                                              | 72.1                                                                              | 84.4                                                                              | 39.9                                                                              | 49.5                                                                                | 63.5                                                                                | 77.3                                                                                | 90.3                                                                                |
| 12                     | 30.9                                                                              | 37.6                                                                              | 48.4                                                                              | 58.7                                                                              | 68.8                                                                              | 32.8                                                                              | 40.3                                                                                | 51.7                                                                                | 62.9                                                                                | 73.6                                                                                |
| 10                     | 24.5                                                                              | 29.5                                                                              | 38.0                                                                              | 46.1                                                                              | 54.0                                                                              | 26.0                                                                              | 31.6                                                                                | 40.6                                                                                | 49.4                                                                                | 57.7                                                                                |

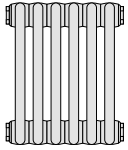
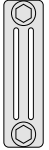
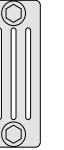
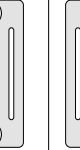
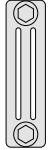
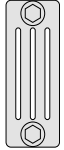
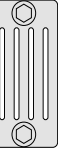
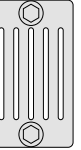
$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

| Bauhöhe 260 – 300 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                      |  |  |  |  |  |  |  |  |  |  |
| Modell               | K2026                                                                             | K3026                                                                             | K4026                                                                             | K5026                                                                             | K6026                                                                             | K2030                                                                             | K3030                                                                               | K4030                                                                               | K5030                                                                               | K6030                                                                               |
| H mm                 | 260                                                                               | 260                                                                               | 260                                                                               | 260                                                                               | 260                                                                               | 292                                                                               | 300                                                                                 | 300                                                                                 | 300                                                                                 | 300                                                                                 |
| T mm                 | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                 | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                  | 65                                                                                  | 65                                                                                  | 65                                                                                  |
| A m²                 | 0.04                                                                              | 0.06                                                                              | 0.09                                                                              | 0.11                                                                              | 0.13                                                                              | 0.05                                                                              | 0.07                                                                                | 0.1                                                                                 | 0.12                                                                                | 0.15                                                                                |
| V dm³                | 0.4                                                                               | 0.6                                                                               | 0.7                                                                               | 0.9                                                                               | 1                                                                                 | 0.4                                                                               | 0.6                                                                                 | 0.8                                                                                 | 1                                                                                   | 1.1                                                                                 |
| M kg                 | 0.5                                                                               | 0.7                                                                               | 1                                                                                 | 1.3                                                                               | 1.5                                                                               | 0.5                                                                               | 0.8                                                                                 | 1.2                                                                                 | 1.4                                                                                 | 1.7                                                                                 |
| s <sub>k</sub> %     | 25                                                                                | 21                                                                                | 18                                                                                | 17                                                                                | 18                                                                                | 25                                                                                | 20                                                                                  | 18                                                                                  | 16                                                                                  | 15                                                                                  |
| q <sub>ms</sub> kg/h | 2.1                                                                               | 2.7                                                                               | 3.5                                                                               | 4.3                                                                               | 5.0                                                                               | 2.3                                                                               | 3.0                                                                                 | 3.9                                                                                 | 4.8                                                                                 | 5.7                                                                                 |
| Exp. n               | 1.30                                                                              | 1.27                                                                              | 1.27                                                                              | 1.27                                                                              | 1.27                                                                              | 1.30                                                                              | 1.27                                                                                | 1.27                                                                                | 1.27                                                                                | 1.27                                                                                |
| Δ TK                 | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                   | 30.3                                                                              | 39.3                                                                              | 50.9                                                                              | 62.3                                                                              | 73.2                                                                              | 33.6                                                                              | 44.6                                                                                | 57.7                                                                                | 70.6                                                                                | 83.1                                                                                |
| 55                   | 27.1                                                                              | 35.2                                                                              | 45.6                                                                              | 55.8                                                                              | 65.6                                                                              | 30.0                                                                              | 40.0                                                                                | 51.7                                                                                | 63.2                                                                                | 74.4                                                                                |
| 50                   | 23.9                                                                              | 31.2                                                                              | 40.4                                                                              | 49.4                                                                              | 58.1                                                                              | 26.5                                                                              | 35.4                                                                                | 45.8                                                                                | 56.0                                                                                | 65.9                                                                                |
| 49                   | 23.3                                                                              | 30.4                                                                              | 39.4                                                                              | 48.1                                                                              | 56.6                                                                              | 25.8                                                                              | 34.5                                                                                | 44.6                                                                                | 54.6                                                                                | 64.2                                                                                |
| 48                   | 22.7                                                                              | 29.6                                                                              | 38.4                                                                              | 46.9                                                                              | 55.2                                                                              | 25.1                                                                              | 33.6                                                                                | 43.5                                                                                | 53.2                                                                                | 62.6                                                                                |
| 47                   | 22.1                                                                              | 28.8                                                                              | 37.3                                                                              | 45.7                                                                              | 53.7                                                                              | 24.5                                                                              | 32.7                                                                                | 42.3                                                                                | 51.8                                                                                | 60.9                                                                                |
| 46                   | 21.4                                                                              | 28.1                                                                              | 36.3                                                                              | 44.4                                                                              | 52.3                                                                              | 23.8                                                                              | 31.8                                                                                | 41.2                                                                                | 50.4                                                                                | 59.3                                                                                |
| 45                   | 20.8                                                                              | 27.3                                                                              | 35.3                                                                              | 43.2                                                                              | 50.8                                                                              | 23.1                                                                              | 31.0                                                                                | 40.1                                                                                | 49.0                                                                                | 57.6                                                                                |
| 44                   | 20.2                                                                              | 26.5                                                                              | 34.3                                                                              | 42.0                                                                              | 49.4                                                                              | 22.4                                                                              | 30.1                                                                                | 38.9                                                                                | 47.6                                                                                | 56.0                                                                                |
| 43                   | 19.6                                                                              | 25.8                                                                              | 33.4                                                                              | 40.8                                                                              | 48.0                                                                              | 21.8                                                                              | 29.2                                                                                | 37.8                                                                                | 46.2                                                                                | 54.4                                                                                |
| 42                   | 19.1                                                                              | 25.0                                                                              | 32.4                                                                              | 39.6                                                                              | 46.6                                                                              | 21.1                                                                              | 28.4                                                                                | 36.7                                                                                | 44.9                                                                                | 52.8                                                                                |
| 41                   | 18.5                                                                              | 24.2                                                                              | 31.4                                                                              | 38.4                                                                              | 45.2                                                                              | 20.5                                                                              | 27.5                                                                                | 35.6                                                                                | 43.5                                                                                | 51.2                                                                                |
| 40                   | 17.9                                                                              | 23.5                                                                              | 30.4                                                                              | 37.2                                                                              | 43.8                                                                              | 19.8                                                                              | 26.7                                                                                | 34.5                                                                                | 42.2                                                                                | 49.6                                                                                |
| 39                   | 17.3                                                                              | 22.8                                                                              | 29.5                                                                              | 36.0                                                                              | 42.4                                                                              | 19.2                                                                              | 25.8                                                                                | 33.4                                                                                | 40.8                                                                                | 48.1                                                                                |
| 38                   | 16.7                                                                              | 22.0                                                                              | 28.5                                                                              | 34.9                                                                              | 41.0                                                                              | 18.5                                                                              | 25.0                                                                                | 32.3                                                                                | 39.5                                                                                | 46.5                                                                                |
| 37                   | 16.2                                                                              | 21.3                                                                              | 27.6                                                                              | 33.7                                                                              | 39.6                                                                              | 17.9                                                                              | 24.2                                                                                | 31.2                                                                                | 38.2                                                                                | 45.0                                                                                |
| 36                   | 15.6                                                                              | 20.6                                                                              | 26.6                                                                              | 32.5                                                                              | 38.3                                                                              | 17.3                                                                              | 23.3                                                                                | 30.2                                                                                | 36.9                                                                                | 43.4                                                                                |
| 35                   | 15.0                                                                              | 19.8                                                                              | 25.7                                                                              | 31.4                                                                              | 36.9                                                                              | 16.7                                                                              | 22.5                                                                                | 29.1                                                                                | 35.6                                                                                | 41.9                                                                                |
| 34                   | 14.5                                                                              | 19.1                                                                              | 24.8                                                                              | 30.3                                                                              | 35.6                                                                              | 16.1                                                                              | 21.7                                                                                | 28.1                                                                                | 34.3                                                                                | 40.4                                                                                |
| 33                   | 13.9                                                                              | 18.4                                                                              | 23.8                                                                              | 29.1                                                                              | 34.3                                                                              | 15.4                                                                              | 20.9                                                                                | 27.0                                                                                | 33.0                                                                                | 38.9                                                                                |
| 32                   | 13.4                                                                              | 17.7                                                                              | 22.9                                                                              | 28.0                                                                              | 33.0                                                                              | 14.8                                                                              | 20.1                                                                                | 26.0                                                                                | 31.8                                                                                | 37.4                                                                                |
| 31                   | 12.8                                                                              | 17.0                                                                              | 22.0                                                                              | 26.9                                                                              | 31.7                                                                              | 14.2                                                                              | 19.3                                                                                | 25.0                                                                                | 30.5                                                                                | 35.9                                                                                |
| 30                   | 12.3                                                                              | 16.3                                                                              | 21.1                                                                              | 25.8                                                                              | 30.4                                                                              | 13.6                                                                              | 18.5                                                                                | 23.9                                                                                | 29.3                                                                                | 34.4                                                                                |
| 29                   | 11.8                                                                              | 15.6                                                                              | 20.2                                                                              | 24.7                                                                              | 29.1                                                                              | 13.1                                                                              | 17.7                                                                                | 22.9                                                                                | 28.0                                                                                | 33.0                                                                                |
| 28                   | 11.2                                                                              | 14.9                                                                              | 19.3                                                                              | 23.7                                                                              | 27.8                                                                              | 12.5                                                                              | 17.0                                                                                | 21.9                                                                                | 26.8                                                                                | 31.6                                                                                |
| 27                   | 10.7                                                                              | 14.3                                                                              | 18.5                                                                              | 22.6                                                                              | 26.6                                                                              | 11.9                                                                              | 16.2                                                                                | 20.9                                                                                | 25.6                                                                                | 30.1                                                                                |
| 26                   | 10.2                                                                              | 13.6                                                                              | 17.6                                                                              | 21.5                                                                              | 25.3                                                                              | 11.3                                                                              | 15.4                                                                                | 20.0                                                                                | 24.4                                                                                | 28.7                                                                                |
| 25                   | 9.7                                                                               | 12.9                                                                              | 16.8                                                                              | 20.5                                                                              | 24.1                                                                              | 10.8                                                                              | 14.7                                                                                | 19.0                                                                                | 23.2                                                                                | 27.3                                                                                |
| 24                   | 9.2                                                                               | 12.3                                                                              | 15.9                                                                              | 19.4                                                                              | 22.9                                                                              | 10.2                                                                              | 13.9                                                                                | 18.0                                                                                | 22.0                                                                                | 25.9                                                                                |
| 23                   | 8.7                                                                               | 11.6                                                                              | 15.1                                                                              | 18.4                                                                              | 21.7                                                                              | 9.7                                                                               | 13.2                                                                                | 17.1                                                                                | 20.9                                                                                | 24.6                                                                                |
| 22                   | 8.2                                                                               | 11.0                                                                              | 14.2                                                                              | 17.4                                                                              | 20.5                                                                              | 9.1                                                                               | 12.5                                                                                | 16.1                                                                                | 19.7                                                                                | 23.2                                                                                |
| 21                   | 7.7                                                                               | 10.4                                                                              | 13.4                                                                              | 16.4                                                                              | 19.3                                                                              | 8.6                                                                               | 11.8                                                                                | 15.2                                                                                | 18.6                                                                                | 21.9                                                                                |
| 20                   | 7.3                                                                               | 9.7                                                                               | 12.6                                                                              | 15.4                                                                              | 18.1                                                                              | 8.1                                                                               | 11.1                                                                                | 14.3                                                                                | 17.5                                                                                | 20.6                                                                                |
| 18                   | 6.3                                                                               | 8.5                                                                               | 11.0                                                                              | 13.5                                                                              | 15.9                                                                              | 7.0                                                                               | 9.7                                                                                 | 12.5                                                                                | 15.3                                                                                | 18.0                                                                                |
| 16                   | 5.4                                                                               | 7.3                                                                               | 9.5                                                                               | 11.6                                                                              | 13.7                                                                              | 6.0                                                                               | 8.3                                                                                 | 10.8                                                                                | 13.2                                                                                | 15.5                                                                                |
| 14                   | 4.6                                                                               | 6.2                                                                               | 8.0                                                                               | 9.8                                                                               | 11.5                                                                              | 5.1                                                                               | 7.0                                                                                 | 9.1                                                                                 | 11.1                                                                                | 13.1                                                                                |
| 12                   | 3.7                                                                               | 5.1                                                                               | 6.6                                                                               | 8.1                                                                               | 9.5                                                                               | 4.1                                                                               | 5.8                                                                                 | 7.5                                                                                 | 9.1                                                                                 | 10.8                                                                                |
| 10                   | 2.9                                                                               | 4.0                                                                               | 5.2                                                                               | 6.4                                                                               | 7.5                                                                               | 3.3                                                                               | 4.6                                                                                 | 5.9                                                                                 | 7.3                                                                                 | 8.5                                                                                 |

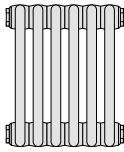
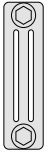
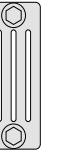
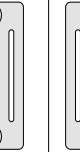
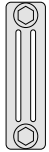
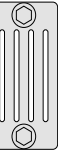
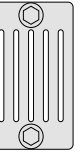
$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

| Bauhöhe 342 – 400 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                      |  |  |  |  |  |  |  |  |  |  |
| Modell               | K2035                                                                             | K3035                                                                             | K4035                                                                             | K5035                                                                             | K6035                                                                             | K2040                                                                             | K3040                                                                               | K4040                                                                               | K5040                                                                               | K6040                                                                               |
| H mm                 | 342                                                                               | 350                                                                               | 350                                                                               | 350                                                                               | 350                                                                               | 392                                                                               | 400                                                                                 | 400                                                                                 | 400                                                                                 | 400                                                                                 |
| T mm                 | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                 | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                  | 65                                                                                  | 65                                                                                  | 65                                                                                  |
| A m²                 | 0.06                                                                              | 0.08                                                                              | 0.11                                                                              | 0.14                                                                              | 0.17                                                                              | 0.07                                                                              | 0.1                                                                                 | 0.13                                                                                | 0.16                                                                                | 0.19                                                                                |
| V dm³                | 0.4                                                                               | 0.7                                                                               | 0.9                                                                               | 1.1                                                                               | 1.3                                                                               | 0.5                                                                               | 0.7                                                                                 | 0.9                                                                                 | 1.2                                                                                 | 1.4                                                                                 |
| M kg                 | 0.7                                                                               | 0.9                                                                               | 1.3                                                                               | 1.6                                                                               | 1.9                                                                               | 0.7                                                                               | 1                                                                                   | 1.5                                                                                 | 1.8                                                                                 | 2.1                                                                                 |
| s <sub>k</sub> %     | 24                                                                                | 20                                                                                | 17                                                                                | 15                                                                                | 14                                                                                | 25                                                                                | 19                                                                                  | 16                                                                                  | 15                                                                                  | 14                                                                                  |
| q <sub>ms</sub> kg/h | 2.6                                                                               | 3.5                                                                               | 4.5                                                                               | 5.5                                                                               | 6.5                                                                               | 2.9                                                                               | 3.9                                                                                 | 5.1                                                                                 | 6.2                                                                                 | 7.3                                                                                 |
| Exp. n               | 1.30                                                                              | 1.28                                                                              | 1.28                                                                              | 1.28                                                                              | 1.28                                                                              | 1.30                                                                              | 1.28                                                                                | 1.28                                                                                | 1.28                                                                                | 1.28                                                                                |
| Δ TK                 | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                   | 38.5                                                                              | 51.3                                                                              | 66.3                                                                              | 81.1                                                                              | 95.3                                                                              | 43.3                                                                              | 57.7                                                                                | 74.8                                                                                | 91.3                                                                                | 107.5                                                                               |
| 55                   | 34.4                                                                              | 45.9                                                                              | 59.3                                                                              | 72.5                                                                              | 85.3                                                                              | 38.7                                                                              | 51.6                                                                                | 66.9                                                                                | 81.7                                                                                | 96.1                                                                                |
| 50                   | 30.4                                                                              | 40.6                                                                              | 52.5                                                                              | 64.2                                                                              | 75.5                                                                              | 34.2                                                                              | 45.7                                                                                | 59.2                                                                                | 72.3                                                                                | 85.1                                                                                |
| 49                   | 29.6                                                                              | 39.6                                                                              | 51.2                                                                              | 62.6                                                                              | 73.6                                                                              | 33.3                                                                              | 44.5                                                                                | 57.7                                                                                | 70.5                                                                                | 82.9                                                                                |
| 48                   | 28.8                                                                              | 38.5                                                                              | 49.8                                                                              | 60.9                                                                              | 71.7                                                                              | 32.4                                                                              | 43.4                                                                                | 56.2                                                                                | 68.6                                                                                | 80.8                                                                                |
| 47                   | 28.1                                                                              | 37.5                                                                              | 48.5                                                                              | 59.3                                                                              | 69.8                                                                              | 31.6                                                                              | 42.2                                                                                | 54.7                                                                                | 66.8                                                                                | 78.6                                                                                |
| 46                   | 27.3                                                                              | 36.5                                                                              | 47.2                                                                              | 57.7                                                                              | 67.9                                                                              | 30.7                                                                              | 41.1                                                                                | 53.2                                                                                | 65.0                                                                                | 76.5                                                                                |
| 45                   | 26.5                                                                              | 35.5                                                                              | 45.9                                                                              | 56.1                                                                              | 66.0                                                                              | 29.8                                                                              | 39.9                                                                                | 51.7                                                                                | 63.2                                                                                | 74.4                                                                                |
| 44                   | 25.7                                                                              | 34.5                                                                              | 44.6                                                                              | 54.5                                                                              | 64.1                                                                              | 29.0                                                                              | 38.8                                                                                | 50.3                                                                                | 61.4                                                                                | 72.3                                                                                |
| 43                   | 25.0                                                                              | 33.5                                                                              | 43.3                                                                              | 52.9                                                                              | 62.2                                                                              | 28.1                                                                              | 37.7                                                                                | 48.8                                                                                | 59.6                                                                                | 70.2                                                                                |
| 42                   | 24.2                                                                              | 32.5                                                                              | 42.0                                                                              | 51.4                                                                              | 60.4                                                                              | 27.3                                                                              | 36.6                                                                                | 47.4                                                                                | 57.8                                                                                | 68.1                                                                                |
| 41                   | 23.5                                                                              | 31.5                                                                              | 40.7                                                                              | 49.8                                                                              | 58.6                                                                              | 26.4                                                                              | 35.4                                                                                | 45.9                                                                                | 56.1                                                                                | 66.0                                                                                |
| 40                   | 22.7                                                                              | 30.5                                                                              | 39.5                                                                              | 48.2                                                                              | 56.7                                                                              | 25.6                                                                              | 34.3                                                                                | 44.5                                                                                | 54.3                                                                                | 64.0                                                                                |
| 39                   | 22.0                                                                              | 29.5                                                                              | 38.2                                                                              | 46.7                                                                              | 54.9                                                                              | 24.8                                                                              | 33.3                                                                                | 43.1                                                                                | 52.6                                                                                | 61.9                                                                                |
| 38                   | 21.3                                                                              | 28.6                                                                              | 36.9                                                                              | 45.2                                                                              | 53.1                                                                              | 23.9                                                                              | 32.2                                                                                | 41.7                                                                                | 50.9                                                                                | 59.9                                                                                |
| 37                   | 20.6                                                                              | 27.6                                                                              | 35.7                                                                              | 43.7                                                                              | 51.4                                                                              | 23.1                                                                              | 31.1                                                                                | 40.3                                                                                | 49.2                                                                                | 57.9                                                                                |
| 36                   | 19.8                                                                              | 26.7                                                                              | 34.5                                                                              | 42.2                                                                              | 49.6                                                                              | 22.3                                                                              | 30.0                                                                                | 38.9                                                                                | 47.5                                                                                | 55.9                                                                                |
| 35                   | 19.1                                                                              | 25.7                                                                              | 33.3                                                                              | 40.7                                                                              | 47.8                                                                              | 21.5                                                                              | 28.9                                                                                | 37.5                                                                                | 45.8                                                                                | 53.9                                                                                |
| 34                   | 18.4                                                                              | 24.8                                                                              | 32.0                                                                              | 39.2                                                                              | 46.1                                                                              | 20.7                                                                              | 27.9                                                                                | 36.1                                                                                | 44.1                                                                                | 51.9                                                                                |
| 33                   | 17.7                                                                              | 23.9                                                                              | 30.8                                                                              | 37.7                                                                              | 44.4                                                                              | 19.9                                                                              | 26.8                                                                                | 34.8                                                                                | 42.5                                                                                | 50.0                                                                                |
| 32                   | 17.0                                                                              | 22.9                                                                              | 29.7                                                                              | 36.3                                                                              | 42.6                                                                              | 19.1                                                                              | 25.8                                                                                | 33.4                                                                                | 40.8                                                                                | 48.1                                                                                |
| 31                   | 16.3                                                                              | 22.0                                                                              | 28.5                                                                              | 34.8                                                                              | 40.9                                                                              | 18.4                                                                              | 24.8                                                                                | 32.1                                                                                | 39.2                                                                                | 46.2                                                                                |
| 30                   | 15.6                                                                              | 21.1                                                                              | 27.3                                                                              | 33.4                                                                              | 39.3                                                                              | 17.6                                                                              | 23.8                                                                                | 30.8                                                                                | 37.6                                                                                | 44.3                                                                                |
| 29                   | 15.0                                                                              | 20.2                                                                              | 26.1                                                                              | 32.0                                                                              | 37.6                                                                              | 16.8                                                                              | 22.8                                                                                | 29.5                                                                                | 36.0                                                                                | 42.4                                                                                |
| 28                   | 14.3                                                                              | 19.3                                                                              | 25.0                                                                              | 30.6                                                                              | 35.9                                                                              | 16.1                                                                              | 21.8                                                                                | 28.2                                                                                | 34.4                                                                                | 40.5                                                                                |
| 27                   | 13.6                                                                              | 18.4                                                                              | 23.9                                                                              | 29.2                                                                              | 34.3                                                                              | 15.4                                                                              | 20.8                                                                                | 26.9                                                                                | 32.9                                                                                | 38.7                                                                                |
| 26                   | 13.0                                                                              | 17.6                                                                              | 22.7                                                                              | 27.8                                                                              | 32.7                                                                              | 14.6                                                                              | 19.8                                                                                | 25.6                                                                                | 31.3                                                                                | 36.8                                                                                |
| 25                   | 12.3                                                                              | 16.7                                                                              | 21.6                                                                              | 26.4                                                                              | 31.1                                                                              | 13.9                                                                              | 18.8                                                                                | 24.4                                                                                | 29.8                                                                                | 35.0                                                                                |
| 24                   | 11.7                                                                              | 15.9                                                                              | 20.5                                                                              | 25.1                                                                              | 29.5                                                                              | 13.2                                                                              | 17.9                                                                                | 23.1                                                                                | 28.3                                                                                | 33.3                                                                                |
| 23                   | 11.1                                                                              | 15.0                                                                              | 19.4                                                                              | 23.8                                                                              | 27.9                                                                              | 12.5                                                                              | 16.9                                                                                | 21.9                                                                                | 26.8                                                                                | 31.5                                                                                |
| 22                   | 10.5                                                                              | 14.2                                                                              | 18.4                                                                              | 22.4                                                                              | 26.4                                                                              | 11.8                                                                              | 16.0                                                                                | 20.7                                                                                | 25.3                                                                                | 29.8                                                                                |
| 21                   | 9.8                                                                               | 13.4                                                                              | 17.3                                                                              | 21.1                                                                              | 24.9                                                                              | 11.1                                                                              | 15.1                                                                                | 19.5                                                                                | 23.8                                                                                | 28.0                                                                                |
| 20                   | 9.2                                                                               | 12.6                                                                              | 16.2                                                                              | 19.9                                                                              | 23.4                                                                              | 10.4                                                                              | 14.1                                                                                | 18.3                                                                                | 22.4                                                                                | 26.3                                                                                |
| 18                   | 8.1                                                                               | 11.0                                                                              | 14.2                                                                              | 17.4                                                                              | 20.4                                                                              | 9.1                                                                               | 12.4                                                                                | 16.0                                                                                | 19.6                                                                                | 23.0                                                                                |
| 16                   | 6.9                                                                               | 9.4                                                                               | 12.2                                                                              | 14.9                                                                              | 17.6                                                                              | 7.8                                                                               | 10.6                                                                                | 13.8                                                                                | 16.8                                                                                | 19.8                                                                                |
| 14                   | 5.8                                                                               | 8.0                                                                               | 10.3                                                                              | 12.6                                                                              | 14.8                                                                              | 6.5                                                                               | 9.0                                                                                 | 11.6                                                                                | 14.2                                                                                | 16.7                                                                                |
| 12                   | 4.8                                                                               | 6.5                                                                               | 8.4                                                                               | 10.3                                                                              | 12.2                                                                              | 5.3                                                                               | 7.4                                                                                 | 9.5                                                                                 | 11.6                                                                                | 13.7                                                                                |
| 10                   | 3.8                                                                               | 5.2                                                                               | 6.7                                                                               | 8.2                                                                               | 9.6                                                                               | 4.2                                                                               | 5.8                                                                                 | 7.5                                                                                 | 9.2                                                                                 | 10.8                                                                                |

$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

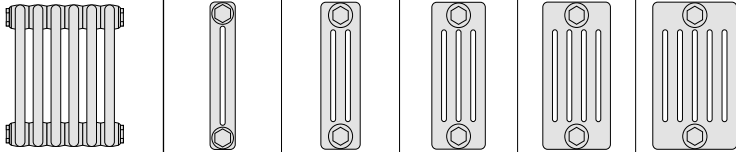
| Bauhöhe 442 – 500 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                      |  |  |  |  |  |  |  |  |  |  |
| Modell               | K2045                                                                             | K3045                                                                             | K4045                                                                             | K5045                                                                             | K6045                                                                             | K2050                                                                             | K3050                                                                               | K4050                                                                               | K5050                                                                               | K6050                                                                               |
| H mm                 | 442                                                                               | 450                                                                               | 450                                                                               | 450                                                                               | 450                                                                               | 492                                                                               | 500                                                                                 | 500                                                                                 | 500                                                                                 | 500                                                                                 |
| T mm                 | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                 | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                  | 65                                                                                  | 65                                                                                  | 65                                                                                  |
| A m²                 | 0.07                                                                              | 0.11                                                                              | 0.15                                                                              | 0.18                                                                              | 0.22                                                                              | 0.08                                                                              | 0.12                                                                                | 0.16                                                                                | 0.2                                                                                 | 0.24                                                                                |
| V dm³                | 0.5                                                                               | 0.8                                                                               | 1                                                                                 | 1.3                                                                               | 1.5                                                                               | 0.6                                                                               | 0.9                                                                                 | 1.1                                                                                 | 1.4                                                                                 | 1.6                                                                                 |
| M kg                 | 0.8                                                                               | 1.1                                                                               | 1.6                                                                               | 2                                                                                 | 2.3                                                                               | 0.8                                                                               | 1.3                                                                                 | 1.7                                                                                 | 2.2                                                                                 | 2.6                                                                                 |
| s <sub>k</sub> %     | 24                                                                                | 19                                                                                | 16                                                                                | 14                                                                                | 13                                                                                | 23                                                                                | 18                                                                                  | 16                                                                                  | 14                                                                                  | 13                                                                                  |
| q <sub>ms</sub> kg/h | 3.3                                                                               | 4.4                                                                               | 5.7                                                                               | 6.9                                                                               | 8.1                                                                               | 3.6                                                                               | 4.8                                                                                 | 6.2                                                                                 | 7.6                                                                                 | 8.9                                                                                 |
| Exp. n               | 1.30                                                                              | 1.28                                                                              | 1.28                                                                              | 1.28                                                                              | 1.28                                                                              | 1.30                                                                              | 1.28                                                                                | 1.28                                                                                | 1.28                                                                                | 1.28                                                                                |
| Δ TK                 | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                   | 48.0                                                                              | 64.2                                                                              | 83.0                                                                              | 101.5                                                                             | 119.5                                                                             | 52.7                                                                              | 70.6                                                                                | 91.3                                                                                | 111.6                                                                               | 131.3                                                                               |
| 55                   | 42.9                                                                              | 57.4                                                                              | 74.2                                                                              | 90.8                                                                              | 106.9                                                                             | 47.1                                                                              | 63.2                                                                                | 81.7                                                                                | 99.9                                                                                | 117.5                                                                               |
| 50                   | 37.9                                                                              | 50.8                                                                              | 65.7                                                                              | 80.4                                                                              | 94.6                                                                              | 41.6                                                                              | 55.9                                                                                | 72.3                                                                                | 88.4                                                                                | 104.0                                                                               |
| 49                   | 36.9                                                                              | 49.5                                                                              | 64.0                                                                              | 78.3                                                                              | 92.2                                                                              | 40.5                                                                              | 54.5                                                                                | 70.5                                                                                | 86.1                                                                                | 101.3                                                                               |
| 48                   | 35.9                                                                              | 48.2                                                                              | 62.4                                                                              | 76.3                                                                              | 89.8                                                                              | 39.4                                                                              | 53.1                                                                                | 68.6                                                                                | 83.9                                                                                | 98.7                                                                                |
| 47                   | 35.0                                                                              | 46.9                                                                              | 60.7                                                                              | 74.3                                                                              | 87.4                                                                              | 38.4                                                                              | 51.6                                                                                | 66.8                                                                                | 81.7                                                                                | 96.1                                                                                |
| 46                   | 34.0                                                                              | 45.7                                                                              | 59.0                                                                              | 72.3                                                                              | 85.0                                                                              | 37.3                                                                              | 50.2                                                                                | 65.0                                                                                | 79.5                                                                                | 93.5                                                                                |
| 45                   | 33.0                                                                              | 44.4                                                                              | 57.4                                                                              | 70.3                                                                              | 82.7                                                                              | 36.3                                                                              | 48.8                                                                                | 63.2                                                                                | 77.2                                                                                | 90.9                                                                                |
| 44                   | 32.1                                                                              | 43.1                                                                              | 55.8                                                                              | 68.3                                                                              | 80.3                                                                              | 35.2                                                                              | 47.5                                                                                | 61.4                                                                                | 75.1                                                                                | 88.3                                                                                |
| 43                   | 31.2                                                                              | 41.9                                                                              | 54.2                                                                              | 66.3                                                                              | 78.0                                                                              | 34.2                                                                              | 46.1                                                                                | 59.6                                                                                | 72.9                                                                                | 85.7                                                                                |
| 42                   | 30.2                                                                              | 40.6                                                                              | 52.6                                                                              | 64.3                                                                              | 75.7                                                                              | 33.2                                                                              | 44.7                                                                                | 57.8                                                                                | 70.7                                                                                | 83.2                                                                                |
| 41                   | 29.3                                                                              | 39.4                                                                              | 51.0                                                                              | 62.4                                                                              | 73.4                                                                              | 32.1                                                                              | 43.4                                                                                | 56.1                                                                                | 68.6                                                                                | 80.7                                                                                |
| 40                   | 28.4                                                                              | 38.2                                                                              | 49.4                                                                              | 60.4                                                                              | 71.1                                                                              | 31.1                                                                              | 42.0                                                                                | 54.3                                                                                | 66.4                                                                                | 78.2                                                                                |
| 39                   | 27.4                                                                              | 37.0                                                                              | 47.8                                                                              | 58.5                                                                              | 68.8                                                                              | 30.1                                                                              | 40.7                                                                                | 52.6                                                                                | 64.3                                                                                | 75.7                                                                                |
| 38                   | 26.5                                                                              | 35.8                                                                              | 46.2                                                                              | 56.6                                                                              | 66.6                                                                              | 29.1                                                                              | 39.3                                                                                | 50.9                                                                                | 62.2                                                                                | 73.2                                                                                |
| 37                   | 25.6                                                                              | 34.6                                                                              | 44.7                                                                              | 54.7                                                                              | 64.3                                                                              | 28.1                                                                              | 38.0                                                                                | 49.2                                                                                | 60.1                                                                                | 70.7                                                                                |
| 36                   | 24.7                                                                              | 33.4                                                                              | 43.1                                                                              | 52.8                                                                              | 62.1                                                                              | 27.1                                                                              | 36.7                                                                                | 47.5                                                                                | 58.1                                                                                | 68.3                                                                                |
| 35                   | 23.8                                                                              | 32.2                                                                              | 41.6                                                                              | 50.9                                                                              | 59.9                                                                              | 26.2                                                                              | 35.4                                                                                | 45.8                                                                                | 56.0                                                                                | 65.9                                                                                |
| 34                   | 23.0                                                                              | 31.0                                                                              | 40.1                                                                              | 49.1                                                                              | 57.7                                                                              | 25.2                                                                              | 34.1                                                                                | 44.1                                                                                | 54.0                                                                                | 63.5                                                                                |
| 33                   | 22.1                                                                              | 29.8                                                                              | 38.6                                                                              | 47.2                                                                              | 55.6                                                                              | 24.2                                                                              | 32.8                                                                                | 42.5                                                                                | 51.9                                                                                | 61.1                                                                                |
| 32                   | 21.2                                                                              | 28.7                                                                              | 37.1                                                                              | 45.4                                                                              | 53.4                                                                              | 23.3                                                                              | 31.6                                                                                | 40.8                                                                                | 49.9                                                                                | 58.7                                                                                |
| 31                   | 20.4                                                                              | 27.6                                                                              | 35.6                                                                              | 43.6                                                                              | 51.3                                                                              | 22.3                                                                              | 30.3                                                                                | 39.2                                                                                | 47.9                                                                                | 56.4                                                                                |
| 30                   | 19.5                                                                              | 26.4                                                                              | 34.2                                                                              | 41.8                                                                              | 49.2                                                                              | 21.4                                                                              | 29.1                                                                                | 37.6                                                                                | 46.0                                                                                | 54.1                                                                                |
| 29                   | 18.7                                                                              | 25.3                                                                              | 32.7                                                                              | 40.0                                                                              | 47.1                                                                              | 20.5                                                                              | 27.8                                                                                | 36.0                                                                                | 44.0                                                                                | 51.8                                                                                |
| 28                   | 17.8                                                                              | 24.2                                                                              | 31.3                                                                              | 38.3                                                                              | 45.0                                                                              | 19.6                                                                              | 26.6                                                                                | 34.4                                                                                | 42.1                                                                                | 49.5                                                                                |
| 27                   | 17.0                                                                              | 23.1                                                                              | 29.9                                                                              | 36.5                                                                              | 43.0                                                                              | 18.7                                                                              | 25.4                                                                                | 32.9                                                                                | 40.2                                                                                | 47.3                                                                                |
| 26                   | 16.2                                                                              | 22.0                                                                              | 28.4                                                                              | 34.8                                                                              | 41.0                                                                              | 17.8                                                                              | 24.2                                                                                | 31.3                                                                                | 38.3                                                                                | 45.0                                                                                |
| 25                   | 15.4                                                                              | 20.9                                                                              | 27.1                                                                              | 33.1                                                                              | 39.0                                                                              | 16.9                                                                              | 23.0                                                                                | 29.8                                                                                | 36.4                                                                                | 42.8                                                                                |
| 24                   | 14.6                                                                              | 19.9                                                                              | 25.7                                                                              | 31.4                                                                              | 37.0                                                                              | 16.0                                                                              | 21.8                                                                                | 28.3                                                                                | 34.5                                                                                | 40.6                                                                                |
| 23                   | 13.8                                                                              | 18.8                                                                              | 24.3                                                                              | 29.8                                                                              | 35.0                                                                              | 15.2                                                                              | 20.7                                                                                | 26.8                                                                                | 32.7                                                                                | 38.5                                                                                |
| 22                   | 13.0                                                                              | 17.8                                                                              | 23.0                                                                              | 28.1                                                                              | 33.1                                                                              | 14.3                                                                              | 19.5                                                                                | 25.3                                                                                | 30.9                                                                                | 36.4                                                                                |
| 21                   | 12.3                                                                              | 16.7                                                                              | 21.6                                                                              | 26.5                                                                              | 31.2                                                                              | 13.5                                                                              | 18.4                                                                                | 23.8                                                                                | 29.1                                                                                | 34.3                                                                                |
| 20                   | 11.5                                                                              | 15.7                                                                              | 20.3                                                                              | 24.9                                                                              | 29.3                                                                              | 12.6                                                                              | 17.3                                                                                | 22.4                                                                                | 27.4                                                                                | 32.2                                                                                |
| 18                   | 10.0                                                                              | 13.7                                                                              | 17.8                                                                              | 21.7                                                                              | 25.6                                                                              | 11.0                                                                              | 15.1                                                                                | 19.6                                                                                | 23.9                                                                                | 28.1                                                                                |
| 16                   | 8.6                                                                               | 11.8                                                                              | 15.3                                                                              | 18.7                                                                              | 22.0                                                                              | 9.5                                                                               | 13.0                                                                                | 16.8                                                                                | 20.6                                                                                | 24.2                                                                                |
| 14                   | 7.2                                                                               | 10.0                                                                              | 12.9                                                                              | 15.8                                                                              | 18.5                                                                              | 8.0                                                                               | 11.0                                                                                | 14.2                                                                                | 17.3                                                                                | 20.4                                                                                |
| 12                   | 5.9                                                                               | 8.2                                                                               | 10.6                                                                              | 12.9                                                                              | 15.2                                                                              | 6.5                                                                               | 9.0                                                                                 | 11.6                                                                                | 14.2                                                                                | 16.7                                                                                |
| 10                   | 4.7                                                                               | 6.5                                                                               | 8.4                                                                               | 10.2                                                                              | 12.1                                                                              | 5.1                                                                               | 7.1                                                                                 | 9.2                                                                                 | 11.3                                                                                | 13.3                                                                                |

$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

| Bauhöhe 542 – 600 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                      |  |  |  |  |  |  |  |  |  |  |
| Modell               | K2055                                                                             | K3055                                                                             | K4055                                                                             | K5055                                                                             | K6055                                                                             | K2060                                                                             | K3060                                                                               | K4060                                                                               | K5060                                                                               | K6060                                                                               |
| H mm                 | 542                                                                               | 550                                                                               | 550                                                                               | 550                                                                               | 550                                                                               | 592                                                                               | 600                                                                                 | 600                                                                                 | 600                                                                                 | 600                                                                                 |
| T mm                 | 62                                                                                | 100                                                                               | 136                                                                               | 173                                                                               | 210                                                                               | 62                                                                                | 100                                                                                 | 136                                                                                 | 173                                                                                 | 210                                                                                 |
| X mm                 | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                | 65                                                                                  | 65                                                                                  | 65                                                                                  | 65                                                                                  |
| A m²                 | 0.09                                                                              | 0.13                                                                              | 0.18                                                                              | 0.22                                                                              | 0.26                                                                              | 0.1                                                                               | 0.14                                                                                | 0.19                                                                                | 0.24                                                                                | 0.29                                                                                |
| V dm³                | 0.6                                                                               | 0.9                                                                               | 1.2                                                                               | 1.5                                                                               | 1.8                                                                               | 0.6                                                                               | 1                                                                                   | 1.3                                                                                 | 1.6                                                                                 | 1.9                                                                                 |
| M kg                 | 1                                                                                 | 1.4                                                                               | 2                                                                                 | 2.3                                                                               | 2.8                                                                               | 1                                                                                 | 1.5                                                                                 | 2                                                                                   | 2.5                                                                                 | 3                                                                                   |
| s <sub>k</sub> %     | 23                                                                                | 18                                                                                | 16                                                                                | 14                                                                                | 12                                                                                | 23                                                                                | 18                                                                                  | 15                                                                                  | 13                                                                                  | 12                                                                                  |
| q <sub>ms</sub> kg/h | 3.9                                                                               | 5.2                                                                               | 6.8                                                                               | 8.3                                                                               | 9.7                                                                               | 4.2                                                                               | 5.7                                                                                 | 7.3                                                                                 | 8.9                                                                                 | 10.6                                                                                |
| Exp. n               | 1.30                                                                              | 1.28                                                                              | 1.28                                                                              | 1.28                                                                              | 1.28                                                                              | 1.30                                                                              | 1.28                                                                                | 1.28                                                                                | 1.28                                                                                | 1.28                                                                                |
| Δ TK                 | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                              | Watt                                                                                | Watt                                                                                | Watt                                                                                | Watt                                                                                |
| 60                   | 57.3                                                                              | 77.0                                                                              | 99.5                                                                              | 121.7                                                                             | 142.7                                                                             | 61.9                                                                              | 83.3                                                                                | 107.8                                                                               | 131.3                                                                               | 155.3                                                                               |
| 55                   | 51.2                                                                              | 68.9                                                                              | 89.0                                                                              | 108.9                                                                             | 127.7                                                                             | 55.2                                                                              | 74.6                                                                                | 96.5                                                                                | 117.5                                                                               | 139.0                                                                               |
| 50                   | 45.2                                                                              | 61.0                                                                              | 78.8                                                                              | 96.4                                                                              | 113.0                                                                             | 48.8                                                                              | 66.0                                                                                | 85.4                                                                                | 104.0                                                                               | 123.0                                                                               |
| 49                   | 44.0                                                                              | 59.4                                                                              | 76.8                                                                              | 93.9                                                                              | 110.1                                                                             | 47.5                                                                              | 64.3                                                                                | 83.2                                                                                | 101.3                                                                               | 119.9                                                                               |
| 48                   | 42.9                                                                              | 57.9                                                                              | 74.8                                                                              | 91.5                                                                              | 107.2                                                                             | 46.3                                                                              | 62.6                                                                                | 81.1                                                                                | 98.7                                                                                | 116.7                                                                               |
| 47                   | 41.7                                                                              | 56.4                                                                              | 72.8                                                                              | 89.1                                                                              | 104.4                                                                             | 45.0                                                                              | 61.0                                                                                | 78.9                                                                                | 96.1                                                                                | 113.6                                                                               |
| 46                   | 40.6                                                                              | 54.8                                                                              | 70.8                                                                              | 86.6                                                                              | 101.6                                                                             | 43.8                                                                              | 59.3                                                                                | 76.8                                                                                | 93.5                                                                                | 110.5                                                                               |
| 45                   | 39.4                                                                              | 53.3                                                                              | 68.9                                                                              | 84.2                                                                              | 98.7                                                                              | 42.6                                                                              | 57.7                                                                                | 74.6                                                                                | 90.9                                                                                | 107.5                                                                               |
| 44                   | 38.3                                                                              | 51.8                                                                              | 66.9                                                                              | 81.8                                                                              | 95.9                                                                              | 41.3                                                                              | 56.0                                                                                | 72.5                                                                                | 88.3                                                                                | 104.4                                                                               |
| 43                   | 37.2                                                                              | 50.3                                                                              | 65.0                                                                              | 79.5                                                                              | 93.2                                                                              | 40.1                                                                              | 54.4                                                                                | 70.4                                                                                | 85.7                                                                                | 101.4                                                                               |
| 42                   | 36.0                                                                              | 48.8                                                                              | 63.0                                                                              | 77.1                                                                              | 90.4                                                                              | 38.9                                                                              | 52.8                                                                                | 68.3                                                                                | 83.2                                                                                | 98.4                                                                                |
| 41                   | 34.9                                                                              | 47.3                                                                              | 61.1                                                                              | 74.8                                                                              | 87.7                                                                              | 37.7                                                                              | 51.2                                                                                | 66.2                                                                                | 80.7                                                                                | 95.4                                                                                |
| 40                   | 33.8                                                                              | 45.8                                                                              | 59.2                                                                              | 72.4                                                                              | 84.9                                                                              | 36.5                                                                              | 49.6                                                                                | 64.2                                                                                | 78.2                                                                                | 92.4                                                                                |
| 39                   | 32.7                                                                              | 44.4                                                                              | 57.3                                                                              | 70.1                                                                              | 82.2                                                                              | 35.3                                                                              | 48.0                                                                                | 62.1                                                                                | 75.7                                                                                | 89.5                                                                                |
| 38                   | 31.6                                                                              | 42.9                                                                              | 55.5                                                                              | 67.8                                                                              | 79.5                                                                              | 34.2                                                                              | 46.4                                                                                | 60.1                                                                                | 73.2                                                                                | 86.6                                                                                |
| 37                   | 30.6                                                                              | 41.5                                                                              | 53.6                                                                              | 65.6                                                                              | 76.9                                                                              | 33.0                                                                              | 44.9                                                                                | 58.1                                                                                | 70.7                                                                                | 83.7                                                                                |
| 36                   | 29.5                                                                              | 40.1                                                                              | 51.8                                                                              | 63.3                                                                              | 74.2                                                                              | 31.8                                                                              | 43.3                                                                                | 56.1                                                                                | 68.3                                                                                | 80.8                                                                                |
| 35                   | 28.4                                                                              | 38.6                                                                              | 49.9                                                                              | 61.1                                                                              | 71.6                                                                              | 30.7                                                                              | 41.8                                                                                | 54.1                                                                                | 65.9                                                                                | 77.9                                                                                |
| 34                   | 27.4                                                                              | 37.2                                                                              | 48.1                                                                              | 58.8                                                                              | 69.0                                                                              | 29.6                                                                              | 40.3                                                                                | 52.1                                                                                | 63.5                                                                                | 75.1                                                                                |
| 33                   | 26.3                                                                              | 35.8                                                                              | 46.3                                                                              | 56.6                                                                              | 66.4                                                                              | 28.4                                                                              | 38.8                                                                                | 50.2                                                                                | 61.1                                                                                | 72.3                                                                                |
| 32                   | 25.3                                                                              | 34.5                                                                              | 44.5                                                                              | 54.4                                                                              | 63.8                                                                              | 27.3                                                                              | 37.3                                                                                | 48.2                                                                                | 58.7                                                                                | 69.5                                                                                |
| 31                   | 24.3                                                                              | 33.1                                                                              | 42.7                                                                              | 52.3                                                                              | 61.3                                                                              | 26.2                                                                              | 35.8                                                                                | 46.3                                                                                | 56.4                                                                                | 66.7                                                                                |
| 30                   | 23.3                                                                              | 31.7                                                                              | 41.0                                                                              | 50.1                                                                              | 58.8                                                                              | 25.1                                                                              | 34.3                                                                                | 44.4                                                                                | 54.1                                                                                | 64.0                                                                                |
| 29                   | 22.3                                                                              | 30.4                                                                              | 39.2                                                                              | 48.0                                                                              | 56.3                                                                              | 24.0                                                                              | 32.9                                                                                | 42.5                                                                                | 51.8                                                                                | 61.2                                                                                |
| 28                   | 21.3                                                                              | 29.0                                                                              | 37.5                                                                              | 45.9                                                                              | 53.8                                                                              | 23.0                                                                              | 31.4                                                                                | 40.7                                                                                | 49.5                                                                                | 58.6                                                                                |
| 27                   | 20.3                                                                              | 27.7                                                                              | 35.8                                                                              | 43.8                                                                              | 51.4                                                                              | 21.9                                                                              | 30.0                                                                                | 38.8                                                                                | 47.3                                                                                | 55.9                                                                                |
| 26                   | 19.3                                                                              | 26.4                                                                              | 34.1                                                                              | 41.7                                                                              | 48.9                                                                              | 20.9                                                                              | 28.6                                                                                | 37.0                                                                                | 45.0                                                                                | 53.3                                                                                |
| 25                   | 18.4                                                                              | 25.1                                                                              | 32.4                                                                              | 39.7                                                                              | 46.5                                                                              | 19.8                                                                              | 27.2                                                                                | 35.2                                                                                | 42.8                                                                                | 50.7                                                                                |
| 24                   | 17.4                                                                              | 23.8                                                                              | 30.8                                                                              | 37.7                                                                              | 44.2                                                                              | 18.8                                                                              | 25.8                                                                                | 33.4                                                                                | 40.6                                                                                | 48.1                                                                                |
| 23                   | 16.5                                                                              | 22.6                                                                              | 29.2                                                                              | 35.7                                                                              | 41.8                                                                              | 17.8                                                                              | 24.4                                                                                | 31.6                                                                                | 38.5                                                                                | 45.5                                                                                |
| 22                   | 15.5                                                                              | 21.3                                                                              | 27.6                                                                              | 33.7                                                                              | 39.5                                                                              | 16.8                                                                              | 23.1                                                                                | 29.9                                                                                | 36.4                                                                                | 43.0                                                                                |
| 21                   | 14.6                                                                              | 20.1                                                                              | 26.0                                                                              | 31.8                                                                              | 37.2                                                                              | 15.8                                                                              | 21.7                                                                                | 28.1                                                                                | 34.3                                                                                | 40.5                                                                                |
| 20                   | 13.7                                                                              | 18.9                                                                              | 24.4                                                                              | 29.8                                                                              | 35.0                                                                              | 14.8                                                                              | 20.4                                                                                | 26.4                                                                                | 32.2                                                                                | 38.1                                                                                |
| 18                   | 12.0                                                                              | 16.5                                                                              | 21.3                                                                              | 26.1                                                                              | 30.6                                                                              | 12.9                                                                              | 17.8                                                                                | 23.1                                                                                | 28.1                                                                                | 33.3                                                                                |
| 16                   | 10.3                                                                              | 14.2                                                                              | 18.3                                                                              | 22.4                                                                              | 26.3                                                                              | 11.1                                                                              | 15.4                                                                                | 19.9                                                                                | 24.2                                                                                | 28.6                                                                                |
| 14                   | 8.6                                                                               | 12.0                                                                              | 15.4                                                                              | 18.9                                                                              | 22.2                                                                              | 9.3                                                                               | 12.9                                                                                | 16.7                                                                                | 20.4                                                                                | 24.1                                                                                |
| 12                   | 7.1                                                                               | 9.8                                                                               | 12.7                                                                              | 15.5                                                                              | 18.2                                                                              | 7.6                                                                               | 10.6                                                                                | 13.7                                                                                | 16.7                                                                                | 19.8                                                                                |
| 10                   | 5.6                                                                               | 7.8                                                                               | 10.0                                                                              | 12.3                                                                              | 14.4                                                                              | 6.0                                                                               | 8.4                                                                                 | 10.9                                                                                | 13.3                                                                                | 15.7                                                                                |

# Zehnder Charleston Clinic

$$\Phi_L = \Delta T \text{ 50K EN 442 (SN 384.501-503)}$$

| Bauhöhe 742 – 750 mm                                                              |       |       |       |       |       |
|-----------------------------------------------------------------------------------|-------|-------|-------|-------|-------|
|  |       |       |       |       |       |
| Modell                                                                            | K2075 | K3075 | K4075 | K5075 | K6075 |
| <b>H</b> mm                                                                       | 742   | 750   | 750   | 750   | 750   |
| <b>T</b> mm                                                                       | 62    | 100   | 136   | 173   | 210   |
| <b>X</b> mm                                                                       | 65    | 65    | 65    | 65    | 65    |
| <b>A</b> m²                                                                       | 0.12  | 0.18  | 0.24  | 0.3   | 0.36  |
| <b>V</b> dm³                                                                      | 0.8   | 1.2   | 1.5   | 1.9   | 2.2   |
| <b>M</b> kg                                                                       | 1.2   | 1.8   | 2.6   | 3     | 3.7   |
| <b>s<sub>k</sub></b> %                                                            | 22    | 18    | 15    | 13    | 12    |
| <b>q<sub>ms</sub></b> kg/h                                                        | 5.1   | 7.0   | 9.0   | 11.0  | 13.0  |
| <b>Exp. n</b>                                                                     | 1.30  | 1.29  | 1.29  | 1.29  | 1.29  |
| Δ TK                                                                              | Watt  | Watt  | Watt  | Watt  | Watt  |
| 60                                                                                | 75.0  | 102.6 | 132.8 | 161.9 | 191.0 |
| 55                                                                                | 67.0  | 91.7  | 118.7 | 144.7 | 170.8 |
| 50                                                                                | 59.2  | 81.1  | 105.0 | 128.0 | 151.0 |
| 49                                                                                | 57.7  | 79.0  | 102.3 | 124.7 | 147.1 |
| 48                                                                                | 56.1  | 76.9  | 99.6  | 121.4 | 143.3 |
| 47                                                                                | 54.6  | 74.9  | 96.9  | 118.2 | 139.4 |
| 46                                                                                | 53.1  | 72.8  | 94.3  | 114.9 | 135.6 |
| 45                                                                                | 51.6  | 70.8  | 91.7  | 111.7 | 131.8 |
| 44                                                                                | 50.1  | 68.8  | 89.0  | 108.5 | 128.0 |
| 43                                                                                | 48.7  | 66.8  | 86.4  | 105.4 | 124.3 |
| 42                                                                                | 47.2  | 64.8  | 83.9  | 102.2 | 120.6 |
| 41                                                                                | 45.7  | 62.8  | 81.3  | 99.1  | 116.9 |
| 40                                                                                | 44.3  | 60.8  | 78.7  | 96.0  | 113.2 |
| 39                                                                                | 42.9  | 58.9  | 76.2  | 92.9  | 109.6 |
| 38                                                                                | 41.4  | 56.9  | 73.7  | 89.8  | 106.0 |
| 37                                                                                | 40.0  | 55.0  | 71.2  | 86.8  | 102.4 |
| 36                                                                                | 38.6  | 53.1  | 68.7  | 83.8  | 98.8  |
| 35                                                                                | 37.2  | 51.2  | 66.3  | 80.8  | 95.3  |
| 34                                                                                | 35.9  | 49.3  | 63.8  | 77.8  | 91.8  |
| 33                                                                                | 34.5  | 47.4  | 61.4  | 74.9  | 88.3  |
| 32                                                                                | 33.1  | 45.6  | 59.0  | 72.0  | 84.9  |
| 31                                                                                | 31.8  | 43.8  | 56.7  | 69.1  | 81.5  |
| 30                                                                                | 30.5  | 42.0  | 54.3  | 66.2  | 78.1  |
| 29                                                                                | 29.2  | 40.2  | 52.0  | 63.4  | 74.8  |
| 28                                                                                | 27.9  | 38.4  | 49.7  | 60.6  | 71.5  |
| 27                                                                                | 26.6  | 36.6  | 47.4  | 57.8  | 68.2  |
| 26                                                                                | 25.3  | 34.9  | 45.2  | 55.1  | 65.0  |
| 25                                                                                | 24.0  | 33.2  | 42.9  | 52.3  | 61.8  |
| 24                                                                                | 22.8  | 31.5  | 40.7  | 49.7  | 58.6  |
| 23                                                                                | 21.6  | 29.8  | 38.6  | 47.0  | 55.5  |
| 22                                                                                | 20.4  | 28.1  | 36.4  | 44.4  | 52.4  |
| 21                                                                                | 19.2  | 26.5  | 34.3  | 41.8  | 49.3  |
| 20                                                                                | 18.0  | 24.9  | 32.2  | 39.3  | 46.3  |
| 18                                                                                | 15.7  | 21.7  | 28.1  | 34.3  | 40.4  |
| 16                                                                                | 13.5  | 18.6  | 24.1  | 29.4  | 34.7  |
| 14                                                                                | 11.3  | 15.7  | 20.3  | 24.8  | 29.2  |
| 12                                                                                | 9.3   | 12.9  | 16.7  | 20.3  | 24.0  |
| 10                                                                                | 7.3   | 10.2  | 13.2  | 16.1  | 18.9  |

