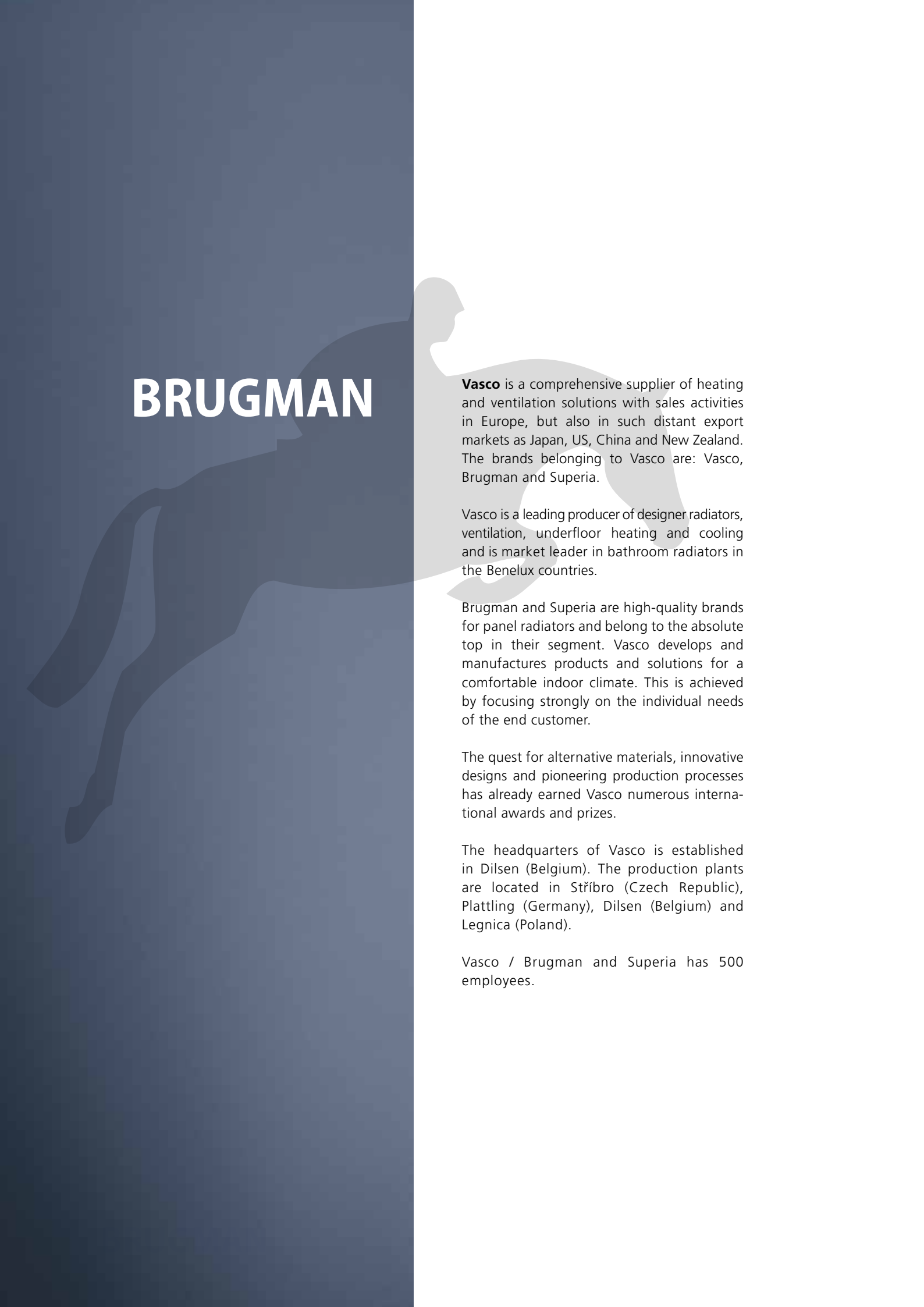


# BRUGMAN

## TECHNICAL MANUAL 2025



**BRUGMAN**



# BRUGMAN

**Vasco** is a comprehensive supplier of heating and ventilation solutions with sales activities in Europe, but also in such distant export markets as Japan, US, China and New Zealand. The brands belonging to Vasco are: Vasco, Brugman and Superia.

Vasco is a leading producer of designer radiators, ventilation, underfloor heating and cooling and is market leader in bathroom radiators in the Benelux countries.

Brugman and Superia are high-quality brands for panel radiators and belong to the absolute top in their segment. Vasco develops and manufactures products and solutions for a comfortable indoor climate. This is achieved by focusing strongly on the individual needs of the end customer.

The quest for alternative materials, innovative designs and pioneering production processes has already earned Vasco numerous international awards and prizes.

The headquarters of Vasco is established in Dilsen (Belgium). The production plants are located in Stříbro (Czech Republic), Plattling (Germany), Dilsen (Belgium) and Legnica (Poland).

Vasco / Brugman and Superia has 500 employees.

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## PRODUCTION AND QUALITY ASPECTS

### QUALITY SPECIFICATIONS

Brugman is ISO 9001: 2015 certified. The radiators are produced from cold-rolled high-strength steel of the finest quality. The radiators are suitable for hot water installations with a maximum temperature of 110°C.

### PRODUCTION

The panel radiators are manufactured on fully-automated production lines that are continuously monitored. Each radiator is individually pressure-tested at the end of each production line, to ensure that it is leak-tight.

### PAINTING PROCESS, IN GENERAL

The finishing of the radiators is performed in a specially-designed and environmentally-friendly installation. The finishing consists of:

#### Pre-treatment:

First the radiators are cleaned, degreased and phosphated. Then they are rinsed with demineralised water in order to obtain an optimal surface for the special cataphoresis primer coating.

#### Primer coating:

After the pre-treatment, the radiators are baked at a temperature of 200°C.

#### Finishing coat:

Then the radiators are given a finishing coat with an epoxy-polyester lacquer in a fully-automatic powder-coating installation and baked once again at 200°C.

The result is a very strong and impact-resistant finishing coat, in the standard colour white RAL 9016.





## ADVANTAGES

- Optimal corrosion resistance.
- Uniform lacquer coat that gives very good cover on the sides, corners and edges.
- No drop formation on the undersides.
- High scratch and impact resistance.

## GUARANTEE

A 10-year guarantee on manufacturing and material defects is given on all panel radiators, provided that they have been properly stored, installed by trained technicians and used under normal circumstances.



See the general terms and conditions on [www.brugman.eu](http://www.brugman.eu)



All radiators with this label are approved for use in senior citizens' residences by the Senior Citizens' Label Project Office.



The Stabu Foundation has developed a system for the generation of construction plans which greatly reduces the number of steps for the construction planner. The products in this catalogue have been integrated into this system.



Vabi is an association active in the automation of construction and installation technology. The products in this catalogue have been integrated into this system.



Krijger BV furnishes the calculation program Bink for the construction and installation sector. The products in this catalogue have been integrated into this system.



ARKEY develops and delivers both drafting and computing software for the construction and installation sector. ARKEY is used on a daily basis by e.g. architects, contractors and installation companies. The products in this catalogue have been integrated into this system.



Stabiplan provides AutoCAD applications for the construction industry. All of the products in this catalogue have been integrated into their applications.



All of the products in this catalogue are suitable for applications in systems that use low temperature heating (LTH) technology.



EN-442 is the standard for the thermal output from heat exchangers in buildings. All of the products in this catalogue are in compliance with this standard.

# Casual

## Collection

Standard

Standard Zn

Compact 4

Uni 6

Piano Uni 6





## STANDARD

Brugman's horizontal Standard radiator is known for its characteristic appearance. The Standard is recognisable and trusted. The model's name says it all: the Standard is a radiator without frills. This panel radiator stands out for its excellent quality and ease of installation. A traditional model that fits in every room. Flexible, classical and discreet.

|                                       |                                                                                                                                                                                                                                  |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Panel radiator with four side connections                                                                                                                                                                                        |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                            |
| <b>Finishing:</b>                     | Standard                                                                                                                                                                                                                         |
| <b>Suspension and accessories:</b>    | L-bracket set: blind plug, air vent, lifting protection, silencers, plugs and bolts (delivered standard)<br>J-bracket set (with the exception of type 10 & 11): blind plug, air vent, plugs and bolts (to be ordered separately) |
| <b>Connections:</b>                   | 4 x ½" internal thread side connections                                                                                                                                                                                          |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard and then shrink-wrapped. A label describes the radiator characteristics: type – height – length.                                                                    |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                          |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cathodically primed and powder-coated standard in RAL 9016.                                                                                                                             |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                      |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                               |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                        |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                           |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                       |
| <b>Types:</b>                         | 10   11   21s   22   33                                                                                                                                                                                                          |
| <b>Heights:</b>                       | 300   400   500   600   700   900 mm                                                                                                                                                                                             |
| <b>Lengths:</b>                       | 400 => 3000 mm                                                                                                                                                                                                                   |
| <b>Depths:</b>                        | 64   61   73   106   165 mm                                                                                                                                                                                                      |

TYPE 10 / 11



TYPE 21s



TYPE 22



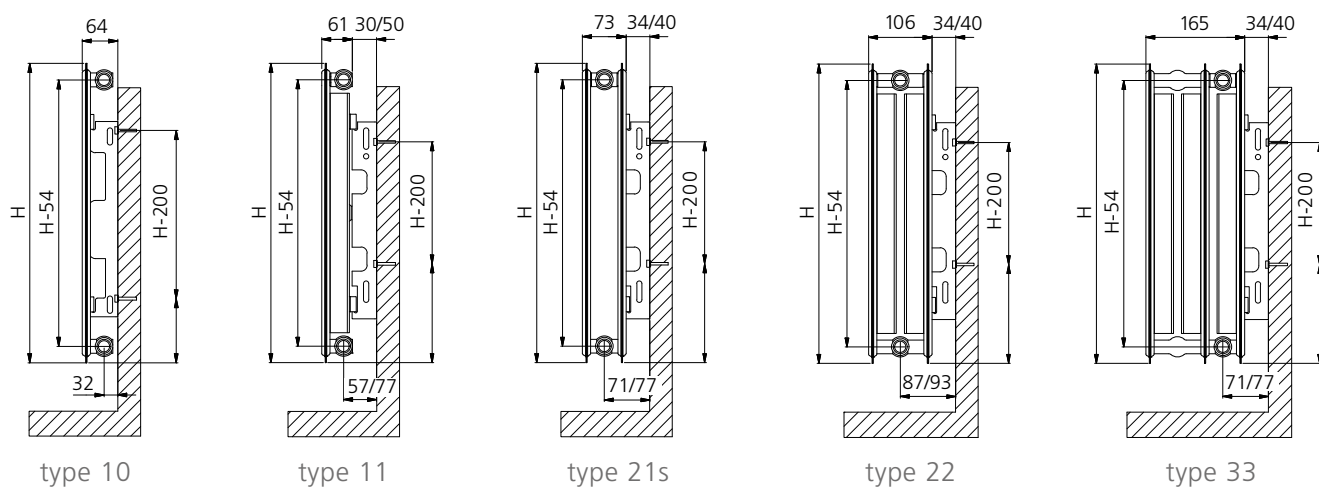
TYPE 33





| Height (mm) |    | NEW Type 10 | NEW Type 11 | Type 21s | Type 22 | Type 33 |
|-------------|----|-------------|-------------|----------|---------|---------|
| 300         | W  |             | 551         |          | 975     | 1365    |
|             | kg |             | 6,92        |          | 13,49   | 20,19   |
|             | l  |             | 2,20        |          | 3,55    | 5,29    |
|             | n  |             | 1,22        |          | 1,28    | 1,31    |
| 400         | W  | 425         | 697         | 985      | 1241    | 1744    |
|             | kg | 7,07        | 9,20        | 15,95    | 18,05   | 27,02   |
|             | l  | 2,49        | 2,49        | 4,42     | 4,47    | 6,71    |
|             | n  | 1,26        | 1,24        | 1,31     | 1,30    | 1,31    |
| 500         | W  | 514         | 840         | 1181     | 1494    | 2103    |
|             | kg | 8,64        | 11,49       | 19,82    | 22,61   | 33,86   |
|             | l  | 2,82        | 2,82        | 5,33     | 5,38    | 8,07    |
|             | n  | 1,27        | 1,25        | 1,32     | 1,33    | 1,32    |
| 600         | W  | 602         | 979         | 1368     | 1738    | 2444    |
|             | kg | 10,21       | 13,77       | 23,68    | 27,17   | 40,70   |
|             | l  | 3,18        | 3,18        | 6,22     | 6,27    | 9,39    |
|             | n  | 1,29        | 1,27        | 1,32     | 1,34    | 1,32    |
| 700         | W  |             | 1117        |          | 1974    | 2769    |
|             | kg |             | 16,08       |          | 31,74   | 47,53   |
|             | l  |             | 3,56        |          | 7,14    | 10,65   |
|             | n  |             | 1,28        |          | 1,35    | 1,33    |
| 900         | W  | 872         | 1390        | 1880     | 2429    | 3376    |
|             | kg | 14,95       | 20,64       | 35,28    | 40,86   | 61,19   |
|             | l  | 4,42        | 4,42        | 8,77     | 8,84    | 13,02   |
|             | n  | 1,29        | 1,30        | 1,34     | 1,36    | 1,36    |

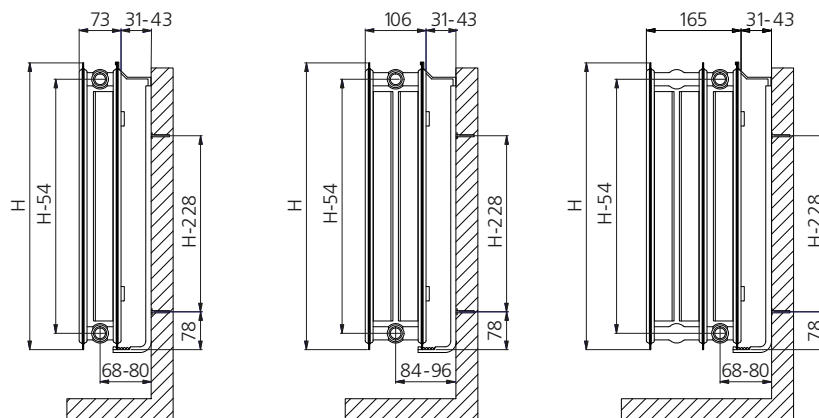
## L-BRACKETS



NEW

NEW

## J-BRACKETS



## STANDARD Zn

The horizontal Standard Zinc radiator is known for its characteristic appearance. The Standard Zinc is recognisable and trusted. The model's name says it all: the Standard Zinc is a radiator without frills.

This panel radiator stands out for its excellent quality and ease of installation. A traditional model that fits in every room. Flexible, classical and discreet.

The radiator is equipped with a protective electrolytically-applied coating of zinc.

|                                       |                                                                                                                                                                                                                                  |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Galvanised panel radiator with four side connections                                                                                                                                                                             |
| <b>Material:</b>                      | Steel (electrolytically galvanised)                                                                                                                                                                                              |
| <b>Finishing:</b>                     | Standard                                                                                                                                                                                                                         |
| <b>Suspension and accessories:</b>    | L-bracket set: blind plug, air vent, lifting protection, silencers, plugs and bolts (delivered standard)<br>J-bracket set (with the exception of type 10 & 11): blind plug, air vent, plugs and bolts (to be ordered separately) |
| <b>Connections:</b>                   | 4 x ½" internal thread side connections                                                                                                                                                                                          |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard and then shrink-wrapped. A label describes the radiator characteristics: type – height – length.                                                                    |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                          |
| <b>Painting process:</b>              | All radiators are degreased, electrolytically galvanised, phosphated, cathodically primed and powder-coated standard in RAL 9016.                                                                                                |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                      |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                               |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                        |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                           |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                       |
| <b>Types:</b>                         | 10   11   20s   21s   22                                                                                                                                                                                                         |
| <b>Heights:</b>                       | 300   400   500   600   700   900 mm                                                                                                                                                                                             |
| <b>Lengths:</b>                       | 500 => 3000 mm                                                                                                                                                                                                                   |
| <b>Depths:</b>                        | 64   61   73   106 mm                                                                                                                                                                                                            |

TYPE 10 / 11



TYPE 20s / 21s



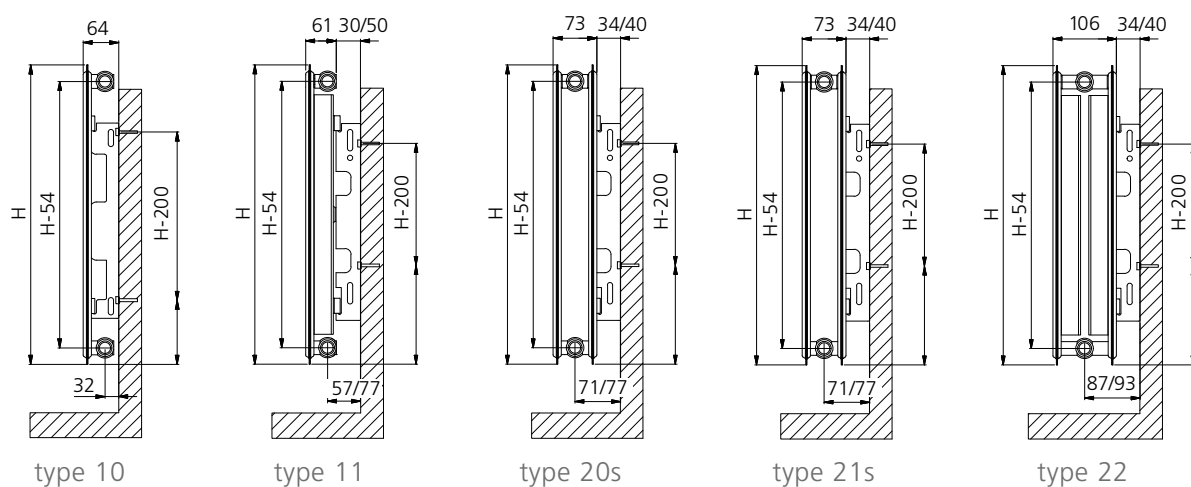
TYPE 22



TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

| Height (mm) |    | NEW Type 10 | NEW Type 11 | Type 20s | Type 21s | Type 22 |
|-------------|----|-------------|-------------|----------|----------|---------|
| 300         | W  |             |             |          |          |         |
|             | kg |             |             |          |          |         |
|             | l  |             |             |          |          |         |
|             | n  |             |             |          |          |         |
| 400         | W  | 425         |             | 743      | 985      |         |
|             | kg | 7,07        |             | 13,78    | 15,95    |         |
|             | l  | 2,49        |             | 4,42     | 4,42     |         |
|             | n  | 1,26        |             | 1,29     | 1,31     |         |
| 500         | W  | 514         |             |          |          |         |
|             | kg | 8,64        |             |          |          |         |
|             | l  | 2,82        |             |          |          |         |
|             | n  | 1,27        |             |          |          |         |
| 600         | W  | 602         | 979         | 1025     | 1368     | 1738    |
|             | kg | 10,21       | 13,77       | 20,05    | 23,68    | 27,17   |
|             | l  | 3,18        | 3,18        | 6,22     | 6,22     | 6,27    |
|             | n  | 1,29        | 1,27        | 1,30     | 1,32     | 1,34    |
| 700         | W  |             |             |          |          | 1974    |
|             | kg |             |             |          |          | 31,74   |
|             | l  |             |             |          |          | 7,14    |
|             | n  |             |             |          |          | 1,35    |
| 900         | W  | 872         | 1390        | 1438     | 1880     | 2429    |
|             | kg | 14,95       | 20,64       | 29,47    | 35,28    | 40,86   |
|             | l  | 4,42        | 4,42        | 8,77     | 8,77     | 8,84    |
|             | n  | 1,29        | 1,30        | 1,31     | 1,34     | 1,36    |

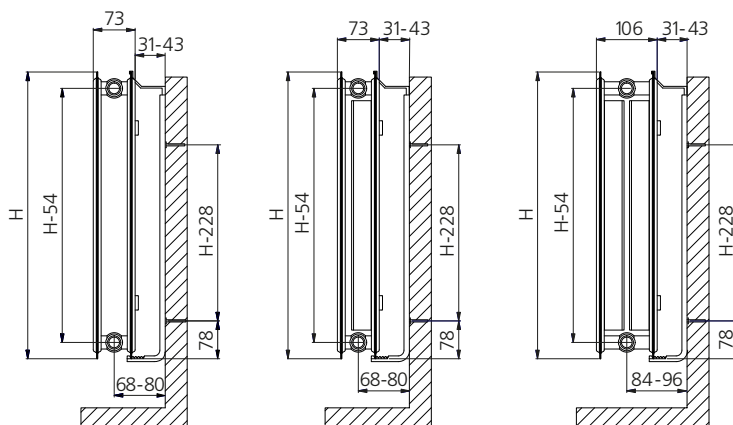
## L-BRACKETS



NEW

NEW

## J-BRACKETS



## COMPACT 4

The elegant, robust decorative grille and the fine side panels give the Compact 4 its characteristic look. The traditional appearance of the Standard radiator, but with a bit more flair all its own.

Love the traditional, elegant look of a radiator? Then go for our Compact radiators. Uncomplicated and highly practical. The Compact radiator has four side connections, a decorative grille and side panels. The subtle design eliminates unsafe, sharp edges. As a result, this functional Compact radiator is especially suitable for schools, health care institutions and senior citizens' residences.

|                                       |                                                                                                                                                                                                                              |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Panel radiator with four side connections                                                                                                                                                                                    |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                        |
| <b>Finishing:</b>                     | Top grille and side panels                                                                                                                                                                                                   |
| <b>Suspension and accessories:</b>    | L-bracket set: blind plug, air vent, lift-out protection, silencers, plugs and bolts (delivered standard)<br>J-bracket set (with the exception of type 11): blind plug, air vent, plugs and bolts (to be ordered separately) |
| <b>Connections:</b>                   | 4 x ½" internal thread side connections                                                                                                                                                                                      |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard and then shrink-wrapped. A label describes the radiator characteristics:<br>type – height – length.                                                             |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                      |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                                                                                     |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                  |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                           |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                    |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                       |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                   |
| <b>Types:</b>                         | 11   21s   22   33                                                                                                                                                                                                           |
| <b>Heights:</b>                       | 300   400   500   600   700   900 mm                                                                                                                                                                                         |
| <b>Lengths:</b>                       | 400 => 3000 mm                                                                                                                                                                                                               |
| <b>Depths:</b>                        | 61   73   106   165 mm                                                                                                                                                                                                       |

TYPE 11



TYPE 21s



TYPE 22



TYPE 33

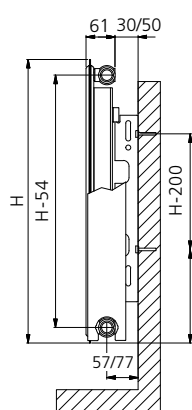


# Casual

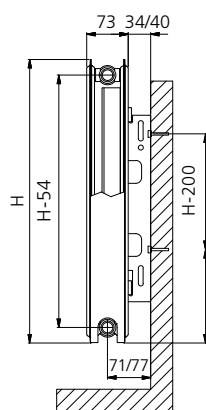
TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

| Height (mm) | NEW | Type 11 | Type 21s | Type 22 | Type 33 |
|-------------|-----|---------|----------|---------|---------|
| 300         | W   |         | 755      | 942     | 1319    |
|             | kg  |         | 12,83    | 14,72   | 21,93   |
|             | l   |         | 4,30     | 3,55    | 5,29    |
|             | n   |         | 1,31     | 1,31    | 1,32    |
| 400         | W   | 697     | 953      | 1202    | 1679    |
|             | kg  | 10,66   | 16,82    | 19,47   | 29,04   |
|             | l   | 2,49    | 4,42     | 4,47    | 6,71    |
|             | n   | 1,24    | 1,31     | 1,32    | 1,32    |
| 500         | W   | 840     | 1141     | 1449    | 2020    |
|             | kg  | 13,13   | 20,82    | 24,21   | 36,14   |
|             | l   | 2,82    | 5,33     | 5,38    | 8,07    |
|             | n   | 1,25    | 1,32     | 1,32    | 1,32    |
| 600         | W   | 979     | 1322     | 1683    | 2345    |
|             | kg  | 15,61   | 24,81    | 28,96   | 43,25   |
|             | l   | 3,18    | 6,22     | 6,27    | 9,39    |
|             | n   | 1,27    | 1,32     | 1,33    | 1,32    |
| 700         | W   | 1117    | 1499     | 1907    | 2657    |
|             | kg  | 18,11   | 28,82    | 33,73   | 50,35   |
|             | l   | 3,57    | 7,09     | 7,14    | 10,65   |
|             | n   | 1,28    | 1,32     | 1,33    | 1,33    |
| 900         | W   | 1390    | 1841     | 2326    | 3248    |
|             | kg  | 23,03   | 36,77    | 43,18   | 64,52   |
|             | l   | 4,42    | 8,77     | 8,84    | 13,02   |
|             | n   | 1,30    | 1,33     | 1,34    | 1,36    |

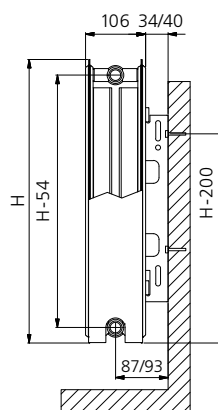
## L-BRACKETS



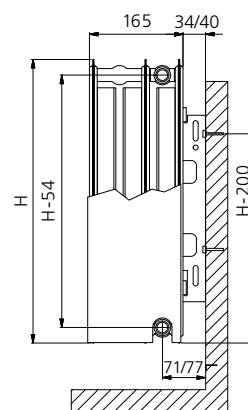
type 11



type 21s

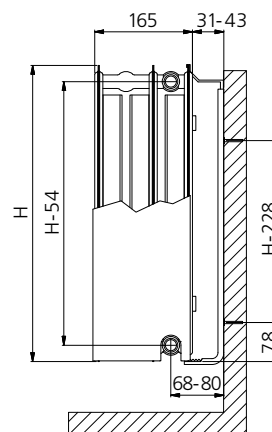
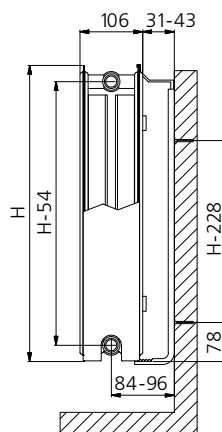
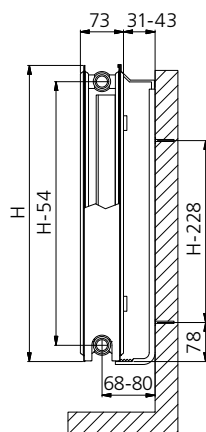


type 22



type 33

NEW



## J-BRACKETS





# UNI 6

The elegant look of the Compact radiator - but with six connections. That's the horizontal Uni 6 from Brugman. The stylish design, including decorative grille and side panels, make this radiator a gift. The Uni 6 radiator also eliminates sharp, unsafe edges. A radiator that is especially suitable for schools, health care institutions and public authorities. The Uni 6 has a 50 millimetre bottom connection which makes mounting very easy. Because the radiator is reversible, one can choose between a left or right bottom connection. Pipes and valve bodies are also fully concealed, so that you can optimally enjoy the classic design of this radiator.

|                                       |                                                                                                                                                                                                                                                                                        |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Valve radiator with both a bottom connection and four side connections. By using the J-bracket it is possible to mirror reverse the radiator, so that the thermostat knob can be mounted on the left or right (with the exception of type 11).                                         |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                                                                                  |
| <b>Finishing:</b>                     | Top grille and side panels                                                                                                                                                                                                                                                             |
| <b>Valve:</b>                         | The valve insert (without thermostatic valve) is compatible with thermostatic valves M30 x 1,5 mm (as an option).                                                                                                                                                                      |
| <b>Suspension and accessories:</b>    | L-bracket set (type 11): blind plug, air vent, lift-out protection, silencers, plugs and bolts (to be ordered separately)<br>J-bracket set (type 21s, 22, 33): blind plug, air vent, plugs and bolts (to be ordered separately)<br>VDI-compliant in conformity with VDI 6036 in option |
| <b>Connections:</b>                   | 2 x ¾" external thread euroconus right bottom connection,<br>4 x ½" internal thread side connections                                                                                                                                                                                   |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard and then shrink-wrapped. A label describes the radiator characteristics: type – height – length.                                                                                                                          |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                                                                                |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                                                                                                                                               |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                                                                            |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                                                                                     |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                                                                              |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                                                                                 |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                                                                             |
| <b>Types:</b>                         | 11   21s   22   33                                                                                                                                                                                                                                                                     |
| <b>Heights:</b>                       | 300   400   500   600   700   900 mm                                                                                                                                                                                                                                                   |
| <b>Lengths:</b>                       | 400 => 3000 mm                                                                                                                                                                                                                                                                         |
| <b>Depths:</b>                        | 61   73   106   165 mm                                                                                                                                                                                                                                                                 |

TYPE 11



TYPE 21s



TYPE 22



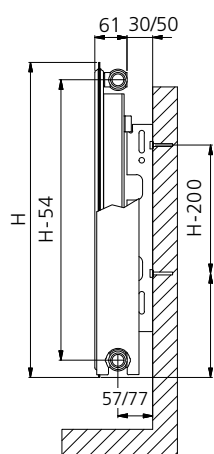
TYPE 33



TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

| Height (mm) | NEW | Type 11 | Type 21s | Type 22 | Type 33 |
|-------------|-----|---------|----------|---------|---------|
| 300         | W   |         |          | 942     | 1334    |
|             | kg  |         |          | 14,96   | 22,19   |
|             | l   |         |          | 3,55    | 5,29    |
|             | n   |         |          | 1,31    | 1,29    |
| 400         | W   | 697     | 953      | 1202    | 1700    |
|             | kg  | 10,83   | 17,13    | 19,75   | 29,35   |
|             | l   | 2,49    | 4,42     | 4,47    | 6,71    |
|             | n   | 1,24    | 1,31     | 1,32    | 1,30    |
| 500         | W   | 840     | 1141     | 1449    | 2048    |
|             | kg  | 13,36   | 21,18    | 24,55   | 36,50   |
|             | l   | 2,82    | 5,33     | 5,38    | 8,07    |
|             | n   | 1,25    | 1,32     | 1,32    | 1,31    |
| 600         | W   | 979     | 1322     | 1683    | 2379    |
|             | kg  | 15,89   | 25,22    | 29,35   | 47,81   |
|             | l   | 3,18    | 6,22     | 6,27    | 9,39    |
|             | n   | 1,27    | 1,32     | 1,33    | 1,32    |
| 700         | W   | 1117    | 1499     | 1907    | 2696    |
|             | kg  | 18,44   | 29,29    | 34,17   | 50,82   |
|             | l   | 3,57    | 7,09     | 7,14    | 10,65   |
|             | n   | 1,28    | 1,32     | 1,33    | 1,33    |
| 900         | W   | 1390    | 1841     | 2326    | 3297    |
|             | kg  | 23,49   | 37,37    | 43,76   | 65,12   |
|             | l   | 4,42    | 8,77     | 8,84    | 13,02   |
|             | n   | 1,30    | 1,33     | 1,34    | 1,34    |

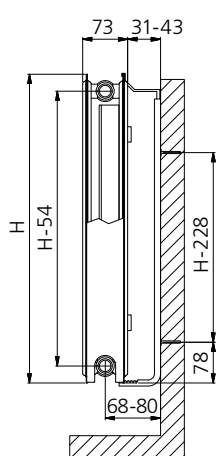
## L-BRACKETS



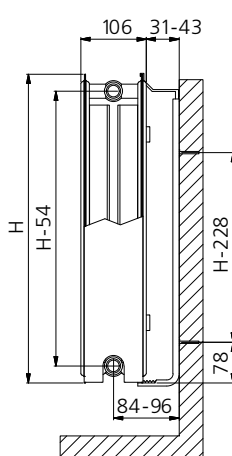
type 11

NEW

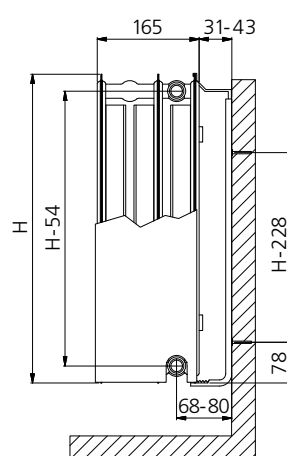
## J-BRACKETS



type 21s



type 22



type 33

## PIANO UNI 6

A minimalist design, discreet and therefore very distinguished. The Piano Uni 6 is known for its elegant, flat design and the familiar, handy bottom connection. The beautiful decorative grille, the flat front panel and the identical housing give the Piano radiators the luxurious aura they deserve. A single whole that, thanks to its fine design, is virtually invisible in your interior. The graceful design also eliminates unsafe, sharp edges. A wide range of authorities, including health care institutions, are therefore saying 'Yes' to these beautiful and highly functional radiators. Characteristic is a choice from six connections, including the simple bottom connection. Along with ease of mounting, the bottom connection has the advantage that pipes are concealed from view. The Piano Uni 6 makes a chic impression and has a very handy bottom connection.

|                                       |                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Valve radiator with both a bottom connection and four side connections. By using J-brackets it is possible to mirror reverse the radiator, so that the thermostat knob can be mounted on the left or right. For this the flat front plate must be dismounted and, after reversing the radiator, mounted back on the radiator. |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                                                                                                                         |
| <b>Finishing:</b>                     | Top grille, side panels and flat front plate                                                                                                                                                                                                                                                                                  |
| <b>Valve:</b>                         | The valve insert (without thermostatic valve) is compatible with thermostatic valves M30 x 1,5 mm (as an option).                                                                                                                                                                                                             |
| <b>Suspension and accessories:</b>    | J-bracket set: blind plug, air vent, plugs and bolts (to be ordered separately)<br>VDI-compliant in conformity with VDI 6036 in option                                                                                                                                                                                        |
| <b>Connections:</b>                   | 2 x ¾" external thread euroconus right bottom connection,<br>4 x ½" internal thread side connections                                                                                                                                                                                                                          |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard and then shrink-wrapped. A label describes the radiator characteristics:<br>type – height – length.                                                                                                                                                              |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                                                                                                                       |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cathodically primed and powder-coated standard in RAL 9016.                                                                                                                                                                                                                          |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                                                                                                                   |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                                                                                                                     |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                                                                                                                        |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                                                                                                                    |
| <b>Types:</b>                         | 21s   22   33                                                                                                                                                                                                                                                                                                                 |
| <b>Heights:</b>                       | 300   400   500   600   700   900 mm                                                                                                                                                                                                                                                                                          |
| <b>Lengths:</b>                       | 400 => 3000 mm                                                                                                                                                                                                                                                                                                                |
| <b>Depths:</b>                        | 74,5   107,5   166,5 mm                                                                                                                                                                                                                                                                                                       |

TYPE 21s



TYPE 22



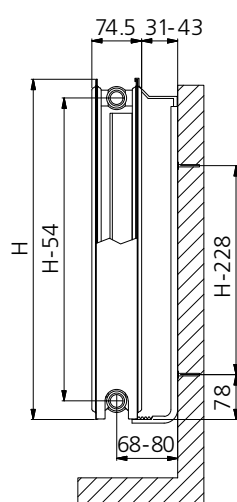
TYPE 33



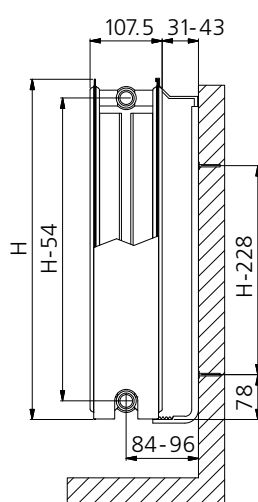
TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

| Height (mm) |    | Type 21s | Type 22 | Type 33 |
|-------------|----|----------|---------|---------|
| 300         | W  |          | 878     | 1236    |
|             | kg |          | 16,96   | 24,17   |
|             | l  |          | 3,55    | 5,29    |
|             | n  |          | 1,30    | 1,32    |
| 400         | W  | 868      | 1104    | 1532    |
|             | kg | 19,78    | 22,42   | 31,99   |
|             | l  | 4,42     | 4,47    | 6,71    |
|             | n  | 1,29     | 1,30    | 1,32    |
| 500         | W  | 1034     | 1317    | 1822    |
|             | kg | 24,50    | 27,90   | 39,82   |
|             | l  | 5,33     | 5,38    | 8,07    |
|             | n  | 1,29     | 1,31    | 1,32    |
| 600         | W  | 1192     | 1521    | 2110    |
|             | kg | 29,20    | 33,35   | 47,64   |
|             | l  | 6,22     | 6,27    | 9,39    |
|             | n  | 1,30     | 1,31    | 1,32    |
| 700         | W  | 1342     | 1717    | 2399    |
|             | kg | 33,98    | 38,89   | 55,52   |
|             | l  | 7,09     | 7,14    | 10,65   |
|             | n  | 1,30     | 1,30    | 1,32    |
| 900         | W  | 1623     | 2089    | 2991    |
|             | kg | 43,30    | 49,71   | 71,05   |
|             | l  | 8,77     | 8,84    | 13,02   |
|             | n  | 1,29     | 1,28    | 1,32    |

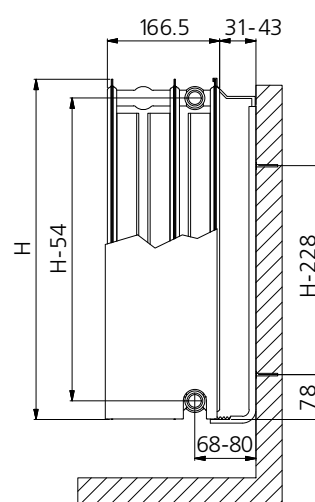
## J-BRACKETS



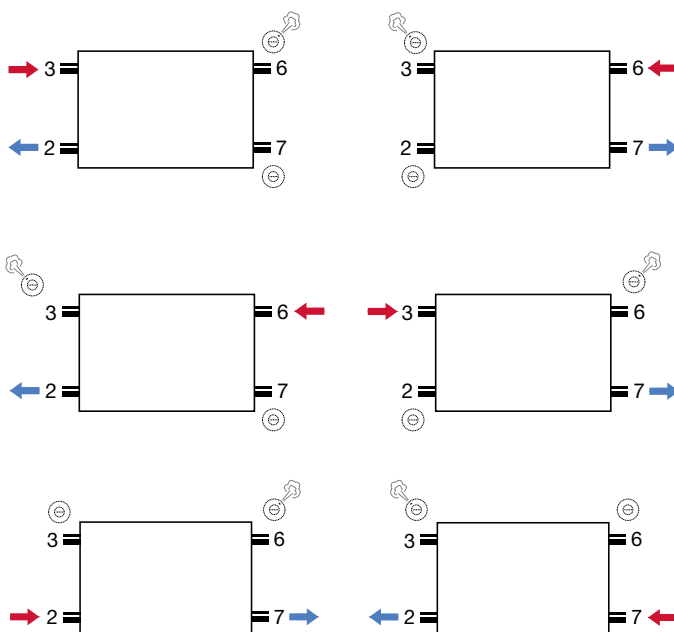
type 21s



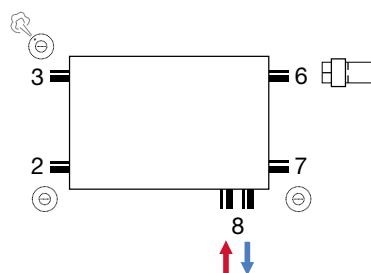
type 22



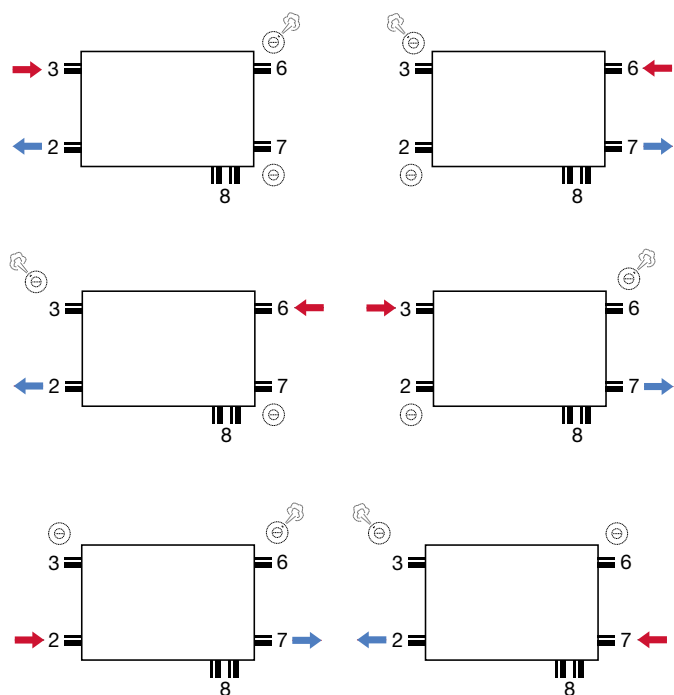
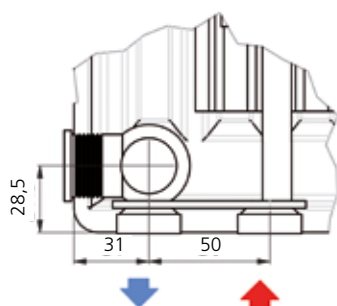
type 33

STANDARD, STANDARD Zn  
& COMPACT 4

## UNI 6 &amp; PIANO UNI 6



## Valve connection



## Left version valve connection:

by turning the radiator (with the exception of type 11)

**Attention with type 33:**

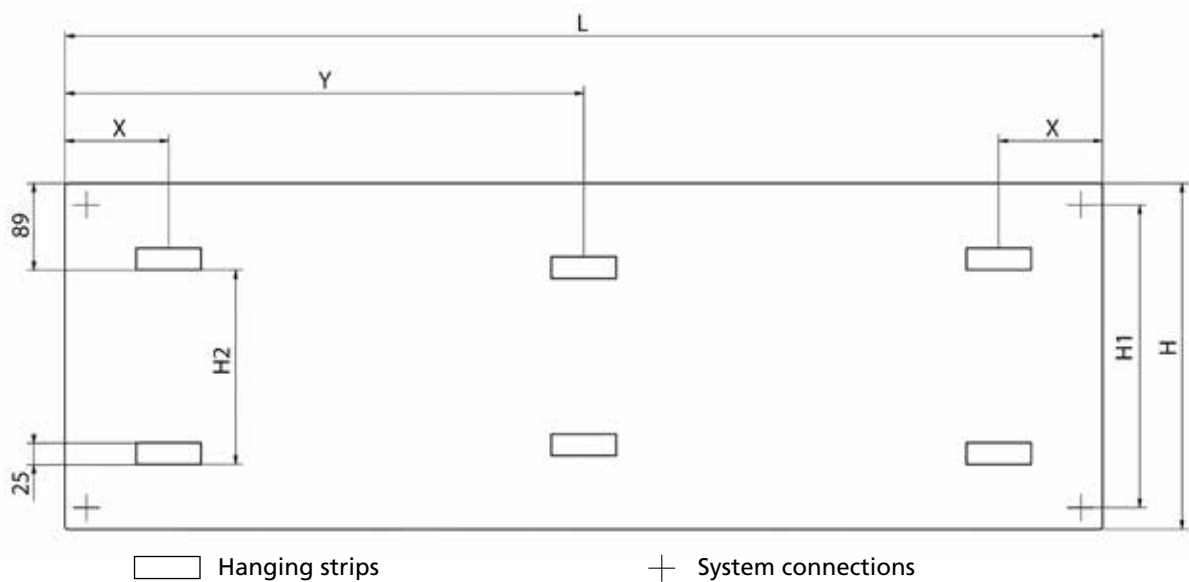
larger distance to the wall

STANDARD  
STANDARD Zn  
COMPACT 4  
UNI 6  
(only type 11)

PIANO UNI 6  
(no strip plan)

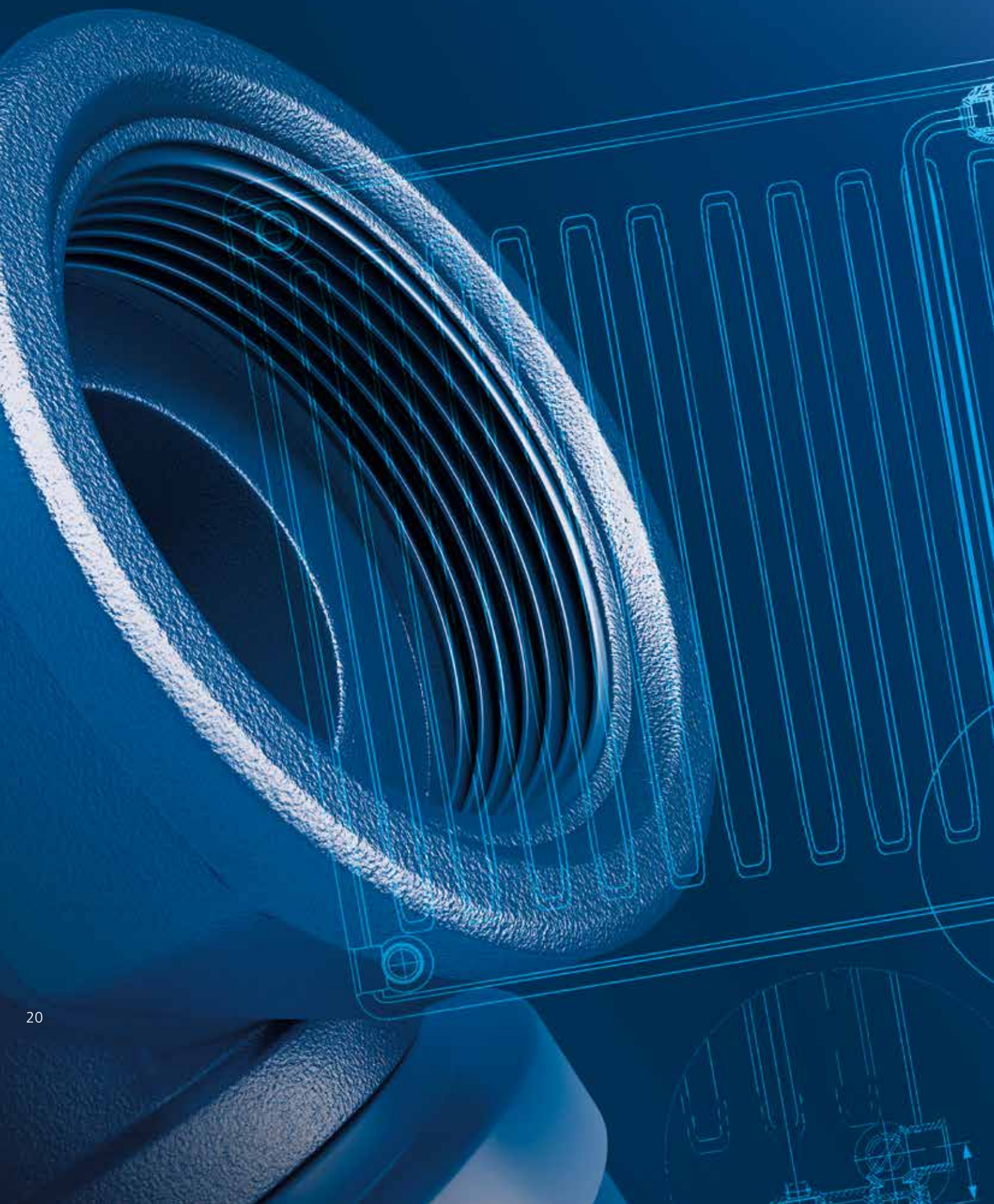


STRIP PLAN HORIZONTAL RADIATORS



| POSITION OF THE HANGING STRIPS |          |     |          |         |      |       |
|--------------------------------|----------|-----|----------|---------|------|-------|
| TYPE                           | L        | X   | Y(≥1800) | H       | H1   | H2    |
| 10                             | 500-2000 | 140 | L/2      | 400-900 | H-54 | H-153 |
| 11                             | 400-3000 | 85  | L/2      | 300-900 | H-54 | H-153 |
| 20-33                          | 400      | 100 | L/2      | 300-900 | H-54 | H-153 |
|                                | 500-3000 | 140 |          |         |      |       |





VALVE U2

Connection adaptor 3/4" euroconus (reversible: floor-wall). One- and two-pipe. Supply and return closable. With bypass control, nickel-plated.



Art. Nr.

13911610200

VALVE N2

Connection adaptor 3/4" euroconus (reversible: floor-wall). Two-pipe. Supply and return closable, nickel-plated.



13911610201

VALVE D2/50

Connection adaptor 3/4" euroconus (floor). One- and two-pipe. Supply and return closable. With bypass control, nickel-plated.



13911610202

VALVE E2/50

Connection adaptor 3/4" euroconus (wall). One- and two-pipe. Supply and return closable. With bypass control, nickel-plated.



13911610203

REVERSIBLE CONNECTION ADAPTOR

Connection adaptor 3/4" euroconus (reversible: floor-wall). Nickel-plated.



13911600200

| STANDARD | STANDARD Zn | COMPACT 4 | UNI 6 | PIANO UNI 6 |
|----------|-------------|-----------|-------|-------------|
|          |             |           | •     | •           |
|          |             |           | •     | •           |
|          |             |           | •     | •           |
|          |             |           | •     | •           |
|          |             |           | •     | •           |

|                                                                                                                                 | Art. Nr.            | Sizes (mm) | STANDARD | STANDARD Zn | COMPACT 4 | UNI 6 | PIANO UNI 6 |
|---------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|----------|-------------|-----------|-------|-------------|
| <b>THERMOSTAT KNOB</b><br>for valve insert M30 x 1,5                                                                            | 13911630101 (white) |            |          |             |           | •     | •           |
| <b>SET A1</b><br>Connection copper tube compression 3/4", 2 connections per set. Nickel-plated. Mention diameter when ordering. |                     |            |          |             |           |       |             |
|                                               | 13911610116         | Ø 16 x 1   |          |             |           | •     | •           |
| <b>SET A3</b><br>Connection PE tube euroconus 3/4", 2 connections per set. Nickel-plated. Mention diameter when ordering.       |                     |            |          |             |           |       |             |
|                                              | 13911610216         | Ø 16 x 1,5 | •        | •           | •         | •     | •           |
| <b>SET A3</b><br>Connection for multi-layer tube, 2 connections per set. Nickel-plated. Mention diameter when ordering.         |                     |            |          |             |           |       |             |
|                                                                                                                                 | 13911611620         | Ø 16 x 2   | •        | •           | •         | •     | •           |
| <b>SET Nr. 11</b><br>Composed of: insert M30 x 1,5 with protective cap and 1 blind plug.                                        |                     |            |          |             |           |       |             |
| <b>Insert clamp connection</b>                                                                                                  | 13911600131         |            |          |             |           | •     | •           |
| <b>Insert M30 x 1,5</b>                                                                                                         | 13911630131         |            |          |             |           | •     | •           |
| <b>SET Nr. 21</b><br>Composed of: insert M30 x 1,5 with protective cap, 1 blind plug and 1 manual knob.                         |                     |            |          |             |           |       |             |
| <b>Insert clamp connection</b>                                                                                                  | 13911630161         |            |          |             |           | •     | •           |
| <b>Insert M30 x 1,5</b>                                                                                                         |                     |            |          |             |           |       |             |

## SET Nr. 22

Composed of: insert M30 x 1,5 with protective cap,  
1 blind plug and 1 thermostat knob.

### Insert clamp connection

Art. Nr.

13911600162

Insert M30 x 1,5

13911630162

### FLOOR SUPPORT BRACKET FOR TYPE 20s/21s (white)

For mounting on the screed (short type) (H = 135-200 mm)  
and in the screed (long type) (H = 285-345 mm)

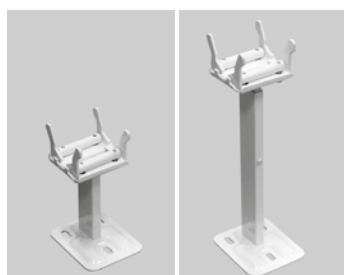


short 13911830913

```
long      13911830914
```

### FLOOR SUPPORT BRACKET FOR TYPE 22/33 (white)

For mounting on the screed (short type) (H = 135-200 mm)  
and in the screed (long type) (H = 285-345 mm)



```
short 13911830917
```

```
long      13911830918
```

TOWEL RAIL (white)

for horizontal panel radiators



13911982040

13911982050

13911982060

13911982080

13911982100

TOWEL RAIL (chrome)

for horizontal panel radiators



13911983050

13911983060

13911983070

13911983080

## SPRAY CAN AND PAINT STICK



Spray can

13919020307

Paint stick

13919020306

| SIZES  | SIZES (mm) | STANDARD |   | STANDARD Zn | COMPACT 4 | UNI 6 |   | PIANO UNI 6 |
|--------|------------|----------|---|-------------|-----------|-------|---|-------------|
|        |            | •        | • | •           | •         | •     | • | •           |
| Length | 400 mm     | •        | • | •           | •         | •     | • | •           |
|        | 500 mm     | •        | • | •           | •         | •     | • | •           |
|        | 600 mm     | •        | • | •           | •         | •     | • | •           |
|        | 800 mm     | •        | • | •           | •         | •     | • | •           |
|        | 1000 mm    | •        | • | •           | •         | •     | • | •           |
| Length | 500 mm     | •        | • | •           | •         | •     | • | •           |
|        | 600 mm     | •        | • | •           | •         | •     | • | •           |
|        | 700 mm     | •        | • | •           | •         | •     | • | •           |
|        | 800 mm     | •        | • | •           | •         | •     | • | •           |
| Length | 500 mm     | •        | • | •           | •         | •     | • | •           |
|        | 600 mm     | •        | • | •           | •         | •     | • | •           |



Suitable for panel radiators  
from production date 01/2025

L-BRACKETS SET  
For type 10 and 11

Art. Nr.

Sizes (mm)

Height

STANDARD

STANDARD Zn

COMPACT 4

UNI 6 (TYPE 11)

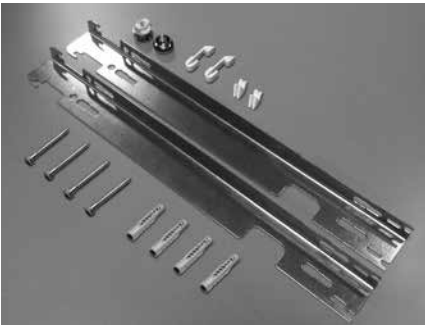
PIANO UNI 6

|             |            |
|-------------|------------|
| 13921502332 | (2 pieces) |
| 13921502342 | (2 pieces) |
| 13921502352 | (2 pieces) |
| 13921502362 | (2 pieces) |
| 13921502372 | (2 pieces) |
| 13921502392 | (2 pieces) |

|        |
|--------|
| 300 mm |
| 400 mm |
| 500 mm |
| 600 mm |
| 700 mm |
| 900 mm |

|   |   |   |   |
|---|---|---|---|
| • | • | • | • |
| • | • | • | • |
| • | • | • | • |
| • | • | • | • |
| • | • | • | • |
| • | • | • | • |

For type 11/20s/21s/22/33



Length:  
L 400-1600 mm                      2 pieces  
L 1800-3000 mm                    3 pieces

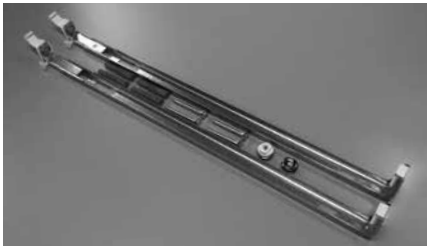
|             |            |
|-------------|------------|
| 13921502232 | (2 pieces) |
| 13921502242 | (2 pieces) |
| 13921502252 | (2 pieces) |
| 13921502262 | (2 pieces) |
| 13921502272 | (2 pieces) |
| 13921502292 | (2 pieces) |

|        |
|--------|
| 300 mm |
| 400 mm |
| 500 mm |
| 600 mm |
| 700 mm |
| 900 mm |

|   |   |   |   |
|---|---|---|---|
| • | • | • | • |
| • | • | • | • |
| • | • | • | • |
| • | • | • | • |
| • | • | • | • |
| • | • | • | • |

JU-BRACKETS SET

For type 21s/22/33



Art. Nr.

JU-set

|             |            |        |
|-------------|------------|--------|
| 13911503032 | (2 pieces) | 300 mm |
| 13911503042 | (2 pieces) | 400 mm |
| 13911503052 | (2 pieces) | 500 mm |
| 13911503062 | (2 pieces) | 600 mm |
| 13911503072 | (2 pieces) | 700 mm |
| 13911503092 | (2 pieces) | 900 mm |

JU-SET VDI-compliant (class III)

|             |            |        |
|-------------|------------|--------|
| 13921520032 | (2 pieces) | 300 mm |
| 13921520042 | (2 pieces) | 400 mm |
| 13921520052 | (2 pieces) | 500 mm |
| 13921520062 | (2 pieces) | 600 mm |
| 13921520072 | (2 pieces) | 700 mm |
| 13921520092 | (2 pieces) | 900 mm |

JS-BRACKETS SET



JS-set

|             |            |        |
|-------------|------------|--------|
| 13911500032 | (2 pieces) | 300 mm |
| 13911500042 | (2 pieces) | 400 mm |
| 13911500052 | (2 pieces) | 500 mm |
| 13911500062 | (2 pieces) | 600 mm |
| 13911500072 | (2 pieces) | 700 mm |
| 13911500092 | (2 pieces) | 900 mm |

| Art. Nr.               | Sizes (mm) | Height | STANDARD | STANDARD Zn | COMPACT 4 | UNI 6 (EX. TYPE 11) | PIANO UNI 6 |
|------------------------|------------|--------|----------|-------------|-----------|---------------------|-------------|
|                        |            |        |          |             |           |                     |             |
| 13911503032 (2 pieces) | 300 mm     |        |          |             | •         | •                   | •           |
| 13911503042 (2 pieces) | 400 mm     |        |          |             | •         | •                   | •           |
| 13911503052 (2 pieces) | 500 mm     |        |          |             | •         | •                   | •           |
| 13911503062 (2 pieces) | 600 mm     |        |          |             | •         | •                   | •           |
| 13911503072 (2 pieces) | 700 mm     |        |          |             | •         | •                   | •           |
| 13911503092 (2 pieces) | 900 mm     |        |          |             | •         | •                   | •           |
|                        |            |        |          |             |           |                     |             |
| 13921520032 (2 pieces) | 300 mm     |        |          |             | •         | •                   | •           |
| 13921520042 (2 pieces) | 400 mm     |        |          |             | •         | •                   | •           |
| 13921520052 (2 pieces) | 500 mm     |        |          |             | •         | •                   | •           |
| 13921520062 (2 pieces) | 600 mm     |        |          |             | •         | •                   | •           |
| 13921520072 (2 pieces) | 700 mm     |        |          |             | •         | •                   | •           |
| 13921520092 (2 pieces) | 900 mm     |        |          |             | •         | •                   | •           |
|                        |            |        |          |             |           |                     |             |
| 13911500032 (2 pieces) | 300 mm     |        | •        | •           |           |                     |             |
| 13911500042 (2 pieces) | 400 mm     |        | •        | •           |           |                     |             |
| 13911500052 (2 pieces) | 500 mm     |        | •        | •           |           |                     |             |
| 13911500062 (2 pieces) | 600 mm     |        | •        | •           |           |                     |             |
| 13911500072 (2 pieces) | 700 mm     |        | •        | •           |           |                     |             |
| 13911500092 (2 pieces) | 900 mm     |        | •        | •           |           |                     |             |





# Horizontal Centric Collection

Centric

Piano Centric

Centric Line



# CENTRIC

Home is still the place where we feel best. The Centric ensures that it is also a warm place. Where a suitable central heating comfort ensures that we can optimally enjoy that home at all times. The Centric adds to this another major plus: stylish design.

The radiator is not only very beautifully finished, it is equipped with an intelligent, fixed middle connection, which turns it into a beautifully harmonious whole. And thanks to this middle connection, it can also be mounted very quickly.

|                                       |                                                                                                                                                                                                                                                                                              |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Valve radiator with both a middle connection (underneath) and four side connections with valve insert included. By using the J-bracket it is possible to mirror reverse the radiator, so that the thermostat knob can be mounted on the left or right (with the exception of type 11).       |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                                                                                        |
| <b>Finishing:</b>                     | Top grille and side panels                                                                                                                                                                                                                                                                   |
| <b>Valve:</b>                         | The included valve insert (without thermostatic valve) is compatible with thermostatic valves M30 x 1,5 mm.                                                                                                                                                                                  |
| <b>Suspension and accessories:</b>    | L-bracket set (type 11): blind plugs, air vent, valve insert M30x1,5, lift-out protection, silencers, plugs and bolts (delivered standard)<br>J-bracket set (type 21s, 22, 33): blind plugs, air vent, valve insert M30x1,5, plugs and bolts (delivered standard)<br>VDI-compliant in option |
| <b>Connections:</b>                   | 2 x ¾" external thread euroconus middle connection 50 mm (underneath),<br>4 x ½" internal thread side connections                                                                                                                                                                            |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard and then shrink-wrapped. A label describes the radiator characteristics:<br>type – height – length.                                                                                                                             |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                                                                                      |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                                                                                                                                                     |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                                                                                  |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                                                                                           |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                                                                                    |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                                                                                       |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                                                                                   |
| <b>Types:</b>                         | 11   21s   22   33                                                                                                                                                                                                                                                                           |
| <b>Heights:</b>                       | 300   400   500   600   700   900 mm                                                                                                                                                                                                                                                         |
| <b>Lengths:</b>                       | 400 => 3000 mm                                                                                                                                                                                                                                                                               |
| <b>Depths:</b>                        | 61   73   106   165 mm                                                                                                                                                                                                                                                                       |

TYPE 11



TYPE 21s



TYPE 22

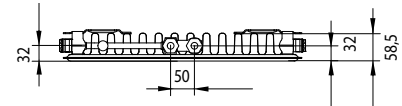


TYPE 33

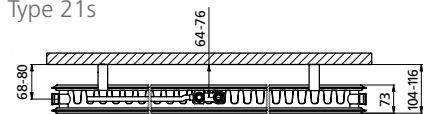


NEW

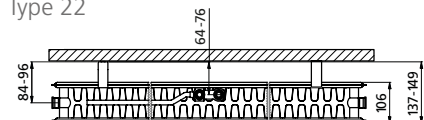
Type 11



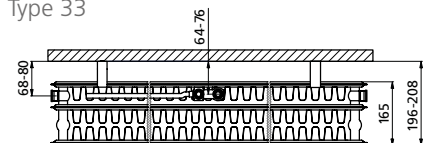
Type 21s



Type 22

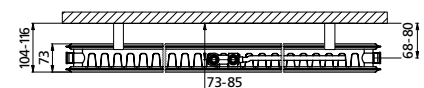


Type 33

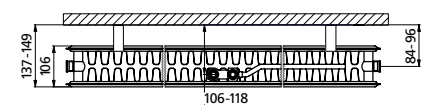


Mounted on the left

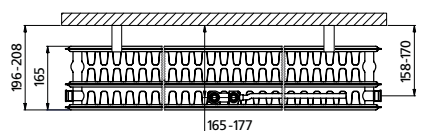
Type 21s



Type 22



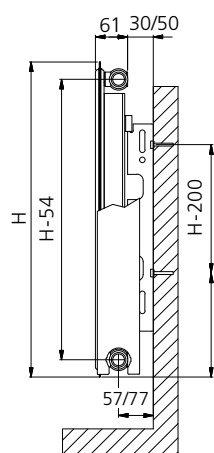
Type 33



TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

| Height (mm) |    | NEW Type 11 | Type 21s | Type 22 | Type 33 |
|-------------|----|-------------|----------|---------|---------|
| 300         | W  | -           | 755      | 942     | 1334    |
|             | kg | -           | 13,92    | 15,65   | 22,87   |
|             | l  | -           | 3,50     | 3,55    | 5,29    |
|             | n  | -           | 1,31     | 1,31    | 1,29    |
| 400         | W  | 697         | 953      | 1202    | 1700    |
|             | kg | 11,53       | 18,00    | 20,49   | 30,03   |
|             | l  | 2,49        | 4,42     | 4,47    | 6,71    |
|             | n  | 1,24        | 1,31     | 1,32    | 1,30    |
| 500         | W  | 840         | 1141     | 1449    | 2048    |
|             | kg | 14,05       | 22,09    | 25,20   | 37,22   |
|             | l  | 2,82        | 5,33     | 5,38    | 8,07    |
|             | n  | 1,25        | 1,32     | 1,32    | 1,31    |
| 600         | W  | 979         | 1322     | 1683    | 2379    |
|             | kg | 16,60       | 26,14    | 30,04   | 44,43   |
|             | l  | 3,18        | 6,22     | 6,27    | 9,39    |
|             | n  | 1,27        | 1,32     | 1,33    | 1,32    |
| 700         | W  | 1117        | 1499     | 1907    | 2696    |
|             | kg | 19,16       | 29,59    | 34,24   | 50,97   |
|             | l  | 3,57        | 7,09     | 7,14    | 10,65   |
|             | n  | 1,28        | 1,32     | 1,33    | 1,33    |
| 900         | W  | 1390        | 1841     | 2326    | 3297    |
|             | kg | 24,23       | 38,06    | 44,50   | 65,95   |
|             | l  | 4,42        | 8,77     | 8,84    | 13,02   |
|             | n  | 1,30        | 1,33     | 1,34    | 1,34    |

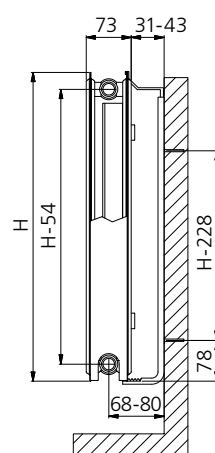
## L-BRACKETS



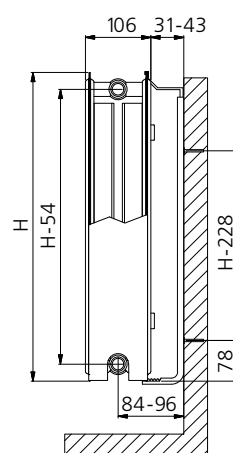
type 11

NEW

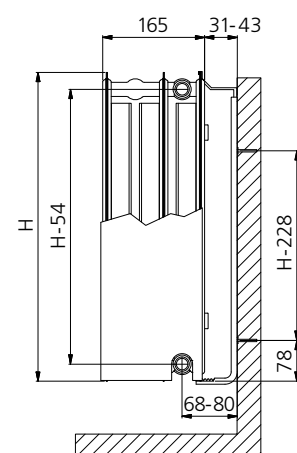
## J-BRACKETS



type 21s



type 22



type 33

## PIANO CENTRIC

The Piano Centric offers an added value for every interior.

A simple, efficient and elegant radiator ... a class apart! Designed to charm you with its looks and performance. The most beautiful example of contemporary comfort in the broadest sense. A CH solution that heats your living space according to your needs and with style. With the intelligent middle connection, it fulfils your every wish.

|                                       |                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Valve radiator with both a middle connection (underneath) and four side connections with valve insert included. By using the J-bracket it is possible to mirror reverse the radiator, so that the thermostat knob can be mounted on the left or right. For this the flat front plate must be dis-mounted and, after reversing the radiator, mounted back on the radiator. |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Finishing:</b>                     | Top grille, side panels and flat front plate                                                                                                                                                                                                                                                                                                                              |
| <b>Valve:</b>                         | The included valve insert (without thermostatic valve) is compatible with thermostatic valves M30 x 1,5 mm.                                                                                                                                                                                                                                                               |
| <b>Suspension and accessories:</b>    | J-bracket set: blind plugs, air vent, valve insert M30x1,5, plugs and bolts (delivered standard)<br>VDI-compliant in option                                                                                                                                                                                                                                               |
| <b>Connections:</b>                   | 2 x ¾" external thread euroconus middle connection 50 mm (underneath),<br>4 x ½" internal thread side connections                                                                                                                                                                                                                                                         |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard and then shrink-wrapped. A label describes the radiator characteristics:<br>type – height – length.                                                                                                                                                                                                          |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                                                                                                                                                                   |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                                                                                                                                                                                                                                  |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                                                                                                                                                               |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                                                                                                                                                                 |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                                                                                                                                                                |
| <b>Types:</b>                         | 21s   22   33                                                                                                                                                                                                                                                                                                                                                             |
| <b>Heights:</b>                       | 300   400   500   600   700   900 mm                                                                                                                                                                                                                                                                                                                                      |
| <b>Lengths:</b>                       | 400 => 3000 mm                                                                                                                                                                                                                                                                                                                                                            |
| <b>Depths:</b>                        | 74,5   107,5   166,5 mm                                                                                                                                                                                                                                                                                                                                                   |

TYPE 21s



TYPE 22



TYPE 33

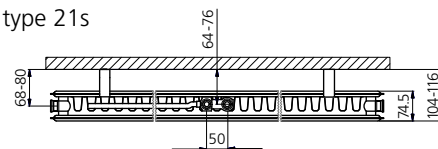


TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

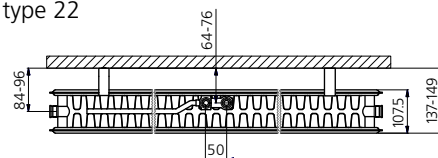
| Height (mm) |    | Type 21s | Type 22 | Type 33 |
|-------------|----|----------|---------|---------|
| 300         | W  | 690      | 878     | 1236    |
|             | kg | 16,15    | 17,89   | 25,11   |
|             | l  | 3,50     | 3,55    | 5,29    |
|             | n  | 1,28     | 1,30    | 1,32    |
| 400         | W  | 868      | 1104    | 1532    |
|             | kg | 20,96    | 23,45   | 32,99   |
|             | l  | 4,42     | 4,47    | 6,71    |
|             | n  | 1,29     | 1,30    | 1,32    |
| 500         | W  | 1034     | 1317    | 1822    |
|             | kg | 25,77    | 28,88   | 40,91   |
|             | l  | 5,33     | 5,38    | 8,07    |
|             | n  | 1,29     | 1,31    | 1,32    |
| 600         | W  | 1192     | 1521    | 2110    |
|             | kg | 30,53    | 34,43   | 48,81   |
|             | l  | 6,22     | 6,27    | 9,39    |
|             | n  | 1,30     | 1,31    | 1,32    |
| 700         | W  | 1342     | 1717    | 2399    |
|             | kg | 34,75    | 39,40   | 56,14   |
|             | l  | 7,09     | 7,14    | 10,65   |
|             | n  | 1,30     | 1,30    | 1,32    |
| 900         | W  | 1623     | 2089    | 2991    |
|             | kg | 44,59    | 51,03   | 72,48   |
|             | l  | 8,77     | 8,84    | 13,02   |
|             | n  | 1,29     | 1,28    | 1,32    |

BOTTOM VIEW

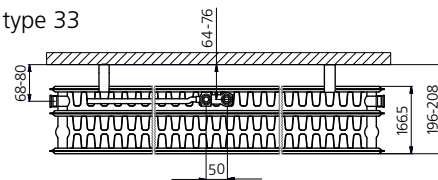
type 21s



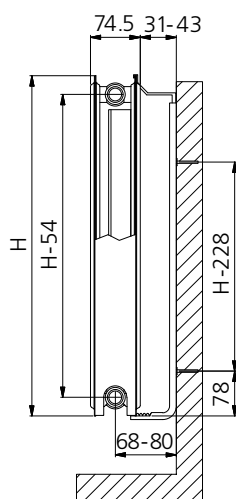
type 22



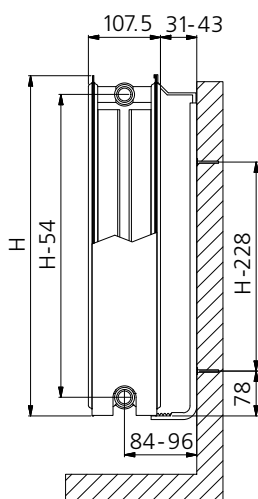
type 33



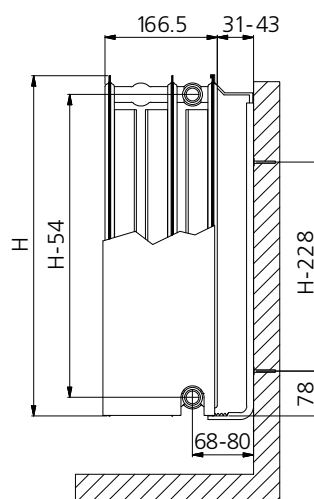
## J-BRACKETS



type 21s



type 22



type 33

## CENTRIC LINE

The Centric Line offers an added value for every interior. A simple, efficient and elegant radiator ... a class apart! Designed to charm you with its looks and performance.

With its flat front plate with horizontal lines, the Centric Line assures a tight design in every interior. A CH solution that heats your living space according to your needs and with style. With the intelligent middle connection, it fulfils your every wish.

|                                       |                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Valve radiator with both a middle connection (underneath) and four side connections with valve insert included. By using the J-bracket it is possible to mirror reverse the radiator, so that the thermostat knob can be mounted on the left or right. For this the flat front plate must be dis-mounted and, after reversing the radiator, mounted back on the radiator. |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Finishing:</b>                     | Top grille, side panels and flat front plate with horizontal lines                                                                                                                                                                                                                                                                                                        |
| <b>Valve:</b>                         | The included valve insert (without thermostatic valve) is compatible with thermostatic valves M30 x 1,5 mm.                                                                                                                                                                                                                                                               |
| <b>Suspension and accessories:</b>    | J-bracket set: blind plugs, air vent, valve insert M30x1,5, plugs and bolts (delivered standard)<br>VDI-compliant in option                                                                                                                                                                                                                                               |
| <b>Connections:</b>                   | 2 x ¾" external thread euroconus middle connection 50 mm (underneath),<br>4 x ½" internal thread side connections                                                                                                                                                                                                                                                         |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard and then shrink-wrapped. A label describes the radiator characteristics:<br>type – height – length.                                                                                                                                                                                                          |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                                                                                                                                                                   |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                                                                                                                                                                                                                                  |
| <b>Colour:</b>                        | RAL 9016                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                                                                                                                                                                 |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                                                                                                                                                                |
| <b>Types:</b>                         | 21s   22   33                                                                                                                                                                                                                                                                                                                                                             |
| <b>Heights:</b>                       | 300   400   500   600   700   900 mm                                                                                                                                                                                                                                                                                                                                      |
| <b>Lengths:</b>                       | 400 => 3000 mm                                                                                                                                                                                                                                                                                                                                                            |
| <b>Depths:</b>                        | 74,5   107,5   166,5 mm                                                                                                                                                                                                                                                                                                                                                   |

TYPE 21s



TYPE 22



TYPE 33



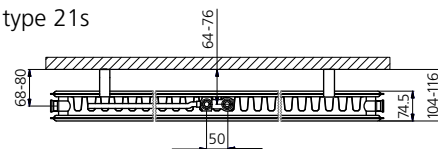


TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

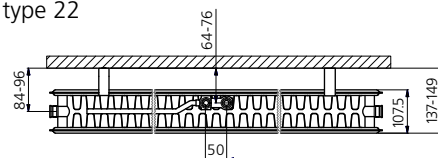
| Height (mm) |    | Type 21s | Type 22 | Type 33 |
|-------------|----|----------|---------|---------|
| 300         | W  | 690      | 878     | 1236    |
|             | kg | 16,15    | 17,89   | 25,11   |
|             | l  | 3,50     | 3,55    | 5,29    |
|             | n  | 1,28     | 1,30    | 1,32    |
| 400         | W  | 868      | 1104    | 1532    |
|             | kg | 20,96    | 23,45   | 32,99   |
|             | l  | 4,42     | 4,47    | 6,71    |
|             | n  | 1,29     | 1,30    | 1,32    |
| 500         | W  | 1034     | 1317    | 1822    |
|             | kg | 25,77    | 28,88   | 40,91   |
|             | l  | 5,33     | 5,38    | 8,07    |
|             | n  | 1,29     | 1,31    | 1,32    |
| 600         | W  | 1192     | 1521    | 2110    |
|             | kg | 30,53    | 34,43   | 48,81   |
|             | l  | 6,22     | 6,27    | 9,39    |
|             | n  | 1,30     | 1,31    | 1,32    |
| 700         | W  | 1342     | 1717    | 2399    |
|             | kg | 34,75    | 39,40   | 56,14   |
|             | l  | 7,09     | 7,14    | 10,65   |
|             | n  | 1,30     | 1,30    | 1,32    |
| 900         | W  | 1623     | 2089    | 2991    |
|             | kg | 44,59    | 51,03   | 72,48   |
|             | l  | 8,77     | 8,84    | 13,02   |
|             | n  | 1,29     | 1,28    | 1,32    |

BOTTOM VIEW

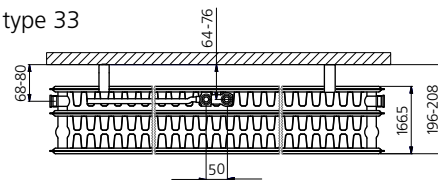
type 21s



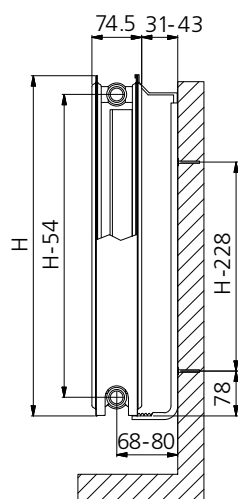
type 22



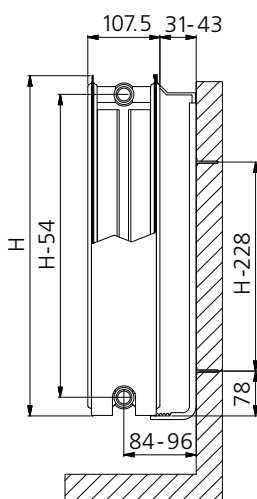
type 33



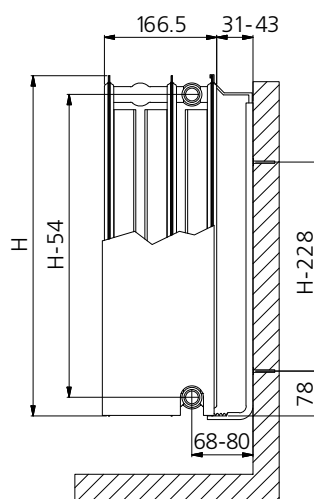
## J-BRACKETS



type 21s

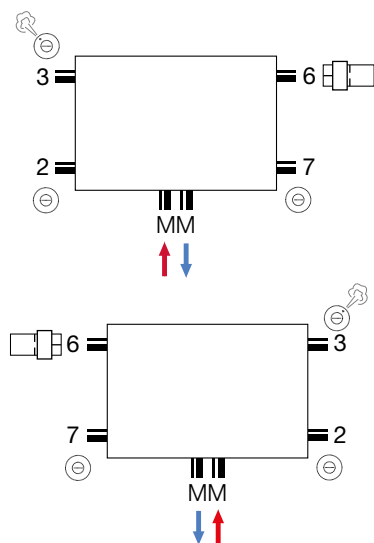


type 22



type 33

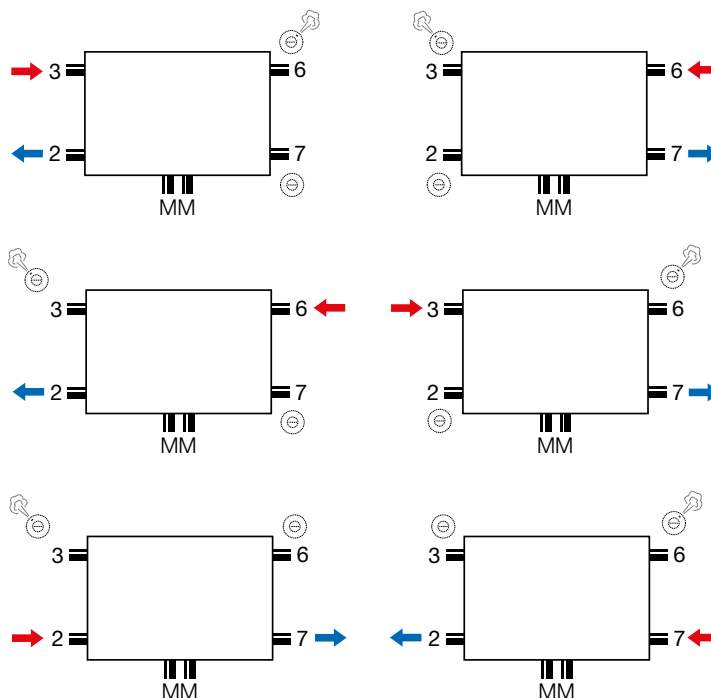
## CENTRIC



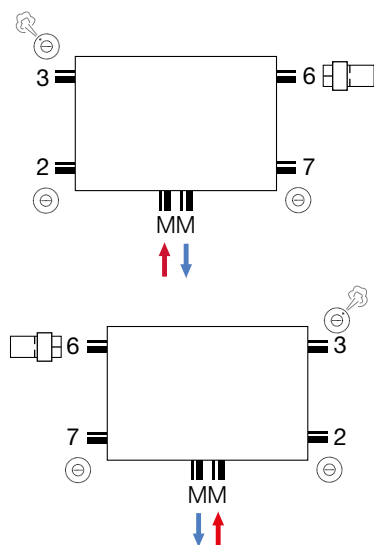
Left version valve connection:

by turning the radiator  
(with the exception of type 11)

**Attention with type 33:**  
larger distance to the wall



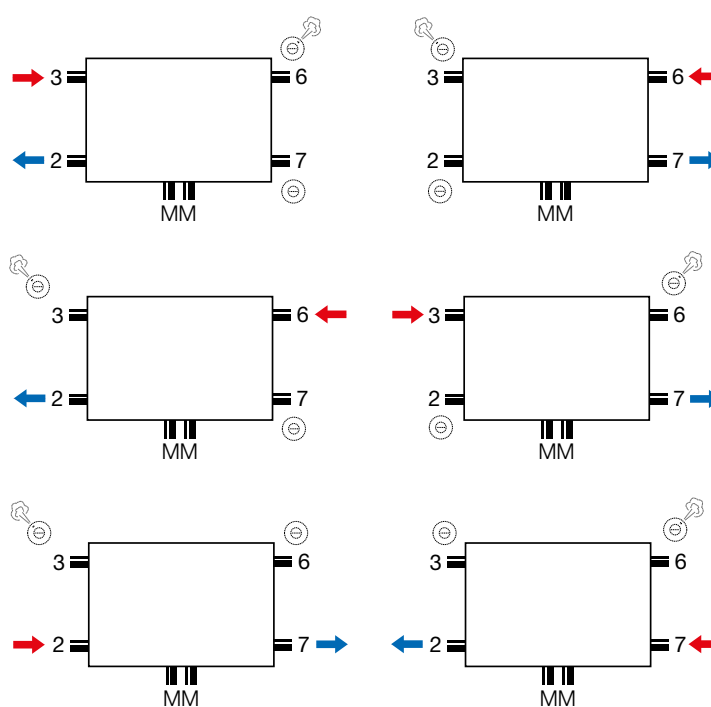
## PIANO CENTRIC &amp; CENTRIC LINE



Left version valve connection:

dismount flat front plate,  
reverse radiator, remount front plate.

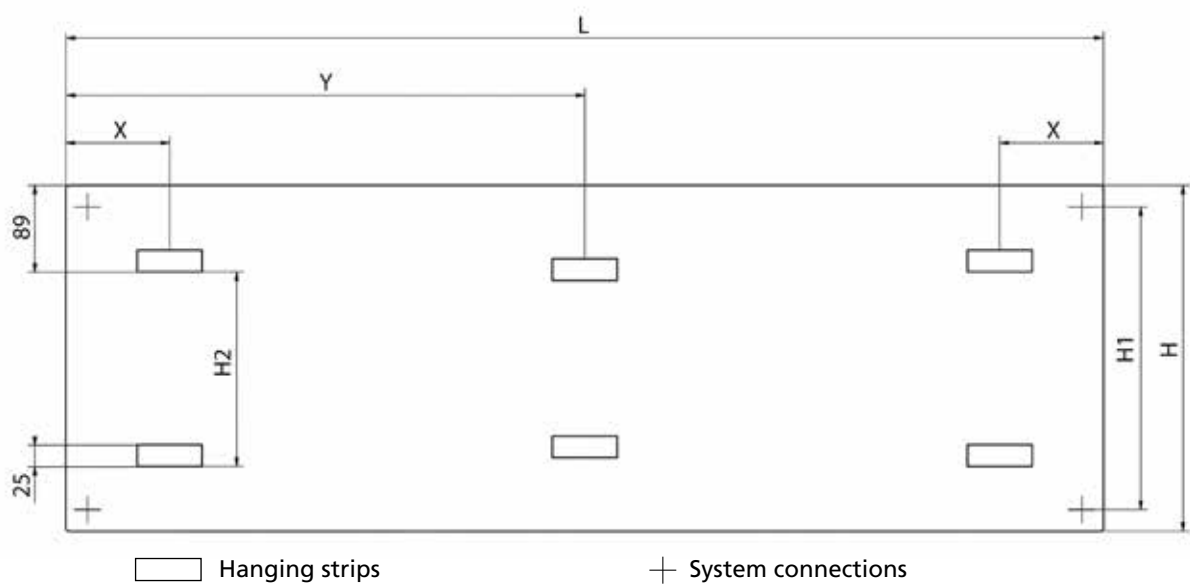
**Attention with type 33:**  
larger distance to the wall



CENTRIC  
(only type 11)

NEW

STRIP PLAN CENTRIC RADIATORS



| POSITION OF THE HANGING STRIPS |          |    |                  |         |      |       |
|--------------------------------|----------|----|------------------|---------|------|-------|
| TYPE                           | L        | X  | Y( $\geq 1800$ ) | H       | H1   | H2    |
| 11                             | 400-3000 | 85 | L/2              | 300-900 | H-54 | H-153 |

# Centric

Collection  
Piano Centric





## VALVE D2/50



Connection adaptor 3/4" euroconus (floor). One- and two-pipe. Supply and return closable. With bypass control, nickel-plated.

Art. Nr.

13911610202

## VALVE E2/50



Connection adaptor 3/4" euroconus (wall). One- and two-pipe. Supply and return closable. With bypass control, nickel-plated.

13911610203

## REVERSIBLE CONNECTION ADAPTOR



Connection adaptor 3/4" euroconus (reversible: floor-wall), nickel-plated.

13911600200

## SET A1



Connection copper tube compression 3/4", 2 connections per set. Nickel-plated. Mention diameter when ordering.

13911610116

## SET A3



Connection PE tube euroconus 3/4", 2 connections per set. Nickel-plated. Mention diameter when ordering.

13911610216

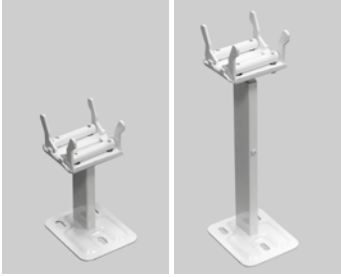
## SET A3

Connection for multi-layer tube, 2 connections per set. Nickel-plated. Mention diameter when ordering.

13911611620

| Sizes (mm) | CENTRIC | PIANO CENTRIC | CENTRIC LINE |
|------------|---------|---------------|--------------|
|            | •       | •             | •            |
|            | •       | •             | •            |
|            | •       | •             | •            |
| Ø 16 x 1   | •       | •             | •            |
| Ø 16 x 1,5 | •       | •             | •            |
| Ø 16 x 2   | •       | •             | •            |



| Art. Nr.                                                                            |                                                          | Sizes (mm)  |         |         | CENTRIC | PIANO CENTRIC | CENTRIC LINE |
|-------------------------------------------------------------------------------------|----------------------------------------------------------|-------------|---------|---------|---------|---------------|--------------|
| <b>FLOOR SUPPORT BRACKET FOR TYPE 21s/22/33 (white)</b>                             |                                                          |             |         |         |         |               |              |
|    | For mounting on the screed (short type) (H = 135-200 mm) | 13911830913 | short   |         | •       | •             | •            |
|                                                                                     | and in the screed (long type) (H = 285-345 mm)           | 13911830914 | long    |         | •       | •             | •            |
| <b>FLOOR SUPPORT BRACKET FOR TYPE 21s/22/33 (white)</b>                             |                                                          |             |         |         |         |               |              |
|   | For mounting on the screed (short type) (H = 135-200 mm) | 13911830917 | short   |         | •       | •             | •            |
|                                                                                     | and in the screed (long type) (H = 285-345 mm)           | 13911830918 | long    |         | •       | •             | •            |
| <b>THERMOSTAT KNOB</b><br>for valve insert M30 x 1,5                                |                                                          | 13911630101 | (white) |         | •       | •             | •            |
| <b>TOWEL RAIL (white)</b><br>for horizontal panel radiators                         |                                                          |             |         | Length  |         |               |              |
|  |                                                          | 13911982040 |         | 400 mm  | •       | •             |              |
|                                                                                     |                                                          | 13911982050 |         | 500 mm  | •       | •             |              |
|                                                                                     |                                                          | 13911982060 |         | 600 mm  | •       | •             |              |
|                                                                                     |                                                          | 13911982080 |         | 800 mm  | •       | •             |              |
|                                                                                     |                                                          | 13911982100 |         | 1000 mm | •       | •             |              |
| <b>TOWEL RAIL (chrome)</b><br>for horizontal panel radiators                        |                                                          |             |         | Length  |         |               |              |
|  |                                                          | 13911983050 |         | 500 mm  | •       | •             |              |
|                                                                                     |                                                          | 13911983060 |         | 600 mm  | •       | •             |              |
|                                                                                     |                                                          | 13911983070 |         | 700 mm  | •       | •             |              |
|                                                                                     |                                                          | 13911983080 |         | 800 mm  | •       | •             |              |
| <b>SPRAY CAN AND PAINT STICK</b>                                                    |                                                          |             |         |         |         |               |              |
|  | Spray can                                                | 13919020307 |         |         | •       | •             | •            |
|                                                                                     | Paint stick                                              | 13919020306 |         |         | •       | •             | •            |





# Vertical Centric

## Collection

Centric Verti Standard

Centric Verti

Piano Centric Verti

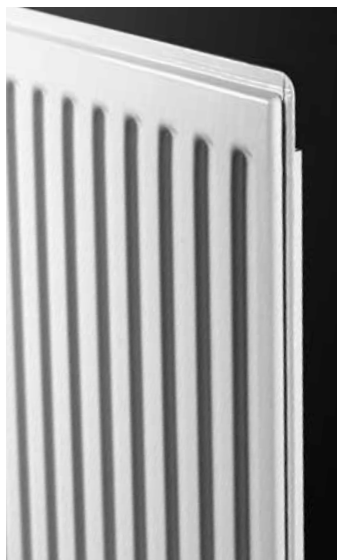
Centric Verti Line

## CENTRIC VERTI STANDARD

The Centric Verti Standard is a vertical panel radiator. It combines superior heat supply with future-oriented technology and a stylish aura. It has all the advantages and characteristics of its horizontal brother: the effective technology, the timeless look and the intelligent middle connection.

But above all, the ability to allow all of these unique characteristics to optimally perform in places with limited wall space.

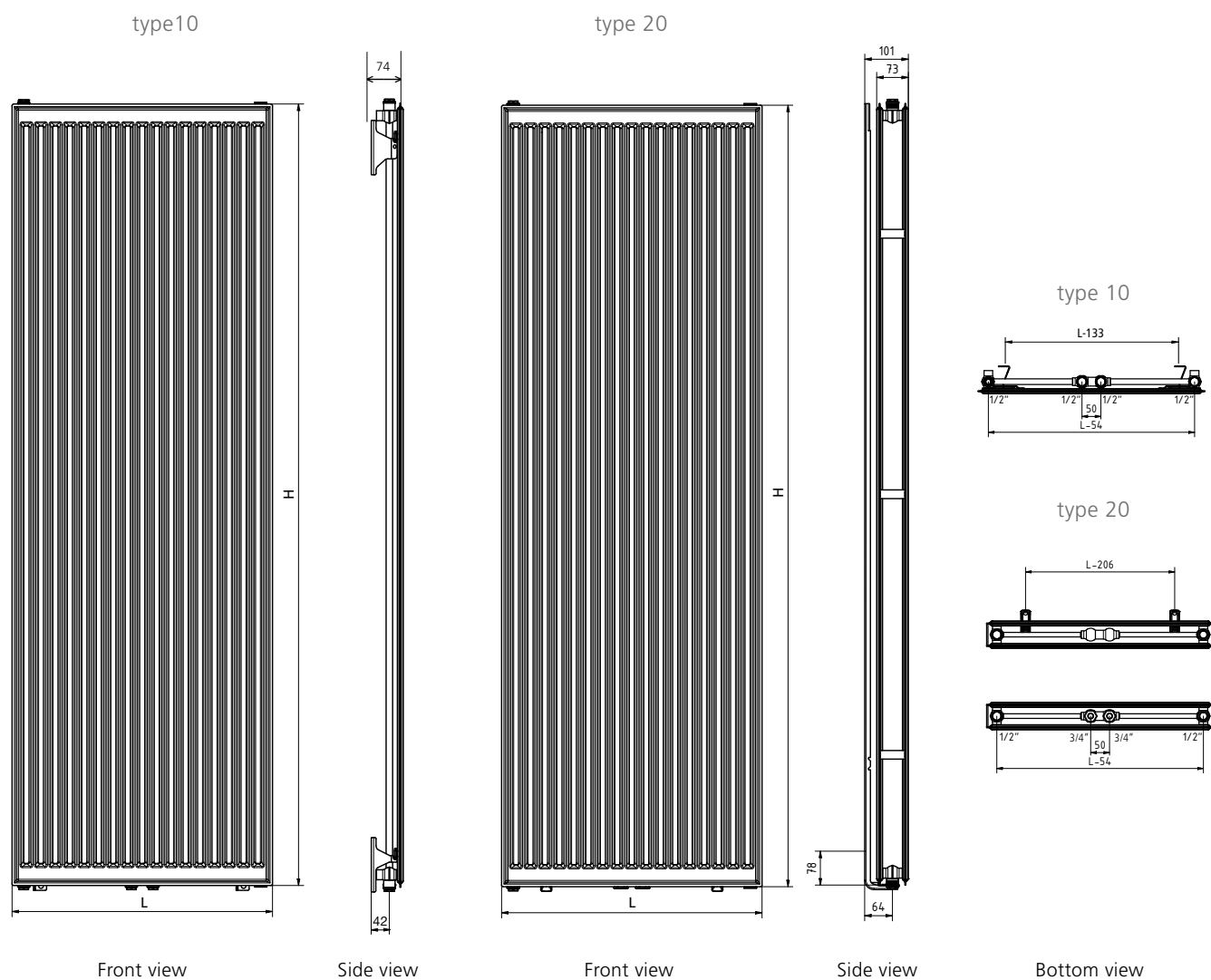
|                                       |                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Vertical panel radiator with both a middle connection (underneath) and two bottom connections (side). The two top connections are for installing the air vent.                                                                                                                                                       |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                                                                                                                |
| <b>Finishing:</b>                     | Standard                                                                                                                                                                                                                                                                                                             |
| <b>Suspension and accessories:</b>    | Wall bracket set short (Type 10) or J-bracket set (Type 20) (supplied as standard)<br>Blind plug (1x) and air vent (1x) supplied with the suspension.<br>Blind plug in connection top left (4) and bottom left (1) already pre-fitted at the factory.                                                                |
| <b>Connections:</b>                   | <b>Type 10:</b> 4 x ½" internal thread (1 and 4 already sealed at the factory)<br>2 x ½" internal thread (center-bottom) (already sealed at the factory)<br><b>Type 20:</b> 4 x ½" internal thread (1 and 4 already sealed at the factory)<br>2 x ¾" external thread (center-bottom) (already sealed at the factory) |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard.<br>A label describes the radiator characteristics: type – height – length.                                                                                                                                                                             |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                                                                                                              |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                                                                                                                                                                             |
| <b>Colour:</b>                        | RAL 9016                                                                                                                                                                                                                                                                                                             |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                                                                                                                   |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                                                                                                            |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                                                                                                               |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                                                                                                           |
| <b>Types:</b>                         | 10   20                                                                                                                                                                                                                                                                                                              |
| <b>Heights:</b>                       | 1600   1800   2000   2200 mm                                                                                                                                                                                                                                                                                         |
| <b>Widths:</b>                        | 400   500   600   700   800 mm                                                                                                                                                                                                                                                                                       |
| <b>Depths:</b>                        | <b>Type 10:</b> 61mm / <b>Type 20:</b> 73mm                                                                                                                                                                                                                                                                          |



TYPE 10 / 20

TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

| Height (mm) |    | Type 10 | Type 20s |
|-------------|----|---------|----------|
| 1600        | W  | 1760    | 2606     |
|             | kg | 29,62   | 64,40    |
|             | l  | 7,68    | 12,96    |
|             | n  | 1,35    | 1,29     |
| 1800        | W  | 1954    | 2886     |
|             | kg | 33,06   | 70,66    |
|             | l  | 8,10    | 16,30    |
|             | n  | 1,38    | 1,29     |
| 2000        | W  | 2150    | 3170     |
|             | kg | 36,48   | 76,92    |
|             | l  | 8,54    | 19,64    |
|             | n  | 1,36    | 1,33     |
| 2200        | W  | 2348    | 3456     |
|             | kg | 39,92   | 84,12    |
|             | l  | 8,96    | 21,62    |
|             | n  | 1,35    | 1,30     |



## CENTRIC VERTI

The Centric Verti is a vertical panel radiator. It combines superior heat supply with future-oriented technology and a stylish aura. It has an effective technology, a timeless look, tightly finished side panels and an intelligent middle connection. But above all, the ability to allow all of these unique characteristics to optimally perform in places with limited wall space.

|                                       |                                                                                                                                                                                                                                     |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Vertical panel radiator with both a middle connection (underneath) and two bottom connections (side). The two top connections are for installing the air vent.                                                                      |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                               |
| <b>Finishing:</b>                     | Side panels                                                                                                                                                                                                                         |
| <b>Suspension and accessories:</b>    | J-bracket set (supplied as standard), VDI-compliant (class III).<br>Blind plug (1x) and air vent (1x) supplied with the suspension.<br>Blind plug in connection top left (4) and bottom left (1) already pre-fitted at the factory. |
| <b>Connections:</b>                   | 4 x ½" internal thread (1 and 4 already sealed at the factory),<br>2 x ¾" external thread (center-bottom) (already sealed at the factory)                                                                                           |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard.<br>A label describes the radiator characteristics: type – height – length.                                                                                            |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                             |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cathodically primed and powder-coated standard in RAL 9016.                                                                                                                                |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                         |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                                  |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                           |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                              |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                          |
| <b>Types:</b>                         | 21s   22                                                                                                                                                                                                                            |
| <b>Heights:</b>                       | 1600   1800   2000   2200 mm                                                                                                                                                                                                        |
| <b>Widths:</b>                        | 400   500   600   700   800 mm                                                                                                                                                                                                      |
| <b>Depths:</b>                        | <b>Type 21s:</b> 73   <b>Type 22:</b> 106 mm                                                                                                                                                                                        |



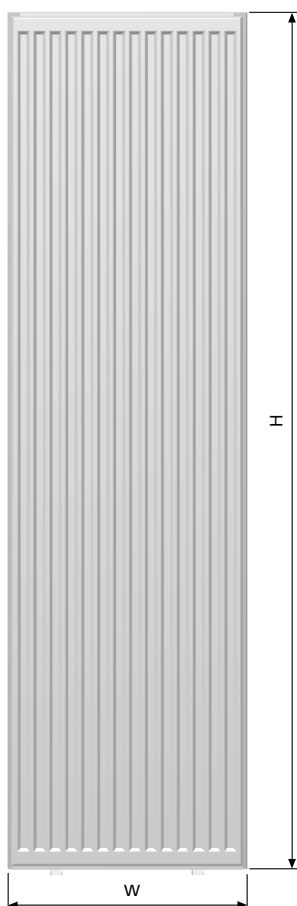
TYPE 21s / 22

TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

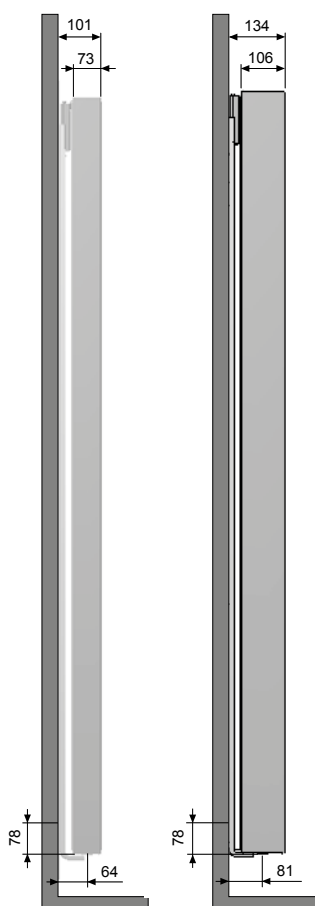
| Height (mm) |    | Type 21s | Type 22 |
|-------------|----|----------|---------|
| 1600        | W  | 2962     | 3608    |
|             | kg | 77,60    | 86,16   |
|             | l  | 13,38    | 13,63   |
|             | n  | 1,35     | 1,38    |
| 1800        | W  | 3242     | 3896    |
|             | kg | 83,92    | 94,58   |
|             | l  | 15,13    | 16,46   |
|             | n  | 1,34     | 1,36    |
| 2000        | W  | 3516     | 4190    |
|             | kg | 90,22    | 103,00  |
|             | l  | 16,88    | 19,29   |
|             | n  | 1,32     | 1,33    |
| 2200        | W  | 3782     | 4488    |
|             | kg | 98,50    | 111,62  |
|             | l  | 19,38    | 22,14   |
|             | n  | 1,36     | 1,45    |

type 21s

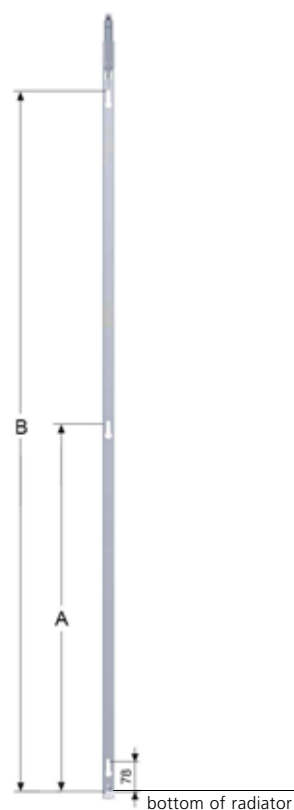
type 22



Front view

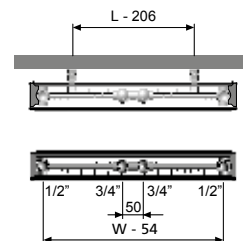


Side view

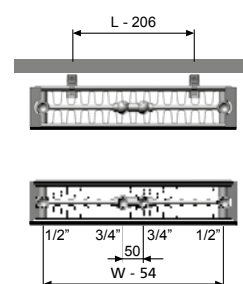


| H    | A    | B    |
|------|------|------|
| 1600 | 748  | 1418 |
| 1800 | 848  | 1618 |
| 2000 | 948  | 1818 |
| 2200 | 1048 | 2018 |

type 21s



type 22



Bottom view



## PIANO CENTRIC VERTI

The Piano Centric Verti is a vertical panel radiator with flat front plate. It combines superior heat supply with future-oriented technology and a stylish aura. Through its mix of simplicity, efficiency and aesthetics, further enhanced by the intelligent, fixed middle connection, the panel radiator forms a harmonious whole in every living and working space.

|                                       |                                                                                                                                                                                                                                     |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Vertical panel radiator with both a middle connection (underneath) and two bottom connections (side). The two top connections are for installing the air vent.<br>The radiator is covered with a flat front plate.                  |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                               |
| <b>Finishing:</b>                     | Side panels and flat front plate                                                                                                                                                                                                    |
| <b>Suspension and accessories:</b>    | J-bracket set (supplied as standard), VDI-compliant (class III).<br>Blind plug (1x) and air vent (1x) supplied with the suspension.<br>Blind plug in connection top left (4) and bottom left (1) already pre-fitted at the factory. |
| <b>Connections:</b>                   | 4 x ½" internal thread (1 and 4 already sealed at the factory),<br>2 x ¾" external thread (center-bottom) (already sealed at the factory)                                                                                           |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard.<br>A label describes the radiator characteristics: type – height – length.                                                                                            |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                             |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                                                                                            |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                         |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                                  |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                           |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                              |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                          |
| <b>Types:</b>                         | 21s   22                                                                                                                                                                                                                            |
| <b>Heights:</b>                       | 1600   1800   2000   2200 mm                                                                                                                                                                                                        |
| <b>Widths:</b>                        | 400   500   600   700   800 mm                                                                                                                                                                                                      |
| <b>Depths:</b>                        | <b>Type 21s:</b> 75   <b>Type 22:</b> 108 mm                                                                                                                                                                                        |

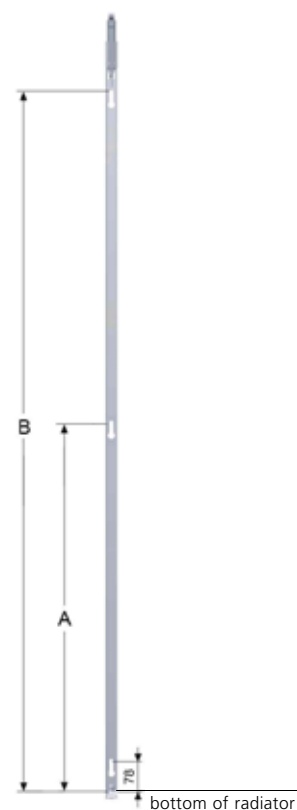


TYPE 21s / 22

# Centric

TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

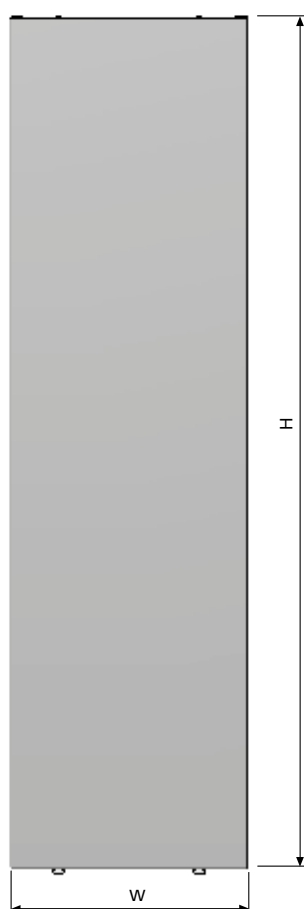
| Height (mm) |    | Type 21s | Type 22 |
|-------------|----|----------|---------|
| 1600        | W  | 2618     | 3202    |
|             | kg | 88,38    | 99,66   |
|             | l  | 13,38    | 13,63   |
|             | n  | 1,33     | 1,40    |
| 1800        | W  | 2800     | 3486    |
|             | kg | 98,36    | 109,48  |
|             | l  | 15,13    | 16,46   |
|             | n  | 1,35     | 1,44    |
| 2000        | W  | 2996     | 3772    |
|             | kg | 108,36   | 119,30  |
|             | l  | 16,88    | 19,29   |
|             | n  | 1,36     | 1,48    |
| 2200        | W  | 3208     | 4064    |
|             | kg | 117,10   | 130,20  |
|             | l  | 19,38    | 22,14   |
|             | n  | 1,46     | 1,35    |



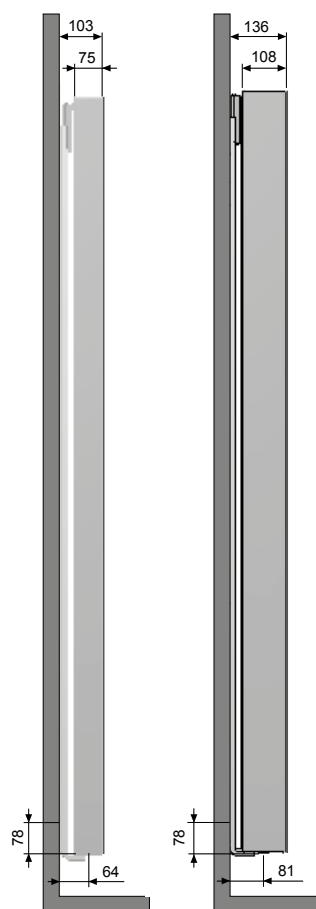
| H    | A    | B    |
|------|------|------|
| 1600 | 748  | 1418 |
| 1800 | 848  | 1618 |
| 2000 | 948  | 1818 |
| 2200 | 1048 | 2018 |

type 21s

type 22

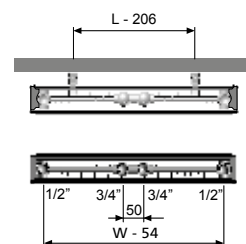


Front view

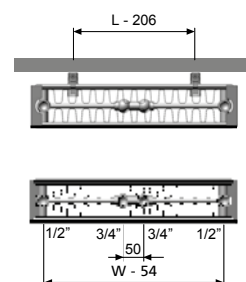


Side view

type 21s



type 22



Bottom view

## CENTRIC VERTI LINE

The Centric Verti Line is a vertical panel radiator with flat front plate having vertical lines. It combines superior heat supply with future-oriented technology and a stylish aura. Through its mix of simplicity, efficiency and aesthetics, further enhanced by the intelligent, fixed middle connection, the panel radiator forms a harmonious whole in every living and working space.

|                                       |                                                                                                                                                                                                                                          |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Vertical panel radiator with both a middle connection (underneath) and two bottom connections (side). The two top connections are for installing the air vent.<br>The radiator is covered with a flat front plate having vertical lines. |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                                    |
| <b>Finishing:</b>                     | Side panels and flat front plate having vertical lines                                                                                                                                                                                   |
| <b>Suspension and accessories:</b>    | J-bracket set (supplied as standard), VDI-compliant (class III).<br>Blind plug (1x) and air vent (1x) supplied with the suspension.<br>Blind plug in connection top left (4) and bottom left (1) already pre-fitted at the factory.      |
| <b>Connections:</b>                   | 4 x ½" internal thread (1 and 4 already sealed at the factory),<br>2 x ¾" external thread (center-bottom) (already sealed at the factory)                                                                                                |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard.<br>A label describes the radiator characteristics: type – height – length.                                                                                                 |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                                  |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cathodically primed and powder-coated standard in RAL 9016.                                                                                                                                     |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                              |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                                       |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                                                                                                |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                                   |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                               |
| <b>Types:</b>                         | 21s   22                                                                                                                                                                                                                                 |
| <b>Heights:</b>                       | 1600   1800   2000   2200 mm                                                                                                                                                                                                             |
| <b>Widths:</b>                        | 400   500   600   700   800 mm                                                                                                                                                                                                           |
| <b>Depths:</b>                        | <b>Type 21s:</b> 75   <b>Type 22:</b> 108 mm                                                                                                                                                                                             |



TYPE 21s / 22

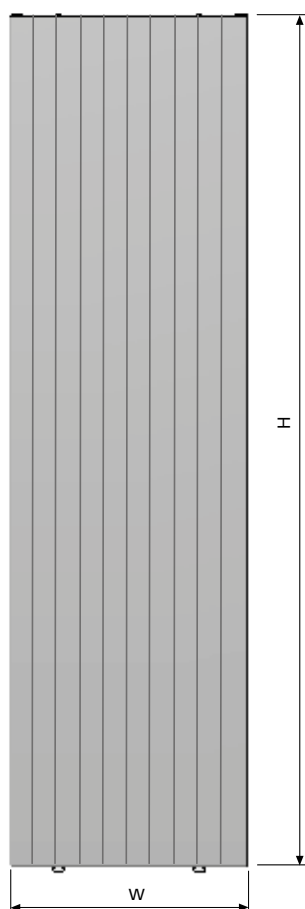
# Centric

TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

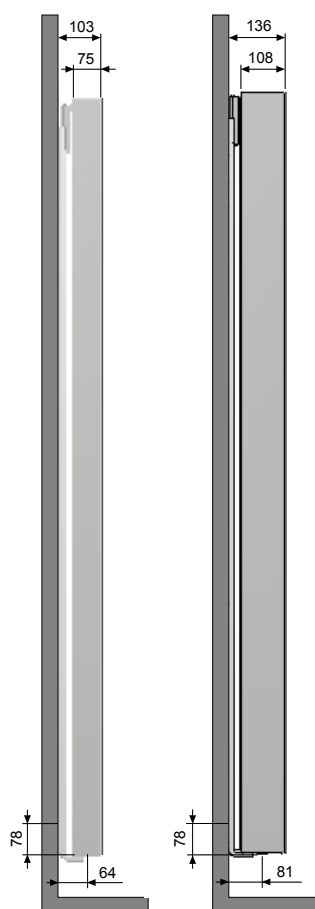
| Height (mm) |    | Type 21s | Type 22 |
|-------------|----|----------|---------|
| 1600        | W  | 2618     | 3202    |
|             | kg | 88,38    | 99,66   |
|             | l  | 13,38    | 13,63   |
|             | n  | 1,33     | 1,40    |
| 1800        | W  | 2800     | 3486    |
|             | kg | 98,36    | 109,48  |
|             | l  | 15,13    | 16,46   |
|             | n  | 1,35     | 1,44    |
| 2000        | W  | 2996     | 3772    |
|             | kg | 108,36   | 119,30  |
|             | l  | 16,88    | 19,29   |
|             | n  | 1,36     | 1,48    |
| 2200        | W  | 3208     | 4064    |
|             | kg | 117,10   | 130,20  |
|             | l  | 19,38    | 22,14   |
|             | n  | 1,46     | 1,35    |

type 21s

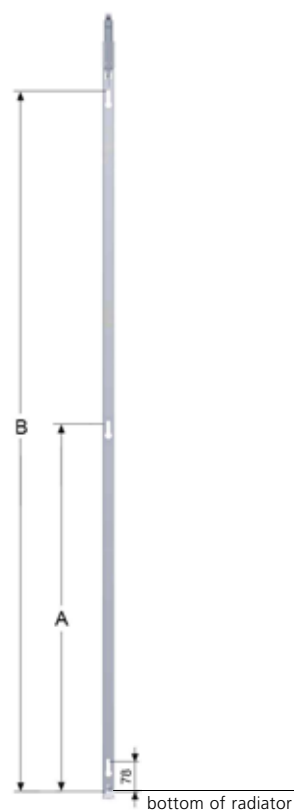
type 22



Front view



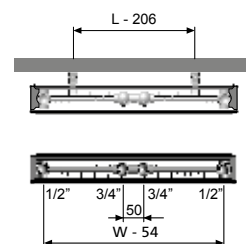
Side view



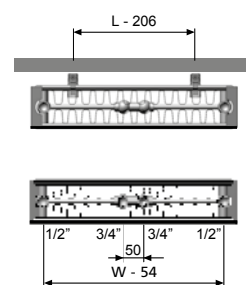
bottom of radiator

| H    | A    | B    |
|------|------|------|
| 1600 | 748  | 1418 |
| 1800 | 848  | 1618 |
| 2000 | 948  | 1818 |
| 2200 | 1048 | 2018 |

type 21s

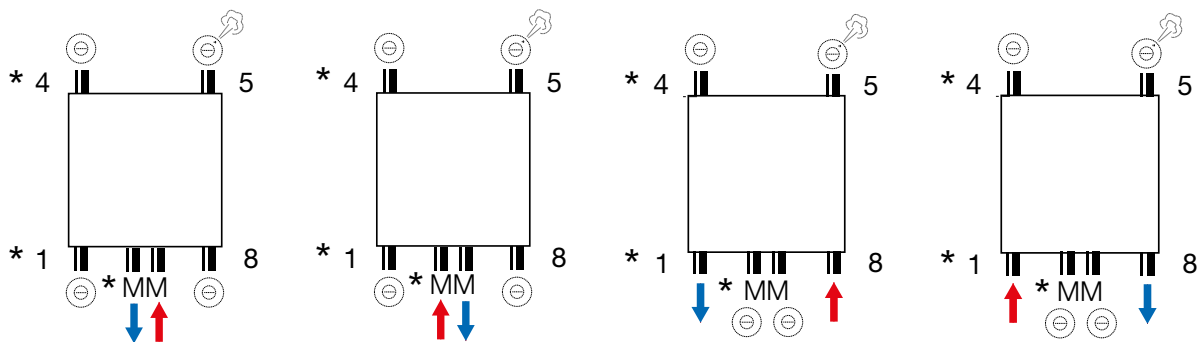


type 22



Bottom view

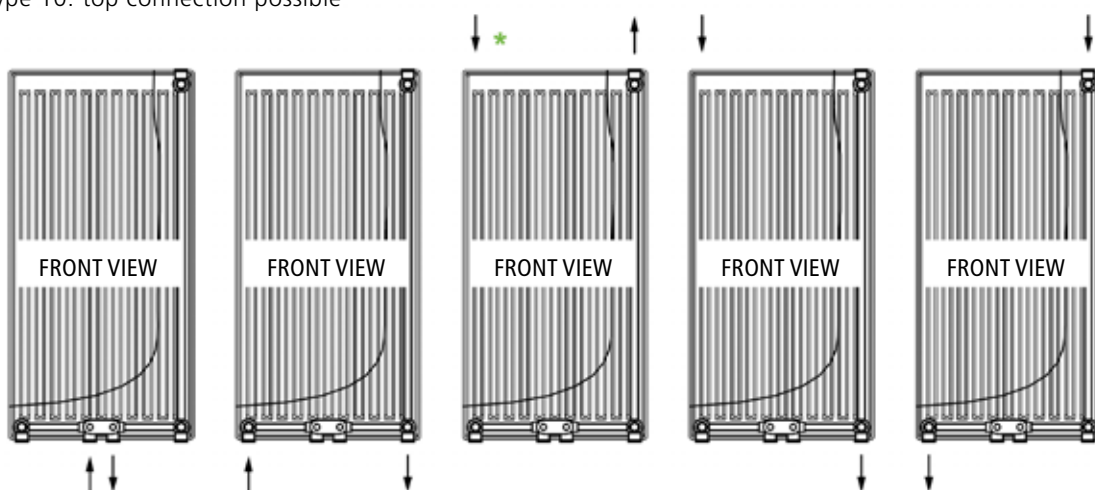
CENTRIC VERTI STANDARD  
CENTRIC VERTI  
PIANO CENTRIC VERTI  
CENTRIC VERTI LINE



\*Connection MM, 1 and 4 already sealed at the factory

**Comment:**

\* Type 10: top connection possible



Type 20-22: top connection with separation plug 13911990010 possible

When connected from above, the power reduction can reach 15%.





### Straight connection adaptor with white thermostat knob

Set consists of: 1 connection adaptor with integrated valve, thermostat knob.

Art. Nr.

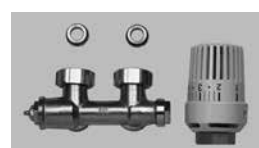
13911630147



### Straight connection adaptor with chrome thermostat knob

Set consists of: 1 connection adaptor with integrated valve, thermostat knob.

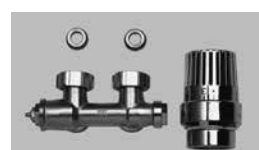
13911631147



### Right-angled connection adaptor with white thermostat knob

Set consists of: 1 connection adaptor with integrated valve, thermostat knob.

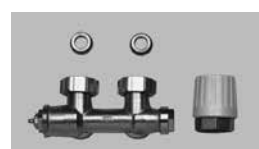
13911630141



### Right-angled connection adaptor with chrome thermostat knob

Set consists of: 1 connection adaptor with integrated valve, thermostat knob.

13911631141



### Right-angled connection adaptor with manual knob

Set consists of: 1 connection adaptor with integrated valve and manual knob.

13911630151



### Straight connection adaptor with manual knob

Set consists of: 1 connection adaptor with integrated valve and manual knob.

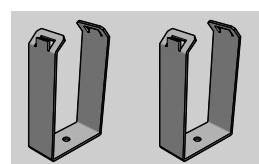
13911630157



### VALVE N3

Connection adaptor 3/4" euroconus (thermostatic) (reversible: floor-wall).  
One- and two-pipe.  
Supply and return closable.  
Nickel-plated.

13911610144



### FLOOR SUPPORT BRACKET

Floor support bracket for vertical radiators (to be used as extra support for wall support).

**Type 21s:** (H) 156 x (L) 86 x (D) 44 mm

**Type 22:** (H) 156 x (L) 99 x (D) 44 mm

13911825000

13911825001

| CENTRIC VERTI STANDARD | CENTRIC VERTI | PIANO CENTRIC VERTI | CENTRIC VERTI LINE |
|------------------------|---------------|---------------------|--------------------|
| •                      | •             | •                   | •                  |
| •                      | •             | •                   | •                  |
| •                      | •             | •                   | •                  |
| •                      | •             | •                   | •                  |
| •                      | •             | •                   | •                  |
| •                      | •             | •                   | •                  |
| •                      | •             | •                   | •                  |
| •                      | •             | •                   | •                  |



**SET A1**

Connection copper tube  
compression 3/4", 2 connections  
per set.  
Nickel-plated. Mention diameter  
when ordering.

Art. Nr.

13911610116

Sizes (mm)

Ø 16 x 1

CENTRIC VERTI STANDARD

CENTRIC VERTI

PIANO CENTRIC VERTI

CENTRIC VERTI LINE

• • • •

**SET A3**

Connection PE tube euroconus  
3/4", 2 connections per set.  
Nickel-plated.  
Mention diameter when ordering.

13911610216

Ø 16 x 1,5

• • • •

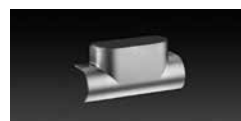
**SET A3**

Connection for multi-layer tube, 2  
connections per set. Nickel-plated.  
Mention diameter when ordering.

13911611620

Ø 16 x 2

• • • •

**COVER PLATE**

Cover plate chrome (right-angled)  
Cover plate chrome (straight)

13911630331

13911630431

Cover plate white (right-angled)  
Cover plate white (straight)

13911630330

13911630430

• • • •  
• • • •  
• • • •  
• • • •

Length

**TOWEL RAIL WHITE / CHROME**

WHITE

13911986040

13911986050

13911986060

13911986070

13911986080

400 mm

500 mm

600 mm

700 mm

800 mm

• • • •  
• • • •  
• • • •  
• • • •  
• • • •

CHROME

13911987040

13911987050

13911987060

13911987070

13911987080

400 mm

500 mm

600 mm

700 mm

800 mm

• • • •  
• • • •  
• • • •  
• • • •  
• • • •**TOWEL RAIL WHITE / CHROME**

WHITE

13911984040

13911984050

13911984060

13911984070

13911984080

400 mm

500 mm

600 mm

700 mm

800 mm

• • • •  
• • • •  
• • • •  
• • • •  
• • • •

CHROME

13911985040

13911985050

13911985060

13911985070

13911985080

400 mm

500 mm

600 mm

700 mm

800 mm

• • • •  
• • • •  
• • • •  
• • • •  
• • • •**TOWEL RAIL STAINLESS STEEL**STAINLESS  
STEEL

13911980040

13911980050

13911980060

13911980070

13911980080

400 mm

500 mm

600 mm

700 mm

800 mm

• • • •  
• • • •  
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• • • •  
• • • •



# Mini Collection

Mini Compact

Piano Mini 1

Piano Mini 2





## MINI COMPACT

The Mini Compact is a modest radiator with a typical look, high thermal output and graceful aura. The elegant, robust decorative grille and the fine side panels give this model a characteristic appearance.

Love the traditional, elegant look of a radiator? Then go for our Mini Compact radiator. Pipes and valve bodies are fully concealed, so that you can optimally enjoy the classic design. The Mini Compact, with a height of only 150 to 200 mm, is ideal as a plinth radiator under high, large windows. The thermal output of this small radiator is on a very high level.

The Mini Compact is available in a wall model or free-standing set-up.

|                                       |                                                                                                                                                                                                                                                 |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Plinth radiator with both a right bottom connection and four side connections with included valve insert. By using the brackets it is possible to mirror reverse the radiator, so that the thermostat knob can be mounted on the left or right. |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                                           |
| <b>Finishing:</b>                     | Top grille and side panels                                                                                                                                                                                                                      |
| <b>Suspension and accessories:</b>    | Wall or foot bracket (to be ordered separately)                                                                                                                                                                                                 |
| <b>Blind plug and air vent:</b>       | To be ordered separately<br>13911990031 blind plug ½" (10 pieces)<br>13911990040 air vent ½" (1 piece)                                                                                                                                          |
| <b>Connections:</b>                   | 2 x ¾" external thread euroconus right bottom connection,<br>4 x ½" internal thread connections                                                                                                                                                 |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard.<br>A label describes the radiator characteristics: type – height – length.                                                                                                        |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                                         |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                                                                                                        |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                                     |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                                              |
| <b>Maximum operating pressure:</b>    | 8 bar (tested at 11 bar)                                                                                                                                                                                                                        |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                                          |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                                      |
| <b>Types:</b>                         | 22   33   34                                                                                                                                                                                                                                    |
| <b>Heights:</b>                       | 150   200 mm                                                                                                                                                                                                                                    |
| <b>Lengths:</b>                       | 800 => 3000 mm                                                                                                                                                                                                                                  |
| <b>Depths:</b>                        | 98   167   184 mm                                                                                                                                                                                                                               |

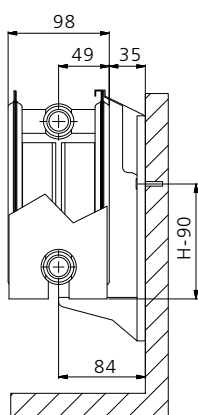


TYPE 22 / 33 / 34

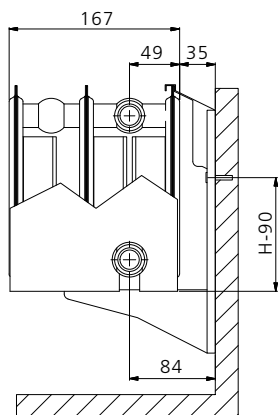
TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

| Height (mm) |    | Type 22 | Type 33 | Type 34 |
|-------------|----|---------|---------|---------|
| 150         | W  | 591     | 844     | 984     |
|             | kg | 10,30   | 16,12   | 17,58   |
|             | l  | 2,30    | 3,50    | 3,60    |
|             | n  | 1,24    | 1,24    | 1,24    |
| 200         | W  | 715     | 1029    | 1205    |
|             | kg | 13,29   | 20,51   | 22,34   |
|             | l  | 3,10    | 3,50    | 4,70    |
|             | n  | 1,25    | 1,26    | 1,26    |

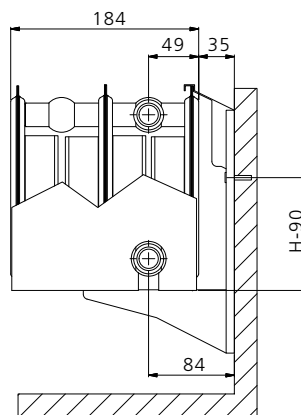
type 22



type 33

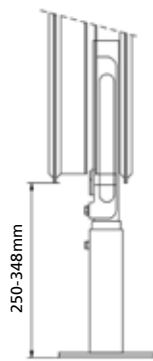
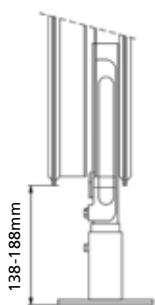


type 34

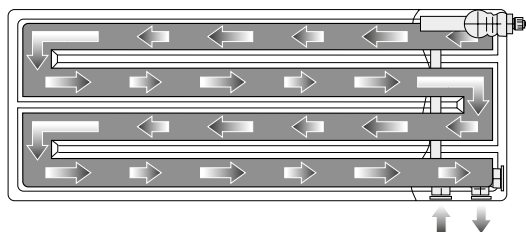


## BRACKETS

Free-standing bracket  
Side view



Forced water flow for a high thermal output



Free-standing bracket  
floor version



Free-standing bracket  
cement screed version



Wall bracket type 22



Wall bracket type 33/34



## PIANO MINI 1

The Piano Mini 1 is a plinth radiator with flat front plate on 1 side. The tight, flat body, the fine, flawless finishing with flat front plate produces a delight for the eyes. It is discreetly present in your interior, but provides generous amounts of heat thanks to the carefully-studied forced water flow. As a result you can be certain of a maximum thermal output, while you cleverly save space in your interior and euros off your energy bill.

The Piano Mini 1 with single flat front plate is available in a wall model or free-standing set-up.

|                                       |                                                                                                                                                                                                                                                 |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Plinth radiator with both a right bottom connection and four side connections with included valve insert. By using the brackets it is possible to mirror reverse the radiator, so that the thermostat knob can be mounted on the left or right. |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                                           |
| <b>Finishing:</b>                     | Top grille, side panels and flat front plate on 1 side                                                                                                                                                                                          |
| <b>Suspension and accessories:</b>    | Wall or foot bracket (to be ordered separately)                                                                                                                                                                                                 |
| <b>Blind plug and air vent:</b>       | To be ordered separately<br>13911990031 blind plug ½" (10 pieces)<br>13911990040 air vent ½" (1 piece)                                                                                                                                          |
| <b>Connections:</b>                   | 2 x ¾" external thread euroconus right bottom connection,<br>4 x ½" internal thread connections                                                                                                                                                 |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard.<br>A label describes the radiator characteristics: type – height – length.                                                                                                        |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                                         |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                                                                                                        |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                                     |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                                              |
| <b>Maximum operating pressure:</b>    | 8 bar (tested at 11 bar)                                                                                                                                                                                                                        |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                                          |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                                      |
| <b>Types:</b>                         | 22   33   34                                                                                                                                                                                                                                    |
| <b>Heights:</b>                       | 150   200 mm                                                                                                                                                                                                                                    |
| <b>Lengths:</b>                       | 800 => 3000 mm                                                                                                                                                                                                                                  |
| <b>Depths:</b>                        | 100   169   186 mm                                                                                                                                                                                                                              |

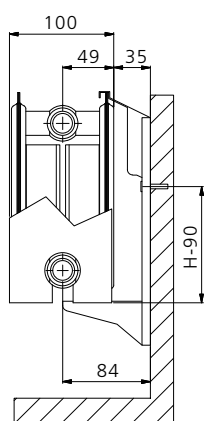


TYPE 22 / 33 / 34

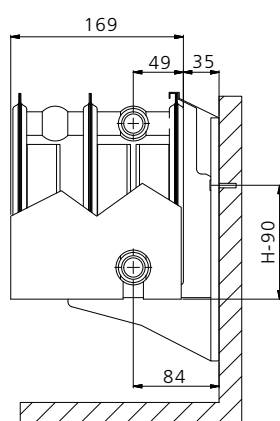
## TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

| Height (mm) |    | Type 22 | Type 33 | Type 34 |
|-------------|----|---------|---------|---------|
| 150         | W  | 591     | 848     | 1014    |
|             | kg | 12,25   | 18,25   | 19,80   |
|             | l  | 2,30    | 3,50    | 3,60    |
|             | n  | 1,23    | 1,24    | 1,25    |
| 200         | W  | 688     | 1011    | 1189    |
|             | kg | 15,85   | 23,20   | 25,30   |
|             | l  | 3,10    | 4,60    | 4,70    |
|             | n  | 1,25    | 1,27    | 1,25    |

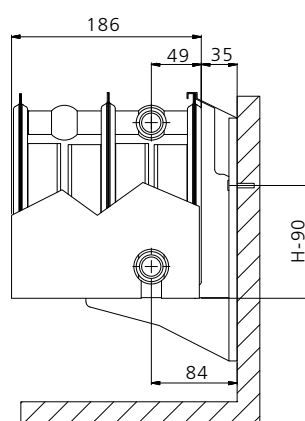
Type 22



Type 33

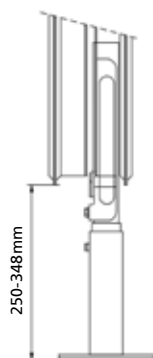
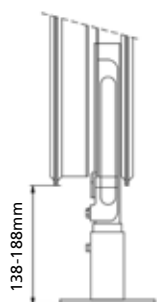


Type 34

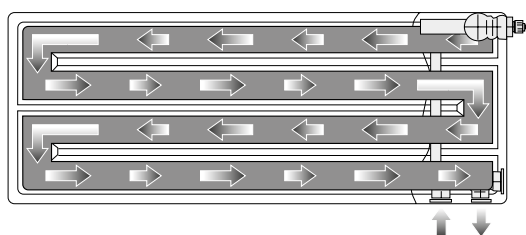


## BRACKETS

Free-standing bracket  
Side view



Forced water flow for a high thermal output



Free-standing bracket  
floor version



Free-standing bracket  
cement screed version



Wall bracket type 22



Wall bracket type 33/34





## PIANO MINI 2

The Piano Mini 2 is a plinth radiator with flat front plate on both sides. The tight, flat body, the fine, flawless finishing with double flat front plate produces a delight for the eyes. It is discreetly present in your interior, but provides generous amounts of heat thanks to the carefully-studied forced water flow. As a result you can be certain of a maximum thermal output, while you cleverly save space in your interior and euros off your energy bill. The Piano Mini 2 with flat front plate on both sides is available in a wall model or free-standing set-up.

|                                       |                                                                                                                                                                                                                                                 |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Plinth radiator with both a right bottom connection and four side connections with included valve insert. By using the brackets it is possible to mirror reverse the radiator, so that the thermostat knob can be mounted on the left or right. |
| <b>Material:</b>                      | Steel                                                                                                                                                                                                                                           |
| <b>Finishing:</b>                     | Top grille, side panels and flat front plate on both sides                                                                                                                                                                                      |
| <b>Suspension and accessories:</b>    | Wall or foot bracket (to be ordered separately)                                                                                                                                                                                                 |
| <b>Blind plug and air vent:</b>       | To be ordered separately<br>13911990031 blind plug ½" (10 pieces)<br>13911990040 air vent ½" (1 piece)                                                                                                                                          |
| <b>Connections:</b>                   | 2 x ¾" external thread euroconus right bottom connection,<br>4 x ½" internal thread connections                                                                                                                                                 |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard.<br>A label describes the radiator characteristics: type – height – length.                                                                                                        |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                                                                                                         |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                                                                                                        |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                                                                                                     |
| <b>Heat meters:</b>                   | Suitable without restrictions for heat meters, both electrical and using the evaporation principle (in accordance with EN834 835).                                                                                                              |
| <b>Maximum operating pressure:</b>    | 8 bar (tested at 11 bar)                                                                                                                                                                                                                        |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                                                                                                          |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                                                                                                      |
| <b>Types:</b>                         | 22   33   34                                                                                                                                                                                                                                    |
| <b>Heights:</b>                       | 150   200 mm                                                                                                                                                                                                                                    |
| <b>Lengths:</b>                       | 800 => 3000 mm                                                                                                                                                                                                                                  |
| <b>Depths:</b>                        | 102   171   188 mm                                                                                                                                                                                                                              |

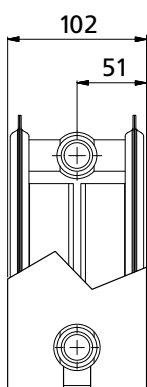


TYPE 22 / 33 / 34

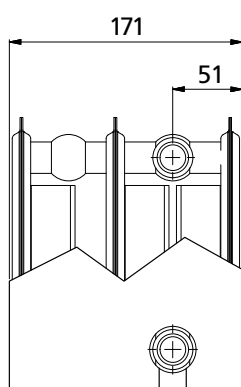
## TECHNICAL DATA PER RUNNING METRE AT 75/65/20°C

| Height (mm) |    | Type 22 | Type 33 | Type 34 |
|-------------|----|---------|---------|---------|
| 150         | W  | 573     | 827     | 965     |
|             | kg | 13,06   | 18,88   | 20,33   |
|             | l  | 2,30    | 3,50    | 3,60    |
|             | n  | 1,23    | 1,22    | 1,22    |
| 200         | W  | 684     | 999     | 1171    |
|             | kg | 16,82   | 24,05   | 25,88   |
|             | l  | 3,10    | 4,60    | 4,70    |
|             | n  | 1,24    | 1,24    | 1,25    |

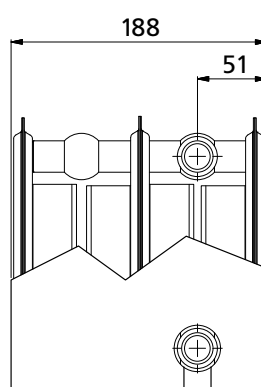
Type 22



Type 33

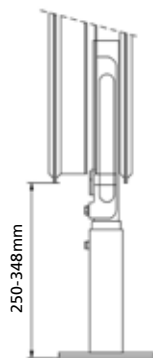
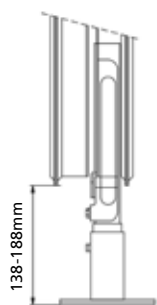


Type 34

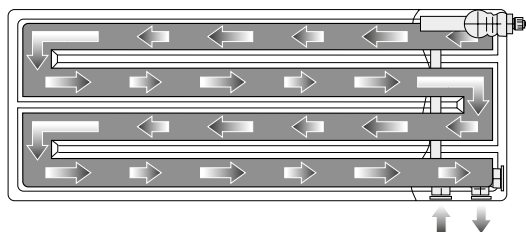


## BRACKETS

Free-standing bracket  
Side view



Forced water flow for a high thermal output



Free-standing bracket  
floor version



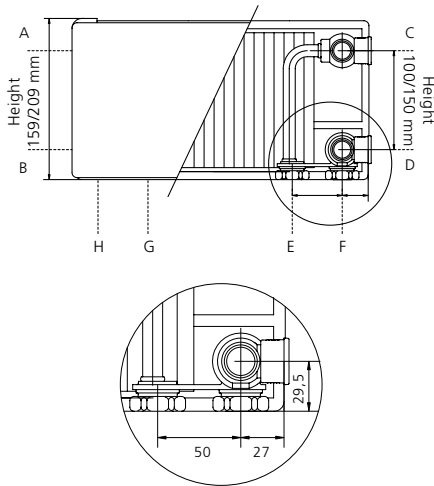
Free-standing bracket  
cement screed version



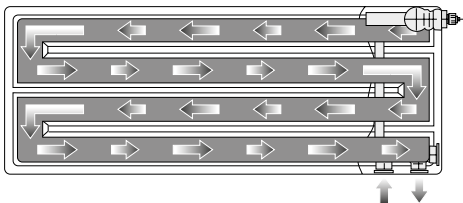
# MINI COMPACT PIANO MINI 1 PIANO MINI 2

## CONNECTIONS

In part because of the forced water flow, several different connection variants are possible.



Forced water flow for a high thermal output



### NOTE! IMPORTANT!

With every order indicate the desired connection variant according to the adjacent schedule!

This does not incur any additional costs.

### The connections are as follows:\*

- A** 1/2" internal thread, possibly suitable for the valve-mounting
- B** 1/2" internal thread
- C** 1/2" internal thread, possibly suitable for the valve-mounting
- D** 1/2" internal thread
- E/G** 3/4" external thread (with internal Euroconus) (inlet side)\*
- F/H** 3/4" external thread (with internal Euroconus) (outlet side)\*

\* Depending on the order code

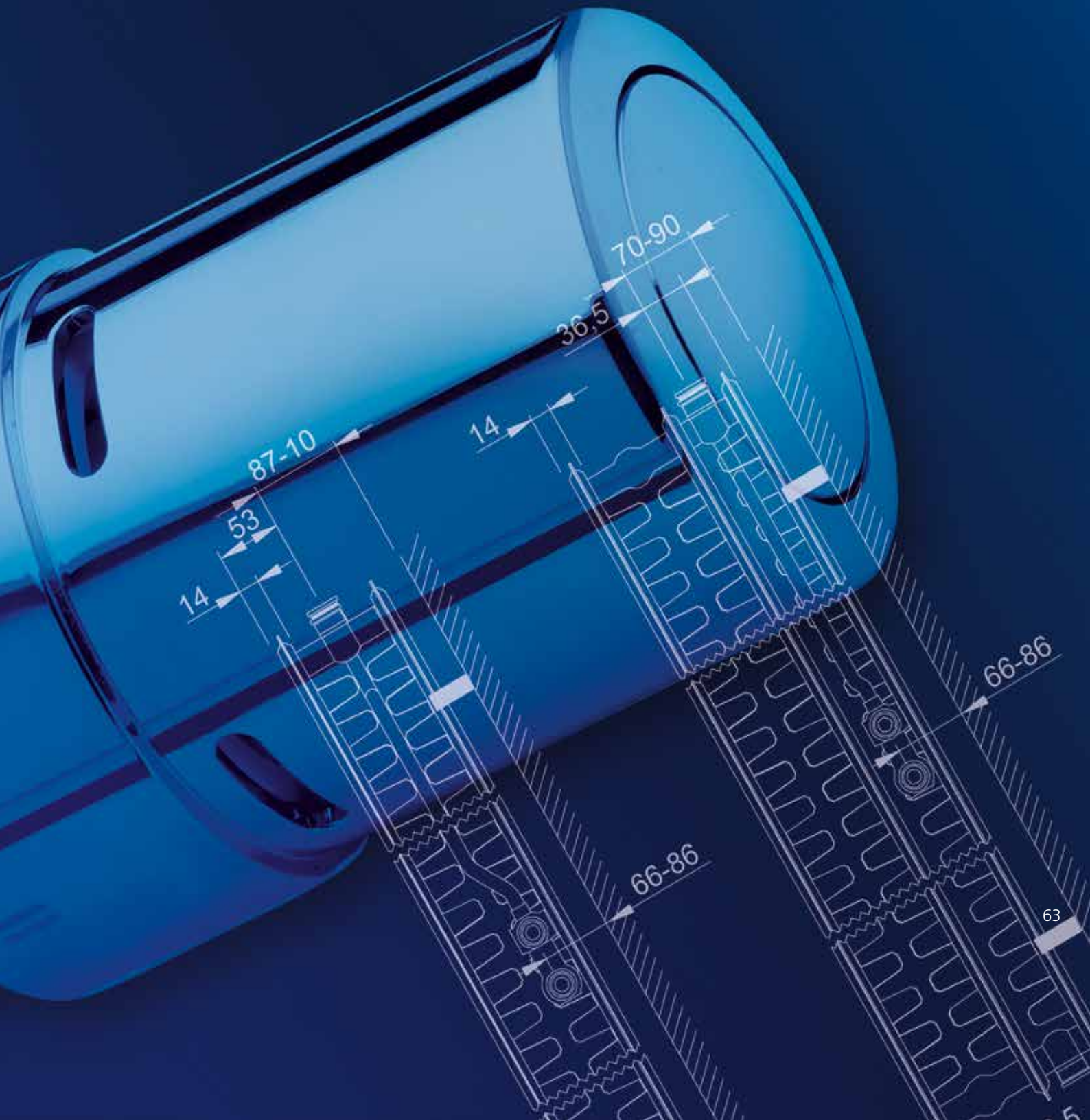
## CONNECTION VARIANTS FOR PARALLEL SYSTEMS.

### Height 150mm:

| Inlet side | Outlet side | Air vent | Code     | CONNECTIONS |
|------------|-------------|----------|----------|-------------|
| E          | F           | A        | E/F (26) |             |
| G          | H           | C        | G/H (25) |             |
| A          | D           | C        | A/D (10) |             |
| C          | B           | A        | C/B (14) |             |
| A          | B           | C        | A/B (12) |             |
| C          | D           | A        | C/D (13) |             |
| B          | D           | C        | B/D (20) |             |
| D          | B           | A        | D/B (20) |             |

### Height 200mm:

| Inlet side | Outlet side | Air vent | Code     | CONNECTIONS |
|------------|-------------|----------|----------|-------------|
| E          | F           | A        | E/F (26) |             |
| G          | H           | C        | G/H (25) |             |
| A          | D           | C        | A/D (10) |             |
| C          | B           | A        | C/B (14) |             |
| A          | B           | C        | A/B (12) |             |
| C          | D           | A        | C/D (13) |             |
| B          | D           | C        | B/D (20) |             |
| D          | B           | A        | D/B (20) |             |



The following brackets are available for the Mini radiator:



For mounting on the floor covering (short type)  
Floor brackets Mini short (H = max. 188 mm)

1 set = 2 pieces (including radiator pipe covers)

**Art. Nr.**

13912015200

Floor support bracket set structure Mini short (H = max. 188 mm)



For mounting in the floor covering (long type)  
Floor brackets Mini long (H = max. 348 mm)

1 set = 2 pieces (including radiator pipe covers)

**Art. Nr.**

13912015201

Floor support bracket set immured Mini long (H = max. 348 mm)



Wall bracket type 22



Wall bracket type 33/34

### Wall brackets for Mini Compact and Piano Mini 1

**150 mm (2 pieces)**

Type 22

Type 33/34

**Art. Nr.**

1391201515022

139120151503334

**200 mm (2 pieces)**

Type 22

Type 33/34

**Art. Nr.**

1391201520022

139120152003334



# Bano

## Collection

Malta (Rondo)

Bano (BM-BMR)

## MALTA (RONDO)

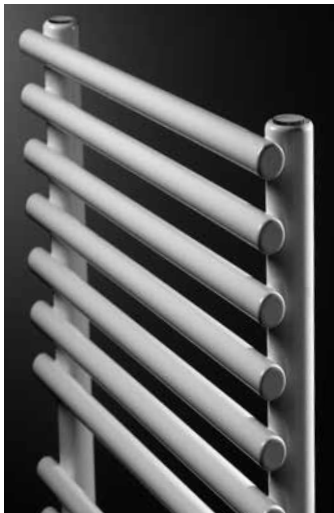
Malta: the bathroom radiator par excellence. This radiator (in both the straight and curved versions) has a characteristically refined look that makes your bathroom complete.

Nowhere in your home is comfort so important as in the bathroom. But not just that. Thanks to its favourable price-quality ratio, the Malta is ideal for your projects.

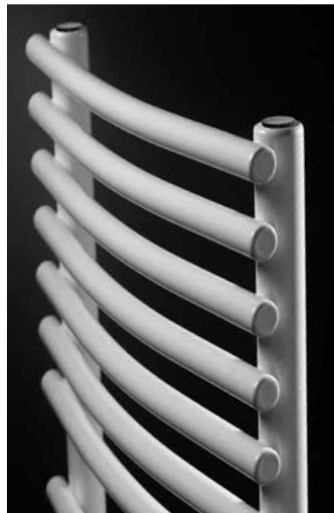
Do you want a straight or curved radiator? There's something for everyone. The Malta Rondo is a curved radiator with a playful effect. Do you prefer classical? Then Brugman's Malta, a straight radiator, is ideal.

|                                       |                                                                                                                                                                  |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Bathroom radiator with horizontal round tubes (Ø 22 mm) on a round collector (Ø 35 mm).<br>Type Rondo: tubes are curved 10°                                      |
| <b>Material:</b>                      | Steel                                                                                                                                                            |
| <b>Suspension and accessories:</b>    | Wall bracket, blind plugs and air vent (delivered standard)                                                                                                      |
| <b>Connections:</b>                   | 4 x ½" internal thread connections                                                                                                                               |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard and then shrink-wrapped.<br>A label describes the radiator characteristics: type – height – length. |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                          |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                         |
| <b>Colour:</b>                        | RAL 9016                                                                                                                                                         |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                        |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                           |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                       |
| <b>Types:</b>                         | Straight or curved                                                                                                                                               |
| <b>Heights:</b>                       | 908   1230   1782 mm                                                                                                                                             |
| <b>Widths:</b>                        | 600   600   750 mm                                                                                                                                               |
| <b>Depths:</b>                        | 57 mm                                                                                                                                                            |

MALTA



MALTA RONDO





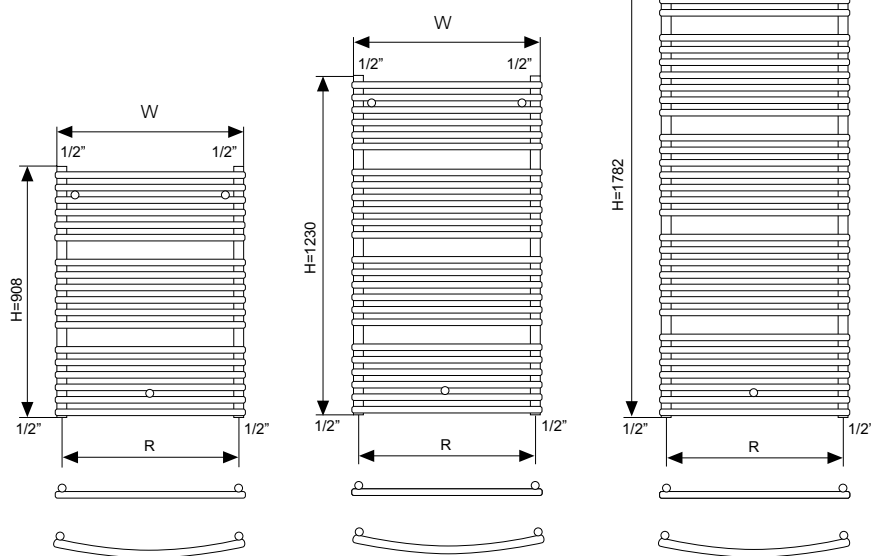
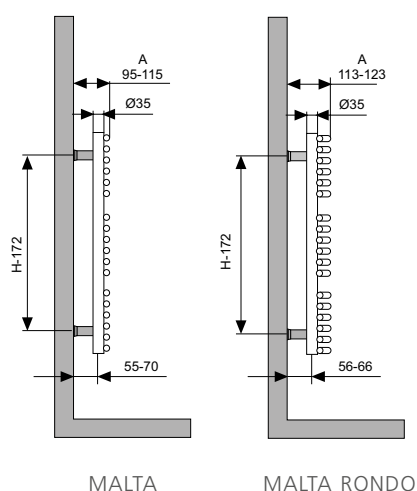
## TECHNICAL DATA AT 75/65/20°C

| TYPE          | Number of tubes | Thermal output (Watt) |                 | n-exponent | Electrical resistance (Watt) |
|---------------|-----------------|-----------------------|-----------------|------------|------------------------------|
|               |                 | 75/65/20 (φ50K)       | 55/45/20 (φ30K) |            |                              |
| MALTA (RONDO) | 18              | 475                   | 258             | 1,18       | 500                          |
| MALTA (RONDO) | 18              | 562                   | 307             | 1,17       | 500                          |
| MALTA (RONDO) | 18              | 689                   | 380             | 1,15       | 750                          |
| MALTA (RONDO) | 24              | 628                   | 363             | 1,06       | 500                          |
| MALTA (RONDO) | 24              | 741                   | 428             | 1,06       | 750                          |
| MALTA (RONDO) | 24              | 909                   | 526             | 1,06       | 750                          |
| MALTA (RONDO) | 35              | 908                   | 486             | 1,21       | 750                          |
| MALTA (RONDO) | 35              | 1072                  | 577             | 1,20       | 1000                         |
| MALTA (RONDO) | 35              | 1316                  | 711             | 1,19       | 1250                         |

| Dimensions | H (mm) | W (mm) | R (mm) | A (mm) |
|------------|--------|--------|--------|--------|
| MALTA      | 908    | 500    | 460    | 95-115 |
| MALTA      | 908    | 600    | 560    | 95-115 |
| MALTA      | 908    | 750    | 710    | 95-115 |
| MALTA      | 1230   | 500    | 460    | 95-115 |
| MALTA      | 1230   | 600    | 560    | 95-115 |
| MALTA      | 1230   | 750    | 710    | 95-115 |
| MALTA      | 1782   | 500    | 460    | 95-115 |
| MALTA      | 1782   | 600    | 560    | 95-115 |
| MALTA      | 1782   | 750    | 710    | 95-115 |

| Dimensions  | H (mm) | W (mm) | R (mm) | A (mm)  |
|-------------|--------|--------|--------|---------|
| MALTA RONDO | 908    | 500    | 450    | 113-123 |
| MALTA RONDO | 908    | 600    | 550    | 113-123 |
| MALTA RONDO | 908    | 750    | 700    | 113-123 |
| MALTA RONDO | 1230   | 500    | 450    | 113-123 |
| MALTA RONDO | 1230   | 600    | 550    | 113-123 |
| MALTA RONDO | 1230   | 750    | 700    | 113-123 |
| MALTA RONDO | 1782   | 500    | 450    | 113-123 |
| MALTA RONDO | 1782   | 600    | 550    | 113-123 |
| MALTA RONDO | 1782   | 750    | 700    | 113-123 |

All dimensions in mm



## BANO (BM-BMR)

The days when the radiator seemed out of place in your bathroom are long past. The Bano is a strikingly refined radiator that lends atmosphere to your interior. An integral part of your bathroom.

The thin, round tubes of the Bano (in both the straight and curved versions) give your bathroom an elegant aura and plenty of towel space.

A strong, everyday project radiator with a favourable price-quality ratio.

|                                       |                                                                                                                                                                  |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Bathroom radiator with horizontal round tubes (Ø 22 mm) in a collector with D-profile (34x34 mm).<br>Type BMR: tubes are curved 10°                              |
| <b>Material:</b>                      | Steel                                                                                                                                                            |
| <b>Suspension and accessories:</b>    | Wall bracket, blind plugs and air vent (delivered standard)                                                                                                      |
| <b>Connections:</b>                   | 4 x ½" internal thread connections                                                                                                                               |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard and then shrink-wrapped.<br>A label describes the radiator characteristics: type – height – length. |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                          |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                         |
| <b>Colour:</b>                        | RAL 9016                                                                                                                                                         |
| <b>Maximum operating pressure:</b>    | 10 bar (tested at 13 bar)                                                                                                                                        |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                           |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                       |
| <b>Types:</b>                         | Straight or curved                                                                                                                                               |
| <b>Heights:</b>                       | 702   1186   1450   1714   1978 mm                                                                                                                               |
| <b>Widths:</b>                        | 450   500   600   750 mm                                                                                                                                         |
| <b>Depths:</b>                        | 34 mm                                                                                                                                                            |

BM



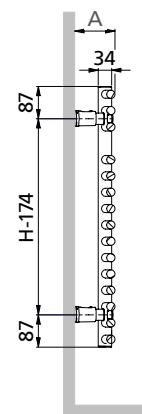
BMR



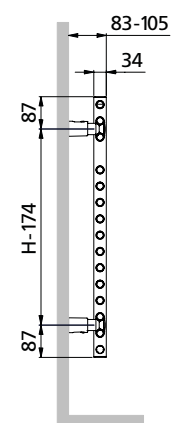
## TECHNICAL DATA AT 75/65/20°C

| TYPE     | Number of tubes | Thermal output (Watt) |                 | n-exponent | Electrical resistance (Watt) |
|----------|-----------------|-----------------------|-----------------|------------|------------------------------|
|          |                 | 75/65/20 (φ50K)       | 55/45/20 (φ30K) |            |                              |
| BM & BMR | 15              | 316                   | 167             | 1,23       | 300                          |
| BM & BMR | 15              | 347                   | 185             | 1,22       | 300                          |
| BM & BMR | 25              | 574                   | 309             | 1,20       | 500                          |
| BM & BMR | 25              | 676                   | 364             | 1,20       | 750                          |
| BM & BMR | 30              | 698                   | 370             | 1,23       | 750                          |
| BM & BMR | 30              | 822                   | 435             | 1,23       | 750                          |
| BM & BMR | 35              | 823                   | 436             | 1,23       | 750                          |
| BM & BMR | 35              | 970                   | 516             | 1,22       | 1000                         |
| BM & BMR | 35              | 1184                  | 630             | 1,22       | 1250                         |
| BM & BMR | 40              | 949                   | 508             | 1,21       | 1000                         |
| BM & BMR | 40              | 1118                  | 592             | 1,23       | 1250                         |
| BM & BMR | 40              | 1365                  | 715             | 1,25       | 1500                         |

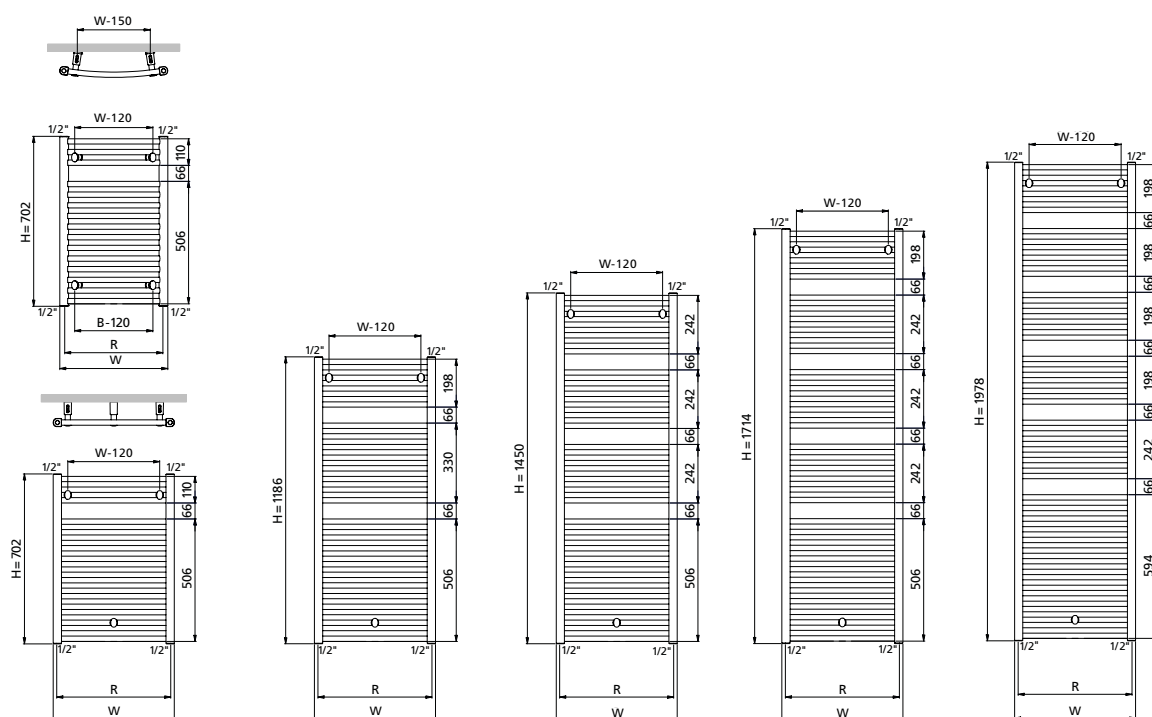
| Dimensions | H (mm) | W (mm) | R (mm) | A (mm) | Dimensions | H (mm) | W (mm) | R (mm) | A (mm)  |
|------------|--------|--------|--------|--------|------------|--------|--------|--------|---------|
| BM         | 702    | 450    | 416    | 94-114 | BMR        | 702    | 450    | 412    | 119-129 |
| BM         | 702    | 500    | 466    | 94-114 | BMR        | 702    | 500    | 461    | 120-130 |
| BM         | 1186   | 500    | 466    | 94-114 | BMR        | 1186   | 500    | 461    | 120-130 |
| BM         | 1186   | 600    | 566    | 94-114 | BMR        | 1186   | 600    | 561    | 126-136 |
| BM         | 1450   | 500    | 466    | 94-114 | BMR        | 1450   | 500    | 461    | 120-130 |
| BM         | 1450   | 600    | 566    | 94-114 | BMR        | 1450   | 600    | 561    | 126-136 |
| BM         | 1714   | 500    | 466    | 94-114 | BMR        | 1714   | 500    | 461    | 120-130 |
| BM         | 1714   | 600    | 566    | 94-114 | BMR        | 1714   | 600    | 561    | 126-136 |
| BM         | 1714   | 750    | 716    | 94-114 | BMR        | 1714   | 750    | 710    | 136-146 |
| BM         | 1978   | 500    | 466    | 94-114 | BMR        | 1978   | 500    | 461    | 120-130 |
| BM         | 1978   | 600    | 566    | 94-114 | BMR        | 1978   | 600    | 561    | 126-136 |
| BM         | 1978   | 750    | 716    | 94-114 | BMR        | 1978   | 750    | 710    | 136-146 |



BANO BM



BANO BMR



All dimensions in mm

## POSSIBLE CONNECTIONS FOR MIXED RADIATORS

**Connection of the central heating:**

to connection 18 via the T-piece.

**Resistance:**

mounted in the right collector.

**T-piece**

Art. Nr. 5058500

In case of use of an electrical resistance, the connection measures change.

**One-point system**

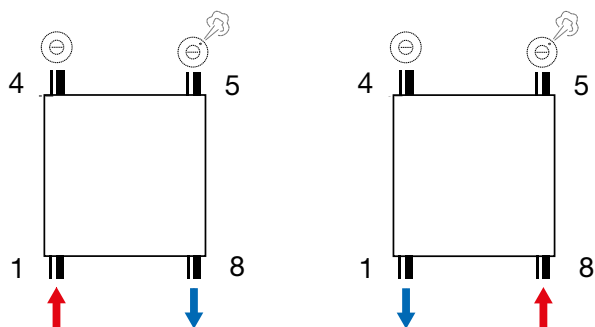
The one-point valve with valve-jet pipe is mounted in the left collector of the radiator according to our instructions. The electrical resistance is mounted in the second collector. Via the return tube, a free expansion to the expansion tank of the central heating installation has to be secured in case of closed radiator valve (in summer).

**Two-pipe system**

The electrical resistance and the radiator valve are mounted according to the diagram in the T-piece which is chrome-plated in case of electrical resistance (extra charge) Ø 1/2". The return connection is of course screwed into the second collector. The resistance can only be connected in the right collector.

Via the return tube, a free expansion to the expansion tank of the central heating installation has to be secured in case of closed radiator valve (in summer).

## CONNECTION POSSIBILITIES



### E-VOLVE E-V REGULATION



Height : 75 mm - Width : 140 mm - Depth : 35 mm

- Operating voltage: 230V AC, 50 Hz
- Weekly and daily programming
- Control of room temperature from 7°C to 30°C
- Boost command: standard 60 minutes
- Auto, Comfort, Eco or frost protection mode
- Set programmes P1, P2 and P3 can be changed
- IPX4 Class II
- Cable length: 0.8 m  
(preferably use a direct fixed wall outlet)
- Energy-consumption indication
- Indicator of open window detection
- Control can be mounted onto the radiator at the bottom right-hand side

#### Remember:

- Connecting the E-V control: brown = live, blue = neutral and black = command wire (to be used only in France; should be shielded in case of non-use)
- Double insulated devices have no earthing.

### E-VOLVE E-V-RF REGULATION



Height : 75 mm - Width : 140 mm - Depth : 35 mm

- Operating voltage of the receiver: 230V AC, 50 Hz
- Thermostat: 2x Alkaline 1.5V
- Weekly and daily programming
- Control of room temperature from 7°C to 30°C
- Boost command: standard 60 minutes
- Auto, Comfort, Eco or frost protection mode
- Set programmes P1, P2 and P3 can be changed
- Receiver: IPX4 Class II
- Thermostat: IP30
- Cable length: 0.8 m  
(preferably use a direct fixed wall outlet)
- Energy-consumption indication
- Indicator of open window detection
- Receiver can be mounted onto the radiator at the bottom right-hand side
- RF communication between the receiver and the thermostat (to be connected)

#### Remember:

- Connecting the E-V-RF RF receiver: brown = live, blue = neutral and black = command wire (to be used only in France; should be shielded in case of non-use)
- Double insulated devices have no earthing
- The thermostat should be connected with the receiver according to the instructions in the manual of the RF thermostat.

### E-VOLVE E-V-RF / RF-THERMOSTAT



Height : 95 mm - Width : 120 mm - Depth : 25 mm

All thermostats and resistances usable for:  
300 / 500 / 750 / 1000 / 1250 / 1500 Watt



# Classic

Collection  
Column







## COLUMN

The Column is a traditional column radiator, fully custom-made and ideal for all rooms. This radiator is characterised by its nostalgic look. In our search for authenticity, we like to reach back to the past. Traditional designs that help give our home a retro-look and instant atmosphere. It's OK for interiors to be warm and luxurious again. The robust, voluminous columns of the radiators ensure an extra high thermal output.

The serial production of the Column radiator is a unique advantage. Along with our standard dimensions, you can also define the number of columns yourself, up to a maximum of 60. A radiator that fits in every room.

|                                       |                                                                                                                                                                 |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                       | Horizontal radiator composed of vertical columns with a centre-to-centre distance of 50 mm                                                                      |
| <b>Material:</b>                      | Steel                                                                                                                                                           |
| <b>Suspension and accessories:</b>    | Wall or foot bracket                                                                                                                                            |
| <b>Connections:</b>                   | 4 x 1/2" internal thread connections,<br>(1/1", 3/4", 3/8" or 1/8" connections on request)                                                                      |
| <b>Packaging:</b>                     | Each radiator is robustly packaged in high-quality cardboard and then shrink-wrapped<br>A label describes the radiator characteristics: type – height – length. |
| <b>Guarantee:</b>                     | 10 years, if the general terms and conditions of Brugman are respected.                                                                                         |
| <b>Painting process:</b>              | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                                        |
| <b>Colour:</b>                        | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                                                     |
| <b>Maximum operating pressure:</b>    | 5 bar (tested at 7 bar)                                                                                                                                         |
| <b>Maximum operating temperature:</b> | 110 °C                                                                                                                                                          |
| <b>Conformity:</b>                    | In accordance with EN442-1: 2014: radiators and convectors                                                                                                      |
| <b>Type:</b>                          | Columns with a width of 50 mm                                                                                                                                   |
| <b>Heights:</b>                       | 300   450   600   1000 mm                                                                                                                                       |
| <b>Widths:</b>                        | 500 => 3000 mm (as a function of the height)                                                                                                                    |
| <b>Depths:</b>                        | 110   160   220   250 mm                                                                                                                                        |



COLUMN

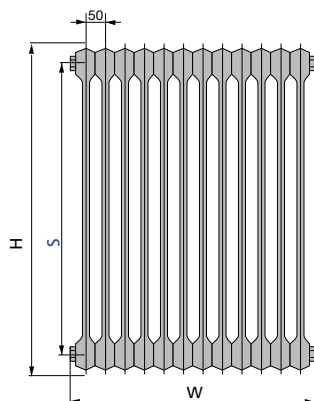
## TECHNICAL DATA AT 75/65/20°C PER COLUMN

| Height (mm) | Depth (mm)        | 110     | 160     | 220     | 250     |
|-------------|-------------------|---------|---------|---------|---------|
| 300         | Number of columns |         |         |         | 5-60    |
|             | 75/65/20 °C       |         |         |         | 62      |
|             | 90/70/20 °C       |         |         |         | 78      |
|             | Weight of column  |         |         |         | 1,53 Kg |
| 450         | Number of columns |         | 5-60    | 5-60    |         |
|             | 75/65/20 °C       |         | 58      | 75      |         |
|             | 90/70/20 °C       |         | 73      | 94      |         |
|             | Weight of column  |         | 1,49 Kg | 2,04 Kg |         |
| 600         | Number of columns | 5-60    | 5-60    | 5-50    |         |
|             | 75/65/20 °C       | 55      | 73      | 94      |         |
|             | 90/70/20 °C       | 69      | 92      | 118     |         |
|             | Weight of column  | 1,39 Kg | 2,01 Kg | 2,62 Kg |         |
| 1000        | Number of columns | 5-45    | 5-30    | 5-30    |         |
|             | 75/65/20 °C       | 84      | 111     | 145     |         |
|             | 90/70/20 °C       | 106     | 140     | 182     |         |
|             | Weight of column  | 2,20 Kg | 3,21 Kg | 4,56 Kg |         |

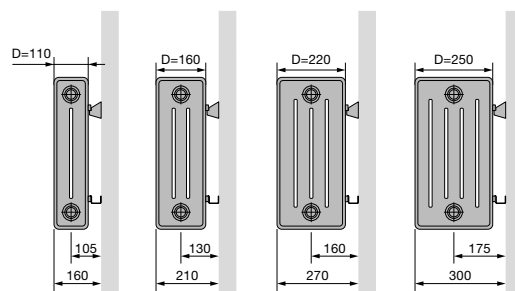
### Front view

#### VINTAGE 50

|                                            |     |     |     |      |
|--------------------------------------------|-----|-----|-----|------|
| Height (H)                                 | 300 | 450 | 600 | 1000 |
| Centre between the lateral connections (S) | 200 | 350 | 500 | 900  |



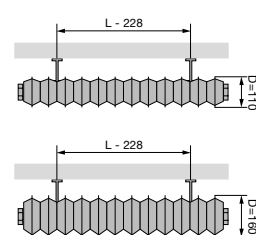
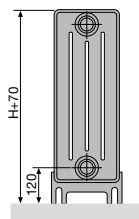
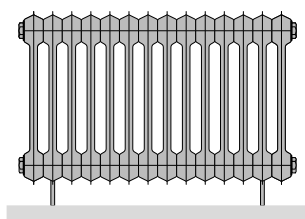
### Side view



### Top view

#### VINTAGE 50 (FLOOR MOUNTING)

|                   |      |       |       |
|-------------------|------|-------|-------|
| Number of columns | 2-25 | 26-50 | 51-60 |
| Number of feet    | 2    | 3     | 4     |

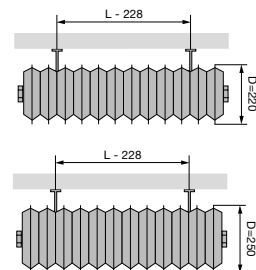
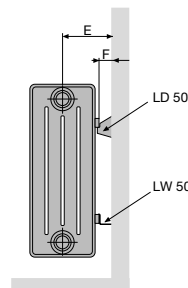
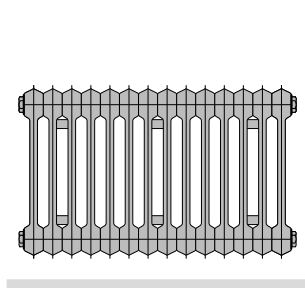


#### VINTAGE 50 (WALL MOUNTING) LD 50 + LW 50

|                                                 |     |     |     |     |
|-------------------------------------------------|-----|-----|-----|-----|
| Depth (D)                                       | 110 | 160 | 220 | 250 |
| Distance between wall and connection (E)        | 105 | 130 | 160 | 175 |
| Distance between wall and backside radiator (F) | 50  |     |     |     |

#### VINTAGE 50 (WALL MOUNTING)

|                                           |     |      |       |       |
|-------------------------------------------|-----|------|-------|-------|
| Number of columns                         | 3-5 | 6-25 | 26-50 | 51-60 |
| Number of wall brackets set LD 50 + LW 50 | 1   | 2    | 3     | 4     |



# COLUMN

## PLACEMENT OF HANGING STRIPS FOR COLUMN RADIATORS ACCORDING TO FACTORY STANDARD (OPTION)

Figure 1

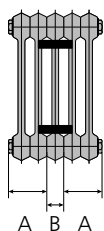


Figure 2

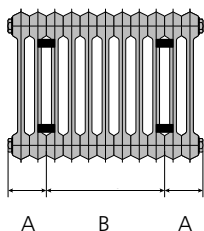


Figure 3

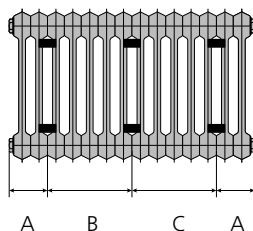


Figure 4

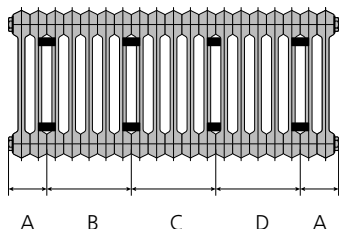
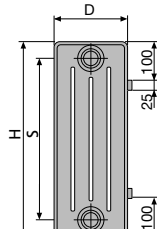


Figure 5



Front view for figures 1 through 4; side view for figure 5.

Radiators longer than the maximum number of columns that is indicated cannot be delivered by the factory. If longer radiators are desired, then the additional sections must be attached with pipe joints on the worksite by the installer.

Pipe joint connections that are done by the installer are always at his own risk!

As of 25 columns, the radiators are equipped with an internal reinforcement strip. In that case, it is not possible to connect further sections with pipe joints.

If the radiators are ordered with hanging strips, corresponding wall brackets are also delivered.

If the radiators are ordered without hanging strips, support feet for the columns are provided.

## TABLE FOR HANGING STRIP INTERVAL DIMENSIONS FOR COLUMN RADIATORS

| Number of columns | Figure | A   | B   | C | D |
|-------------------|--------|-----|-----|---|---|
| 5                 | 1      | 100 | 50  | - | - |
| 6                 | 2      | 100 | 100 | - | - |
| 7                 | 2      | 100 | 150 | - | - |
| 8                 | 2      | 100 | 200 | - | - |
| 9                 | 2      | 100 | 250 | - | - |
| 10                | 2      | 100 | 300 | - | - |
| 11                | 2      | 100 | 350 | - | - |
| 12                | 2      | 100 | 400 | - | - |
| 13                | 2      | 100 | 450 | - | - |
| 14                | 2      | 100 | 500 | - | - |
| 15                | 2      | 100 | 550 | - | - |
| 16                | 2      | 100 | 600 | - | - |
| 17                | 2      | 100 | 650 | - | - |
| 18                | 2      | 100 | 700 | - | - |
| 19                | 2      | 100 | 750 | - | - |
| 20                | 2      | 100 | 800 | - | - |
| 21                | 2      | 100 | 850 | - | - |
| 22                | 2      | 100 | 900 | - | - |
| 23                | 2      | 100 | 950 | - | - |

| Number of columns | Figure | A   | B    | C   | D |
|-------------------|--------|-----|------|-----|---|
| 24                | 2      | 100 | 1000 | -   | - |
| 25                | 2      | 100 | 1050 | -   | - |
| 26                | 3      | 100 | 550  | 550 | - |
| 27                | 3      | 100 | 550  | 600 | - |
| 28                | 3      | 100 | 600  | 600 | - |
| 29                | 3      | 100 | 600  | 650 | - |
| 30                | 3      | 100 | 650  | 650 | - |
| 31                | 3      | 100 | 650  | 700 | - |
| 32                | 3      | 100 | 700  | 700 | - |
| 33                | 3      | 100 | 700  | 750 | - |
| 34                | 3      | 100 | 750  | 750 | - |
| 35                | 3      | 100 | 750  | 800 | - |
| 36                | 3      | 100 | 800  | 800 | - |
| 37                | 3      | 100 | 800  | 850 | - |
| 38                | 2      | 100 | 850  | 850 | - |
| 39                | 3      | 100 | 850  | 900 | - |
| 40                | 3      | 100 | 900  | 900 | - |
| 41                | 3      | 100 | 900  | 950 | - |
| 42                | 3      | 100 | 950  | 950 | - |

| Number of columns | Figure | A   | B    | C    | D   |
|-------------------|--------|-----|------|------|-----|
| 43                | 3      | 100 | 950  | 1000 | -   |
| 44                | 3      | 100 | 1000 | 1000 | -   |
| 45                | 3      | 100 | 1000 | 1050 | -   |
| 46                | 3      | 100 | 1050 | 1050 | -   |
| 47                | 3      | 100 | 1050 | 1100 | -   |
| 48                | 3      | 100 | 1100 | 1100 | -   |
| 49                | 3      | 100 | 1100 | 1150 | -   |
| 50                | 3      | 100 | 1150 | 1150 | -   |
| 51                | 4      | 100 | 750  | 800  | 800 |
| 52                | 4      | 100 | 800  | 800  | 800 |
| 53                | 4      | 100 | 800  | 800  | 850 |
| 54                | 4      | 100 | 800  | 850  | 850 |
| 55                | 4      | 100 | 850  | 850  | 850 |
| 56                | 4      | 100 | 850  | 850  | 900 |
| 57                | 4      | 100 | 850  | 900  | 900 |
| 58                | 4      | 100 | 900  | 900  | 900 |
| 59                | 4      | 100 | 900  | 900  | 950 |
| 60                | 4      | 100 | 900  | 950  | 950 |
| -                 | -      | -   | -    | -    | -   |



#### Radiator pipe-joint

(one half is provided with a right-hand thread, and the other half with a left-hand thread)

**Art. Nr.**

13912150005



#### Radiator sealing ring

Sealing ring. 1,5 mm thick for warm and hot water heating systems

**Art. Nr.**

13912150004

(Required: 2 pipe-joints and 2 sealing rings to joint 2 DIN-blocs).

### FASTENING MATERIALS



#### Suspension brackets: Type LD

LD brackets are included for column radiators with strips.

(Required: 1 suspension bracket per strip on the top).

**Art. Nr.**

13912140002



#### Spacer: Type LW

LW brackets are included for column radiators with strips.

(Required: 1 spacer per strip on the bottom).

**Art. Nr.**

13912140003

### SECTION SUPPORT FOOT

Choice from: strips, with wall attachment and no strips, with feet. Section support feet are included for column radiators without strips. (Required: 2 section support feet for radiators up to and including 25 sections, 3 section support feet up to and including 50 sections and 4 section support feet up to and including 60 sections).



Section support foot 110mm

**Art. Nr.**

13912140110



Section support foot 160mm

**Art. Nr.**

13912140160



Section support foot 220mm

**Art. Nr.**

13912140220

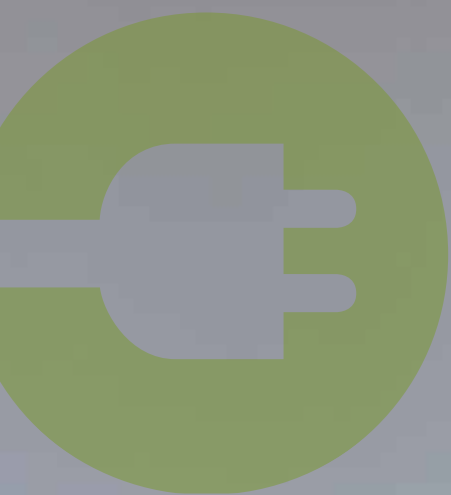


Section support foot 250mm

**Art. Nr.**

13912140250







# E-Collection

E-Panel Horizontal Ribbed

E-Panel Horizontal Flat

E-Panel Verti Flat

E-Bano (by Vasco)

ECO  
DESIGN  
2018



## E-PANEL HORZ. RIBBED

Brugman presents the E-Panel Horizontal Ribbed. An electric radiator based on a traditional panel radiator. The E-Panel has a classic design with profiled front panel, robust decorative grille and fine side panels. From now on you can heat stylishly, elegantly and electrically! The E-Panel radiator is very easy to operate and also features the nostalgic look of a traditional radiator.

Electric heating works fast, and also gives you the ability to precisely regulate the consumption by means of an internal temperature sensor. So you always know exactly how warm it is in the house.

|                                    |                                                                                                                                          |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                    | Horizontal panel radiator with the control panel on the right or left-hand side                                                          |
| <b>Material:</b>                   | Steel                                                                                                                                    |
| <b>Finishing:</b>                  | Top grille and side panels                                                                                                               |
| <b>Suspension and accessories:</b> | Locked click bracket and mounting instructions (delivered standard)                                                                      |
| <b>Connections:</b>                | 230VAC, 50 Hz, IPX4 Class II                                                                                                             |
| <b>Packaging:</b>                  | Each radiator is robustly packaged in high-quality cardboard.<br>A label describes the radiator characteristics: type – height – length. |
| <b>Guarantee:</b>                  | 2 years on electrical components and 10 years on paint and leak tightness, if the general terms and conditions of Brugman are respected. |
| <b>Painting process:</b>           | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                 |
| <b>Colour:</b>                     | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                              |
| <b>Version:</b>                    | Completely filled with oil, an electrical heating element and a connection cable of 0,8 m                                                |
| <b>Conformity:</b>                 | CE                                                                                                                                       |
| <b>Output:</b>                     | 500   750   1000   1250   1500   1750   2000 W                                                                                           |
| <b>Heights:</b>                    | 600 mm                                                                                                                                   |
| <b>Widths:</b>                     | 500 => 1201 mm                                                                                                                           |
| <b>Depth:</b>                      | 73 mm                                                                                                                                    |

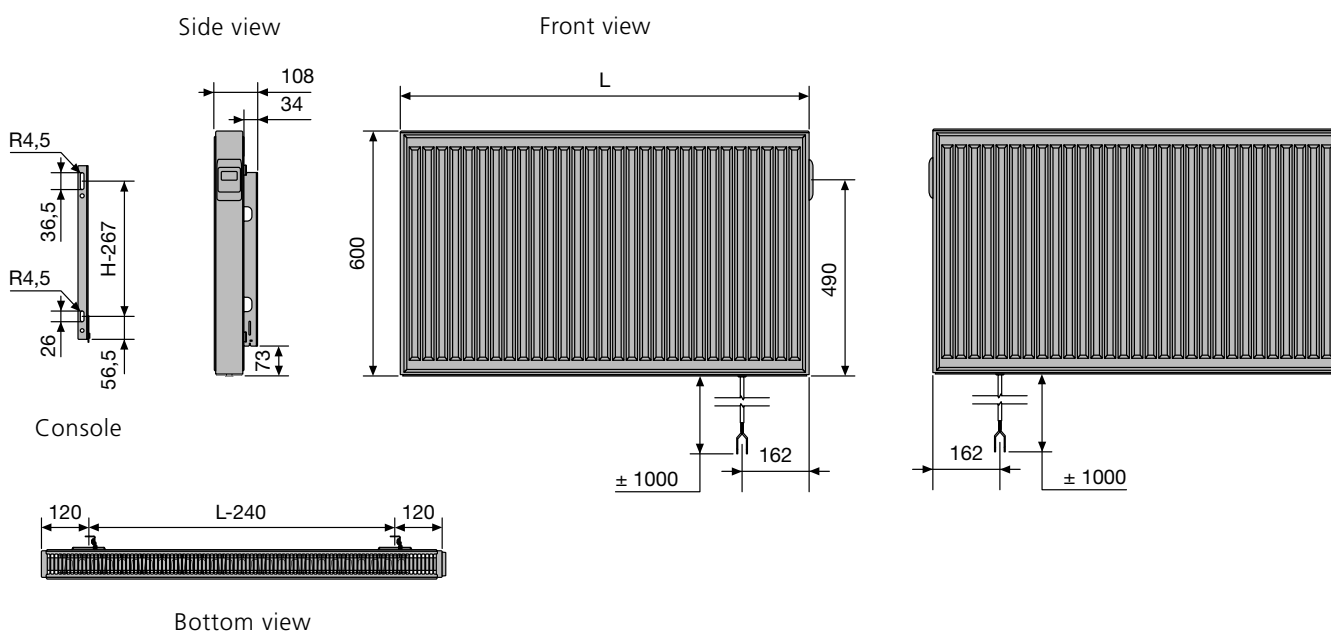
### E-PANEL HORZ. RIBBED



| Type              | Width (mm) | Height (mm) | Depth (mm) | Electrical output (Watt) |
|-------------------|------------|-------------|------------|--------------------------|
| HORIZONTAL RIBBED | 500        | 600         | 73         | 500                      |
|                   | 600        | 600         | 73         | 750                      |
|                   | 800        | 600         | 73         | 1000                     |
|                   | 1000       | 600         | 73         | 1250                     |
|                   | 1001       | 600         | 73         | 1500                     |
|                   | 1200       | 600         | 73         | 1750                     |
|                   | 1201       | 600         | 73         | 2000                     |

## Technical data:

- Operating voltage: 230V AC, 50 Hz
- Weekly and daily programming
- Control of room temperature from 7°C to 30°C
- Auto, Comfort, Eco or frost protection mode
- Set programmes P1, P2 and P3 can be changed
- IPX4 Class II
- Cable length: 0.8 m (preferably use a direct fixed wall outlet)
- Energy-consumption indication
- Indicator of open window detection
- Control mounted onto the radiator at the right or left-hand side (included in the price).
- Connecting the receiver: brown = live, blue = neutral and black = command wire (to be used only in France; should be shielded in case of non-use)
- Double insulated devices do not have earthing



## E-PANEL HORZ. FLAT

The E-Panel with its flat front panel is a little gem. The radiator offers the convenience of electrical operation and the look of a designer radiator.

‘Charming and amazingly attractive’. The E-Panel positively exudes design. It’s the perfect finishing touch for your living room, bedroom or modern office.

Electric heating works fast, and also gives you the ability to precisely regulate the consumption by means of an internal temperature sensor. So you always know exactly how warm it is in the house.

|                                    |                                                                                                                                          |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                    | Horizontal panel radiator with the control panel on the right or left-hand side                                                          |
| <b>Material:</b>                   | Steel                                                                                                                                    |
| <b>Finishing:</b>                  | Top grille, side panels and flat front plate                                                                                             |
| <b>Suspension and accessories:</b> | Locked click bracket and mounting instructions (delivered standard)                                                                      |
| <b>Connections:</b>                | 230VAC, 50 Hz, IPX4 Class II                                                                                                             |
| <b>Packaging:</b>                  | Each radiator is robustly packaged in high-quality cardboard.<br>A label describes the radiator characteristics: type – height – length. |
| <b>Guarantee:</b>                  | 2 years on electrical components and 10 years on paint and leak tightness, if the general terms and conditions of Brugman are respected. |
| <b>Painting process:</b>           | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                 |
| <b>Colour:</b>                     | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                              |
| <b>Version:</b>                    | Completely filled with oil, an electrical heating element and a connection cable of 0,8 m                                                |
| <b>Conformity:</b>                 | CE                                                                                                                                       |
| <b>Output:</b>                     | 500   750   1000   1250   1500   1750   2000 W                                                                                           |
| <b>Heights:</b>                    | 600 mm                                                                                                                                   |
| <b>Widths:</b>                     | 500 => 1201 mm                                                                                                                           |
| <b>Depth:</b>                      | 73 mm                                                                                                                                    |

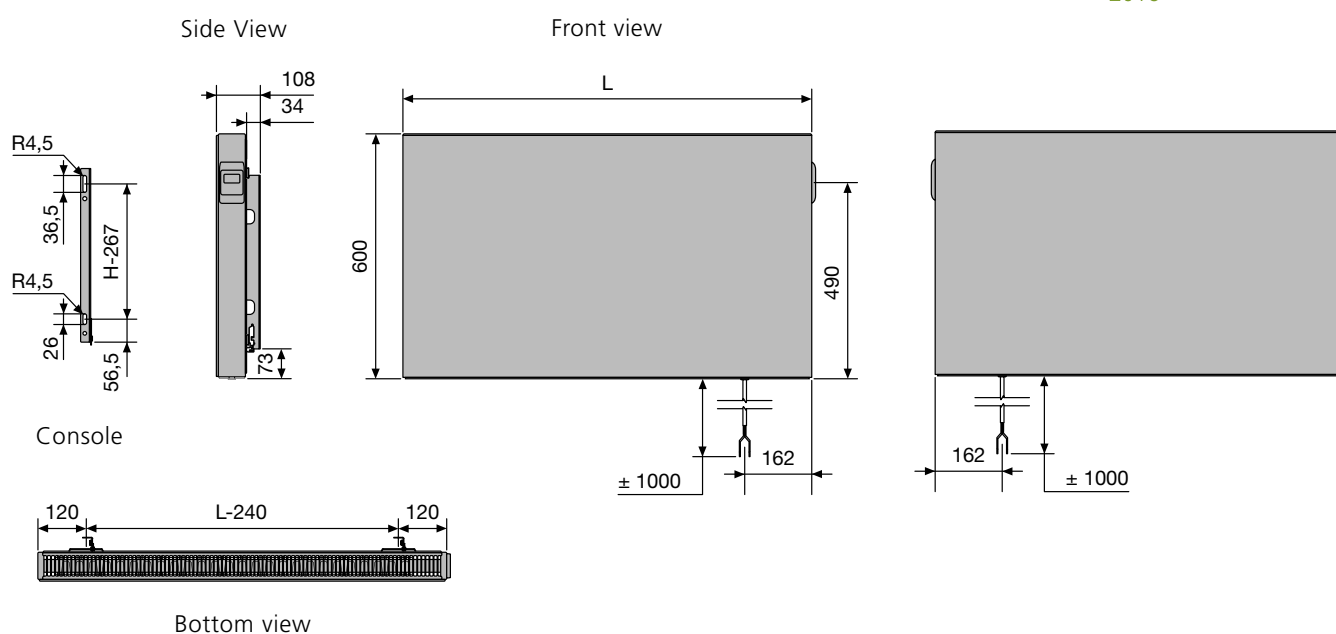
E-PANEL HORZ. FLAT



| Type            | Width (mm) | Height (mm) | Depth (mm) | Electrical output (Watt) |
|-----------------|------------|-------------|------------|--------------------------|
| HORIZONTAL FLAT | 500        | 600         | 73         | 500                      |
|                 | 600        | 600         | 73         | 750                      |
|                 | 800        | 600         | 73         | 1000                     |
|                 | 1000       | 600         | 73         | 1250                     |
|                 | 1001       | 600         | 73         | 1500                     |
|                 | 1200       | 600         | 73         | 1750                     |
|                 | 1201       | 600         | 73         | 2000                     |

## Technical data:

- Operating voltage: 230V AC, 50 Hz
- Weekly and daily programming
- Control of room temperature from 7°C to 30°C
- Auto, Comfort, Eco or frost protection mode
- Set programmes P1, P2 and P3 can be changed
- IPX4 Class II
- Cable length: 0.8 m (preferably use a direct fixed wall outlet)
- Energy-consumption indication
- Indicator of open window detection
- Control mounted onto the radiator at the right or left-hand side (included in the price).
- Connecting the receiver: brown = live, blue = neutral and black = command wire (to be used only in France; should be shielded in case of non-use)
- Double insulated devices do not have earthing



## E-PANEL VERTI FLAT

This vertical, flat electric radiator takes up only a limited amount of space, is very intelligent and has the look of a designer radiator. 'Charming and amazingly attractive'. The E-Panel positively exudes design. It's the perfect finishing touch for your living room, bedroom or modern office.

Electric heating works fast, and also gives you the ability to precisely regulate the consumption by means of an internal temperature sensor. So you always know exactly how warm it is in the house.

|                                    |                                                                                                                                          |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                    | Vertical panel radiator with the control panel on the right or left-hand side                                                            |
| <b>Material:</b>                   | Steel                                                                                                                                    |
| <b>Finishing:</b>                  | Top grille, side panels and flat front plate                                                                                             |
| <b>Suspension and accessories:</b> | Locked click bracket and mounting instructions (delivered standard)                                                                      |
| <b>Connections:</b>                | 230VAC, 50 Hz, IPX4 Class II                                                                                                             |
| <b>Packaging:</b>                  | Each radiator is robustly packaged in high-quality cardboard.<br>A label describes the radiator characteristics: type – height – length. |
| <b>Guarantee:</b>                  | 2 years on electrical components and 10 years on paint and leak tightness, if the general terms and conditions of Brugman are respected. |
| <b>Painting process:</b>           | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                 |
| <b>Colour:</b>                     | RAL 9016 (other colours can also be delivered on request: see colour chart)                                                              |
| <b>Version:</b>                    | Completely filled with oil, an electrical heating element and a connection cable of 0,8 m                                                |
| <b>Conformity:</b>                 | CE                                                                                                                                       |
| <b>Output:</b>                     | 750   1000   1250   1500   1750 W                                                                                                        |
| <b>Heights:</b>                    | 1800   2000 mm                                                                                                                           |
| <b>Widths:</b>                     | 400   500   600 mm                                                                                                                       |
| <b>Depth:</b>                      | 73 mm                                                                                                                                    |

### E-PANEL VERTI FLAT

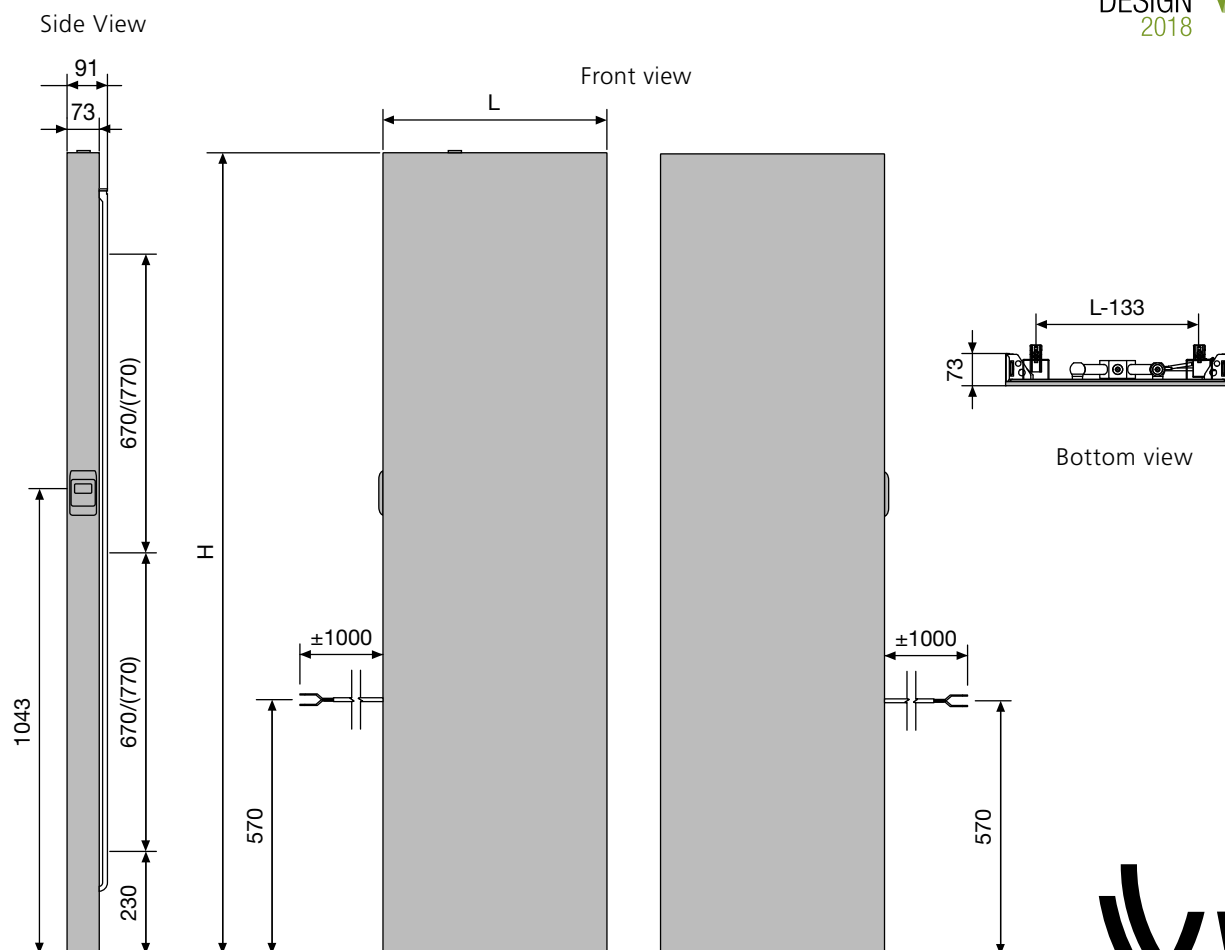




| Type          | Width (mm) | Height (mm) | Depth (mm) | Electrical output (Watt) |
|---------------|------------|-------------|------------|--------------------------|
| VERTICAL FLAT | 400        | 1800        | 73         | 750                      |
|               | 400        | 1801        | 73         | 1000                     |
|               | 500        | 1800        | 73         | 1250                     |
|               | 500        | 2000        | 73         | 1500                     |
|               | 600        | 2000        | 73         | 1750                     |

## Technical data:

- Operating voltage: 230V AC, 50 Hz
- Weekly and daily programming
- Control of room temperature from 7°C to 30°C
- Auto, Comfort, Eco or frost protection mode
- Set programmes P1, P2 and P3 can be changed
- IPX4 Class II
- Cable length: 0.8 m (preferably use a direct fixed wall outlet)
- Energy-consumption indication
- Indicator of open window detection
- Control mounted onto the radiator at the right or left-hand side (included in the price).
- Connecting the receiver: brown = live, blue = neutral and black = command wire (to be used only in France; should be shielded in case of non-use)
- Double insulated devices do not have earthing



## E-BANO (BY VASCO)

The electric towel radiator E-Bano is the answer to all of today's bathroom comfort requirements. It offers comfort on every level - and it's beautiful to look at.

Together, the horizontal round tubes and the vertical collectors in D-profile form an elegant, balanced whole. As a result it exudes calm and simplicity, which is essential for the feeling of wellness in today's bathrooms.

You can set the temperature quickly and easily, thanks to an individual thermostat. Moreover, it is usefully pre-assembled on the radiator.

|                                    |                                                                                                                                          |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                    | Electric bathroom radiator with horizontal round tubes (Ø 22 mm) in a collector with D-profile (34x34 mm)                                |
| <b>Material:</b>                   | Steel                                                                                                                                    |
| <b>Suspension and accessories:</b> | Control already pre-assembled and wall bracket (delivered standard)                                                                      |
| <b>Packaging:</b>                  | Each radiator is robustly packaged in high-quality cardboard.<br>A label describes the radiator characteristics: type – height – length. |
| <b>Guarantee:</b>                  | 2 years on electrical components and 5 years on paint and leak tightness, if the general terms and conditions of Vasco are respected.    |
| <b>Painting process:</b>           | All radiators are degreased, phosphated, cataphoretically primed and powder-coated standard in RAL 9016.                                 |
| <b>Colour:</b>                     | RAL 9016                                                                                                                                 |
| <b>Version:</b>                    | Completely filled with oil. An electrical heating element including control with boost function                                          |
| <b>Conformity:</b>                 | CE                                                                                                                                       |
| <b>Type:</b>                       | Straight                                                                                                                                 |
| <b>Output:</b>                     | 500   750   1000   1250 W                                                                                                                |
| <b>Heights:</b>                    | 878   1274   1714   1802 mm                                                                                                              |
| <b>Widths:</b>                     | 500   600 mm                                                                                                                             |
| <b>Depth:</b>                      | 34 mm                                                                                                                                    |



E-BANO (BY VASCO)



# E-Collection

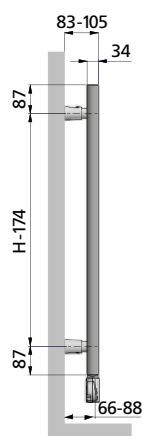
| Type   | Number of tubes | Width (mm) | Height (mm) | Electrical output (Watt) |
|--------|-----------------|------------|-------------|--------------------------|
| E-BANO | 18              | 500        | 878         | 500                      |
|        | 26              | 500        | 1274        | 750                      |
|        | 35              | 500        | 1714        | 1000                     |
|        | 37              | 600        | 1802        | 1250                     |

## Technical data:

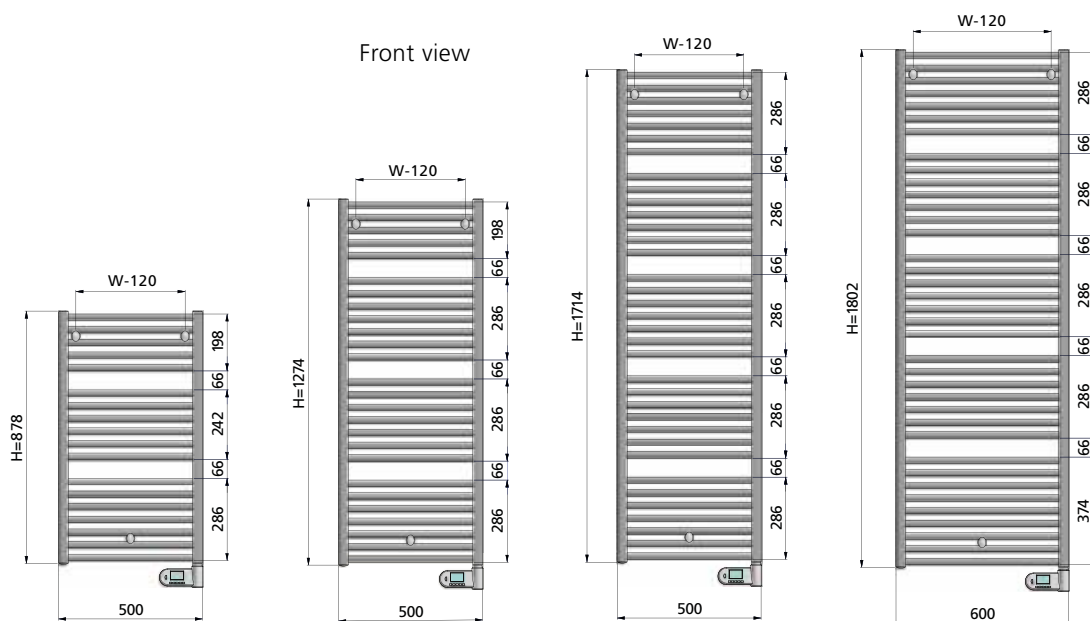
- Electrically laser welded (invisible weld seams)
- KTL priming coat, powder coating
- Operating voltage: 230V AC, 50 Hz
- Control of room temperature from 5°C to 30°
- Control of the room temperature according different modes: auto / comfort / eco / frost protection
- Mode auto: 9 preprogrammed weekly programs and 4 that you can set yourself
- BOOST cycle duration: 2 hours
- IP44, Insulation class II
- Power cable: 1,2 m: brown = phase, blue = neutral, black = command wire (to be used only in France; should be shielded in case of non-use). Preferably use a direct fixed wall outlet.
- Indicator of open window detection and self-adjusting temperature control
- Control can be mounted onto the radiator at the bottom right-hand side (included in the price).
- Double insulated devices do not have earthing.
- Dimension control: H = 75mm, W = 155mm, D = 40mm



Side View



Front view



## PRESSURE LOSSES OF RADIATORS AND VALVE INSERTS

### RADIATOR

#### CALCULATION EXAMPLE

Type 22, 600 x 1000 mm  
Radiator output (75/65/20°C) = 1683 Watt

$$T_a = 75\text{ (°C)} - T_r = 65\text{ (°C)} - T_i = 20\text{ (°C)}$$

$$\Delta T = T_a - T_r = 75\text{ (°C)} - 65\text{ (°C)} = 10\text{ (°C)}$$

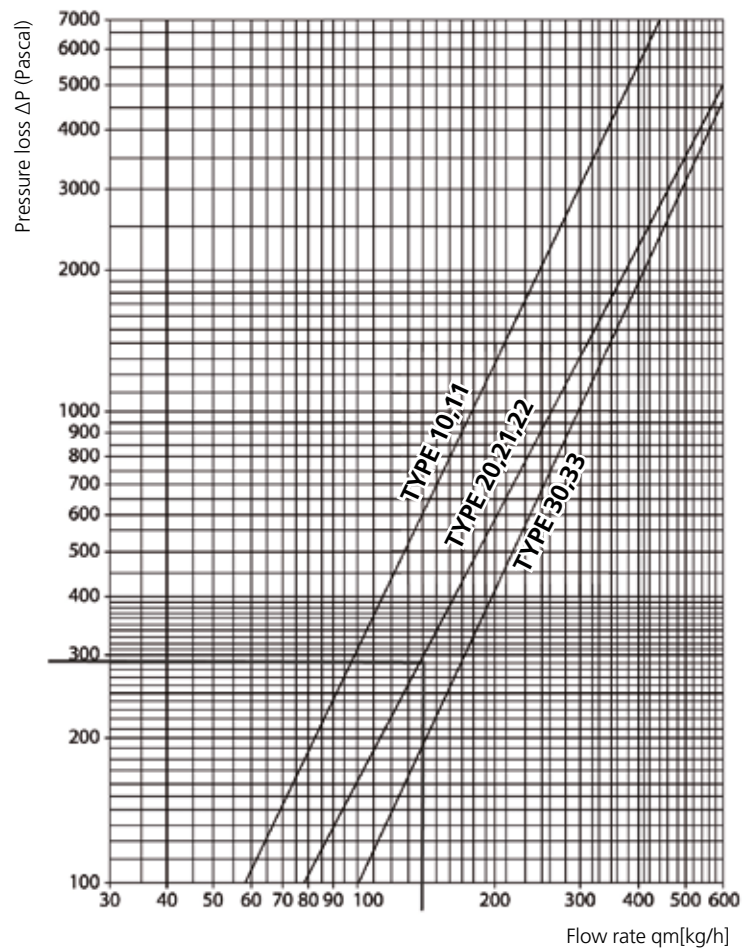
$$q_m = \frac{P \cdot 3600}{4200 \cdot \Delta T} = \frac{1683 \cdot 3600}{4200 \cdot 10} = 144\text{ (kg/h)}$$

$$\Delta P = 290\text{ Pa}$$

$T_a$  = Temperature inlet side

$T_r$  = Temperature outlet side

$T_i$  = Ambient temperature

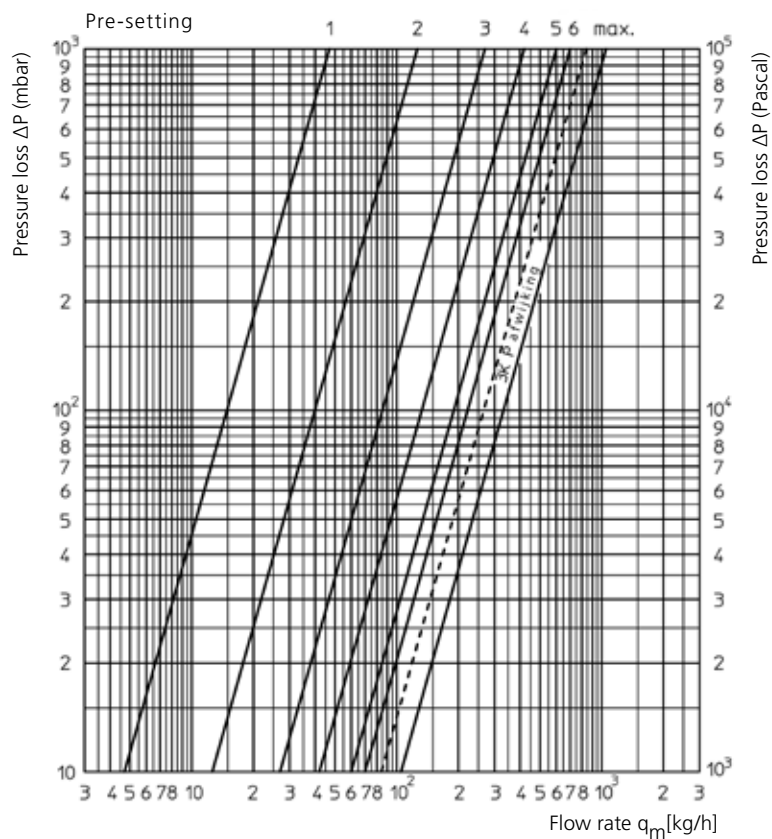


## VALVE INSERT (M30 X 1,5)



UNI 6  
PIANO UNI 6  
CENTRIC  
PIANO CENTRIC  
CENTRIC LINE  
MINI

(INSERTS FOR DISTRICT HEATING ON REQUEST)



| Type             | Pre-setting |      |      |      |      |      |                |
|------------------|-------------|------|------|------|------|------|----------------|
|                  | 1           | 2    | 3    | 4    | 5    | 6    | K <sub>V</sub> |
| Insert M30 x 1,5 | 0,05        | 0,13 | 0,27 | 0,42 | 0,60 | 0,70 | 1,50           |

## PRESSURE LOSSES OF RADIATORS AND VALVE INSERTS

### PRE-SETTING INSERT CENTRIC

75/65/20°C

Setting valve insert "M30x1,5" at 100mbar pressure loss (factory setting = 6)

| Length (mm) | Height 300 (mm) |          |         |         | Height 400 (mm) |          |         |         | Height 500 (mm) |          |         |         |
|-------------|-----------------|----------|---------|---------|-----------------|----------|---------|---------|-----------------|----------|---------|---------|
|             | type 11         | type 21s | type 22 | type 33 | type 11         | type 21s | type 22 | type 33 | type 11         | type 21s | type 22 | type 33 |
| 400         | 1               | 2        | 2       |         | 2               | 2        | 2       |         | 2               | 2        | 2       |         |
| 500         | 2               | 2        | 2       | 2       | 2               | 2        | 2       | 3       | 2               | 2        | 3       | 3       |
| 600         | 2               | 2        | 2       | 3       | 2               | 2        | 3       | 3       | 2               | 2        | 3       | 3       |
| 700         | 2               | 2        | 2       | 3       | 2               | 2        | 3       | 3       | 2               | 3        | 3       | 3       |
| 800         | 2               | 2        | 3       | 3       | 2               | 3        | 3       | 3       | 2               | 3        | 3       | 4       |
| 900         | 2               | 2        | 3       | 3       | 2               | 3        | 3       | 4       | 3               | 3        | 3       | 4       |
| 1000        | 2               | 3        | 3       | 3       | 2               | 3        | 3       | 4       | 3               | 3        | 3       | 4       |
| 1100        | 2               | 3        | 3       | 3       | 3               | 3        | 3       | 4       | 3               | 3        | 4       | 4       |
| 1200        | 2               | 3        | 3       | 4       | 3               | 3        | 3       | 4       | 3               | 3        | 4       | 5       |
| 1400        | 3               | 3        | 3       | 4       | 3               | 3        | 4       | 5       | 3               | 4        | 4       | 5       |
| 1600        | 3               | 3        | 4       | 4       | 3               | 4        | 4       | 5       | 3               | 4        | 5       | 5       |
| 1800        | 3               | 3        | 4       | 5       | 3               | 4        | 4       | 5       | 3               | 4        | 5       | 6       |
| 2000        | 3               | 4        | 4       | 5       | 3               | 4        | 5       | 6       | 4               | 4        | 5       |         |
| 2200        | 3               | 4        | 4       | 5       | 3               | 4        | 5       | 6       | 4               | 5        | 5       |         |
| 2400        | 3               | 4        | 4       | 5       | 4               | 4        | 5       | -       | 4               | 5        | 6       |         |
| 2600        | 3               | 4        | 5       | 6       | 4               | 5        | 5       | -       | 4               | 5        | 6       |         |
| 2800        | 3               | 4        | 5       | 6       | 4               | 5        | 6       | -       | 4               | 5        | -       |         |
| 3000        | 4               | 4        | 5       | -       | 4               | 5        | 6       | -       | 5               | 6        | -       |         |

| Length (mm) | Height 600 (mm) |          |         |         | Height 700 (mm) |          |         |         | Height 900 (mm) |          |         |         |
|-------------|-----------------|----------|---------|---------|-----------------|----------|---------|---------|-----------------|----------|---------|---------|
|             | type 11         | type 21s | type 22 | type 33 | type 11         | type 21s | type 22 | type 33 | type 11         | type 21s | type 22 | type 33 |
| 400         | 2               | 2        | 2       |         | 2               | 2        | 3       |         | 2               | 3        | 3       |         |
| 500         | 2               | 2        | 3       | 3       | 2               | 3        | 3       | 3       | 2               | 3        | 3       | 4       |
| 600         | 2               | 3        | 3       | 3       | 2               | 3        | 3       | 4       | 3               | 3        | 3       | 4       |
| 700         | 2               | 3        | 3       | 4       | 3               | 3        | 3       | 4       | 3               | 3        | 4       | 5       |
| 800         | 3               | 3        | 3       | 4       | 3               | 3        | 4       | 4       | 3               | 3        | 4       | 5       |
| 900         | 3               | 3        | 4       | 4       | 3               | 3        | 4       | 5       | 3               | 4        | 4       | 5       |
| 1000        | 3               | 3        | 4       | 5       | 3               | 4        | 4       | 5       | 3               | 4        | 5       | 5       |
| 1100        | 3               | 3        | 4       | 5       | 3               | 4        | 4       | 5       | 3               | 4        | 5       | 6       |
| 1200        | 3               | 4        | 4       | 5       | 3               | 4        | 4       | 5       | 4               | 4        | 5       | -       |
| 1400        | 3               | 4        | 5       | 6       | 4               | 4        | 5       | 6       | 4               | 5        | 5       | -       |
| 1600        | 4               | 4        | 5       | 6       | 4               | 5        | 5       | -       | 4               | 5        | 6       | -       |
| 1800        | 4               | 5        | 5       | -       | 4               | 5        | 6       | -       | 5               | 6        | -       | -       |
| 2000        | 4               | 5        | 6       | -       | 4               | 5        | 6       | -       | 5               | 6        | -       | -       |
| 2200        | 4               | 5        | 6       | -       | 5               | 5        | -       |         |                 |          |         |         |
| 2400        | 4               | 5        | -       | -       | 5               | 6        | -       |         |                 |          |         |         |
| 2600        | 5               | 6        | -       | -       | 5               | -        | -       |         |                 |          |         |         |
| 2800        | 5               | 6        | -       | -       | 5               | -        | -       |         |                 |          |         |         |
| 3000        | 5               | -        | -       | -       | 5               | -        | -       |         |                 |          |         |         |



## PRE-SETTING INSERT PIANO CENTRIC / CENTRIC LINE

75/65/20°C

Setting valve insert "M30x1,5" at 100mbar pressure loss (factory setting = 6)

| Length (mm) | Height 300 (mm) |         |         | Height 400 (mm) |         |         | Height 500 (mm) |         |         |
|-------------|-----------------|---------|---------|-----------------|---------|---------|-----------------|---------|---------|
|             | type 21s        | type 22 | type 33 | type 21s        | type 22 | type 33 | type 21s        | type 22 | type 33 |
| 400         | 2               | 2       |         | 2               | 2       |         | 2               | 2       |         |
| 500         | 2               | 2       | 2       | 2               | 2       | 3       | 2               | 2       | 3       |
| 600         | 2               | 2       | 3       | 2               | 2       | 3       | 2               | 3       | 3       |
| 700         | 2               | 2       | 3       | 2               | 3       | 3       | 3               | 3       | 3       |
| 800         | 2               | 3       | 3       | 2               | 3       | 3       | 3               | 3       | 3       |
| 900         | 2               | 3       | 3       | 3               | 3       | 3       | 3               | 3       | 4       |
| 1000        | 2               | 3       | 3       | 3               | 3       | 4       | 3               | 3       | 4       |
| 1200        | 3               | 3       | 3       | 3               | 3       | 4       | 3               | 4       | 4       |
| 1400        | 3               | 3       | 4       | 3               | 4       | 4       | 3               | 4       | 5       |
| 1600        | 3               | 3       | 4       | 3               | 4       | 5       | 4               | 4       | 5       |
| 1800        | 3               | 4       | 4       | 4               | 4       | 5       | 4               | 5       | 5       |
| 2000        | 4               | 4       | 5       | 4               | 4       | 5       | 4               | 5       | 6       |
| 2200        | 4               | 4       | 5       | 4               | 5       | 6       | 4               | 5       | -       |
| 2400        | 4               | 4       | 5       | 4               | 5       | 6       | 5               | 5       | -       |
| 2600        | 4               | 4       | 5       | 4               | 5       | -       | 5               | 6       | -       |
| 2800        | 4               | 5       | 6       | 5               | 5       | -       | 5               | 6       | -       |
| 3000        | 4               | 5       | 6       | 5               | 6       | -       | 5               | -       | -       |

| Length (mm) | Height 600 (mm) |         |         | Height 700 (mm) |         |         | Height 900 (mm) |         |         |
|-------------|-----------------|---------|---------|-----------------|---------|---------|-----------------|---------|---------|
|             | type 21s        | type 22 | type 33 | type 21s        | type 22 | type 33 | type 21s        | type 22 | type 33 |
| 400         | 2               | 2       |         | 2               | 2       |         | 2               | 3       |         |
| 500         | 2               | 3       | 3       | 2               | 3       | 3       | 3               | 3       | 4       |
| 600         | 3               | 3       | 3       | 3               | 3       | 3       | 3               | 3       | 4       |
| 700         | 3               | 3       | 3       | 3               | 3       | 4       | 3               | 3       | 4       |
| 800         | 3               | 3       | 4       | 3               | 3       | 4       | 3               | 4       | 5       |
| 900         | 3               | 3       | 4       | 3               | 4       | 4       | 3               | 4       | 5       |
| 1000        | 3               | 4       | 4       | 3               | 4       | 5       | 4               | 4       | 5       |
| 1200        | 3               | 4       | 5       | 4               | 4       | 5       | 4               | 5       | 6       |
| 1400        | 4               | 4       | 5       | 4               | 5       | 6       | 4               | 5       | -       |
| 1600        | 4               | 5       | 6       | 4               | 5       | 6       | 5               | 6       | -       |
| 1800        | 4               | 5       | 6       | 5               | 5       | -       | 5               | 6       | -       |
| 2000        | 5               | 5       | -       | 5               | 6       | -       | 5               | -       | -       |
| 2200        | 5               | 6       | -       | 5               | 6       |         |                 |         |         |
| 2400        | 5               | 6       | -       | 5               | -       |         |                 |         |         |
| 2600        | 5               | -       | -       | 6               | -       |         |                 |         |         |
| 2800        | 6               | -       | -       | 6               | -       |         |                 |         |         |
| 3000        | 6               | -       | -       | -               | -       |         |                 |         |         |

## CORRECTION TABLE

| n= | 1,30 |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Tr |      | 25   | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   |
| Ta | Ti   |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 90 | 12   | 0,88 | 0,95 | 1,01 | 1,08 | 1,15 | 1,21 | 1,28 | 1,35 | 1,42 | 1,49 | 1,56 | 1,64 | 1,71 |
| 90 | 15   | 0,81 | 0,87 | 0,94 | 1,00 | 1,07 | 1,13 | 1,20 | 1,27 | 1,34 | 1,41 | 1,48 | 1,55 | 1,62 |
| 90 | 16   | 0,78 | 0,85 | 0,91 | 0,97 | 1,04 | 1,11 | 1,17 | 1,24 | 1,31 | 1,38 | 1,45 | 1,52 | 1,59 |
| 90 | 18   | 0,74 | 0,80 | 0,86 | 0,92 | 0,99 | 1,05 | 1,12 | 1,19 | 1,25 | 1,32 | 1,39 | 1,46 | 1,53 |
| 90 | 19   | 0,71 | 0,77 | 0,83 | 0,90 | 0,96 | 1,03 | 1,09 | 1,16 | 1,23 | 1,29 | 1,36 | 1,43 | 1,51 |
| 90 | 20   | 0,69 | 0,75 | 0,81 | 0,87 | 0,94 | 1,00 | 1,07 | 1,13 | 1,20 | 1,27 | 1,34 | 1,41 | 1,48 |
| 90 | 22   | 0,64 | 0,70 | 0,76 | 0,82 | 0,88 | 0,95 | 1,01 | 1,08 | 1,15 | 1,21 | 1,28 | 1,35 | 1,42 |
| 90 | 24   | 0,59 | 0,65 | 0,71 | 0,77 | 0,83 | 0,90 | 0,96 | 1,03 | 1,09 | 1,16 | 1,23 | 1,29 | 1,36 |
| 85 | 12   | 0,82 | 0,88 | 0,95 | 1,01 | 1,08 | 1,15 | 1,21 | 1,28 | 1,35 | 1,42 | 1,49 | 1,56 |      |
| 85 | 15   | 0,75 | 0,81 | 0,87 | 0,94 | 1,00 | 1,07 | 1,13 | 1,20 | 1,27 | 1,34 | 1,41 | 1,48 |      |
| 85 | 16   | 0,72 | 0,78 | 0,85 | 0,91 | 0,97 | 1,04 | 1,11 | 1,17 | 1,24 | 1,31 | 1,38 | 1,45 |      |
| 85 | 18   | 0,68 | 0,74 | 0,80 | 0,86 | 0,92 | 0,99 | 1,05 | 1,12 | 1,19 | 1,25 | 1,32 | 1,39 |      |
| 85 | 19   | 0,65 | 0,71 | 0,77 | 0,83 | 0,90 | 0,96 | 1,03 | 1,09 | 1,16 | 1,23 | 1,29 | 1,36 |      |
| 85 | 20   | 0,63 | 0,69 | 0,75 | 0,81 | 0,87 | 0,94 | 1,00 | 1,07 | 1,13 | 1,20 | 1,27 | 1,34 |      |
| 85 | 22   | 0,58 | 0,64 | 0,70 | 0,76 | 0,82 | 0,88 | 0,95 | 1,01 | 1,08 | 1,15 | 1,21 | 1,28 |      |
| 85 | 24   | 0,54 | 0,59 | 0,65 | 0,71 | 0,77 | 0,83 | 0,90 | 0,96 | 1,03 | 1,09 | 1,16 | 1,23 |      |
| 80 | 12   | 0,76 | 0,82 | 0,88 | 0,95 | 1,01 | 1,08 | 1,15 | 1,21 | 1,28 | 1,35 | 1,42 |      |      |
| 80 | 15   | 0,69 | 0,75 | 0,81 | 0,87 | 0,94 | 1,00 | 1,07 | 1,13 | 1,20 | 1,27 | 1,34 |      |      |
| 80 | 16   | 0,66 | 0,72 | 0,78 | 0,85 | 0,91 | 0,97 | 1,04 | 1,11 | 1,17 | 1,24 | 1,31 |      |      |
| 80 | 18   | 0,62 | 0,68 | 0,74 | 0,80 | 0,86 | 0,92 | 0,99 | 1,05 | 1,12 | 1,19 | 1,25 |      |      |
| 80 | 19   | 0,59 | 0,65 | 0,71 | 0,77 | 0,83 | 0,90 | 0,96 | 1,03 | 1,09 | 1,16 | 1,23 |      |      |
| 80 | 20   | 0,57 | 0,63 | 0,69 | 0,75 | 0,81 | 0,87 | 0,94 | 1,00 | 1,07 | 1,13 | 1,20 |      |      |
| 80 | 22   | 0,53 | 0,58 | 0,64 | 0,70 | 0,76 | 0,82 | 0,88 | 0,95 | 1,01 | 1,08 | 1,15 |      |      |
| 80 | 24   | 0,48 | 0,54 | 0,59 | 0,65 | 0,71 | 0,77 | 0,83 | 0,90 | 0,96 | 1,03 | 1,09 |      |      |
| 75 | 12   | 0,70 | 0,76 | 0,82 | 0,88 | 0,95 | 1,01 | 1,08 | 1,15 | 1,21 | 1,28 |      |      |      |
| 75 | 15   | 0,63 | 0,69 | 0,75 | 0,81 | 0,87 | 0,94 | 1,00 | 1,07 | 1,13 | 1,20 |      |      |      |
| 75 | 16   | 0,61 | 0,66 | 0,72 | 0,78 | 0,85 | 0,91 | 0,97 | 1,04 | 1,11 | 1,17 |      |      |      |
| 75 | 18   | 0,56 | 0,62 | 0,68 | 0,74 | 0,80 | 0,86 | 0,92 | 0,99 | 1,05 | 1,12 |      |      |      |
| 75 | 19   | 0,54 | 0,59 | 0,65 | 0,71 | 0,77 | 0,83 | 0,90 | 0,96 | 1,03 | 1,09 |      |      |      |
| 75 | 20   | 0,51 | 0,57 | 0,63 | 0,69 | 0,75 | 0,81 | 0,87 | 0,94 | 1,00 | 1,07 |      |      |      |
| 75 | 22   | 0,47 | 0,53 | 0,58 | 0,64 | 0,70 | 0,76 | 0,82 | 0,88 | 0,95 | 1,01 |      |      |      |
| 75 | 24   | 0,43 | 0,48 | 0,54 | 0,59 | 0,65 | 0,71 | 0,77 | 0,83 | 0,90 | 0,96 |      |      |      |
| 70 | 12   | 0,64 | 0,70 | 0,76 | 0,82 | 0,88 | 0,95 | 1,01 | 1,08 | 1,15 |      |      |      |      |
| 70 | 15   | 0,57 | 0,63 | 0,69 | 0,75 | 0,81 | 0,87 | 0,94 | 1,00 | 1,07 |      |      |      |      |
| 70 | 16   | 0,55 | 0,61 | 0,66 | 0,72 | 0,78 | 0,85 | 0,91 | 0,97 | 1,04 |      |      |      |      |
| 70 | 18   | 0,50 | 0,56 | 0,62 | 0,68 | 0,74 | 0,80 | 0,86 | 0,92 | 0,99 |      |      |      |      |
| 70 | 19   | 0,48 | 0,54 | 0,59 | 0,65 | 0,71 | 0,77 | 0,83 | 0,90 | 0,96 |      |      |      |      |
| 70 | 20   | 0,46 | 0,51 | 0,57 | 0,63 | 0,69 | 0,75 | 0,81 | 0,87 | 0,94 |      |      |      |      |
| 70 | 22   | 0,42 | 0,47 | 0,53 | 0,58 | 0,64 | 0,70 | 0,76 | 0,82 | 0,88 |      |      |      |      |
| 70 | 24   | 0,37 | 0,43 | 0,48 | 0,54 | 0,59 | 0,65 | 0,71 | 0,77 | 0,83 |      |      |      |      |
| 65 | 12   | 0,58 | 0,64 | 0,70 | 0,76 | 0,82 | 0,88 | 0,95 | 1,01 |      |      |      |      |      |
| 65 | 15   | 0,51 | 0,57 | 0,63 | 0,69 | 0,75 | 0,81 | 0,87 | 0,94 |      |      |      |      |      |
| 65 | 16   | 0,49 | 0,55 | 0,61 | 0,66 | 0,72 | 0,78 | 0,85 | 0,91 |      |      |      |      |      |
| 65 | 18   | 0,45 | 0,50 | 0,56 | 0,62 | 0,68 | 0,74 | 0,80 | 0,86 |      |      |      |      |      |
| 65 | 19   | 0,43 | 0,48 | 0,54 | 0,59 | 0,65 | 0,71 | 0,77 | 0,83 |      |      |      |      |      |
| 65 | 20   | 0,41 | 0,46 | 0,51 | 0,57 | 0,63 | 0,69 | 0,75 | 0,81 |      |      |      |      |      |
| 65 | 22   | 0,36 | 0,42 | 0,47 | 0,53 | 0,58 | 0,64 | 0,70 | 0,76 |      |      |      |      |      |
| 65 | 24   | 0,32 | 0,37 | 0,43 | 0,48 | 0,54 | 0,59 | 0,65 | 0,71 |      |      |      |      |      |
| 60 | 12   | 0,53 | 0,58 | 0,64 | 0,70 | 0,76 | 0,82 | 0,88 |      |      |      |      |      |      |
| 60 | 15   | 0,46 | 0,51 | 0,57 | 0,63 | 0,69 | 0,75 | 0,81 |      |      |      |      |      |      |
| 60 | 16   | 0,44 | 0,49 | 0,55 | 0,61 | 0,66 | 0,72 | 0,78 |      |      |      |      |      |      |
| 60 | 18   | 0,40 | 0,45 | 0,50 | 0,56 | 0,62 | 0,68 | 0,74 |      |      |      |      |      |      |
| 60 | 19   | 0,37 | 0,43 | 0,48 | 0,54 | 0,59 | 0,65 | 0,71 |      |      |      |      |      |      |
| 60 | 20   | 0,35 | 0,41 | 0,46 | 0,51 | 0,57 | 0,63 | 0,69 |      |      |      |      |      |      |
| 60 | 22   | 0,31 | 0,36 | 0,42 | 0,47 | 0,53 | 0,58 | 0,64 |      |      |      |      |      |      |
| 60 | 24   | 0,27 | 0,32 | 0,37 | 0,43 | 0,48 | 0,54 | 0,59 |      |      |      |      |      |      |
| 55 | 12   | 0,47 | 0,53 | 0,58 | 0,64 | 0,70 | 0,76 |      |      |      |      |      |      |      |
| 55 | 15   | 0,41 | 0,46 | 0,51 | 0,57 | 0,63 | 0,69 |      |      |      |      |      |      |      |
| 55 | 16   | 0,39 | 0,44 | 0,49 | 0,55 | 0,61 | 0,66 |      |      |      |      |      |      |      |
| 55 | 18   | 0,34 | 0,40 | 0,45 | 0,50 | 0,56 | 0,62 |      |      |      |      |      |      |      |
| 55 | 19   | 0,32 | 0,37 | 0,43 | 0,48 | 0,54 | 0,59 |      |      |      |      |      |      |      |
| 55 | 20   | 0,30 | 0,35 | 0,41 | 0,46 | 0,51 | 0,57 |      |      |      |      |      |      |      |
| 55 | 22   | 0,26 | 0,31 | 0,36 | 0,42 | 0,47 | 0,53 |      |      |      |      |      |      |      |
| 55 | 24   | 0,23 | 0,27 | 0,32 | 0,37 | 0,43 | 0,48 |      |      |      |      |      |      |      |
| 50 | 12   | 0,42 | 0,47 | 0,53 | 0,58 | 0,64 |      |      |      |      |      |      |      |      |
| 50 | 15   | 0,35 | 0,41 | 0,46 | 0,51 | 0,57 |      |      |      |      |      |      |      |      |
| 50 | 16   | 0,33 | 0,39 | 0,44 | 0,49 | 0,55 |      |      |      |      |      |      |      |      |
| 50 | 18   | 0,29 | 0,34 | 0,40 | 0,45 | 0,50 |      |      |      |      |      |      |      |      |
| 50 | 19   | 0,27 | 0,32 | 0,37 | 0,43 | 0,48 |      |      |      |      |      |      |      |      |
| 50 | 20   | 0,26 | 0,30 | 0,35 | 0,41 | 0,46 |      |      |      |      |      |      |      |      |
| 50 | 22   | 0,22 | 0,26 | 0,31 | 0,36 | 0,42 |      |      |      |      |      |      |      |      |
| 50 | 24   | 0,18 | 0,23 | 0,27 | 0,32 | 0,37 |      |      |      |      |      |      |      |      |
| 45 | 12   | 0,36 | 0,42 | 0,47 | 0,53 |      |      |      |      |      |      |      |      |      |
| 45 | 15   | 0,30 | 0,35 | 0,41 | 0,46 |      |      |      |      |      |      |      |      |      |
| 45 | 16   | 0,28 | 0,33 | 0,39 | 0,44 |      |      |      |      |      |      |      |      |      |
| 45 | 18   | 0,25 | 0,29 | 0,34 | 0,40 |      |      |      |      |      |      |      |      |      |
| 45 | 19   | 0,23 | 0,27 | 0,32 | 0,37 |      |      |      |      |      |      |      |      |      |
| 45 | 20   | 0,21 | 0,26 | 0,30 | 0,35 |      |      |      |      |      |      |      |      |      |
| 45 | 22   | 0,17 | 0,22 | 0,26 | 0,31 |      |      |      |      |      |      |      |      |      |
| 45 | 24   | 0,14 | 0,18 | 0,23 | 0,27 |      |      |      |      |      |      |      |      |      |
| 40 | 12   | 0,31 | 0,36 | 0,42 |      |      |      |      |      |      |      |      |      |      |
| 40 | 15   | 0,26 | 0,30 | 0,35 |      |      |      |      |      |      |      |      |      |      |
| 40 | 16   | 0,24 | 0,28 | 0,33 |      |      |      |      |      |      |      |      |      |      |
| 40 | 18   | 0,20 | 0,25 | 0,29 |      |      |      |      |      |      |      |      |      |      |
| 40 | 19   | 0,18 | 0,23 | 0,27 |      |      |      |      |      |      |      |      |      |      |
| 40 | 20   | 0,16 | 0,21 | 0,26 |      |      |      |      |      |      |      |      |      |      |
| 40 | 22   | 0,13 | 0,17 | 0,22 |      |      |      |      |      |      |      |      |      |      |
| 40 | 24   | 0,10 | 0,14 | 0,18 |      |      |      |      |      |      |      |      |      |      |
| 35 | 12   | 0,26 | 0,31 |      |      |      |      |      |      |      |      |      |      |      |
| 35 | 15   | 0,21 | 0,26 |      |      |      |      |      |      |      |      |      |      |      |
| 35 | 16   | 0,19 | 0,24 |      |      |      |      |      |      |      |      |      |      |      |
| 35 | 18   | 0,16 | 0,20 |      |      |      |      |      |      |      |      |      |      |      |
| 35 | 19   | 0,14 | 0,18 |      |      |      |      |      |      |      |      |      |      |      |
| 35 | 20   | 0,12 | 0,16 |      |      |      |      |      |      |      |      |      |      |      |
| 35 | 22   | 0,09 | 0,13 |      |      |      |      |      |      |      |      |      |      |      |
| 35 | 24   | 0,06 | 0,10 |      |      |      |      |      |      |      |      |      |      |      |
| 30 | 12   | 0,22 |      |      |      |      |      |      |      |      |      |      |      |      |
| 30 | 15   | 0,16 |      |      |      |      |      |      |      |      |      |      |      |      |
| 30 | 16   | 0,15 |      |      |      |      |      |      |      |      |      |      |      |      |
| 30 | 18   | 0,12 |      |      |      |      |      |      |      |      |      |      |      |      |
| 30 | 19   | 0,10 |      |      |      |      |      |      |      |      |      |      |      |      |
| 30 | 20   | 0,08 |      |      |      |      |      |      |      |      |      |      |      |      |
| 30 | 22   | 0,06 |      |      |      |      |      |      |      |      |      |      |      |      |
| 30 | 24   | 0,03 |      |      |      |      |      |      |      |      |      |      |      |      |

Example of a conversion to a different regime than  $\phi 50K$ :  
 Required output: 1050 Watt under the following conditions:  
 Room temperature:  $T_i = 22^\circ C$   
 Water temperature inlet side:  $T_a = 70^\circ C$   
 Water temperature outlet side:  $T_r = 50^\circ C$   
 => on the basis of these data you can find the correction factor in the above table = 0,70.  
 You look in the price list with  $\phi 50K$  for a radiator that lies in the neighbourhood of:  $1050 : 0,70 = 1500 \text{ Watt}$

# Vertical Centric

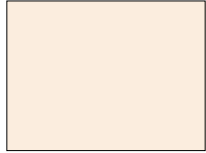
## Collection

Piano Centric Verti



# COLOURS

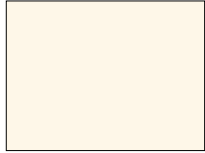
## NOBLE



Pergamon  
SAN 0019

01

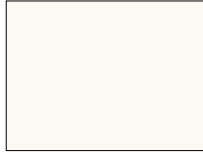
## WHITE BLACK



Cream White  
RAL 9001

08

## NATURAL GREY MATT



Mist White  
N500

15

## PURE GREY MATT



Signal White  
RAL 9003

22

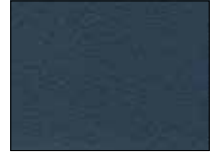
## METALIC GREY STRUCTURE



Grey Aluminium  
M307

29

## BLUE GREEN MINERAL



Dark Blue  
9801

36



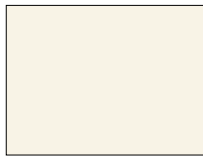
Pink  
3012

02



White Fine Texture  
S600

09



Sand Light  
N502

16



Tele Grey 4  
RAL 7047

23



White Aluminium  
M306

30



Mid Blue  
9802

37



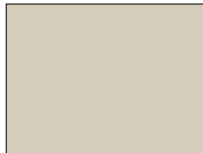
Silver  
9898

03



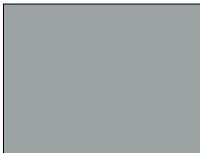
Traffic White  
RAL 9016

10



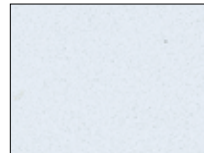
Sand  
N503

17



Widow Grey  
RAL 7040

24



Grey White January  
M303

31



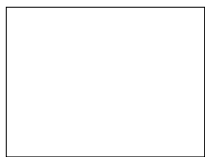
Grey Blue  
9803

38



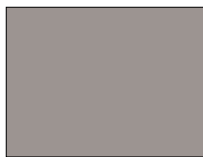
Pearl Beige  
1035

04



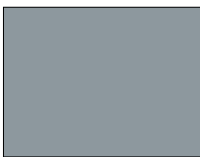
Pure White  
RAL 9010

11



Platina Grey  
N504

18



Tele Grey 2  
RAL 7046

25



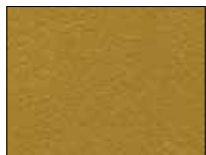
Aluminium Grey January  
M302

32



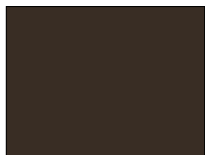
Forest Green  
9804

39



Gold  
9899

05



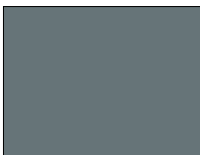
Brown Black  
9826

12



Dust Grey  
N505

19



Blue Grey  
RAL 7031

26



Anthracite January  
M301

33



Jade Green  
9805

40



Curry  
9894

06



Grey Anthracite  
9827

13



Warm Grey  
N506

20



Slate Grey  
RAL 7015

27



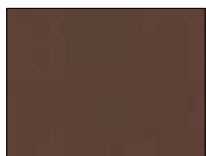
Black January  
M300

34



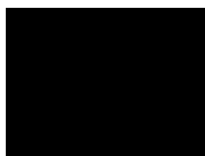
Grey Green  
9806

41



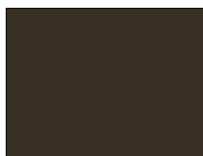
Bronze  
9893

07



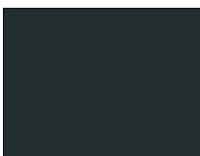
Jet Black  
RAL 9005

14



Brown Grey  
N507

21



Anthracite Grey  
RAL 7016

28



Brown January  
M304

35



Warm Green  
9807

42

## TERRA-COTTA MINERAL



Dark Brown  
9808

43



Rust Brown  
9809

44



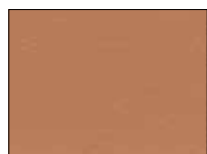
Quartz Brown  
9810

45



Light Beige  
9811

46



Orange Brown  
9812

47



Blood Red  
9813

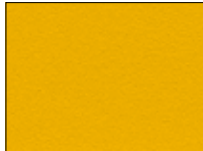
48



Purple Red  
9814

49

## UNI COLOURS FINE TEXTURE



Melon Yellow  
9815

50



Carmine Red  
9816

51



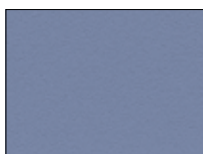
Claret Violet  
9817

52



Night Blue  
9818

53



Pigeon Blue  
S601

54



Yellow Green  
9820

55



Moss Green  
9821

56

## BRUGMAN COLOURS YOUR HEATING COMFORT

Opting for a colourful interior and beautifully matching CH radiators? Brugman offers you a range of fresh, contemporary hues.

Whatever colour you have in mind, Brugman ensures flawless, colourfast painting.

Would you like more information about Brugman radiators? Talk with a specialist.

Contact us via [www.brugman.eu](http://www.brugman.eu) or via the address on the back of this brochure.

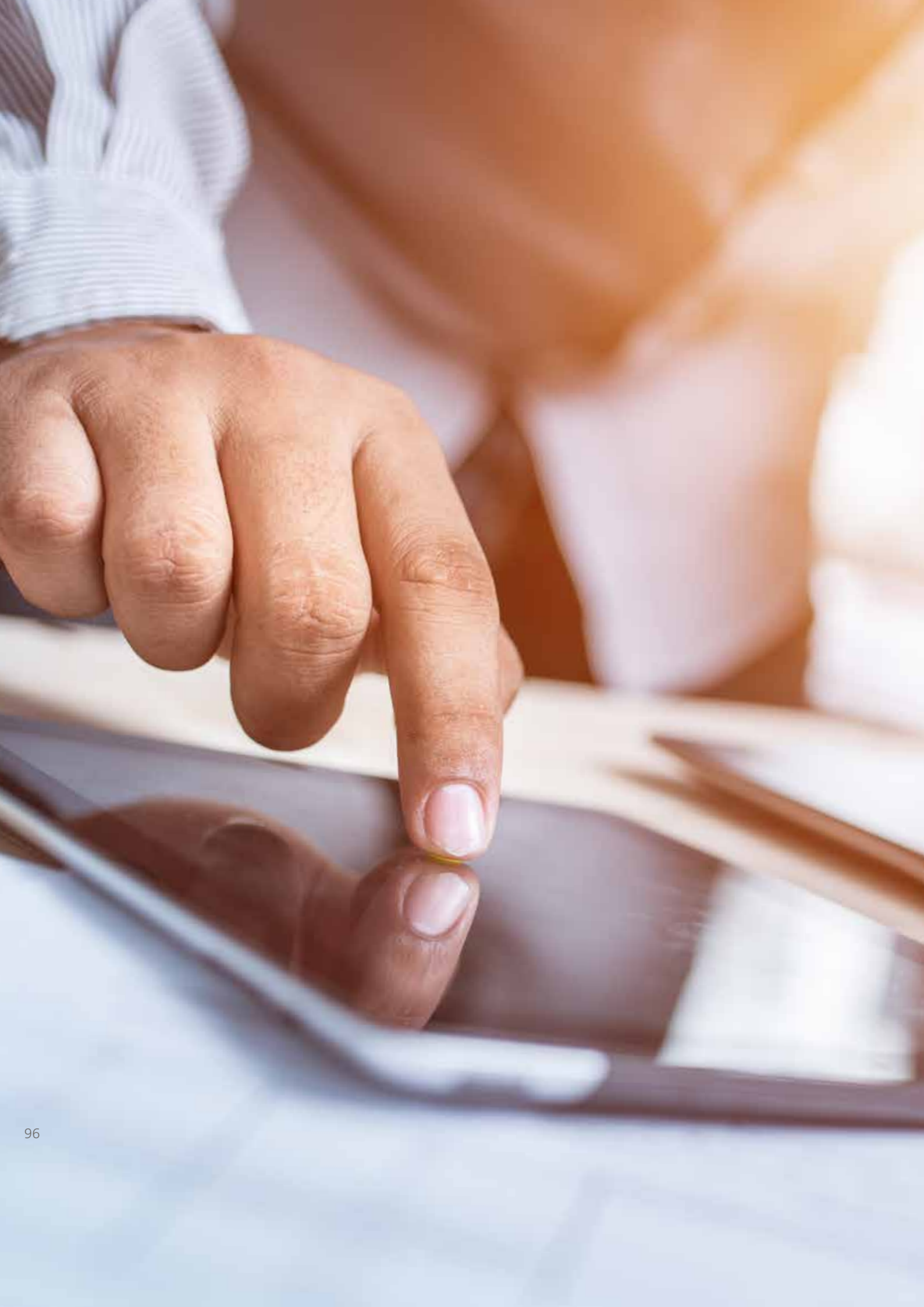
- RADIATORS: standard colour RAL 9016

Extra charge for colour on request.

- HORIZONTAL CENTRIC LINE: only RAL 9016

- BANO Collection: only RAL 9016

- E-BANO: only RAL 9016





# THERMAL OUTPUT PER RADIATOR TYPE



## STANDARD

## TYPE 10

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 900  |
|---------------------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 425  | 514  | 602  | 872  |
| n-exponent          | 1,26 | 1,27 | 1,29 | 1,29 |
| Length (mm)         | Watt | Watt | Watt | Watt |
| 500                 | 213  | 257  | 301  | 436  |
| 600                 | 255  | 308  | 361  | 523  |
| 800                 | 340  | 411  | 482  | 698  |
| 1000                | 425  | 514  | 602  |      |

## TYPE 10

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 400  | 500  | 600  | 900  |
|-----------------------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 344  | 414  | 483  | 700  |
| n-exponent            | 1,26 | 1,27 | 1,29 | 1,29 |
| Length (mm)           | Watt | Watt | Watt | Watt |
| 500                   | 172  | 207  | 242  | 350  |
| 600                   | 206  | 248  | 290  | 420  |
| 800                   | 275  | 331  | 387  | 560  |
| 1000                  | 344  | 414  | 483  |      |

## TYPE 10

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 900  |
|---------------------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 222  | 266  | 309  | 447  |
| n-exponent          | 1,26 | 1,27 | 1,29 | 1,29 |
| Length (mm)         | Watt | Watt | Watt | Watt |
| 500                 | 111  | 133  | 154  | 223  |
| 600                 | 133  | 160  | 185  | 268  |
| 800                 | 178  | 213  | 247  | 358  |
| 1000                | 222  | 266  | 309  |      |



STANDARD

## TYPE 11

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 551  | 697  | 840  | 979  | 1117 | 1390 |
| n-exponent          | 1,22 | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      | 279  | 336  | 392  | 447  | 556  |
| 500                 | 276  | 349  | 420  | 490  | 559  | 695  |
| 600                 | 331  | 418  | 504  | 587  | 670  | 834  |
| 700                 |      |      | 588  | 685  | 782  | 973  |
| 800                 | 441  | 558  | 672  | 783  | 894  | 1112 |
| 900                 |      | 627  | 756  | 881  | 1005 | 1251 |
| 1000                |      | 697  | 840  | 979  | 1117 | 1390 |
| 1200                |      | 836  | 1008 | 1175 | 1340 |      |
| 1400                | 771  | 976  | 1176 | 1371 | 1564 |      |
| 1600                |      | 1115 | 1344 | 1567 |      |      |
| 1800                |      | 1255 | 1512 | 1762 | 2011 |      |
| 2000                |      | 1394 | 1680 | 1958 | 2234 |      |
| 2200                |      | 1534 | 1848 | 2154 |      |      |
| 2400                |      | 1673 | 2016 | 2350 |      |      |

## TYPE 11

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 448  | 565  | 679  | 789  | 899  | 1114 |
| n-exponent            | 1,22 | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      | 226  | 272  | 316  | 359  | 446  |
| 500                   | 224  | 283  | 339  | 394  | 449  | 557  |
| 600                   | 269  | 339  | 407  | 473  | 539  | 668  |
| 700                   |      |      | 475  | 552  | 629  | 780  |
| 800                   | 358  | 452  | 543  | 631  | 719  | 891  |
| 900                   |      | 509  | 611  | 710  | 809  | 1003 |
| 1000                  |      | 565  | 679  | 789  | 899  | 1114 |
| 1200                  |      | 678  | 815  | 947  | 1078 |      |
| 1400                  | 627  | 791  | 951  | 1105 | 1258 |      |
| 1600                  |      | 904  | 1086 | 1262 |      |      |
| 1800                  |      | 1017 | 1222 | 1420 | 1617 |      |
| 2000                  |      | 1130 | 1358 | 1578 | 1797 |      |
| 2200                  |      | 1243 | 1494 | 1736 |      |      |
| 2400                  |      | 1356 | 1630 | 1894 |      |      |

## TYPE 11

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 293  | 368  | 439  | 507  | 576  | 708  |
| n-exponent          | 1,22 | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      | 147  | 176  | 203  | 230  | 283  |
| 500                 | 147  | 184  | 220  | 254  | 288  | 354  |
| 600                 | 176  | 221  | 264  | 304  | 345  | 425  |
| 700                 |      |      | 307  | 355  | 403  | 496  |
| 800                 | 235  | 294  | 351  | 406  | 460  | 567  |
| 900                 |      | 331  | 395  | 457  | 518  | 638  |
| 1000                |      | 368  | 439  | 507  | 576  | 708  |
| 1200                |      | 441  | 527  | 609  | 691  |      |
| 1400                | 411  | 515  | 615  | 710  | 806  |      |
| 1600                |      | 588  | 703  | 812  |      |      |
| 1800                |      | 662  | 791  | 913  | 1036 |      |
| 2000                |      | 736  | 878  | 1015 | 1151 |      |
| 2200                |      | 809  | 966  | 1116 |      |      |
| 2400                |      | 883  | 1054 | 1218 |      |      |

## STANDARD

| TYPE 21s            |  | Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |            |
|---------------------|--|---------------------------------------------------------------------------|------|------|------------|
| Height (mm)         |  | 400                                                                       | 500  | 600  | 900        |
| W/m 75/65/20 (φ50K) |  | 985                                                                       | 1181 | 1368 | 1880       |
| n-exponent          |  | 1,31                                                                      | 1,32 | 1,32 | 1,34       |
| Length (mm)         |  | Watt                                                                      | Watt | Watt | Watt       |
| 400                 |  |                                                                           |      |      | <b>752</b> |
| 500                 |  |                                                                           | 591  | 684  | 940        |
| 600                 |  | 591                                                                       | 709  | 821  | 1128       |
| 700                 |  |                                                                           | 827  | 958  | 1316       |
| 800                 |  | 788                                                                       | 945  | 1094 | 1504       |
| 900                 |  |                                                                           | 1063 | 1231 | 1692       |
| 1000                |  | 985                                                                       | 1181 | 1368 | 1880       |
| 1200                |  | 1182                                                                      | 1417 | 1642 |            |
| 1400                |  | 1379                                                                      | 1653 | 1915 |            |
| 1600                |  | 1576                                                                      | 1890 | 2189 |            |
| 1800                |  | 1773                                                                      | 2126 | 2462 |            |
| 2000                |  | 1970                                                                      | 2362 | 2736 |            |
| 2200                |  | 2167                                                                      | 2598 |      |            |
| 2400                |  | 2364                                                                      |      |      |            |
| 2800                |  | 2758                                                                      |      |      |            |

| TYPE 21s              |  | Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |            |
|-----------------------|--|---------------------------------------------------------------------------|------|------|------------|
| Height (mm)           |  | 400                                                                       | 500  | 600  | 900        |
| W/m 70/55/20 (φ42,5K) |  | 796                                                                       | 953  | 1104 | 1512       |
| n-exponent            |  | 1,31                                                                      | 1,32 | 1,32 | 1,34       |
| Length (mm)           |  | Watt                                                                      | Watt | Watt | Watt       |
| 400                   |  |                                                                           |      |      | <b>609</b> |
| 500                   |  |                                                                           | 476  | 552  | 756        |
| 600                   |  | 478                                                                       | 572  | 662  | 907        |
| 700                   |  |                                                                           | 667  | 773  | 1058       |
| 800                   |  | 637                                                                       | 762  | 883  | 1210       |
| 900                   |  |                                                                           | 858  | 993  | 1361       |
| 1000                  |  | 796                                                                       | 953  | 1104 | 1512       |
| 1200                  |  | 955                                                                       | 1144 | 1325 |            |
| 1400                  |  | 1115                                                                      | 1334 | 1545 |            |
| 1600                  |  | 1274                                                                      | 1525 | 1766 |            |
| 1800                  |  | 1433                                                                      | 1715 | 1987 |            |
| 2000                  |  | 1592                                                                      | 1906 | 2208 |            |
| 2200                  |  | 1751                                                                      | 2097 |      |            |
| 2400                  |  | 1911                                                                      |      |      |            |
| 2800                  |  | 2229                                                                      |      |      |            |

| TYPE 21s            |  | Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |      |
|---------------------|--|---------------------------------------------------------------------------|------|------|------|
| Height (mm)         |  | 400                                                                       | 500  | 600  | 900  |
| W/m 55/45/20 (φ30K) |  | 504                                                                       | 602  | 697  | 948  |
| n-exponent          |  | 1,31                                                                      | 1,32 | 1,32 | 1,34 |
| Length (mm)         |  | Watt                                                                      | Watt | Watt | Watt |
| 400                 |  |                                                                           |      |      | 387  |
| 500                 |  |                                                                           | 301  | 349  | 474  |
| 600                 |  | 303                                                                       | 361  | 418  | 569  |
| 700                 |  |                                                                           | 421  | 488  | 664  |
| 800                 |  | 404                                                                       | 481  | 558  | 759  |
| 900                 |  |                                                                           | 542  | 627  | 853  |
| 1000                |  | 504                                                                       | 602  | 697  | 948  |
| 1200                |  | 605                                                                       | 722  | 836  |      |
| 1400                |  | 706                                                                       | 842  | 976  |      |
| 1600                |  | 807                                                                       | 963  | 1115 |      |
| 1800                |  | 908                                                                       | 1083 | 1255 |      |
| 2000                |  | 1009                                                                      | 1203 | 1394 |      |
| 2200                |  | 1110                                                                      | 1324 |      |      |
| 2400                |  | 1211                                                                      |      |      |      |
| 2800                |  | 1412                                                                      |      |      |      |

## STANDARD

### TYPE 22

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 975  | 1241 | 1494 | 1738 | 1974 | 2429 |
| n-exponent          | 1,28 | 1,30 | 1,33 | 1,34 | 1,35 | 1,36 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      | 598  | 695  | 790  | 972  |
| 500                 | 488  | 621  | 747  | 869  | 987  | 1215 |
| 600                 | 585  | 745  | 896  | 1043 | 1184 | 1457 |
| 700                 |      |      | 1046 | 1217 | 1382 | 1700 |
| 800                 | 780  | 993  | 1195 | 1390 | 1579 | 1943 |
| 900                 |      |      | 1345 | 1564 | 1777 | 2186 |
| 1000                | 975  | 1241 | 1494 | 1738 | 1974 | 2429 |
| 1100                |      |      | 1643 | 1912 |      |      |
| 1200                | 1170 | 1489 | 1793 | 2086 | 2369 | 2915 |
| 1400                | 1365 | 1737 | 2092 | 2433 |      |      |
| 1600                | 1560 | 1986 | 2390 | 2781 |      |      |
| 1800                | 1755 | 2234 | 2689 | 3128 |      |      |
| 2000                | 1950 | 2482 | 2988 | 3476 |      |      |
| 2200                | 2145 | 2730 | 3287 |      |      |      |
| 2400                | 2340 | 2978 | 3586 | 4171 |      |      |
| 2600                | 2535 | 3227 | 3884 | 4519 |      |      |
| 2800                | 2730 | 3475 | 4183 |      |      |      |
| 3000                |      | 3732 | 4482 |      |      |      |

### TYPE 22

Watts 70/55/20 conform EN442-1: 2014: radiatoren en convectoren

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 792  | 1005 | 1204 | 1398 | 1585 | 1947 |
| n-exponent            | 1,28 | 1,30 | 1,33 | 1,34 | 1,35 | 1,36 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      |      | 481  | 559  | 634  | 779  |
| 500                   | 396  | 502  | 602  | 699  | 793  | 974  |
| 600                   | 475  | 603  | 722  | 839  | 951  | 1168 |
| 700                   |      |      | 843  | 979  | 1110 | 1363 |
| 800                   | 634  | 804  | 963  | 1118 | 1268 | 1558 |
| 900                   |      |      | 1083 | 1258 | 1427 | 1753 |
| 1000                  | 792  | 1005 | 1204 | 1398 | 1585 | 1947 |
| 1100                  |      |      | 1324 | 1538 |      |      |
| 1200                  | 950  | 1206 | 1444 | 1677 | 1902 | 2337 |
| 1400                  | 1109 | 1407 | 1685 | 1957 |      |      |
| 1600                  | 1267 | 1607 | 1926 | 2237 |      |      |
| 1800                  | 1425 | 1808 | 2166 | 2516 |      |      |
| 2000                  | 1584 | 2009 | 2407 | 2796 |      |      |
| 2200                  | 1742 | 2210 | 2648 |      |      |      |
| 2400                  | 1901 | 2411 | 2889 | 3355 |      |      |
| 2600                  | 2059 | 2612 | 3129 | 3634 |      |      |
| 2800                  | 2217 | 2813 | 3370 |      |      |      |
| 3000                  |      | 3014 | 3611 |      |      |      |

### TYPE 22

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 507  | 639  | 757  | 877  | 990  | 1213 |
| n-exponent          | 1,28 | 1,30 | 1,33 | 1,34 | 1,35 | 1,36 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      | 303  | 351  | 396  | 485  |
| 500                 | 254  | 319  | 379  | 438  | 495  | 606  |
| 600                 | 304  | 383  | 454  | 526  | 594  | 728  |
| 700                 |      |      | 530  | 614  | 693  | 849  |
| 800                 | 406  | 511  | 606  | 701  | 792  | 970  |
| 900                 |      |      | 682  | 789  | 891  | 1091 |
| 1000                | 507  | 639  | 757  | 877  | 990  | 1213 |
| 1100                |      |      | 833  | 964  |      |      |
| 1200                | 608  | 767  | 909  | 1052 | 1189 | 1455 |
| 1400                | 710  | 894  | 1060 | 1227 |      |      |
| 1600                | 811  | 1022 | 1212 | 1402 |      |      |
| 1800                | 913  | 1150 | 1363 | 1578 |      |      |
| 2000                | 1014 | 1278 | 1515 | 1753 |      |      |
| 2200                | 1115 | 1405 | 1666 |      |      |      |
| 2400                | 1217 | 1533 | 1818 | 2104 |      |      |
| 2600                | 1318 | 1661 | 1969 | 2279 |      |      |
| 2800                | 1420 | 1789 | 2121 |      |      |      |
| 3000                |      | 1916 | 2272 |      |      |      |

## STANDARD

## TYPE 33

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 1365 | 1744 | 2103 | 2444 | 2769 | 3376 |
| n-exponent          | 1,28 | 1,32 | 1,33 | 1,33 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 500                 |      |      | 1052 |      | 1385 | 1688 |
| 600                 |      |      | 1262 | 1466 |      | 2026 |
| 700                 |      |      | 1472 |      | 1938 | 2363 |
| 800                 | 1092 | 1395 | 1682 | 1955 |      | 2701 |
| 1000                |      | 1744 | 2103 | 2444 | 2769 | 3376 |
| 1200                |      | 2093 | 2524 | 2933 |      | 4051 |
| 1400                | 1911 | 2442 | 2944 | 3422 |      |      |
| 1600                | 2184 | 2790 | 3365 | 3910 |      |      |
| 1800                | 2457 | 3139 | 3785 | 4399 |      |      |
| 2000                | 2730 | 3488 | 4206 | 4888 |      |      |
| 2200                | 3003 | 3837 |      |      |      |      |
| 2400                | 3276 | 4186 |      |      |      |      |
| 2600                |      | 4534 |      |      |      |      |
| 2800                | 3822 | 4883 |      |      |      |      |
| 3000                |      | 5232 |      |      |      |      |

## TYPE 33

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 1105 | 1412 | 1702 | 1979 | 2242 | 2733 |
| n-exponent            | 1,28 | 1,32 | 1,33 | 1,33 | 1,33 | 1,34 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 500                   |      |      | 852  |      | 1121 | 1367 |
| 600                   |      |      | 1022 | 1187 |      | 1640 |
| 700                   |      |      | 1192 |      | 1569 | 1913 |
| 800                   | 884  | 1129 | 1362 | 1583 |      | 2187 |
| 1000                  |      | 1412 | 1702 | 1979 | 2242 | 2733 |
| 1200                  |      | 1694 | 2043 | 2374 |      | 3279 |
| 1400                  | 1547 | 1977 | 2383 | 2770 |      |      |
| 1600                  | 1768 | 2259 | 2724 | 3156 |      |      |
| 1800                  | 1989 | 2541 | 3064 | 3561 |      |      |
| 2000                  | 2210 | 2824 | 3405 | 3957 |      |      |
| 2200                  | 2431 | 3106 |      |      |      |      |
| 2400                  | 2652 | 3389 |      |      |      |      |
| 2600                  |      | 3671 |      |      |      |      |
| 2800                  | 3094 | 3953 |      |      |      |      |
| 3000                  |      | 4236 |      |      |      |      |

## TYPE 33

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 703  | 898  | 1083 | 1258 | 1425 | 1738 |
| n-exponent          | 1,28 | 1,32 | 1,33 | 1,33 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 500                 |      |      | 542  |      | 713  | 869  |
| 600                 |      |      | 650  | 755  |      | 1043 |
| 700                 |      |      | 758  |      | 998  | 1216 |
| 800                 | 562  | 718  | 866  | 1006 |      | 1390 |
| 1000                |      | 898  | 1083 | 1258 | 1425 | 1738 |
| 1200                |      | 1077 | 1299 | 1510 |      | 2085 |
| 1400                | 984  | 1257 | 1515 | 1761 |      |      |
| 1600                | 1124 | 1436 | 1732 | 2013 |      |      |
| 1800                | 1265 | 1616 | 1948 | 2264 |      |      |
| 2000                | 1405 | 1795 | 2165 | 2516 |      |      |
| 2200                | 1546 | 1975 |      |      |      |      |
| 2400                | 1686 | 2155 |      |      |      |      |
| 2600                |      | 2334 |      |      |      |      |
| 2800                | 1967 | 2514 |      |      |      |      |
| 3000                |      | 2693 |      |      |      |      |



# Casual

## Collection



NEW

## STANDARD Zn

## TYPE 10

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 900  |
|---------------------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 425  | 514  | 602  | 872  |
| n-exponent          | 1,26 | 1,27 | 1,29 | 1,29 |
| Length (mm)         | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |
| 500                 | 213  | 257  | 301  | 436  |
| 600                 | 255  | 308  | 361  | 523  |
| 700                 |      |      |      |      |
| 800                 | 340  | 411  | 482  | 698  |

## TYPE 10

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 400  | 500  | 600  | 900  |
|-----------------------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 344  | 414  | 483  | 700  |
| n-exponent            | 1,26 | 1,27 | 1,29 | 1,29 |
| Length (mm)           | Watt | Watt | Watt | Watt |
| 400                   |      |      |      |      |
| 500                   | 172  | 207  | 242  | 350  |
| 600                   | 206  | 248  | 290  | 420  |
| 700                   |      |      |      |      |
| 800                   | 275  | 331  | 387  | 560  |

## TYPE 10

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 900  |
|---------------------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 222  | 266  | 309  | 447  |
| n-exponent          | 1,26 | 1,27 | 1,29 | 1,29 |
| Length (mm)         | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |
| 500                 | 111  | 133  | 154  | 223  |
| 600                 | 133  | 160  | 185  | 268  |
| 700                 |      |      |      |      |
| 800                 | 178  | 213  | 247  | 358  |

NEW

## TYPE 11

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 551  | 697  | 840  | 979  | 1117 | 1390 |
| n-exponent          | 1,22 | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      |      | 490  |      | 695  |
| 600                 |      |      |      | 587  |      | 834  |

## TYPE 11

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 448  | 565  | 679  | 789  | 899  | 1114 |
| n-exponent            | 1,22 | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      |      |      |      |      |      |
| 500                   |      |      |      | 394  |      | 557  |
| 600                   |      |      |      | 473  |      | 668  |

## TYPE 11

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 293  | 368  | 439  | 507  | 576  | 708  |
| n-exponent          | 1,22 | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      |      | 254  |      | 354  |
| 600                 |      |      |      | 304  |      | 425  |

## STANDARD Zn

### TYPE 20s

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 600  | 900  |
|---------------------|------|------|------|
| W/m 75/65/20 (φ50K) | 743  | 1025 | 1438 |
| n-exponent          | 1,29 | 1,30 | 1,31 |
| Length (mm)         | Watt | Watt | Watt |
| 400                 |      |      |      |
| 500                 |      | 513  | 719  |
| 600                 |      | 615  | 863  |
| 700                 |      |      |      |
| 800                 | 594  | 820  | 1150 |

### TYPE 20s

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 400  | 600  | 900  |
|-----------------------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 602  | 830  | 1162 |
| n-exponent            | 1,29 | 1,30 | 1,31 |
| Length (mm)           | Watt | Watt | Watt |
| 400                   |      |      |      |
| 500                   |      | 415  | 581  |
| 600                   |      | 498  | 697  |
| 700                   |      |      |      |
| 800                   | 482  | 664  | 930  |

### TYPE 20s

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 600  | 900  |
|---------------------|------|------|------|
| W/m 55/45/20 (φ30K) | 384  | 528  | 736  |
| n-exponent          | 1,29 | 1,30 | 1,31 |
| Length (mm)         | Watt | Watt | Watt |
| 400                 |      |      |      |
| 500                 |      | 264  | 368  |
| 600                 |      | 317  | 442  |
| 700                 |      |      |      |
| 800                 | 308  | 422  | 589  |

### TYPE 21s

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 900  |
|---------------------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 985  | 1181 | 1368 | 1880 |
| n-exponent          | 1,31 | 1,32 | 1,32 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |
| 500                 |      |      | 684  | 940  |
| 600                 |      |      | 821  | 1128 |
| 700                 |      |      |      |      |
| 800                 | 788  |      | 1094 | 1504 |

### TYPE 21s

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 400  | 500  | 600  | 900  |
|-----------------------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 796  | 953  | 1104 | 1512 |
| n-exponent            | 1,31 | 1,32 | 1,32 | 1,34 |
| Length (mm)           | Watt | Watt | Watt | Watt |
| 400                   |      |      |      |      |
| 500                   |      |      | 552  | 756  |
| 600                   |      |      | 662  | 907  |
| 700                   |      |      |      |      |
| 800                   | 637  |      | 883  | 1210 |

### TYPE 21s

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 900  |
|---------------------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 504  | 602  | 697  | 948  |
| n-exponent          | 1,31 | 1,32 | 1,32 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |
| 500                 |      |      | 349  | 474  |
| 600                 |      |      | 418  | 569  |
| 700                 |      |      |      |      |
| 800                 | 404  |      | 558  | 759  |

## STANDARD Zn

TYPE 22

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 975  | 1241 | 1494 | 1738 | 1974 | 2429 |
| n-exponent          | 1,28 | 1,30 | 1,33 | 1,34 | 1,35 | 1,36 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      |      |      | 987  | 1215 |
| 600                 |      |      |      | 1043 | 1184 | 1457 |
| 700                 |      |      |      |      | 1382 | 1700 |
| 800                 |      |      |      | 1390 | 1579 | 1943 |

TYPE 22

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 792  | 1005 | 1204 | 1398 | 1585 | 1947 |
| n-exponent            | 1,28 | 1,30 | 1,33 | 1,34 | 1,35 | 1,36 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      |      |      |      |      |      |
| 500                   |      |      |      |      | 793  | 974  |
| 600                   |      |      |      | 839  | 951  | 1168 |
| 700                   |      |      |      |      | 1110 | 1363 |
| 800                   |      |      |      | 1118 | 1268 | 1558 |

TYPE 22

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 507  | 639  | 757  | 877  | 990  | 1213 |
| n-exponent          | 1,28 | 1,30 | 1,33 | 1,34 | 1,35 | 1,36 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      |      |      | 495  | 606  |
| 600                 |      |      |      | 526  | 594  | 728  |
| 700                 |      |      |      |      | 693  | 849  |
| 800                 |      |      |      | 701  | 792  | 970  |

# Casual

## Collection

### Compact 4





## COMPACT 4

## TYPE 11

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 697  | 840  | 979  | 1117 | 1390 |
| n-exponent          | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt |
| 400                 | 279  | 336  | 392  | 447  | 556  |
| 500                 | 349  | 420  | 490  | 559  | 695  |
| 600                 | 418  | 504  | 587  | 670  | 834  |
| 700                 | 488  | 588  | 685  | 782  | 973  |
| 800                 | 558  | 672  | 783  | 894  | 1112 |
| 900                 | 627  | 756  | 881  | 1005 | 1251 |
| 1000                | 697  | 840  | 979  | 1117 | 1390 |
| 1100                | 767  | 924  | 1077 | 1229 | 1529 |
| 1200                | 836  | 1008 | 1175 | 1340 | 1668 |
| 1300                | 906  | 1092 | 1273 | 1452 | 1807 |
| 1400                | 976  | 1176 | 1371 | 1564 | 1946 |
| 1600                | 1115 | 1344 | 1567 | 1787 | 2224 |
| 1800                | 1255 | 1512 | 1762 | 2011 | 2502 |
| 2000                | 1394 | 1680 | 1958 | 2234 | 2780 |

## TYPE 11

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 565  | 679  | 789  | 899  | 1114 |
| n-exponent            | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt |
| 400                   | 226  | 272  | 316  | 359  | 446  |
| 500                   | 283  | 339  | 394  | 449  | 557  |
| 600                   | 339  | 407  | 473  | 539  | 668  |
| 700                   | 396  | 475  | 552  | 629  | 780  |
| 800                   | 452  | 543  | 631  | 719  | 891  |
| 900                   | 509  | 611  | 710  | 809  | 1003 |
| 1000                  | 565  | 679  | 789  | 899  | 1114 |
| 1100                  | 622  | 747  | 868  | 988  | 1225 |
| 1200                  | 678  | 815  | 947  | 1078 | 1337 |
| 1300                  | 735  | 883  | 1026 | 1168 | 1448 |
| 1400                  | 791  | 951  | 1105 | 1258 | 1560 |
| 1600                  | 904  | 1086 | 1262 | 1438 | 1783 |
| 1800                  | 1017 | 1222 | 1420 | 1617 | 2005 |
| 2000                  | 1130 | 1358 | 1578 | 1797 | 2228 |

## TYPE 11

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 368  | 439  | 507  | 576  | 708  |
| n-exponent          | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt |
| 400                 | 147  | 176  | 203  | 230  | 283  |
| 500                 | 184  | 220  | 254  | 288  | 354  |
| 600                 | 221  | 264  | 304  | 345  | 425  |
| 700                 | 257  | 307  | 355  | 403  | 496  |
| 800                 | 294  | 351  | 406  | 460  | 567  |
| 900                 | 331  | 395  | 457  | 518  | 638  |
| 1000                | 368  | 439  | 507  | 576  | 708  |
| 1100                | 405  | 483  | 558  | 633  | 779  |
| 1200                | 441  | 527  | 609  | 691  | 850  |
| 1300                | 478  | 571  | 660  | 748  | 921  |
| 1400                | 515  | 615  | 710  | 806  | 992  |
| 1600                | 588  | 703  | 812  | 921  | 1133 |
| 1800                | 662  | 791  | 913  | 1036 | 1275 |
| 2000                | 736  | 878  | 1015 | 1151 | 1417 |

## COMPACT 4

| TYPE 21s            |  | Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |      |      |
|---------------------|--|---------------------------------------------------------------------------|------|------|------|------|
| Height (mm)         |  | 300                                                                       | 400  | 500  | 600  | 700  |
| W/m 75/65/20 (φ50K) |  | 755                                                                       | 953  | 1141 | 1322 | 1499 |
| n-exponent          |  | 1,31                                                                      | 1,31 | 1,32 | 1,32 | 1,32 |
| Length (mm)         |  | Watt                                                                      | Watt | Watt | Watt | Watt |
| 400                 |  |                                                                           | 381  | 456  | 529  | 600  |
| 500                 |  | 378                                                                       | 477  | 571  | 661  | 750  |
| 600                 |  | 453                                                                       | 572  | 685  | 793  | 899  |
| 700                 |  |                                                                           | 667  | 799  | 925  | 1049 |
| 800                 |  | 604                                                                       | 762  | 913  | 1058 | 1199 |
| 900                 |  |                                                                           | 858  | 1027 | 1190 | 1349 |
| 1000                |  |                                                                           | 953  | 1141 | 1322 | 1499 |
| 1200                |  |                                                                           | 1144 | 1369 | 1586 | 1799 |
| 1400                |  |                                                                           | 1334 | 1597 | 1851 | 2099 |
| 1600                |  |                                                                           | 1525 | 1826 | 2115 | 2398 |
| 1800                |  |                                                                           | 1715 | 2054 | 2380 | 2698 |
| 2000                |  |                                                                           | 1906 | 2282 | 2644 | 2998 |
| 2200                |  |                                                                           | 2097 | 2510 | 2908 |      |
| 2400                |  |                                                                           | 2287 | 2738 | 3173 |      |
| 2600                |  |                                                                           | 2478 | 2967 | 3437 |      |
| 2800                |  |                                                                           | 2668 | 3195 | 3702 |      |
| 3000                |  |                                                                           | 2859 | 3423 | 3966 |      |

| TYPE 21s              |  | Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |      |      |
|-----------------------|--|---------------------------------------------------------------------------|------|------|------|------|
| Height (mm)           |  | 300                                                                       | 400  | 500  | 600  | 700  |
| W/m 70/55/20 (φ42,5K) |  | 610                                                                       | 770  | 921  | 1067 | 1210 |
| n-exponent            |  | 1,31                                                                      | 1,31 | 1,32 | 1,32 | 1,32 |
| Length (mm)           |  | Watt                                                                      | Watt | Watt | Watt | Watt |
| 400                   |  |                                                                           | 308  | 368  | 427  | 484  |
| 500                   |  | 305                                                                       | 385  | 460  | 533  | 605  |
| 600                   |  | 366                                                                       | 462  | 552  | 640  | 726  |
| 700                   |  |                                                                           | 539  | 644  | 747  | 847  |
| 800                   |  | 488                                                                       | 616  | 737  | 853  | 968  |
| 900                   |  |                                                                           | 693  | 829  | 960  | 1089 |
| 1000                  |  |                                                                           | 770  | 921  | 1067 | 1210 |
| 1200                  |  |                                                                           | 924  | 1105 | 1280 | 1451 |
| 1400                  |  |                                                                           | 1078 | 1289 | 1493 | 1693 |
| 1600                  |  |                                                                           | 1232 | 1473 | 1707 | 1935 |
| 1800                  |  |                                                                           | 1386 | 1657 | 1920 | 2177 |
| 2000                  |  |                                                                           | 1540 | 1841 | 2134 | 2419 |
| 2200                  |  |                                                                           | 1695 | 2026 | 2347 |      |
| 2400                  |  |                                                                           | 1849 | 2210 | 2560 |      |
| 2600                  |  |                                                                           | 2003 | 2394 | 2774 |      |
| 2800                  |  |                                                                           | 2157 | 2578 | 2987 |      |
| 3000                  |  |                                                                           | 2311 | 2762 | 3200 |      |

| TYPE 21s            |  | Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |      |      |
|---------------------|--|---------------------------------------------------------------------------|------|------|------|------|
| Height (mm)         |  | 300                                                                       | 400  | 500  | 600  | 700  |
| W/m 55/45/20 (φ30K) |  | 387                                                                       | 488  | 581  | 674  | 764  |
| n-exponent          |  | 1,31                                                                      | 1,31 | 1,32 | 1,32 | 1,32 |
| Length (mm)         |  | Watt                                                                      | Watt | Watt | Watt | Watt |
| 400                 |  |                                                                           | 195  | 233  | 269  | 306  |
| 500                 |  | 193                                                                       | 244  | 291  | 337  | 382  |
| 600                 |  | 232                                                                       | 293  | 349  | 404  | 458  |
| 700                 |  |                                                                           | 342  | 407  | 472  | 535  |
| 800                 |  | 309                                                                       | 390  | 465  | 539  | 611  |
| 900                 |  |                                                                           | 439  | 523  | 606  | 687  |
| 1000                |  |                                                                           | 488  | 581  | 674  | 764  |
| 1200                |  |                                                                           | 586  | 698  | 808  | 917  |
| 1400                |  |                                                                           | 683  | 814  | 943  | 1069 |
| 1600                |  |                                                                           | 781  | 930  | 1078 | 1222 |
| 1800                |  |                                                                           | 879  | 1046 | 1212 | 1375 |
| 2000                |  |                                                                           | 976  | 1163 | 1347 | 1528 |
| 2200                |  |                                                                           | 1074 | 1279 | 1482 |      |
| 2400                |  |                                                                           | 1171 | 1395 | 1617 |      |
| 2600                |  |                                                                           | 1269 | 1512 | 1751 |      |
| 2800                |  |                                                                           | 1367 | 1628 | 1886 |      |
| 3000                |  |                                                                           | 1464 | 1744 | 2021 |      |



## COMPACT 4

## TYPE 22

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 942  | 1202 | 1449 | 1683 | 1907 | 2326 |
| n-exponent          | 1,31 | 1,32 | 1,32 | 1,33 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      | 481  | 580  | 673  | 763  | 930  |
| 500                 | 471  | 601  | 725  | 842  | 954  | 1163 |
| 600                 | 565  | 721  | 869  | 1010 | 1144 | 1396 |
| 700                 | 659  | 841  | 1014 | 1178 | 1335 | 1628 |
| 800                 | 754  | 962  | 1159 | 1346 | 1526 | 1861 |
| 900                 | 848  | 1082 | 1304 | 1515 | 1716 | 2093 |
| 1000                | 942  | 1202 | 1449 | 1683 | 1907 | 2326 |
| 1100                | 1036 | 1322 | 1594 | 1851 | 2098 | 2559 |
| 1200                | 1130 | 1442 | 1739 | 2020 | 2288 | 2791 |
| 1300                | 1225 | 1563 | 1884 | 2188 | 2479 | 3024 |
| 1400                | 1319 | 1683 | 2029 | 2356 | 2670 | 3256 |
| 1600                | 1507 | 1923 | 2318 | 2693 | 3051 | 3722 |
| 1800                | 1696 | 2164 | 2608 | 3029 | 3433 | 4187 |
| 2000                | 1884 | 2404 | 2898 | 3366 | 3814 | 4652 |
| 2200                | 2072 | 2644 | 3188 | 3703 |      |      |
| 2400                | 2261 | 2885 | 3478 | 4039 |      |      |
| 2600                | 2449 | 3125 | 3767 | 4376 |      |      |
| 2800                | 2638 | 3366 | 4057 | 4712 |      |      |
| 3000                | 2826 | 3606 | 4347 | 5049 |      |      |

## TYPE 22

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 761  | 970  | 1169 | 1356 | 1536 | 1871 |
| n-exponent            | 1,31 | 1,32 | 1,32 | 1,33 | 1,33 | 1,34 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      | 388  | 468  | 542  | 615  | 748  |
| 500                   | 381  | 485  | 585  | 678  | 768  | 935  |
| 600                   | 457  | 582  | 702  | 814  | 922  | 1122 |
| 700                   | 533  | 679  | 818  | 949  | 1075 | 1310 |
| 800                   | 609  | 776  | 935  | 1085 | 1229 | 1497 |
| 900                   | 685  | 873  | 1052 | 1220 | 1383 | 1684 |
| 1000                  | 761  | 970  | 1169 | 1356 | 1536 | 1871 |
| 1100                  | 837  | 1067 | 1286 | 1491 | 1690 | 2058 |
| 1200                  | 914  | 1164 | 1403 | 1627 | 1844 | 2245 |
| 1300                  | 990  | 1261 | 1520 | 1763 | 1997 | 2432 |
| 1400                  | 1066 | 1358 | 1637 | 1898 | 2151 | 2619 |
| 1600                  | 1218 | 1552 | 1871 | 2169 | 2458 | 2993 |
| 1800                  | 1370 | 1746 | 2105 | 2441 | 2765 | 3367 |
| 2000                  | 1523 | 1940 | 2338 | 2712 | 3073 | 3742 |
| 2200                  | 1675 | 2134 | 2572 | 2983 |      |      |
| 2400                  | 1827 | 2328 | 2806 | 3254 |      |      |
| 2600                  | 1980 | 2522 | 3040 | 3525 |      |      |
| 2800                  | 2132 | 2716 | 3274 | 3796 |      |      |
| 3000                  | 2284 | 2910 | 3508 | 4068 |      |      |

## TYPE 22

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 482  | 612  | 738  | 853  | 967  | 1173 |
| n-exponent          | 1,31 | 1,32 | 1,32 | 1,33 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      | 245  | 295  | 341  | 387  | 469  |
| 500                 | 241  | 306  | 369  | 427  | 483  | 587  |
| 600                 | 289  | 367  | 443  | 512  | 580  | 704  |
| 700                 | 338  | 429  | 517  | 597  | 677  | 821  |
| 800                 | 386  | 490  | 591  | 683  | 773  | 938  |
| 900                 | 434  | 551  | 664  | 768  | 870  | 1056 |
| 1000                | 482  | 612  | 738  | 853  | 967  | 1173 |
| 1100                | 531  | 674  | 812  | 938  | 1063 | 1290 |
| 1200                | 579  | 735  | 886  | 1024 | 1160 | 1408 |
| 1300                | 627  | 796  | 960  | 1109 | 1257 | 1525 |
| 1400                | 675  | 857  | 1034 | 1194 | 1353 | 1642 |
| 1600                | 772  | 980  | 1181 | 1365 | 1547 | 1877 |
| 1800                | 868  | 1102 | 1329 | 1536 | 1740 | 2112 |
| 2000                | 965  | 1225 | 1477 | 1706 | 1933 | 2346 |
| 2200                | 1061 | 1347 | 1624 | 1877 |      |      |
| 2400                | 1158 | 1470 | 1772 | 2048 |      |      |
| 2600                | 1254 | 1592 | 1920 | 2218 |      |      |
| 2800                | 1351 | 1715 | 2067 | 2389 |      |      |
| 3000                | 1447 | 1837 | 2215 | 2559 |      |      |

## COMPACT 4

### TYPE 33

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 1319 | 1679 | 2020 | 2345 | 2657 | 3248 |
| n-exponent          | 1,29 | 1,30 | 1,31 | 1,32 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      | 1063 | 1299 |
| 500                 |      |      | 1010 | 1173 | 1329 | 1624 |
| 600                 |      | 1007 | 1212 | 1407 | 1594 | 1949 |
| 700                 |      | 1175 | 1414 | 1642 | 1860 | 2274 |
| 800                 | 1055 | 1343 | 1616 | 1876 | 2126 | 2598 |
| 900                 | 1187 | 1511 | 1818 | 2111 | 2391 | 2923 |
| 1000                | 1319 | 1679 | 2020 | 2345 | 2657 | 3248 |
| 1100                | 1451 | 1847 | 2222 | 2580 | 2923 | 3573 |
| 1200                | 1583 | 2015 | 2424 | 2814 | 3188 | 3898 |
| 1300                | 1715 | 2183 | 2626 | 3049 | 3454 | 4222 |
| 1400                | 1847 | 2351 | 2828 | 3283 | 3720 | 4547 |
| 1600                | 2110 | 2686 | 3232 | 3752 | 4251 | 5197 |
| 1800                | 2374 | 3022 | 3636 | 4221 | 4783 | 5846 |
| 2000                | 2638 | 3358 | 4040 | 4690 | 5314 | 6496 |
| 2200                | 2902 | 3694 | 4444 | 5159 |      |      |
| 2400                | 3166 | 4030 | 4848 | 5628 |      |      |
| 2600                | 3429 | 4365 | 5252 | 6097 |      |      |
| 2800                | 3693 | 4701 | 5656 | 6566 |      |      |
| 3000                | 3957 | 5037 | 6060 | 7035 |      |      |

### TYPE 33

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 1068 | 1359 | 1635 | 1898 | 2151 | 2629 |
| n-exponent            | 1,29 | 1,30 | 1,31 | 1,32 | 1,33 | 1,34 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      |      |      |      | 861  | 1052 |
| 500                   |      |      | 818  | 950  | 1076 | 1315 |
| 600                   |      | 815  | 981  | 1139 | 1290 | 1578 |
| 700                   |      | 951  | 1145 | 1329 | 1506 | 1841 |
| 800                   | 854  | 1087 | 1308 | 1519 | 1721 | 2103 |
| 900                   | 961  | 1223 | 1472 | 1709 | 1936 | 2366 |
| 1000                  | 1068 | 1359 | 1635 | 1898 | 2151 | 2629 |
| 1100                  | 1175 | 1495 | 1799 | 2089 | 2366 | 2893 |
| 1200                  | 1282 | 1631 | 1962 | 2278 | 2581 | 3156 |
| 1300                  | 1388 | 1767 | 2126 | 2468 | 2796 | 3418 |
| 1400                  | 1495 | 1903 | 2289 | 2658 | 3012 | 3681 |
| 1600                  | 1708 | 2174 | 2616 | 3037 | 3441 | 4207 |
| 1800                  | 1922 | 2446 | 2944 | 3417 | 3872 | 4733 |
| 2000                  | 2136 | 2718 | 3271 | 3797 | 4302 | 5259 |
| 2200                  | 2349 | 2990 | 3598 | 4176 |      |      |
| 2400                  | 2563 | 3262 | 3925 | 4556 |      |      |
| 2600                  | 2776 | 3534 | 4252 | 4936 |      |      |
| 2800                  | 2990 | 3806 | 4579 | 5316 |      |      |
| 3000                  | 3203 | 4078 | 4906 | 5695 |      |      |

### TYPE 33

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 679  | 864  | 1040 | 1207 | 1368 | 1672 |
| n-exponent          | 1,29 | 1,30 | 1,31 | 1,32 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      | 547  | 669  |
| 500                 |      |      | 520  | 604  | 684  | 836  |
| 600                 |      | 518  | 624  | 724  | 821  | 1003 |
| 700                 |      | 605  | 728  | 845  | 957  | 1171 |
| 800                 | 543  | 691  | 832  | 966  | 1094 | 1337 |
| 900                 | 611  | 778  | 936  | 1087 | 1231 | 1505 |
| 1000                | 679  | 864  | 1040 | 1207 | 1368 | 1672 |
| 1100                | 747  | 951  | 1144 | 1328 | 1505 | 1839 |
| 1200                | 815  | 1037 | 1248 | 1449 | 1641 | 2006 |
| 1300                | 883  | 1124 | 1352 | 1569 | 1778 | 2173 |
| 1400                | 951  | 1210 | 1456 | 1690 | 1915 | 2341 |
| 1600                | 1086 | 1383 | 1664 | 1931 | 2188 | 2675 |
| 1800                | 1222 | 1556 | 1872 | 2173 | 2462 | 3009 |
| 2000                | 1358 | 1729 | 2080 | 2414 | 2735 | 3344 |
| 2200                | 1494 | 1901 | 2288 | 2656 |      |      |
| 2400                | 1630 | 2074 | 2496 | 2897 |      |      |
| 2600                | 1765 | 2247 | 2703 | 3138 |      |      |
| 2800                | 1901 | 2420 | 2911 | 3380 |      |      |
| 3000                | 2037 | 2593 | 3119 | 3621 |      |      |



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## TYPE 11

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 697  | 840  | 979  | 1117 | 1390 |
| n-exponent          | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt |
| 400                 | 279  | 336  | 392  | 447  | 556  |
| 500                 | 349  | 420  | 490  | 559  | 695  |
| 600                 | 418  | 504  | 587  | 670  | 834  |
| 700                 | 488  | 588  | 685  | 782  | 973  |
| 800                 | 558  | 672  | 783  | 894  | 1112 |
| 900                 | 627  | 756  | 881  | 1005 | 1251 |
| 1000                | 697  | 840  | 979  | 1117 | 1390 |
| 1100                | 767  | 924  | 1077 | 1229 | 1529 |
| 1200                | 836  | 1008 | 1175 | 1340 | 1668 |
| 1300                | 906  | 1092 | 1273 | 1452 | 1807 |
| 1400                | 976  | 1176 | 1371 | 1564 | 1946 |
| 1600                | 1115 | 1344 | 1567 | 1787 | 2224 |
| 1800                | 1255 | 1512 | 1762 | 2011 | 2502 |
| 2000                | 1394 | 1680 | 1958 | 2234 | 2780 |

## TYPE 11

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 565  | 679  | 789  | 899  | 1114 |
| n-exponent            | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt |
| 400                   | 226  | 272  | 316  | 359  | 446  |
| 500                   | 283  | 339  | 394  | 449  | 557  |
| 600                   | 339  | 407  | 473  | 539  | 668  |
| 700                   | 396  | 475  | 552  | 629  | 780  |
| 800                   | 452  | 543  | 631  | 719  | 891  |
| 900                   | 509  | 611  | 710  | 809  | 1003 |
| 1000                  | 565  | 679  | 789  | 899  | 1114 |
| 1100                  | 622  | 747  | 868  | 988  | 1225 |
| 1200                  | 678  | 815  | 947  | 1078 | 1337 |
| 1300                  | 735  | 883  | 1026 | 1168 | 1448 |
| 1400                  | 791  | 951  | 1105 | 1258 | 1560 |
| 1600                  | 904  | 1086 | 1262 | 1438 | 1783 |
| 1800                  | 1017 | 1222 | 1420 | 1617 | 2005 |
| 2000                  | 1130 | 1358 | 1578 | 1797 | 2228 |

## TYPE 11

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 368  | 439  | 507  | 576  | 708  |
| n-exponent          | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt |
| 400                 | 147  | 176  | 203  | 230  | 283  |
| 500                 | 184  | 220  | 254  | 288  | 354  |
| 600                 | 221  | 264  | 304  | 345  | 425  |
| 700                 | 257  | 307  | 355  | 403  | 496  |
| 800                 | 294  | 351  | 406  | 460  | 567  |
| 900                 | 331  | 395  | 457  | 518  | 638  |
| 1000                | 368  | 439  | 507  | 576  | 708  |
| 1100                | 405  | 483  | 558  | 633  | 779  |
| 1200                | 441  | 527  | 609  | 691  | 850  |
| 1300                | 478  | 571  | 660  | 748  | 921  |
| 1400                | 515  | 615  | 710  | 806  | 992  |
| 1600                | 588  | 703  | 812  | 921  | 1133 |
| 1800                | 662  | 791  | 913  | 1036 | 1275 |
| 2000                | 736  | 878  | 1015 | 1151 | 1417 |

## UNI 6

### TYPE 21s

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 953  | 1141 | 1322 | 1499 | 1841 |
| n-exponent          | 1,31 | 1,32 | 1,32 | 1,32 | 1,33 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt |
| 400                 | 381  | 456  | 529  | 600  | 736  |
| 500                 | 477  | 571  | 661  | 750  | 921  |
| 600                 | 572  | 685  | 793  | 899  | 1105 |
| 700                 | 667  | 799  | 925  | 1049 | 1289 |
| 800                 | 762  | 913  | 1058 | 1199 | 1473 |
| 900                 | 858  | 1027 | 1190 | 1349 | 1657 |
| 1000                | 953  | 1141 | 1322 | 1499 | 1841 |
| 1100                | 1048 | 1255 | 1454 | 1649 | 2025 |
| 1200                | 1144 | 1369 | 1586 | 1799 | 2209 |
| 1300                | 1239 | 1483 | 1719 | 1949 | 2393 |
| 1400                | 1334 | 1597 | 1851 | 2099 | 2577 |
| 1600                | 1525 | 1826 | 2115 | 2398 | 2946 |
| 1800                | 1715 | 2054 | 2380 | 2698 | 3314 |
| 2000                | 1906 | 2282 | 2644 | 2998 | 3682 |
| 2200                | 2097 | 2510 | 2908 |      |      |
| 2400                | 2287 | 2738 | 3173 |      |      |
| 2600                | 2478 | 2967 | 3437 |      |      |
| 2800                | 2668 | 3195 | 3702 |      |      |
| 3000                | 2859 | 3423 | 3966 |      |      |

### TYPE 21s

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 770  | 921  | 1067 | 1210 | 1483 |
| n-exponent            | 1,31 | 1,32 | 1,32 | 1,32 | 1,33 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt |
| 400                   | 308  | 368  | 427  | 484  | 593  |
| 500                   | 385  | 460  | 533  | 605  | 742  |
| 600                   | 462  | 552  | 640  | 726  | 890  |
| 700                   | 539  | 644  | 747  | 847  | 1038 |
| 800                   | 616  | 737  | 853  | 968  | 1187 |
| 900                   | 693  | 829  | 960  | 1089 | 1335 |
| 1000                  | 770  | 921  | 1067 | 1210 | 1483 |
| 1100                  | 847  | 1013 | 1173 | 1331 | 1631 |
| 1200                  | 924  | 1105 | 1280 | 1451 | 1780 |
| 1300                  | 1001 | 1197 | 1387 | 1572 | 1928 |
| 1400                  | 1078 | 1289 | 1493 | 1693 | 2076 |
| 1600                  | 1232 | 1473 | 1707 | 1935 | 2373 |
| 1800                  | 1386 | 1657 | 1920 | 2177 | 2670 |
| 2000                  | 1540 | 1841 | 2134 | 2419 | 2966 |
| 2200                  | 1695 | 2026 | 2347 |      |      |
| 2400                  | 1849 | 2210 | 2560 |      |      |
| 2600                  | 2003 | 2394 | 2774 |      |      |
| 2800                  | 2157 | 2578 | 2987 |      |      |
| 3000                  | 2311 | 2762 | 3200 |      |      |

### TYPE 21s

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 488  | 581  | 674  | 764  | 933  |
| n-exponent          | 1,31 | 1,32 | 1,32 | 1,32 | 1,33 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt |
| 400                 | 195  | 233  | 269  | 306  | 373  |
| 500                 | 244  | 291  | 337  | 382  | 467  |
| 600                 | 293  | 349  | 404  | 458  | 560  |
| 700                 | 342  | 407  | 472  | 535  | 653  |
| 800                 | 390  | 465  | 539  | 611  | 747  |
| 900                 | 439  | 523  | 606  | 687  | 840  |
| 1000                | 488  | 581  | 674  | 764  | 933  |
| 1100                | 537  | 639  | 741  | 840  | 1027 |
| 1200                | 586  | 698  | 808  | 917  | 1120 |
| 1300                | 634  | 756  | 876  | 993  | 1213 |
| 1400                | 683  | 814  | 943  | 1069 | 1307 |
| 1600                | 781  | 930  | 1078 | 1222 | 1493 |
| 1800                | 879  | 1046 | 1212 | 1375 | 1680 |
| 2000                | 976  | 1163 | 1347 | 1528 | 1866 |
| 2200                | 1074 | 1279 | 1482 |      |      |
| 2400                | 1171 | 1395 | 1617 |      |      |
| 2600                | 1269 | 1512 | 1751 |      |      |
| 2800                | 1367 | 1628 | 1886 |      |      |
| 3000                | 1464 | 1744 | 2021 |      |      |

## UNI 6

## TYPE 22

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 942  | 1202 | 1449 | 1683 | 1907 | 2326 |
| n-exponent          | 1,31 | 1,32 | 1,32 | 1,33 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | watt |
| 400                 |      | 481  | 580  | 673  | 763  | 930  |
| 500                 | 471  | 601  | 725  | 842  | 954  | 1163 |
| 600                 | 565  | 721  | 869  | 1010 | 1144 | 1396 |
| 700                 | 659  | 841  | 1014 | 1178 | 1335 | 1628 |
| 800                 | 754  | 962  | 1159 | 1346 | 1526 | 1861 |
| 900                 | 848  | 1082 | 1304 | 1515 | 1716 | 2093 |
| 1000                | 942  | 1202 | 1449 | 1683 | 1907 | 2326 |
| 1100                | 1036 | 1322 | 1594 | 1851 | 2098 | 2559 |
| 1200                | 1130 | 1442 | 1739 | 2020 | 2288 | 2791 |
| 1300                | 1225 | 1563 | 1884 | 2188 | 2479 | 3024 |
| 1400                | 1319 | 1683 | 2029 | 2356 | 2670 | 3256 |
| 1600                | 1507 | 1923 | 2318 | 2693 | 3051 | 3722 |
| 1800                | 1696 | 2164 | 2608 | 3029 | 3433 | 4187 |
| 2000                | 1884 | 2404 | 2898 | 3366 | 3814 | 4652 |
| 2200                | 2072 | 2644 | 3188 | 3703 |      |      |
| 2400                | 2261 | 2885 | 3478 | 4039 |      |      |
| 2600                | 2449 | 3125 | 3767 | 4376 |      |      |
| 2800                | 2638 | 3366 | 4057 | 4712 |      |      |
| 3000                | 2826 | 3606 | 4347 | 5049 |      |      |

## TYPE 22

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 761  | 970  | 1169 | 1356 | 1536 | 1871 |
| n-exponent            | 1,31 | 1,32 | 1,32 | 1,33 | 1,33 | 1,34 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | watt |
| 400                   |      | 388  | 468  | 542  | 615  | 748  |
| 500                   | 381  | 485  | 585  | 678  | 768  | 935  |
| 600                   | 457  | 582  | 702  | 814  | 922  | 1122 |
| 700                   | 533  | 679  | 818  | 949  | 1075 | 1310 |
| 800                   | 609  | 776  | 935  | 1085 | 1229 | 1497 |
| 900                   | 685  | 873  | 1052 | 1220 | 1383 | 1684 |
| 1000                  | 761  | 970  | 1169 | 1356 | 1536 | 1871 |
| 1100                  | 837  | 1067 | 1286 | 1491 | 1690 | 2058 |
| 1200                  | 914  | 1164 | 1403 | 1627 | 1844 | 2245 |
| 1300                  | 990  | 1261 | 1520 | 1763 | 1997 | 2432 |
| 1400                  | 1066 | 1358 | 1637 | 1898 | 2151 | 2619 |
| 1600                  | 1218 | 1552 | 1871 | 2169 | 2458 | 2993 |
| 1800                  | 1370 | 1746 | 2105 | 2441 | 2765 | 3367 |
| 2000                  | 1523 | 1940 | 2338 | 2712 | 3073 | 3742 |
| 2200                  | 1675 | 2134 | 2572 | 2983 |      |      |
| 2400                  | 1827 | 2328 | 2806 | 3254 |      |      |
| 2600                  | 1980 | 2522 | 3040 | 3525 |      |      |
| 2800                  | 2132 | 2716 | 3274 | 3796 |      |      |
| 3000                  | 2284 | 2910 | 3508 | 4068 |      |      |

## TYPE 22

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 482  | 612  | 738  | 853  | 967  | 1173 |
| n-exponent          | 1,31 | 1,32 | 1,32 | 1,33 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | watt |
| 400                 |      | 245  | 295  | 341  | 387  | 469  |
| 500                 | 241  | 306  | 369  | 427  | 483  | 587  |
| 600                 | 289  | 367  | 443  | 512  | 580  | 704  |
| 700                 | 338  | 429  | 517  | 597  | 677  | 821  |
| 800                 | 386  | 490  | 591  | 683  | 773  | 938  |
| 900                 | 434  | 551  | 664  | 768  | 870  | 1056 |
| 1000                | 482  | 612  | 738  | 853  | 967  | 1173 |
| 1100                | 531  | 674  | 812  | 938  | 1063 | 1290 |
| 1200                | 579  | 735  | 886  | 1024 | 1160 | 1408 |
| 1300                | 627  | 796  | 960  | 1109 | 1257 | 1525 |
| 1400                | 675  | 857  | 1034 | 1194 | 1353 | 1642 |
| 1600                | 772  | 980  | 1181 | 1365 | 1547 | 1877 |
| 1800                | 868  | 1102 | 1329 | 1536 | 1740 | 2112 |
| 2000                | 965  | 1225 | 1477 | 1706 | 1933 | 2346 |
| 2200                | 1061 | 1347 | 1624 | 1877 |      |      |
| 2400                | 1158 | 1470 | 1772 | 2048 |      |      |
| 2600                | 1254 | 1592 | 1920 | 2218 |      |      |
| 2800                | 1351 | 1715 | 2067 | 2389 |      |      |
| 3000                | 1447 | 1837 | 2215 | 2559 |      |      |

## UNI 6

### TYPE 33

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 1334 | 1700 | 2048 | 2379 | 2696 | 3297 |
| n-exponent          | 1,29 | 1,30 | 1,31 | 1,32 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      | 1024 | 1190 | 1348 | 1649 |
| 600                 |      | 1020 | 1229 | 1427 | 1618 | 1978 |
| 700                 |      | 1190 | 1434 | 1665 | 1887 | 2308 |
| 800                 | 1067 | 1360 | 1638 | 1903 | 2157 | 2638 |
| 900                 | 1201 | 1530 | 1843 | 2141 | 2426 | 2967 |
| 1000                | 1334 | 1700 | 2048 | 2379 | 2696 | 3297 |
| 1100                | 1467 | 1870 | 2253 | 2617 | 2966 | 3627 |
| 1200                | 1601 | 2040 | 2458 | 2855 | 3235 | 3956 |
| 1300                | 1734 | 2210 | 2662 | 3093 | 3505 | 4286 |
| 1400                | 1868 | 2380 | 2867 | 3331 | 3774 | 4616 |
| 1600                | 2134 | 2720 | 3277 | 3806 | 4314 | 5275 |
| 1800                | 2401 | 3060 | 3686 | 4282 | 4853 | 5935 |
| 2000                | 2668 | 3400 | 4096 | 4758 | 5392 | 6594 |
| 2200                | 2935 | 3740 | 4506 | 5234 |      |      |
| 2400                | 3202 | 4080 | 4915 | 5710 |      |      |
| 2600                | 3468 | 4420 | 5325 | 6185 |      |      |
| 2800                | 3735 | 4760 | 5734 | 6661 |      |      |
| 3000                | 4002 | 5100 | 6144 | 7137 |      |      |

### TYPE 33

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 1082 | 1376 | 1655 | 1920 | 2172 | 2652 |
| n-exponent            | 1,29 | 1,30 | 1,31 | 1,32 | 1,33 | 1,34 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | watt |
| 400                   |      |      |      |      |      |      |
| 500                   |      |      | 828  | 960  | 1086 | 1326 |
| 600                   |      | 826  | 993  | 1152 | 1303 | 1591 |
| 700                   |      | 963  | 1159 | 1344 | 1520 | 1856 |
| 800                   | 865  | 1101 | 1324 | 1536 | 1738 | 2121 |
| 900                   | 974  | 1239 | 1490 | 1728 | 1955 | 2387 |
| 1000                  | 1082 | 1376 | 1655 | 1920 | 2172 | 2652 |
| 1100                  | 1190 | 1514 | 1821 | 2112 | 2389 | 2917 |
| 1200                  | 1298 | 1651 | 1986 | 2304 | 2606 | 3182 |
| 1300                  | 1406 | 1789 | 2152 | 2496 | 2824 | 3447 |
| 1400                  | 1514 | 1927 | 2317 | 2688 | 3041 | 3713 |
| 1600                  | 1731 | 2202 | 2648 | 3071 | 3475 | 4243 |
| 1800                  | 1947 | 2477 | 2979 | 3455 | 3909 | 4773 |
| 2000                  | 2163 | 2752 | 3311 | 3839 | 4344 | 5304 |
| 2200                  | 2380 | 3028 | 3642 | 4223 |      |      |
| 2400                  | 2596 | 3303 | 3973 | 4607 |      |      |
| 2600                  | 2812 | 3578 | 4304 | 4991 |      |      |
| 2800                  | 3029 | 3853 | 4635 | 5375 |      |      |
| 3000                  | 3245 | 4129 | 4966 | 5759 |      |      |

### TYPE 33

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 690  | 875  | 1049 | 1212 | 1367 | 1663 |
| n-exponent          | 1,29 | 1,30 | 1,31 | 1,32 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      | 524  | 606  | 683  | 831  |
| 600                 |      | 525  | 629  | 727  | 820  | 998  |
| 700                 |      | 613  | 734  | 849  | 957  | 1164 |
| 800                 | 552  | 700  | 839  | 970  | 1093 | 1330 |
| 900                 | 621  | 788  | 944  | 1091 | 1230 | 1497 |
| 1000                | 690  | 875  | 1049 | 1212 | 1367 | 1663 |
| 1100                | 759  | 963  | 1154 | 1333 | 1503 | 1829 |
| 1200                | 828  | 1050 | 1259 | 1455 | 1640 | 1995 |
| 1300                | 897  | 1138 | 1363 | 1576 | 1777 | 2162 |
| 1400                | 966  | 1225 | 1468 | 1697 | 1913 | 2328 |
| 1600                | 1104 | 1400 | 1678 | 1939 | 2187 | 2660 |
| 1800                | 1242 | 1575 | 1888 | 2182 | 2460 | 2993 |
| 2000                | 1380 | 1750 | 2098 | 2424 | 2733 | 3326 |
| 2200                | 1518 | 1925 | 2307 | 2667 |      |      |
| 2400                | 1656 | 2100 | 2517 | 2909 |      |      |
| 2600                | 1795 | 2275 | 2727 | 3152 |      |      |
| 2800                | 1933 | 2450 | 2937 | 3394 |      |      |
| 3000                | 2071 | 2625 | 3147 | 3636 |      |      |

## PIANO UNI 6

## TYPE 21s

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 868  | 1034 | 1192 | 1342 | 1623 |
| n-exponent          | 1,29 | 1,29 | 1,30 | 1,30 | 1,29 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt |
| 400                 | 347  | 414  | 477  | 537  | 649  |
| 500                 | 434  | 517  | 596  | 671  | 812  |
| 600                 | 521  | 620  | 715  | 805  | 974  |
| 700                 | 608  | 724  | 834  | 939  | 1136 |
| 800                 | 694  | 827  | 954  | 1074 | 1298 |
| 900                 | 781  | 931  | 1073 | 1208 | 1461 |
| 1000                | 868  | 1034 | 1192 | 1342 | 1623 |
| 1100                | 955  | 1137 | 1311 | 1476 | 1785 |
| 1200                | 1042 | 1241 | 1430 | 1610 | 1948 |
| 1300                | 1128 | 1344 | 1550 | 1745 | 2110 |
| 1400                | 1215 | 1448 | 1669 | 1879 | 2272 |
| 1600                | 1389 | 1654 | 1907 | 2147 | 2597 |
| 1800                | 1562 | 1861 | 2146 | 2416 | 2921 |
| 2000                | 1736 | 2068 | 2384 | 2684 | 3246 |
| 2200                | 1910 | 2275 | 2622 |      |      |
| 2400                | 2083 | 2482 | 2861 |      |      |
| 2600                | 2257 | 2688 | 3099 |      |      |
| 2800                | 2430 | 2895 | 3338 |      |      |
| 3000                | 2604 | 3102 | 3576 |      |      |

## TYPE 21s

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 704  | 838  | 965  | 1086 | 1316 |
| n-exponent            | 1,29 | 1,29 | 1,30 | 1,30 | 1,29 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt |
| 400                   | 282  | 335  | 386  | 435  | 526  |
| 500                   | 352  | 419  | 482  | 543  | 658  |
| 600                   | 422  | 503  | 579  | 652  | 790  |
| 700                   | 493  | 587  | 675  | 760  | 921  |
| 800                   | 563  | 671  | 772  | 869  | 1053 |
| 900                   | 633  | 755  | 868  | 978  | 1184 |
| 1000                  | 704  | 838  | 965  | 1086 | 1316 |
| 1100                  | 774  | 922  | 1061 | 1195 | 1448 |
| 1200                  | 845  | 1006 | 1158 | 1304 | 1579 |
| 1300                  | 915  | 1090 | 1254 | 1412 | 1711 |
| 1400                  | 985  | 1174 | 1351 | 1521 | 1842 |
| 1600                  | 1126 | 1342 | 1544 | 1738 | 2106 |
| 1800                  | 1267 | 1509 | 1737 | 1956 | 2369 |
| 2000                  | 1408 | 1677 | 1930 | 2173 | 2632 |
| 2200                  | 1548 | 1845 | 2123 |      |      |
| 2400                  | 1689 | 2012 | 2316 |      |      |
| 2600                  | 1830 | 2180 | 2509 |      |      |
| 2800                  | 1971 | 2348 | 2702 |      |      |
| 3000                  | 2112 | 2515 | 2895 |      |      |

## TYPE 21s

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 449  | 535  | 614  | 691  | 840  |
| n-exponent          | 1,29 | 1,29 | 1,30 | 1,30 | 1,29 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt |
| 400                 | 180  | 214  | 245  | 276  | 336  |
| 500                 | 225  | 267  | 307  | 345  | 420  |
| 600                 | 269  | 321  | 368  | 414  | 504  |
| 700                 | 314  | 374  | 430  | 484  | 588  |
| 800                 | 359  | 428  | 491  | 553  | 672  |
| 900                 | 404  | 481  | 552  | 622  | 756  |
| 1000                | 449  | 535  | 614  | 691  | 840  |
| 1100                | 494  | 588  | 675  | 760  | 924  |
| 1200                | 539  | 642  | 736  | 829  | 1008 |
| 1300                | 584  | 695  | 798  | 898  | 1092 |
| 1400                | 629  | 749  | 859  | 967  | 1176 |
| 1600                | 719  | 856  | 982  | 1105 | 1344 |
| 1800                | 808  | 963  | 1104 | 1243 | 1511 |
| 2000                | 898  | 1070 | 1227 | 1382 | 1679 |
| 2200                | 988  | 1177 | 1350 |      |      |
| 2400                | 1078 | 1284 | 1473 |      |      |
| 2600                | 1168 | 1391 | 1595 |      |      |
| 2800                | 1257 | 1498 | 1718 |      |      |
| 3000                | 1347 | 1605 | 1841 |      |      |



## PIANO UNI 6

### TYPE 22

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 878  | 1104 | 1317 | 1521 | 1717 | 2089 |
| n-exponent          | 1,30 | 1,30 | 1,31 | 1,31 | 1,30 | 1,28 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 | 351  | 442  | 527  | 608  | 687  | 836  |
| 500                 | 439  | 552  | 659  | 761  | 859  | 1045 |
| 600                 | 527  | 662  | 790  | 913  | 1030 | 1253 |
| 700                 | 615  | 773  | 922  | 1065 | 1202 | 1462 |
| 800                 | 702  | 883  | 1054 | 1217 | 1374 | 1671 |
| 900                 | 790  | 994  | 1185 | 1369 | 1545 | 1880 |
| 1000                | 878  | 1104 | 1317 | 1521 | 1717 | 2089 |
| 1100                | 966  | 1214 | 1449 | 1673 | 1889 | 2298 |
| 1200                | 1054 | 1325 | 1580 | 1825 | 2060 | 2507 |
| 1300                | 1141 | 1435 | 1712 | 1977 | 2232 | 2716 |
| 1400                | 1229 | 1546 | 1844 | 2129 | 2404 | 2925 |
| 1600                | 1405 | 1766 | 2107 | 2434 | 2747 | 3342 |
| 1800                | 1580 | 1987 | 2371 | 2738 | 3091 | 3760 |
| 2000                | 1756 | 2208 | 2634 | 3042 | 3434 | 4178 |
| 2200                | 1932 | 2429 | 2897 | 3346 |      |      |
| 2400                | 2107 | 2650 | 3161 | 3650 |      |      |
| 2600                | 2283 | 2870 | 3424 | 3955 |      |      |
| 2800                | 2458 | 3091 | 3688 | 4259 |      |      |
| 3000                | 2634 | 3312 | 3951 | 4563 |      |      |

### TYPE 22

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 711  | 894  | 1064 | 1229 | 1390 | 1697 |
| n-exponent            | 1,30 | 1,30 | 1,31 | 1,31 | 1,30 | 1,28 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   | 284  | 357  | 426  | 492  | 556  | 679  |
| 500                   | 355  | 447  | 532  | 615  | 695  | 848  |
| 600                   | 426  | 536  | 639  | 738  | 834  | 1018 |
| 700                   | 498  | 626  | 745  | 861  | 973  | 1188 |
| 800                   | 569  | 715  | 852  | 983  | 1112 | 1357 |
| 900                   | 640  | 804  | 958  | 1106 | 1251 | 1527 |
| 1000                  | 711  | 894  | 1064 | 1229 | 1390 | 1697 |
| 1100                  | 782  | 983  | 1171 | 1352 | 1529 | 1866 |
| 1200                  | 853  | 1072 | 1277 | 1475 | 1668 | 2036 |
| 1300                  | 924  | 1162 | 1384 | 1598 | 1807 | 2206 |
| 1400                  | 995  | 1251 | 1490 | 1721 | 1946 | 2375 |
| 1600                  | 1137 | 1430 | 1703 | 1967 | 2224 | 2715 |
| 1800                  | 1279 | 1609 | 1916 | 2213 | 2502 | 3054 |
| 2000                  | 1422 | 1787 | 2129 | 2459 | 2780 | 3393 |
| 2200                  | 1564 | 1966 | 2342 | 2705 |      |      |
| 2400                  | 1706 | 2145 | 2555 | 2950 |      |      |
| 2600                  | 1848 | 2324 | 2768 | 3196 |      |      |
| 2800                  | 1990 | 2502 | 2980 | 3442 |      |      |
| 3000                  | 2132 | 2681 | 3193 | 3688 |      |      |

### TYPE 22

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 452  | 568  | 674  | 779  | 884  | 1086 |
| n-exponent          | 1,30 | 1,30 | 1,31 | 1,31 | 1,30 | 1,28 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 | 181  | 227  | 270  | 312  | 354  | 435  |
| 500                 | 226  | 284  | 337  | 389  | 442  | 543  |
| 600                 | 271  | 341  | 405  | 467  | 530  | 652  |
| 700                 | 316  | 398  | 472  | 545  | 619  | 760  |
| 800                 | 362  | 455  | 540  | 623  | 707  | 869  |
| 900                 | 407  | 511  | 607  | 701  | 795  | 978  |
| 1000                | 452  | 568  | 674  | 779  | 884  | 1086 |
| 1100                | 497  | 625  | 742  | 857  | 972  | 1195 |
| 1200                | 542  | 682  | 809  | 935  | 1061 | 1304 |
| 1300                | 588  | 739  | 877  | 1013 | 1149 | 1412 |
| 1400                | 633  | 796  | 944  | 1091 | 1237 | 1521 |
| 1600                | 723  | 909  | 1079 | 1246 | 1414 | 1738 |
| 1800                | 814  | 1023 | 1214 | 1402 | 1591 | 1955 |
| 2000                | 904  | 1137 | 1349 | 1558 | 1768 | 2173 |
| 2200                | 994  | 1250 | 1484 | 1714 |      |      |
| 2400                | 1085 | 1364 | 1619 | 1869 |      |      |
| 2600                | 1175 | 1478 | 1754 | 2025 |      |      |
| 2800                | 1265 | 1591 | 1889 | 2181 |      |      |
| 3000                | 1356 | 1705 | 2023 | 2337 |      |      |

## PIANO UNI 6

## TYPE 33

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 1236 | 1532 | 1822 | 2110 | 2399 | 2991 |
| n-exponent          | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      | 911  | 1055 | 1200 | 1496 |
| 600                 |      | 919  | 1093 | 1266 | 1439 | 1795 |
| 700                 |      | 1072 | 1275 | 1477 | 1679 | 2094 |
| 800                 | 989  | 1226 | 1458 | 1688 | 1919 | 2393 |
| 900                 | 1112 | 1379 | 1640 | 1899 | 2159 | 2692 |
| 1000                | 1236 | 1532 | 1822 | 2110 | 2399 | 2991 |
| 1100                | 1360 | 1685 | 2004 | 2321 | 2639 | 3290 |
| 1200                | 1483 | 1838 | 2186 | 2532 | 2879 | 3589 |
| 1300                | 1607 | 1992 | 2369 | 2743 | 3119 | 3888 |
| 1400                | 1730 | 2145 | 2551 | 2954 | 3359 | 4187 |
| 1600                | 1978 | 2451 | 2915 | 3376 | 3838 | 4786 |
| 1800                | 2225 | 2758 | 3280 | 3798 | 4318 | 5384 |
| 2000                | 2472 | 3064 | 3644 | 4220 | 4798 | 5982 |
| 2200                | 2719 | 3370 | 4008 | 4642 |      |      |
| 2400                | 2966 | 3677 | 4373 | 5064 |      |      |
| 2600                | 3214 | 3983 | 4737 | 5486 |      |      |
| 2800                | 3461 | 4290 | 5102 | 5908 |      |      |
| 3000                | 3708 | 4596 | 5466 | 6330 |      |      |

## TYPE 33

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 997  | 1236 | 1470 | 1703 | 1936 | 2414 |
| n-exponent            | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      |      |      |      |      |      |
| 500                   |      |      | 735  | 851  | 968  | 1207 |
| 600                   |      | 742  | 882  | 1022 | 1161 | 1448 |
| 700                   |      | 865  | 1029 | 1192 | 1355 | 1689 |
| 800                   | 798  | 989  | 1176 | 1362 | 1549 | 1931 |
| 900                   | 898  | 1113 | 1323 | 1532 | 1742 | 2172 |
| 1000                  | 997  | 1236 | 1470 | 1703 | 1936 | 2414 |
| 1100                  | 1097 | 1360 | 1617 | 1873 | 2129 | 2655 |
| 1200                  | 1197 | 1483 | 1764 | 2043 | 2323 | 2896 |
| 1300                  | 1297 | 1607 | 1911 | 2213 | 2517 | 3138 |
| 1400                  | 1396 | 1731 | 2058 | 2384 | 2710 | 3379 |
| 1600                  | 1596 | 1978 | 2352 | 2724 | 3097 | 3862 |
| 1800                  | 1795 | 2225 | 2646 | 3065 | 3484 | 4344 |
| 2000                  | 1995 | 2472 | 2940 | 3405 | 3872 | 4827 |
| 2200                  | 2194 | 2720 | 3234 | 3746 |      |      |
| 2400                  | 2394 | 2967 | 3529 | 4086 |      |      |
| 2600                  | 2593 | 3214 | 3823 | 4427 |      |      |
| 2800                  | 2793 | 3461 | 4117 | 4767 |      |      |
| 3000                  | 2992 | 3709 | 4411 | 5108 |      |      |

## TYPE 33

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 630  | 781  | 928  | 1075 | 1222 | 1524 |
| n-exponent          | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      | 464  | 538  | 611  | 762  |
| 600                 |      | 468  | 557  | 645  | 733  | 914  |
| 700                 |      | 546  | 650  | 753  | 856  | 1067 |
| 800                 | 504  | 624  | 743  | 860  | 978  | 1219 |
| 900                 | 567  | 703  | 836  | 968  | 1100 | 1372 |
| 1000                | 630  | 781  | 928  | 1075 | 1222 | 1524 |
| 1100                | 693  | 859  | 1021 | 1183 | 1345 | 1676 |
| 1200                | 756  | 937  | 1114 | 1290 | 1467 | 1829 |
| 1300                | 819  | 1015 | 1207 | 1398 | 1589 | 1981 |
| 1400                | 882  | 1093 | 1300 | 1505 | 1711 | 2134 |
| 1600                | 1008 | 1249 | 1485 | 1720 | 1956 | 2438 |
| 1800                | 1134 | 1405 | 1671 | 1935 | 2200 | 2743 |
| 2000                | 1260 | 1561 | 1857 | 2150 | 2445 | 3048 |
| 2200                | 1385 | 1717 | 2042 | 2365 |      |      |
| 2400                | 1511 | 1873 | 2228 | 2580 |      |      |
| 2600                | 1637 | 2030 | 2414 | 2795 |      |      |
| 2800                | 1763 | 2186 | 2599 | 3010 |      |      |
| 3000                | 1889 | 2342 | 2785 | 3225 |      |      |

# Centric

## Collection





CENTRIC

## TYPE 11

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 697  | 840  | 979  | 1117 | 1390 |
| n-exponent          | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt |
| 400                 | 279  | 336  | 392  | 447  | 556  |
| 500                 | 349  | 420  | 490  | 559  | 695  |
| 600                 | 418  | 504  | 587  | 670  | 834  |
| 700                 | 488  | 588  | 685  | 782  | 973  |
| 800                 | 558  | 672  | 783  | 894  | 1112 |
| 900                 | 627  | 756  | 881  | 1005 | 1251 |
| 1000                | 697  | 840  | 979  | 1117 | 1390 |
| 1100                | 767  | 924  | 1077 | 1229 | 1529 |
| 1200                | 836  | 1008 | 1175 | 1340 | 1668 |
| 1400                | 976  | 1176 | 1371 | 1564 | 1946 |
| 1600                | 1115 | 1344 | 1567 | 1787 | 2224 |
| 1800                | 1255 | 1512 | 1762 | 2011 | 2502 |
| 2000                | 1394 | 1680 | 1958 | 2234 | 2780 |
| 2200                |      |      |      |      |      |
| 2400                |      |      |      |      |      |
| 2600                |      |      |      |      |      |
| 2800                |      |      |      |      |      |
| 3000                |      |      |      |      |      |

## TYPE 11

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 565  | 679  | 789  | 899  | 1114 |
| n-exponent            | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt |
| 400                   | 226  | 272  | 316  | 359  | 446  |
| 500                   | 283  | 339  | 394  | 449  | 557  |
| 600                   | 339  | 407  | 473  | 539  | 668  |
| 700                   | 396  | 475  | 552  | 629  | 780  |
| 800                   | 452  | 543  | 631  | 719  | 891  |
| 900                   | 509  | 611  | 710  | 809  | 1003 |
| 1000                  | 565  | 679  | 789  | 899  | 1114 |
| 1100                  | 622  | 747  | 868  | 988  | 1225 |
| 1200                  | 678  | 815  | 947  | 1078 | 1337 |
| 1400                  | 791  | 951  | 1105 | 1258 | 1560 |
| 1600                  | 904  | 1086 | 1262 | 1438 | 1783 |
| 1800                  | 1017 | 1222 | 1420 | 1617 | 2005 |
| 2000                  | 1130 | 1358 | 1578 | 1797 | 2228 |
| 2200                  |      |      |      |      |      |
| 2400                  |      |      |      |      |      |
| 2600                  |      |      |      |      |      |
| 2800                  |      |      |      |      |      |
| 3000                  |      |      |      |      |      |

## TYPE 11

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 368  | 439  | 507  | 576  | 708  |
| n-exponent          | 1,24 | 1,25 | 1,27 | 1,28 | 1,30 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt |
| 400                 | 147  | 176  | 203  | 230  | 283  |
| 500                 | 184  | 220  | 254  | 288  | 354  |
| 600                 | 221  | 264  | 304  | 345  | 425  |
| 700                 | 257  | 307  | 355  | 403  | 496  |
| 800                 | 294  | 351  | 406  | 460  | 567  |
| 900                 | 331  | 395  | 457  | 518  | 638  |
| 1000                | 368  | 439  | 507  | 576  | 708  |
| 1100                | 405  | 483  | 558  | 633  | 779  |
| 1200                | 441  | 527  | 609  | 691  | 850  |
| 1400                | 515  | 615  | 710  | 806  | 992  |
| 1600                | 588  | 703  | 812  | 921  | 1133 |
| 1800                | 662  | 791  | 913  | 1036 | 1275 |
| 2000                | 736  | 878  | 1015 | 1151 | 1417 |
| 2200                |      |      |      |      |      |
| 2400                |      |      |      |      |      |
| 2600                |      |      |      |      |      |
| 2800                |      |      |      |      |      |
| 3000                |      |      |      |      |      |

### TYPE 21s

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 755  | 953  | 1141 | 1322 | 1499 | 1841 |
| n-exponent          | 1,31 | 1,31 | 1,32 | 1,32 | 1,32 | 1,33 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 | 302  | 381  | 456  | 529  | 600  | 736  |
| 500                 | 378  | 477  | 571  | 661  | 750  | 921  |
| 600                 | 453  | 572  | 685  | 793  | 899  | 1105 |
| 700                 | 529  | 667  | 799  | 925  | 1049 | 1289 |
| 800                 | 604  | 762  | 913  | 1058 | 1199 | 1473 |
| 900                 | 680  | 858  | 1027 | 1190 | 1349 | 1657 |
| 1000                | 755  | 953  | 1141 | 1322 | 1499 | 1841 |
| 1100                | 831  | 1048 | 1255 | 1454 | 1649 | 2025 |
| 1200                | 906  | 1144 | 1369 | 1586 | 1799 | 2209 |
| 1400                | 1057 | 1334 | 1597 | 1851 | 2099 | 2577 |
| 1500                | 1133 | 1430 | 1712 | 1983 | 2249 | 2762 |
| 1600                | 1208 | 1525 | 1826 | 2115 | 2398 | 2946 |
| 1800                | 1359 | 1715 | 2054 | 2380 | 2698 | 3314 |
| 2000                | 1510 | 1906 | 2282 | 2644 | 2998 | 3682 |
| 2200                | 1661 | 2097 | 2510 | 2908 |      |      |
| 2400                | 1812 | 2287 | 2738 | 3173 |      |      |
| 2600                | 1963 | 2478 | 2967 | 3437 |      |      |
| 2800                | 2114 | 2668 | 3195 | 3702 |      |      |
| 3000                | 2265 | 2859 | 3423 | 3966 |      |      |

### TYPE 21s

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 610  | 770  | 921  | 1067 | 1210 | 1483 |
| n-exponent            | 1,31 | 1,31 | 1,32 | 1,32 | 1,32 | 1,33 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   | 244  | 308  | 368  | 427  | 484  | 593  |
| 500                   | 305  | 385  | 460  | 533  | 605  | 742  |
| 600                   | 366  | 462  | 552  | 640  | 726  | 890  |
| 700                   | 427  | 539  | 644  | 747  | 847  | 1038 |
| 800                   | 488  | 616  | 737  | 853  | 968  | 1187 |
| 900                   | 549  | 693  | 829  | 960  | 1089 | 1335 |
| 1000                  | 610  | 770  | 921  | 1067 | 1210 | 1483 |
| 1100                  | 671  | 847  | 1013 | 1173 | 1331 | 1631 |
| 1200                  | 732  | 924  | 1105 | 1280 | 1451 | 1780 |
| 1400                  | 854  | 1078 | 1289 | 1493 | 1693 | 2076 |
| 1500                  | 915  | 1155 | 1381 | 1600 | 1814 | 2225 |
| 1600                  | 976  | 1232 | 1473 | 1707 | 1935 | 2373 |
| 1800                  | 1098 | 1386 | 1657 | 1920 | 2177 | 2670 |
| 2000                  | 1220 | 1540 | 1841 | 2134 | 2419 | 2966 |
| 2200                  | 1342 | 1695 | 2026 | 2347 |      |      |
| 2400                  | 1465 | 1849 | 2210 | 2560 |      |      |
| 2600                  | 1587 | 2003 | 2394 | 2774 |      |      |
| 2800                  | 1709 | 2157 | 2578 | 2987 |      |      |
| 3000                  | 1831 | 2311 | 2762 | 3200 |      |      |

### TYPE 21s

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 387  | 488  | 581  | 674  | 764  | 933  |
| n-exponent          | 1,31 | 1,31 | 1,32 | 1,32 | 1,32 | 1,33 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 | 155  | 195  | 233  | 269  | 306  | 373  |
| 500                 | 193  | 244  | 291  | 337  | 382  | 467  |
| 600                 | 232  | 293  | 349  | 404  | 458  | 560  |
| 700                 | 271  | 342  | 407  | 472  | 535  | 653  |
| 800                 | 309  | 390  | 465  | 539  | 611  | 747  |
| 900                 | 348  | 439  | 523  | 606  | 687  | 840  |
| 1000                | 387  | 488  | 581  | 674  | 764  | 933  |
| 1100                | 425  | 537  | 639  | 741  | 840  | 1027 |
| 1200                | 464  | 586  | 698  | 808  | 917  | 1120 |
| 1400                | 541  | 683  | 814  | 943  | 1069 | 1307 |
| 1500                | 580  | 732  | 872  | 1010 | 1146 | 1400 |
| 1600                | 619  | 781  | 930  | 1078 | 1222 | 1493 |
| 1800                | 696  | 879  | 1046 | 1212 | 1375 | 1680 |
| 2000                | 773  | 976  | 1163 | 1347 | 1528 | 1866 |
| 2200                | 851  | 1074 | 1279 | 1482 |      |      |
| 2400                | 928  | 1171 | 1395 | 1617 |      |      |
| 2600                | 1005 | 1269 | 1512 | 1751 |      |      |
| 2800                | 1083 | 1367 | 1628 | 1886 |      |      |
| 3000                | 1160 | 1464 | 1744 | 2021 |      |      |

## CENTRIC

## TYPE 22

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 942  | 1202 | 1449 | 1683 | 1907 | 2326 |
| n-exponent          | 1,31 | 1,32 | 1,32 | 1,33 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      | 481  | 580  | 673  | 763  | 930  |
| 500                 | 471  | 601  | 725  | 842  | 954  | 1163 |
| 600                 | 565  | 721  | 869  | 1010 | 1144 | 1396 |
| 700                 | 659  | 841  | 1014 | 1178 | 1335 | 1628 |
| 800                 | 754  | 962  | 1159 | 1346 | 1526 | 1861 |
| 900                 | 848  | 1082 | 1304 | 1515 | 1716 | 2093 |
| 1000                | 942  | 1202 | 1449 | 1683 | 1907 | 2326 |
| 1100                | 1036 | 1322 | 1594 | 1851 | 2098 | 2559 |
| 1200                | 1130 | 1442 | 1739 | 2020 | 2288 | 2791 |
| 1400                | 1319 | 1683 | 2029 | 2356 | 2670 | 3256 |
| 1600                | 1507 | 1923 | 2318 | 2693 | 3051 | 3722 |
| 1800                | 1696 | 2164 | 2608 | 3029 | 3433 | 4187 |
| 2000                | 1884 | 2404 | 2898 | 3366 | 3814 | 4652 |
| 2200                | 2072 | 2644 | 3188 | 3703 |      |      |
| 2400                | 2261 | 2885 | 3478 | 4039 |      |      |
| 2600                | 2449 | 3125 | 3767 | 4376 |      |      |
| 2800                | 2638 | 3366 | 4057 | 4712 |      |      |
| 3000                | 2826 | 3606 | 4347 | 5049 |      |      |

## TYPE 22

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 761  | 970  | 1169 | 1356 | 1536 | 1871 |
| n-exponent            | 1,31 | 1,32 | 1,32 | 1,33 | 1,33 | 1,34 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      | 388  | 468  | 542  | 615  | 748  |
| 500                   | 381  | 485  | 585  | 678  | 768  | 935  |
| 600                   | 457  | 582  | 702  | 814  | 922  | 1122 |
| 700                   | 533  | 679  | 818  | 949  | 1075 | 1310 |
| 800                   | 609  | 776  | 935  | 1085 | 1229 | 1497 |
| 900                   | 685  | 873  | 1052 | 1220 | 1383 | 1684 |
| 1000                  | 761  | 970  | 1169 | 1356 | 1536 | 1871 |
| 1100                  | 837  | 1067 | 1286 | 1491 | 1690 | 2058 |
| 1200                  | 914  | 1164 | 1403 | 1627 | 1844 | 2245 |
| 1400                  | 1066 | 1358 | 1637 | 1898 | 2151 | 2619 |
| 1600                  | 1218 | 1552 | 1871 | 2169 | 2458 | 2993 |
| 1800                  | 1370 | 1746 | 2105 | 2441 | 2765 | 3367 |
| 2000                  | 1523 | 1940 | 2338 | 2712 | 3073 | 3742 |
| 2200                  | 1675 | 2134 | 2572 | 2983 |      |      |
| 2400                  | 1827 | 2328 | 2806 | 3254 |      |      |
| 2600                  | 1980 | 2522 | 3040 | 3525 |      |      |
| 2800                  | 2132 | 2716 | 3274 | 3796 |      |      |
| 3000                  | 2284 | 2910 | 3508 | 4068 |      |      |

## TYPE 22

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 482  | 612  | 738  | 853  | 967  | 1173 |
| n-exponent          | 1,31 | 1,32 | 1,32 | 1,33 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      | 245  | 295  | 341  | 387  | 469  |
| 500                 | 241  | 306  | 369  | 427  | 483  | 587  |
| 600                 | 289  | 367  | 443  | 512  | 580  | 704  |
| 700                 | 338  | 429  | 517  | 597  | 677  | 821  |
| 800                 | 386  | 490  | 591  | 683  | 773  | 938  |
| 900                 | 434  | 551  | 664  | 768  | 870  | 1056 |
| 1000                | 482  | 612  | 738  | 853  | 967  | 1173 |
| 1100                | 531  | 674  | 812  | 938  | 1063 | 1290 |
| 1200                | 579  | 735  | 886  | 1024 | 1160 | 1408 |
| 1400                | 675  | 857  | 1034 | 1194 | 1353 | 1642 |
| 1600                | 772  | 980  | 1181 | 1365 | 1547 | 1877 |
| 1800                | 868  | 1102 | 1329 | 1536 | 1740 | 2112 |
| 2000                | 965  | 1225 | 1477 | 1706 | 1933 | 2346 |
| 2200                | 1061 | 1347 | 1624 | 1877 |      |      |
| 2400                | 1158 | 1470 | 1772 | 2048 |      |      |
| 2600                | 1254 | 1592 | 1920 | 2218 |      |      |
| 2800                | 1351 | 1715 | 2067 | 2389 |      |      |
| 3000                | 1447 | 1837 | 2215 | 2559 |      |      |

### TYPE 33

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 1334 | 1700 | 2048 | 2379 | 2696 | 3297 |
| n-exponent          | 1,29 | 1,30 | 1,31 | 1,32 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      | 1024 | 1190 | 1348 | 1649 |
| 600                 |      | 1020 | 1229 | 1427 | 1618 | 1978 |
| 700                 |      | 1190 | 1434 | 1665 | 1887 | 2308 |
| 800                 | 1067 | 1360 | 1638 | 1903 | 2157 | 2638 |
| 900                 | 1201 | 1530 | 1843 | 2141 | 2426 | 2967 |
| 1000                | 1334 | 1700 | 2048 | 2379 | 2696 | 3297 |
| 1100                | 1467 | 1870 | 2253 | 2617 | 2966 | 3627 |
| 1200                | 1601 | 2040 | 2458 | 2855 | 3235 | 3956 |
| 1400                | 1868 | 2380 | 2867 | 3331 | 3774 | 4616 |
| 1600                | 2134 | 2720 | 3277 | 3806 | 4314 | 5275 |
| 1800                | 2401 | 3060 | 3686 | 4282 | 4853 | 5935 |
| 2000                | 2668 | 3400 | 4096 | 4758 | 5392 | 6594 |
| 2200                | 2935 | 3740 | 4506 | 5234 |      |      |
| 2400                | 3202 | 4080 | 4915 | 5710 |      |      |
| 2600                | 3468 | 4420 | 5325 | 6185 |      |      |
| 2800                | 3735 | 4760 | 5734 | 6661 |      |      |
| 3000                | 4002 | 5100 | 6144 | 7137 |      |      |

### TYPE 33

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 761  | 970  | 1169 | 1356 | 1536 | 1871 |
| n-exponent            | 1,31 | 1,32 | 1,32 | 1,33 | 1,33 | 1,34 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      |      |      |      |      |      |
| 500                   |      |      | 828  | 960  | 1086 | 1326 |
| 600                   |      | 826  | 993  | 1152 | 1303 | 1591 |
| 700                   |      | 963  | 1159 | 1344 | 1520 | 1856 |
| 800                   | 865  | 1101 | 1324 | 1536 | 1738 | 2121 |
| 900                   | 974  | 1239 | 1490 | 1728 | 1955 | 2387 |
| 1000                  | 1082 | 1376 | 1655 | 1920 | 2172 | 2652 |
| 1100                  | 1190 | 1514 | 1821 | 2112 | 2389 | 2917 |
| 1200                  | 1298 | 1651 | 1986 | 2304 | 2606 | 3182 |
| 1400                  | 1514 | 1927 | 2317 | 2688 | 3041 | 3713 |
| 1600                  | 1731 | 2202 | 2648 | 3071 | 3475 | 4243 |
| 1800                  | 1947 | 2477 | 2979 | 3455 | 3909 | 4773 |
| 2000                  | 2163 | 2752 | 3311 | 3839 | 4344 | 5304 |
| 2200                  | 2380 | 3028 | 3642 | 4223 |      |      |
| 2400                  | 2596 | 3303 | 3973 | 4607 |      |      |
| 2600                  | 2812 | 3578 | 4304 | 4991 |      |      |
| 2800                  | 3029 | 3853 | 4635 | 5375 |      |      |
| 3000                  | 3245 | 4129 | 4966 | 5759 |      |      |

### TYPE 33

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 690  | 875  | 1049 | 1212 | 1367 | 1663 |
| n-exponent          | 1,29 | 1,30 | 1,31 | 1,32 | 1,33 | 1,34 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      | 524  | 606  | 683  | 831  |
| 600                 |      | 525  | 629  | 727  | 820  | 998  |
| 700                 |      | 613  | 734  | 849  | 957  | 1164 |
| 800                 | 552  | 700  | 839  | 970  | 1093 | 1330 |
| 900                 | 621  | 788  | 944  | 1091 | 1230 | 1497 |
| 1000                | 690  | 875  | 1049 | 1212 | 1367 | 1663 |
| 1100                | 759  | 963  | 1154 | 1333 | 1503 | 1829 |
| 1200                | 828  | 1050 | 1259 | 1455 | 1640 | 1995 |
| 1400                | 966  | 1225 | 1468 | 1697 | 1913 | 2328 |
| 1600                | 1104 | 1400 | 1678 | 1939 | 2187 | 2660 |
| 1800                | 1242 | 1575 | 1888 | 2182 | 2460 | 2993 |
| 2000                | 1380 | 1750 | 2098 | 2424 | 2733 | 3326 |
| 2200                | 1518 | 1925 | 2307 | 2667 |      |      |
| 2400                | 1656 | 2100 | 2517 | 2909 |      |      |
| 2600                | 1795 | 2275 | 2727 | 3152 |      |      |
| 2800                | 1933 | 2450 | 2937 | 3394 |      |      |
| 3000                | 2071 | 2625 | 3147 | 3636 |      |      |



## PIANO CENTRIC

| TYPE 21s            |      | Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |      |      |
|---------------------|------|---------------------------------------------------------------------------|------|------|------|------|
| Height (mm)         | 300  | 400                                                                       | 500  | 600  | 700  | 900  |
| W/m 75/65/20 (φ50K) | 690  | 868                                                                       | 1034 | 1192 | 1342 | 1623 |
| n-exponent          | 1,28 | 1,29                                                                      | 1,29 | 1,30 | 1,30 | 1,29 |
| Length (mm)         | Watt | Watt                                                                      | Watt | Watt | Watt | Watt |
| 400                 | 276  | 347                                                                       | 414  | 477  | 537  | 649  |
| 500                 | 345  | 434                                                                       | 517  | 596  | 671  | 812  |
| 600                 | 414  | 521                                                                       | 620  | 715  | 805  | 974  |
| 700                 | 483  | 608                                                                       | 724  | 834  | 939  | 1136 |
| 800                 | 552  | 694                                                                       | 827  | 954  | 1074 | 1298 |
| 900                 | 621  | 781                                                                       | 931  | 1073 | 1208 | 1461 |
| 1000                | 690  | 868                                                                       | 1034 | 1192 | 1342 | 1623 |
| 1100                | 759  | 955                                                                       | 1137 | 1311 | 1476 | 1785 |
| 1200                | 828  | 1042                                                                      | 1241 | 1430 | 1610 | 1948 |
| 1400                | 966  | 1215                                                                      | 1448 | 1669 | 1879 | 2272 |
| 1600                | 1104 | 1389                                                                      | 1654 | 1907 | 2147 | 2597 |
| 1800                | 1242 | 1562                                                                      | 1861 | 2146 | 2416 | 2921 |
| 2000                | 1380 | 1736                                                                      | 2068 | 2384 | 2684 | 3246 |
| 2200                | 1518 | 1910                                                                      | 2275 | 2622 |      |      |
| 2400                | 1656 | 2083                                                                      | 2482 | 2861 |      |      |
| 2600                | 1794 | 2257                                                                      | 2688 | 3099 |      |      |
| 2800                | 1932 | 2430                                                                      | 2895 | 3338 |      |      |
| 3000                | 2070 | 2604                                                                      | 3102 | 3576 |      |      |

| TYPE 21s              |      | Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |      |      |
|-----------------------|------|---------------------------------------------------------------------------|------|------|------|------|
| Height (mm)           | 300  | 400                                                                       | 500  | 600  | 700  | 900  |
| W/m 70/55/20 (φ42,5K) | 560  | 704                                                                       | 838  | 965  | 1086 | 1316 |
| n-exponent            | 1,28 | 1,29                                                                      | 1,29 | 1,30 | 1,30 | 1,29 |
| Length (mm)           | Watt | Watt                                                                      | Watt | Watt | Watt | Watt |
| 400                   | 224  | 282                                                                       | 335  | 386  | 435  | 526  |
| 500                   | 280  | 352                                                                       | 419  | 482  | 543  | 658  |
| 600                   | 336  | 422                                                                       | 503  | 579  | 652  | 790  |
| 700                   | 392  | 493                                                                       | 587  | 675  | 760  | 921  |
| 800                   | 448  | 563                                                                       | 671  | 772  | 869  | 1053 |
| 900                   | 504  | 633                                                                       | 755  | 868  | 978  | 1184 |
| 1000                  | 560  | 704                                                                       | 838  | 965  | 1086 | 1316 |
| 1100                  | 616  | 774                                                                       | 922  | 1061 | 1195 | 1448 |
| 1200                  | 672  | 845                                                                       | 1006 | 1158 | 1304 | 1579 |
| 1400                  | 785  | 985                                                                       | 1174 | 1351 | 1521 | 1842 |
| 1600                  | 897  | 1126                                                                      | 1342 | 1544 | 1738 | 2106 |
| 1800                  | 1009 | 1267                                                                      | 1509 | 1737 | 1956 | 2369 |
| 2000                  | 1121 | 1408                                                                      | 1677 | 1930 | 2173 | 2632 |
| 2200                  | 1233 | 1548                                                                      | 1845 | 2123 |      |      |
| 2400                  | 1345 | 1689                                                                      | 2012 | 2316 |      |      |
| 2600                  | 1457 | 1830                                                                      | 2180 | 2509 |      |      |
| 2800                  | 1569 | 1971                                                                      | 2348 | 2702 |      |      |
| 3000                  | 1681 | 2112                                                                      | 2515 | 2895 |      |      |

| TYPE 21s            |      | Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |      |      |
|---------------------|------|---------------------------------------------------------------------------|------|------|------|------|
| Height (mm)         | 300  | 400                                                                       | 500  | 600  | 700  | 900  |
| W/m 55/45/20 (φ30K) | 359  | 449                                                                       | 535  | 614  | 691  | 840  |
| n-exponent          | 1,28 | 1,29                                                                      | 1,29 | 1,30 | 1,30 | 1,29 |
| Length (mm)         | Watt | Watt                                                                      | Watt | Watt | Watt | Watt |
| 400                 | 144  | 180                                                                       | 214  | 245  | 276  | 336  |
| 500                 | 179  | 225                                                                       | 267  | 307  | 345  | 420  |
| 600                 | 215  | 269                                                                       | 321  | 368  | 414  | 504  |
| 700                 | 251  | 314                                                                       | 374  | 430  | 484  | 588  |
| 800                 | 287  | 359                                                                       | 428  | 491  | 553  | 672  |
| 900                 | 323  | 404                                                                       | 481  | 552  | 622  | 756  |
| 1000                | 359  | 449                                                                       | 535  | 614  | 691  | 840  |
| 1100                | 395  | 494                                                                       | 588  | 675  | 760  | 924  |
| 1200                | 431  | 539                                                                       | 642  | 736  | 829  | 1008 |
| 1400                | 502  | 629                                                                       | 749  | 859  | 967  | 1176 |
| 1600                | 574  | 719                                                                       | 856  | 982  | 1105 | 1344 |
| 1800                | 646  | 808                                                                       | 963  | 1104 | 1243 | 1511 |
| 2000                | 718  | 898                                                                       | 1070 | 1227 | 1382 | 1679 |
| 2200                | 789  | 988                                                                       | 1177 | 1350 |      |      |
| 2400                | 861  | 1078                                                                      | 1284 | 1473 |      |      |
| 2600                | 933  | 1168                                                                      | 1391 | 1595 |      |      |
| 2800                | 1005 | 1257                                                                      | 1498 | 1718 |      |      |
| 3000                | 1076 | 1347                                                                      | 1605 | 1841 |      |      |

## PIANO CENTRIC

### TYPE 22

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 878  | 1104 | 1317 | 1521 | 1717 | 2089 |
| n-exponent          | 1,30 | 1,30 | 1,31 | 1,31 | 1,30 | 1,28 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      | 442  | 527  | 608  | 687  | 836  |
| 500                 | 439  | 552  | 659  | 761  | 859  | 1045 |
| 600                 | 527  | 662  | 790  | 913  | 1030 | 1253 |
| 700                 | 615  | 773  | 922  | 1065 | 1202 | 1462 |
| 800                 | 702  | 883  | 1054 | 1217 | 1374 | 1671 |
| 900                 | 790  | 994  | 1185 | 1369 | 1545 | 1880 |
| 1000                | 878  | 1104 | 1317 | 1521 | 1717 | 2089 |
| 1100                | 966  | 1214 | 1449 | 1673 | 1889 | 2298 |
| 1200                | 1054 | 1325 | 1580 | 1825 | 2060 | 2507 |
| 1400                | 1229 | 1546 | 1844 | 2129 | 2404 | 2925 |
| 1600                | 1405 | 1766 | 2107 | 2434 | 2747 | 3342 |
| 1800                | 1580 | 1987 | 2371 | 2738 | 3091 | 3760 |
| 2000                | 1756 | 2208 | 2634 | 3042 | 3434 | 4178 |
| 2200                | 1932 | 2429 | 2897 | 3346 |      |      |
| 2400                | 2107 | 2650 | 3161 | 3650 |      |      |
| 2600                | 2283 | 2870 | 3424 | 3955 |      |      |
| 2800                | 2458 | 3091 | 3688 | 4259 |      |      |
| 3000                | 2634 | 3312 | 3951 | 4563 |      |      |

### TYPE 22

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 711  | 894  | 1064 | 1229 | 1390 | 1697 |
| n-exponent            | 1,30 | 1,30 | 1,31 | 1,31 | 1,30 | 1,28 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      | 357  | 426  | 492  | 556  | 679  |
| 500                   | 355  | 447  | 532  | 615  | 695  | 848  |
| 600                   | 426  | 536  | 639  | 738  | 834  | 1018 |
| 700                   | 498  | 626  | 745  | 861  | 973  | 1188 |
| 800                   | 569  | 715  | 852  | 983  | 1112 | 1357 |
| 900                   | 640  | 804  | 958  | 1106 | 1251 | 1527 |
| 1000                  | 711  | 894  | 1064 | 1229 | 1390 | 1697 |
| 1100                  | 782  | 983  | 1171 | 1352 | 1529 | 1866 |
| 1200                  | 853  | 1072 | 1277 | 1475 | 1668 | 2036 |
| 1400                  | 995  | 1251 | 1490 | 1721 | 1946 | 2375 |
| 1600                  | 1137 | 1430 | 1703 | 1967 | 2224 | 2715 |
| 1800                  | 1279 | 1609 | 1916 | 2213 | 2502 | 3054 |
| 2000                  | 1422 | 1787 | 2129 | 2459 | 2780 | 3393 |
| 2200                  | 1564 | 1966 | 2342 | 2705 |      |      |
| 2400                  | 1706 | 2145 | 2555 | 2950 |      |      |
| 2600                  | 1848 | 2324 | 2768 | 3196 |      |      |
| 2800                  | 1990 | 2502 | 2980 | 3442 |      |      |
| 3000                  | 2132 | 2681 | 3193 | 3688 |      |      |

### TYPE 22

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 452  | 568  | 674  | 779  | 884  | 1086 |
| n-exponent          | 1,30 | 1,30 | 1,31 | 1,31 | 1,30 | 1,28 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      | 227  | 270  | 312  | 354  | 435  |
| 500                 | 226  | 284  | 337  | 389  | 442  | 543  |
| 600                 | 271  | 341  | 405  | 467  | 530  | 652  |
| 700                 | 316  | 398  | 472  | 545  | 619  | 760  |
| 800                 | 362  | 455  | 540  | 623  | 707  | 869  |
| 900                 | 407  | 511  | 607  | 701  | 795  | 978  |
| 1000                | 452  | 568  | 674  | 779  | 884  | 1086 |
| 1100                | 497  | 625  | 742  | 857  | 972  | 1195 |
| 1200                | 542  | 682  | 809  | 935  | 1061 | 1304 |
| 1400                | 633  | 796  | 944  | 1091 | 1237 | 1521 |
| 1600                | 723  | 909  | 1079 | 1246 | 1414 | 1738 |
| 1800                | 814  | 1023 | 1214 | 1402 | 1591 | 1955 |
| 2000                | 904  | 1137 | 1349 | 1558 | 1768 | 2173 |
| 2200                | 994  | 1250 | 1484 | 1714 |      |      |
| 2400                | 1085 | 1364 | 1619 | 1869 |      |      |
| 2600                | 1175 | 1478 | 1754 | 2025 |      |      |
| 2800                | 1265 | 1591 | 1889 | 2181 |      |      |
| 3000                | 1356 | 1705 | 2023 | 2337 |      |      |

## PIANO CENTRIC

TYPE 33

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 1236 | 1532 | 1822 | 2110 | 2399 | 2991 |
| n-exponent          | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      | 911  | 1055 | 1200 | 1496 |
| 600                 |      | 919  | 1093 | 1266 | 1439 | 1795 |
| 700                 |      | 1072 | 1275 | 1477 | 1679 | 2094 |
| 800                 | 989  | 1226 | 1458 | 1688 | 1919 | 2393 |
| 900                 | 1112 | 1379 | 1640 | 1899 | 2159 | 2692 |
| 1000                | 1236 | 1532 | 1822 | 2110 | 2399 | 2991 |
| 1100                | 1360 | 1685 | 2004 | 2321 | 2639 | 3290 |
| 1200                | 1483 | 1838 | 2186 | 2532 | 2879 | 3589 |
| 1400                | 1730 | 2145 | 2551 | 2954 | 3359 | 4187 |
| 1600                | 1978 | 2451 | 2915 | 3376 | 3838 | 4786 |
| 1800                | 2225 | 2758 | 3280 | 3798 | 4318 | 5384 |
| 2000                | 2472 | 3064 | 3644 | 4220 | 4798 | 5982 |
| 2200                | 2719 | 3370 | 4008 | 4642 |      |      |
| 2400                | 2966 | 3677 | 4373 | 5064 |      |      |
| 2600                | 3214 | 3983 | 4737 | 5486 |      |      |
| 2800                | 3461 | 4290 | 5102 | 5908 |      |      |
| 3000                | 3708 | 4596 | 5466 | 6330 |      |      |

TYPE 33

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 997  | 1236 | 1470 | 1703 | 1936 | 2414 |
| n-exponent            | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      |      |      |      |      |      |
| 500                   |      |      | 735  | 851  | 968  | 1207 |
| 600                   |      | 742  | 882  | 1022 | 1161 | 1448 |
| 700                   |      | 865  | 1029 | 1192 | 1355 | 1689 |
| 800                   | 798  | 989  | 1176 | 1362 | 1549 | 1931 |
| 900                   | 898  | 1113 | 1323 | 1532 | 1742 | 2172 |
| 1000                  | 997  | 1236 | 1470 | 1703 | 1936 | 2414 |
| 1100                  | 1097 | 1360 | 1617 | 1873 | 2129 | 2655 |
| 1200                  | 1197 | 1483 | 1764 | 2043 | 2323 | 2896 |
| 1400                  | 1396 | 1731 | 2058 | 2384 | 2710 | 3379 |
| 1600                  | 1596 | 1978 | 2352 | 2724 | 3097 | 3862 |
| 1800                  | 1795 | 2225 | 2646 | 3065 | 3484 | 4344 |
| 2000                  | 1995 | 2472 | 2940 | 3405 | 3872 | 4827 |
| 2200                  | 2194 | 2720 | 3234 | 3746 |      |      |
| 2400                  | 2394 | 2967 | 3529 | 4086 |      |      |
| 2600                  | 2593 | 3214 | 3823 | 4427 |      |      |
| 2800                  | 2793 | 3461 | 4117 | 4767 |      |      |
| 3000                  | 2992 | 3709 | 4411 | 5108 |      |      |

TYPE 33

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 630  | 781  | 928  | 1075 | 1222 | 1524 |
| n-exponent          | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      | 464  | 538  | 611  | 762  |
| 600                 |      | 468  | 557  | 645  | 733  | 914  |
| 700                 |      | 546  | 650  | 753  | 856  | 1067 |
| 800                 | 504  | 624  | 743  | 860  | 978  | 1219 |
| 900                 | 567  | 703  | 836  | 968  | 1100 | 1372 |
| 1000                | 630  | 781  | 928  | 1075 | 1222 | 1524 |
| 1100                | 693  | 859  | 1021 | 1183 | 1345 | 1676 |
| 1200                | 756  | 937  | 1114 | 1290 | 1467 | 1829 |
| 1400                | 882  | 1093 | 1300 | 1505 | 1711 | 2134 |
| 1600                | 1008 | 1249 | 1485 | 1720 | 1956 | 2438 |
| 1800                | 1134 | 1405 | 1671 | 1935 | 2200 | 2743 |
| 2000                | 1260 | 1561 | 1857 | 2150 | 2445 | 3048 |
| 2200                | 1385 | 1717 | 2042 | 2365 |      |      |
| 2400                | 1511 | 1873 | 2228 | 2580 |      |      |
| 2600                | 1637 | 2030 | 2414 | 2795 |      |      |
| 2800                | 1763 | 2186 | 2599 | 3010 |      |      |
| 3000                | 1889 | 2342 | 2785 | 3225 |      |      |

## CENTRIC LINE

| TYPE 21s            |      | Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |      |      |
|---------------------|------|---------------------------------------------------------------------------|------|------|------|------|
| Height (mm)         | 300  | 400                                                                       | 500  | 600  | 700  | 900  |
| W/m 75/65/20 (φ50K) | 690  | 868                                                                       | 1034 | 1192 | 1342 | 1623 |
| n-exponent          | 1,28 | 1,29                                                                      | 1,29 | 1,30 | 1,30 | 1,29 |
| Length (mm)         | Watt | Watt                                                                      | Watt | Watt | Watt | Watt |
| 400                 | 276  | 347                                                                       | 414  | 477  | 537  | 649  |
| 500                 | 345  | 434                                                                       | 517  | 596  | 671  | 812  |
| 600                 | 414  | 521                                                                       | 620  | 715  | 805  | 974  |
| 700                 | 483  | 608                                                                       | 724  | 834  | 939  | 1136 |
| 800                 | 552  | 694                                                                       | 827  | 954  | 1074 | 1298 |
| 900                 | 621  | 781                                                                       | 931  | 1073 | 1208 | 1461 |
| 1000                | 690  | 868                                                                       | 1034 | 1192 | 1342 | 1623 |
| 1100                | 759  | 955                                                                       | 1137 | 1311 | 1476 | 1785 |
| 1200                | 828  | 1042                                                                      | 1241 | 1430 | 1610 | 1948 |
| 1400                | 966  | 1215                                                                      | 1448 | 1669 | 1879 | 2272 |
| 1600                | 1104 | 1389                                                                      | 1654 | 1907 | 2147 | 2597 |
| 1800                | 1242 | 1562                                                                      | 1861 | 2146 | 2416 | 2921 |
| 2000                | 1380 | 1736                                                                      | 2068 | 2384 | 2684 | 3246 |
| 2200                | 1518 | 1910                                                                      | 2275 | 2622 |      |      |
| 2400                | 1656 | 2083                                                                      | 2482 | 2861 |      |      |
| 2600                | 1794 | 2257                                                                      | 2688 | 3099 |      |      |
| 2800                | 1932 | 2430                                                                      | 2895 | 3338 |      |      |
| 3000                | 2070 | 2604                                                                      | 3102 | 3576 |      |      |

| TYPE 21s              |      | Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |      |      |
|-----------------------|------|---------------------------------------------------------------------------|------|------|------|------|
| Height (mm)           | 300  | 400                                                                       | 500  | 600  | 700  | 900  |
| W/m 70/55/20 (φ42,5K) | 560  | 704                                                                       | 838  | 965  | 1086 | 1316 |
| n-exponent            | 1,28 | 1,29                                                                      | 1,29 | 1,30 | 1,30 | 1,29 |
| Length (mm)           | Watt | Watt                                                                      | Watt | Watt | Watt | Watt |
| 400                   | 224  | 282                                                                       | 335  | 386  | 435  | 526  |
| 500                   | 280  | 352                                                                       | 419  | 482  | 543  | 658  |
| 600                   | 336  | 422                                                                       | 503  | 579  | 652  | 790  |
| 700                   | 392  | 493                                                                       | 587  | 675  | 760  | 921  |
| 800                   | 448  | 563                                                                       | 671  | 772  | 869  | 1053 |
| 900                   | 504  | 633                                                                       | 755  | 868  | 978  | 1184 |
| 1000                  | 560  | 704                                                                       | 838  | 965  | 1086 | 1316 |
| 1100                  | 616  | 774                                                                       | 922  | 1061 | 1195 | 1448 |
| 1200                  | 672  | 845                                                                       | 1006 | 1158 | 1304 | 1579 |
| 1400                  | 785  | 985                                                                       | 1174 | 1351 | 1521 | 1842 |
| 1600                  | 897  | 1126                                                                      | 1342 | 1544 | 1738 | 2106 |
| 1800                  | 1009 | 1267                                                                      | 1509 | 1737 | 1956 | 2369 |
| 2000                  | 1121 | 1408                                                                      | 1677 | 1930 | 2173 | 2632 |
| 2200                  | 1233 | 1548                                                                      | 1845 | 2123 |      |      |
| 2400                  | 1345 | 1689                                                                      | 2012 | 2316 |      |      |
| 2600                  | 1457 | 1830                                                                      | 2180 | 2509 |      |      |
| 2800                  | 1569 | 1971                                                                      | 2348 | 2702 |      |      |
| 3000                  | 1681 | 2112                                                                      | 2515 | 2895 |      |      |

| TYPE 21s            |      | Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors |      |      |      |      |
|---------------------|------|---------------------------------------------------------------------------|------|------|------|------|
| Height (mm)         | 300  | 400                                                                       | 500  | 600  | 700  | 900  |
| W/m 55/45/20 (φ30K) | 359  | 449                                                                       | 535  | 614  | 691  | 840  |
| n-exponent          | 1,28 | 1,29                                                                      | 1,29 | 1,30 | 1,30 | 1,29 |
| Length (mm)         | Watt | Watt                                                                      | Watt | Watt | Watt | Watt |
| 400                 | 144  | 180                                                                       | 214  | 245  | 276  | 336  |
| 500                 | 179  | 225                                                                       | 267  | 307  | 345  | 420  |
| 600                 | 215  | 269                                                                       | 321  | 368  | 414  | 504  |
| 700                 | 251  | 314                                                                       | 374  | 430  | 484  | 588  |
| 800                 | 287  | 359                                                                       | 428  | 491  | 553  | 672  |
| 900                 | 323  | 404                                                                       | 481  | 552  | 622  | 756  |
| 1000                | 359  | 449                                                                       | 535  | 614  | 691  | 840  |
| 1100                | 395  | 494                                                                       | 588  | 675  | 760  | 924  |
| 1200                | 431  | 539                                                                       | 642  | 736  | 829  | 1008 |
| 1400                | 502  | 629                                                                       | 749  | 859  | 967  | 1176 |
| 1600                | 574  | 719                                                                       | 856  | 982  | 1105 | 1344 |
| 1800                | 646  | 808                                                                       | 963  | 1104 | 1243 | 1511 |
| 2000                | 718  | 898                                                                       | 1070 | 1227 | 1382 | 1679 |
| 2200                | 789  | 988                                                                       | 1177 | 1350 |      |      |
| 2400                | 861  | 1078                                                                      | 1284 | 1473 |      |      |
| 2600                | 933  | 1168                                                                      | 1391 | 1595 |      |      |
| 2800                | 1005 | 1257                                                                      | 1498 | 1718 |      |      |
| 3000                | 1076 | 1347                                                                      | 1605 | 1841 |      |      |

## CENTRIC LINE

TYPE 22

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 878  | 1104 | 1317 | 1521 | 1717 | 2089 |
| n-exponent          | 1,30 | 1,30 | 1,31 | 1,31 | 1,30 | 1,28 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      | 442  | 527  | 608  | 687  | 836  |
| 500                 | 439  | 552  | 659  | 761  | 859  | 1045 |
| 600                 | 527  | 662  | 790  | 913  | 1030 | 1253 |
| 700                 | 615  | 773  | 922  | 1065 | 1202 | 1462 |
| 800                 | 702  | 883  | 1054 | 1217 | 1374 | 1671 |
| 900                 | 790  | 994  | 1185 | 1369 | 1545 | 1880 |
| 1000                | 878  | 1104 | 1317 | 1521 | 1717 | 2089 |
| 1100                | 966  | 1214 | 1449 | 1673 | 1889 | 2298 |
| 1200                | 1054 | 1325 | 1580 | 1825 | 2060 | 2507 |
| 1400                | 1229 | 1546 | 1844 | 2129 | 2404 | 2925 |
| 1600                | 1405 | 1766 | 2107 | 2434 | 2747 | 3342 |
| 1800                | 1580 | 1987 | 2371 | 2738 | 3091 | 3760 |
| 2000                | 1756 | 2208 | 2634 | 3042 | 3434 | 4178 |
| 2200                | 1932 | 2429 | 2897 | 3346 |      |      |
| 2400                | 2107 | 2650 | 3161 | 3650 |      |      |
| 2600                | 2283 | 2870 | 3424 | 3955 |      |      |
| 2800                | 2458 | 3091 | 3688 | 4259 |      |      |
| 3000                | 2634 | 3312 | 3951 | 4563 |      |      |

TYPE 22

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 711  | 894  | 1064 | 1229 | 1390 | 1697 |
| n-exponent            | 1,30 | 1,30 | 1,31 | 1,31 | 1,30 | 1,28 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      | 357  | 426  | 492  | 556  | 679  |
| 500                   | 355  | 447  | 532  | 615  | 695  | 848  |
| 600                   | 426  | 536  | 639  | 738  | 834  | 1018 |
| 700                   | 498  | 626  | 745  | 861  | 973  | 1188 |
| 800                   | 569  | 715  | 852  | 983  | 1112 | 1357 |
| 900                   | 640  | 804  | 958  | 1106 | 1251 | 1527 |
| 1000                  | 711  | 894  | 1064 | 1229 | 1390 | 1697 |
| 1100                  | 782  | 983  | 1171 | 1352 | 1529 | 1866 |
| 1200                  | 853  | 1072 | 1277 | 1475 | 1668 | 2036 |
| 1400                  | 995  | 1251 | 1490 | 1721 | 1946 | 2375 |
| 1600                  | 1137 | 1430 | 1703 | 1967 | 2224 | 2715 |
| 1800                  | 1279 | 1609 | 1916 | 2213 | 2502 | 3054 |
| 2000                  | 1422 | 1787 | 2129 | 2459 | 2780 | 3393 |
| 2200                  | 1564 | 1966 | 2342 | 2705 |      |      |
| 2400                  | 1706 | 2145 | 2555 | 2950 |      |      |
| 2600                  | 1848 | 2324 | 2768 | 3196 |      |      |
| 2800                  | 1990 | 2502 | 2980 | 3442 |      |      |
| 3000                  | 2132 | 2681 | 3193 | 3688 |      |      |

TYPE 22

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 452  | 568  | 674  | 779  | 884  | 1086 |
| n-exponent          | 1,30 | 1,30 | 1,31 | 1,31 | 1,30 | 1,28 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      | 227  | 270  | 312  | 354  | 435  |
| 500                 | 226  | 284  | 337  | 389  | 442  | 543  |
| 600                 | 271  | 341  | 405  | 467  | 530  | 652  |
| 700                 | 316  | 398  | 472  | 545  | 619  | 760  |
| 800                 | 362  | 455  | 540  | 623  | 707  | 869  |
| 900                 | 407  | 511  | 607  | 701  | 795  | 978  |
| 1000                | 452  | 568  | 674  | 779  | 884  | 1086 |
| 1100                | 497  | 625  | 742  | 857  | 972  | 1195 |
| 1200                | 542  | 682  | 809  | 935  | 1061 | 1304 |
| 1400                | 633  | 796  | 944  | 1091 | 1237 | 1521 |
| 1600                | 723  | 909  | 1079 | 1246 | 1414 | 1738 |
| 1800                | 814  | 1023 | 1214 | 1402 | 1591 | 1955 |
| 2000                | 904  | 1137 | 1349 | 1558 | 1768 | 2173 |
| 2200                | 994  | 1250 | 1484 | 1714 |      |      |
| 2400                | 1085 | 1364 | 1619 | 1869 |      |      |
| 2600                | 1175 | 1478 | 1754 | 2025 |      |      |
| 2800                | 1265 | 1591 | 1889 | 2181 |      |      |
| 3000                | 1356 | 1705 | 2023 | 2337 |      |      |

## CENTRIC LINE

### TYPE 33

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 1236 | 1532 | 1822 | 2110 | 2399 | 2991 |
| n-exponent          | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      | 911  | 1055 | 1200 | 1496 |
| 600                 |      | 919  | 1093 | 1266 | 1439 | 1795 |
| 700                 |      | 1072 | 1275 | 1477 | 1679 | 2094 |
| 800                 | 989  | 1226 | 1458 | 1688 | 1919 | 2393 |
| 900                 | 1112 | 1379 | 1640 | 1899 | 2159 | 2692 |
| 1000                | 1236 | 1532 | 1822 | 2110 | 2399 | 2991 |
| 1100                | 1360 | 1685 | 2004 | 2321 | 2639 | 3290 |
| 1200                | 1483 | 1838 | 2186 | 2532 | 2879 | 3589 |
| 1400                | 1730 | 2145 | 2551 | 2954 | 3359 | 4187 |
| 1600                | 1978 | 2451 | 2915 | 3376 | 3838 | 4786 |
| 1800                | 2225 | 2758 | 3280 | 3798 | 4318 | 5384 |
| 2000                | 2472 | 3064 | 3644 | 4220 | 4798 | 5982 |
| 2200                | 2719 | 3370 | 4008 | 4642 |      |      |
| 2400                | 2966 | 3677 | 4373 | 5064 |      |      |
| 2600                | 3214 | 3983 | 4737 | 5486 |      |      |
| 2800                | 3461 | 4290 | 5102 | 5908 |      |      |
| 3000                | 3708 | 4596 | 5466 | 6330 |      |      |

### TYPE 33

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 300  | 400  | 500  | 600  | 700  | 900  |
|-----------------------|------|------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 997  | 1236 | 1470 | 1703 | 1936 | 2414 |
| n-exponent            | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 |
| Length (mm)           | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                   |      |      |      |      |      |      |
| 500                   |      |      | 735  | 851  | 968  | 1207 |
| 600                   |      | 742  | 882  | 1022 | 1161 | 1448 |
| 700                   |      | 865  | 1029 | 1192 | 1355 | 1689 |
| 800                   | 798  | 989  | 1176 | 1362 | 1549 | 1931 |
| 900                   | 898  | 1113 | 1323 | 1532 | 1742 | 2172 |
| 1000                  | 997  | 1236 | 1470 | 1703 | 1936 | 2414 |
| 1100                  | 1097 | 1360 | 1617 | 1873 | 2129 | 2655 |
| 1200                  | 1197 | 1483 | 1764 | 2043 | 2323 | 2896 |
| 1400                  | 1396 | 1731 | 2058 | 2384 | 2710 | 3379 |
| 1600                  | 1596 | 1978 | 2352 | 2724 | 3097 | 3862 |
| 1800                  | 1795 | 2225 | 2646 | 3065 | 3484 | 4344 |
| 2000                  | 1995 | 2472 | 2940 | 3405 | 3872 | 4827 |
| 2200                  | 2194 | 2720 | 3234 | 3746 |      |      |
| 2400                  | 2394 | 2967 | 3529 | 4086 |      |      |
| 2600                  | 2593 | 3214 | 3823 | 4427 |      |      |
| 2800                  | 2793 | 3461 | 4117 | 4767 |      |      |
| 3000                  | 2992 | 3709 | 4411 | 5108 |      |      |

### TYPE 33

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 300  | 400  | 500  | 600  | 700  | 900  |
|---------------------|------|------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 630  | 781  | 928  | 1075 | 1222 | 1524 |
| n-exponent          | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 | 1,32 |
| Length (mm)         | Watt | Watt | Watt | Watt | Watt | Watt |
| 400                 |      |      |      |      |      |      |
| 500                 |      |      | 464  | 538  | 611  | 762  |
| 600                 |      | 468  | 557  | 645  | 733  | 914  |
| 700                 |      | 546  | 650  | 753  | 856  | 1067 |
| 800                 | 504  | 624  | 743  | 860  | 978  | 1219 |
| 900                 | 567  | 703  | 836  | 968  | 1100 | 1372 |
| 1000                | 630  | 781  | 928  | 1075 | 1222 | 1524 |
| 1100                | 693  | 859  | 1021 | 1183 | 1345 | 1676 |
| 1200                | 756  | 937  | 1114 | 1290 | 1467 | 1829 |
| 1400                | 882  | 1093 | 1300 | 1505 | 1711 | 2134 |
| 1600                | 1008 | 1249 | 1485 | 1720 | 1956 | 2438 |
| 1800                | 1134 | 1405 | 1671 | 1935 | 2200 | 2743 |
| 2000                | 1260 | 1561 | 1857 | 2150 | 2445 | 3048 |
| 2200                | 1385 | 1717 | 2042 | 2365 |      |      |
| 2400                | 1511 | 1873 | 2228 | 2580 |      |      |
| 2600                | 1637 | 2030 | 2414 | 2795 |      |      |
| 2800                | 1763 | 2186 | 2599 | 3010 |      |      |
| 3000                | 1889 | 2342 | 2785 | 3225 |      |      |

CENTRIC VERTI  
STANDARD

## TYPE 10

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 1760 | 1954 | 2150 | 2348 |
| n-exponent          | 1,35 | 1,38 | 1,36 | 1,35 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 |      | 801  | 881  | 961  |
| 500                 |      | 977  | 1075 | 1174 |
| 600                 |      | 1150 | 1265 | 1381 |
| 700                 | 1189 | 1320 | 1452 | 1586 |
| 800                 | 1340 | 1488 | 1637 | 1787 |

## TYPE 10

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 1600 | 1800 | 2000 | 2200 |
|-----------------------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 1400 | 1546 | 1706 | 1868 |
| n-exponent            | 1,35 | 1,38 | 1,36 | 1,35 |
| Width (mm)            | Watt | Watt | Watt | Watt |
| 400                   |      | 618  | 682  | 747  |
| 500                   |      | 773  | 853  | 934  |
| 600                   |      | 928  | 1024 | 1121 |
| 700                   | 980  | 1082 | 1194 | 1308 |
| 800                   | 1120 | 1237 | 1365 | 1494 |

## TYPE 10

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 876  | 960  | 1064 | 1172 |
| n-exponent          | 1,35 | 1,38 | 1,36 | 1,35 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 |      | 384  | 426  | 469  |
| 500                 |      | 480  | 532  | 586  |
| 600                 |      | 576  | 638  | 703  |
| 700                 | 613  | 672  | 745  | 820  |
| 800                 | 701  | 768  | 851  | 938  |

## TYPE 20

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 2606 | 2886 | 3170 | 3456 |
| n-exponent          | 1,29 | 1,29 | 1,33 | 1,30 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 1065 | 1179 | 1295 | 1413 |
| 500                 | 1303 | 1443 | 1585 | 1728 |
| 600                 | 1536 | 1701 | 1868 | 2038 |
| 700                 | 1765 | 1955 | 2147 | 2342 |
| 800                 | 1992 | 2206 | 2423 | 2643 |

## TYPE 20

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 1600 | 1800 | 2000 | 2200 |
|-----------------------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 2094 | 2319 | 2530 | 2772 |
| n-exponent            | 1,29 | 1,29 | 1,33 | 1,30 |
| Width (mm)            | Watt | Watt | Watt | Watt |
| 400                   | 838  | 928  | 1012 | 1109 |
| 500                   | 1047 | 1160 | 1265 | 1386 |
| 600                   | 1256 | 1391 | 1518 | 1663 |
| 700                   | 1466 | 1623 | 1771 | 1940 |
| 800                   | 1675 | 1855 | 2024 | 2218 |

## TYPE 20

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 1346 | 1486 | 1626 | 1768 |
| n-exponent          | 1,29 | 1,29 | 1,33 | 1,30 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 538  | 594  | 650  | 707  |
| 500                 | 673  | 743  | 813  | 884  |
| 600                 | 808  | 892  | 976  | 1061 |
| 700                 | 942  | 1040 | 1138 | 1238 |
| 800                 | 1077 | 1189 | 1301 | 1414 |



## CENTRIC VERTI

### TYPE 21s

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 2962 | 3242 | 3516 | 3782 |
| n-exponent          | 1,35 | 1,34 | 1,32 | 1,36 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 1185 | 1297 | 1406 | 1513 |
| 500                 | 1481 | 1621 | 1758 | 1891 |
| 600                 | 1777 | 1945 | 2110 | 2269 |
| 700                 | 2073 | 2269 | 2461 | 2647 |
| 800                 | 2370 | 2594 | 2813 | 3026 |

### TYPE 21s

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 1600 | 1800 | 2000 | 2200 |
|-----------------------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 2378 | 2608 | 2837 | 3032 |
| n-exponent            | 1,35 | 1,34 | 1,32 | 1,36 |
| Width (mm)            | Watt | Watt | Watt | Watt |
| 400                   | 951  | 1043 | 1135 | 1213 |
| 500                   | 1189 | 1304 | 1419 | 1516 |
| 600                   | 1427 | 1565 | 1702 | 1819 |
| 700                   | 1665 | 1826 | 1986 | 2122 |
| 800                   | 1902 | 2086 | 2270 | 2426 |

### TYPE 21s

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 1486 | 1635 | 1791 | 1888 |
| n-exponent          | 1,35 | 1,34 | 1,32 | 1,36 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 594  | 654  | 716  | 755  |
| 500                 | 743  | 818  | 896  | 944  |
| 600                 | 892  | 981  | 1075 | 1133 |
| 700                 | 1040 | 1145 | 1254 | 1322 |
| 800                 | 1189 | 1308 | 1433 | 1510 |

### TYPE 22

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 3608 | 3896 | 4190 | 4488 |
| n-exponent          | 1,38 | 1,36 | 1,33 | 1,45 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 1443 | 1558 | 1676 | 1795 |
| 500                 | 1804 | 1948 | 2095 | 2244 |
| 600                 | 2165 | 2338 | 2514 | 2693 |
| 700                 | 2526 | 2727 | 2933 | 3142 |
| 800                 | 2886 | 3117 | 3352 | 3590 |

### TYPE 22

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 1600 | 1800 | 2000 | 2200 |
|-----------------------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 2883 | 3123 | 3376 | 3546 |
| n-exponent            | 1,38 | 1,36 | 1,33 | 1,45 |
| Width (mm)            | Watt | Watt | Watt | Watt |
| 400                   | 1153 | 1249 | 1350 | 1418 |
| 500                   | 1442 | 1562 | 1688 | 1773 |
| 600                   | 1730 | 1874 | 2026 | 2128 |
| 700                   | 2018 | 2186 | 2363 | 2482 |
| 800                   | 2306 | 2498 | 2701 | 2837 |

### TYPE 22

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 1783 | 1945 | 2124 | 2140 |
| n-exponent          | 1,38 | 1,36 | 1,33 | 1,45 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 713  | 778  | 850  | 856  |
| 500                 | 892  | 973  | 1062 | 1070 |
| 600                 | 1070 | 1167 | 1274 | 1284 |
| 700                 | 1248 | 1362 | 1487 | 1498 |
| 800                 | 1426 | 1556 | 1699 | 1712 |

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## TYPE 21s

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 2618 | 2800 | 2996 | 3208 |
| n-exponent          | 1,33 | 1,35 | 1,36 | 1,46 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 1047 | 1120 | 1198 | 1283 |
| 500                 | 1309 | 1400 | 1498 | 1604 |
| 600                 | 1571 | 1680 | 1798 | 1925 |
| 700                 | 1833 | 1960 | 2097 | 2246 |
| 800                 | 2094 | 2240 | 2397 | 2566 |

## TYPE 21s

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 1600 | 1800 | 2000 | 2200 |
|-----------------------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 2109 | 2248 | 2402 | 2530 |
| n-exponent            | 1,33 | 1,35 | 1,36 | 1,46 |
| Width (mm)            | Watt | Watt | Watt | Watt |
| 400                   | 844  | 899  | 961  | 1012 |
| 500                   | 1055 | 1124 | 1201 | 1265 |
| 600                   | 1265 | 1349 | 1441 | 1518 |
| 700                   | 1476 | 1574 | 1681 | 1771 |
| 800                   | 1687 | 1798 | 1922 | 2024 |

## TYPE 21s

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 1327 | 1405 | 1496 | 1522 |
| n-exponent          | 1,33 | 1,35 | 1,36 | 1,46 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 531  | 562  | 598  | 609  |
| 500                 | 664  | 703  | 748  | 761  |
| 600                 | 796  | 843  | 898  | 913  |
| 700                 | 929  | 984  | 1047 | 1065 |
| 800                 | 1062 | 1124 | 1197 | 1218 |

## TYPE 22

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 3202 | 3486 | 3772 | 4064 |
| n-exponent          | 1,40 | 1,44 | 1,48 | 1,35 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 1281 | 1394 | 1509 | 1626 |
| 500                 | 1601 | 1743 | 1886 | 2032 |
| 600                 | 1921 | 2092 | 2263 | 2438 |
| 700                 | 2241 | 2440 | 2640 | 2845 |
| 800                 | 2562 | 2789 | 3018 | 3251 |

## TYPE 22

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 1600 | 1800 | 2000 | 2200 |
|-----------------------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 2550 | 2759 | 2966 | 3263 |
| n-exponent            | 1,40 | 1,44 | 1,48 | 1,35 |
| Width (mm)            | Watt | Watt | Watt | Watt |
| 400                   | 1020 | 1104 | 1186 | 1305 |
| 500                   | 1275 | 1380 | 1483 | 1632 |
| 600                   | 1530 | 1655 | 1780 | 1958 |
| 700                   | 1785 | 1931 | 2076 | 2284 |
| 800                   | 2040 | 2207 | 2373 | 2610 |

## TYPE 22

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 1566 | 1671 | 1771 | 2039 |
| n-exponent          | 1,40 | 1,44 | 1,48 | 1,35 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 626  | 668  | 708  | 816  |
| 500                 | 783  | 836  | 886  | 1020 |
| 600                 | 940  | 1003 | 1063 | 1223 |
| 700                 | 1096 | 1170 | 1240 | 1427 |
| 800                 | 1253 | 1337 | 1417 | 1631 |

## CENTRIC VERTI LINE

### TYPE 21s

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 2618 | 2800 | 2996 | 3208 |
| n-exponent          | 1,33 | 1,35 | 1,36 | 1,46 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 1047 | 1120 | 1198 | 1283 |
| 500                 | 1309 | 1400 | 1498 | 1604 |
| 600                 | 1571 | 1680 | 1798 | 1925 |
| 700                 | 1833 | 1960 | 2097 | 2246 |
| 800                 | 2094 | 2240 | 2397 | 2566 |

### TYPE 21s

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 1600 | 1800 | 2000 | 2200 |
|-----------------------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 2109 | 2248 | 2402 | 2530 |
| n-exponent            | 1,33 | 1,35 | 1,36 | 1,46 |
| Width (mm)            | Watt | Watt | Watt | Watt |
| 400                   | 844  | 899  | 961  | 1012 |
| 500                   | 1055 | 1124 | 1201 | 1265 |
| 600                   | 1265 | 1349 | 1441 | 1518 |
| 700                   | 1476 | 1574 | 1681 | 1771 |
| 800                   | 1687 | 1798 | 1922 | 2024 |

### TYPE 21s

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 1327 | 1405 | 1496 | 1522 |
| n-exponent          | 1,33 | 1,35 | 1,36 | 1,46 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 531  | 562  | 598  | 609  |
| 500                 | 664  | 703  | 748  | 761  |
| 600                 | 796  | 843  | 898  | 913  |
| 700                 | 929  | 984  | 1047 | 1065 |
| 800                 | 1062 | 1124 | 1197 | 1218 |

### TYPE 22

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 75/65/20 (φ50K) | 3202 | 3486 | 3772 | 4064 |
| n-exponent          | 1,40 | 1,44 | 1,48 | 1,35 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 1281 | 1394 | 1509 | 1626 |
| 500                 | 1601 | 1743 | 1886 | 2032 |
| 600                 | 1921 | 2092 | 2263 | 2438 |
| 700                 | 2241 | 2440 | 2640 | 2845 |
| 800                 | 2562 | 2789 | 3018 | 3251 |

### TYPE 22

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)           | 1600 | 1800 | 2000 | 2200 |
|-----------------------|------|------|------|------|
| W/m 70/55/20 (φ42,5K) | 2550 | 2759 | 2966 | 3263 |
| n-exponent            | 1,40 | 1,44 | 1,48 | 1,35 |
| Width (mm)            | Watt | Watt | Watt | Watt |
| 400                   | 1020 | 1104 | 1186 | 1305 |
| 500                   | 1275 | 1380 | 1483 | 1632 |
| 600                   | 1530 | 1655 | 1780 | 1958 |
| 700                   | 1785 | 1931 | 2076 | 2284 |
| 800                   | 2040 | 2207 | 2373 | 2610 |

### TYPE 22

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

| Height (mm)         | 1600 | 1800 | 2000 | 2200 |
|---------------------|------|------|------|------|
| W/m 55/45/20 (φ30K) | 1566 | 1671 | 1771 | 2039 |
| n-exponent          | 1,40 | 1,44 | 1,48 | 1,35 |
| Width (mm)          | Watt | Watt | Watt | Watt |
| 400                 | 626  | 668  | 708  | 816  |
| 500                 | 783  | 836  | 886  | 1020 |
| 600                 | 940  | 1003 | 1063 | 1223 |
| 700                 | 1096 | 1170 | 1240 | 1427 |
| 800                 | 1253 | 1337 | 1417 | 1631 |

MINI COLLECTION

THERMAL OUTPUT PER RADIATOR TYPE

# Mini Collection



## MINI COMPACT

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

|              | Type 22 |      | Type 33 |      | Type 34 |      |
|--------------|---------|------|---------|------|---------|------|
| Height (mm)  | 150     | 200  | 150     | 200  | 150     | 200  |
| W/m 75/65/20 | 591     | 715  | 844     | 1029 | 984     | 1205 |
| n-exponent   | 1,24    | 1,25 | 1,24    | 1,26 | 1,24    | 1,26 |
| Length (mm)  | Watt    | Watt | Watt    | Watt | Watt    | Watt |
| 800          | 473     | 572  | 675     | 823  | 787     | 964  |
| 900          | 532     | 644  | 760     | 926  | 886     | 1085 |
| 1000         | 591     | 715  | 844     | 1029 | 984     | 1205 |
| 1100         | 650     | 787  | 928     | 1132 | 1082    | 1326 |
| 1200         | 709     | 858  | 1013    | 1235 | 1181    | 1446 |
| 1300         | 768     | 930  | 1097    | 1338 | 1279    | 1567 |
| 1400         | 827     | 1001 | 1182    | 1441 | 1378    | 1687 |
| 1500         | 887     | 1073 | 1266    | 1544 | 1476    | 1808 |
| 1600         | 946     | 1144 | 1350    | 1646 | 1574    | 1928 |
| 1800         | 1064    | 1287 | 1519    | 1852 | 1771    | 2169 |
| 2000         | 1182    | 1430 | 1688    | 2058 | 1968    | 2410 |
| 2200         | 1300    | 1573 | 1857    | 2264 | 2165    | 2651 |
| 2400         | 1418    | 1716 | 2026    | 2470 | 2362    | 2892 |
| 2600         | 1537    | 1859 | 2194    | 2675 | 2558    | 3133 |
| 2800         | 1655    | 2002 | 2363    | 2881 | 2755    | 3374 |
| 3000         | 1773    | 2145 | 2532    | 3087 | 2952    | 3615 |

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

|              | Type 22 |      | Type 33 |      | Type 34 |      |
|--------------|---------|------|---------|------|---------|------|
| Height (mm)  | 150     | 200  | 150     | 200  | 150     | 200  |
| W/m 70/55/20 | 483     | 584  | 690     | 838  | 804     | 982  |
| n-exponent   | 1,24    | 1,25 | 1,24    | 1,26 | 1,24    | 1,26 |
| Length (mm)  | Watt    | Watt | Watt    | Watt | Watt    | Watt |
| 800          | 387     | 467  | 552     | 671  | 644     | 785  |
| 900          | 435     | 525  | 621     | 755  | 724     | 884  |
| 1000         | 483     | 584  | 690     | 838  | 804     | 982  |
| 1100         | 531     | 642  | 759     | 922  | 885     | 1080 |
| 1200         | 580     | 700  | 828     | 1006 | 965     | 1178 |
| 1300         | 628     | 759  | 897     | 1090 | 1046    | 1276 |
| 1400         | 676     | 817  | 966     | 1174 | 1126    | 1375 |
| 1500         | 725     | 875  | 1035    | 1258 | 1207    | 1473 |
| 1600         | 773     | 934  | 1104    | 1342 | 1287    | 1571 |
| 1800         | 870     | 1050 | 1242    | 1509 | 1448    | 1767 |
| 2000         | 966     | 1167 | 1380    | 1677 | 1609    | 1964 |
| 2200         | 1063    | 1284 | 1518    | 1845 | 1770    | 2160 |
| 2400         | 1160    | 1401 | 1656    | 2012 | 1931    | 2356 |
| 2600         | 1256    | 1517 | 1794    | 2180 | 2091    | 2553 |
| 2800         | 1353    | 1634 | 1932    | 2348 | 2252    | 2749 |
| 3000         | 1449    | 1751 | 2070    | 2515 | 2413    | 2946 |

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

|              | Type 22 |      | Type 33 |      | Type 34 |      |
|--------------|---------|------|---------|------|---------|------|
| Height (mm)  | 150     | 200  | 150     | 200  | 150     | 200  |
| W/m 55/45/20 | 314     | 378  | 448     | 541  | 522     | 633  |
| n-exponent   | 1,24    | 1,25 | 1,24    | 1,26 | 1,24    | 1,26 |
| Length (mm)  | Watt    | Watt | Watt    | Watt | Watt    | Watt |
| 800          | 251     | 302  | 358     | 432  | 418     | 506  |
| 900          | 282     | 340  | 403     | 487  | 470     | 570  |
| 1000         | 314     | 378  | 448     | 541  | 522     | 633  |
| 1100         | 345     | 415  | 493     | 595  | 575     | 696  |
| 1200         | 376     | 453  | 538     | 649  | 627     | 760  |
| 1300         | 408     | 491  | 582     | 703  | 679     | 823  |
| 1400         | 439     | 529  | 627     | 757  | 731     | 886  |
| 1500         | 471     | 566  | 672     | 811  | 783     | 950  |
| 1600         | 502     | 604  | 717     | 865  | 836     | 1013 |
| 1800         | 565     | 680  | 806     | 973  | 940     | 1140 |
| 2000         | 627     | 755  | 896     | 1081 | 1045    | 1266 |
| 2200         | 690     | 831  | 986     | 1189 | 1149    | 1393 |
| 2400         | 753     | 906  | 1075    | 1297 | 1253    | 1519 |
| 2600         | 816     | 982  | 1165    | 1406 | 1358    | 1646 |
| 2800         | 878     | 1057 | 1254    | 1514 | 1462    | 1773 |
| 3000         | 941     | 1133 | 1344    | 1622 | 1567    | 1899 |

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Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

|              | Type 22 |      | Type 33 |      | Type 34 |      |
|--------------|---------|------|---------|------|---------|------|
| Height (mm)  | 150     | 200  | 150     | 200  | 150     | 200  |
| W/m 75/65/20 | 591     | 688  | 848     | 1011 | 1014    | 1189 |
| n-exponent   | 1,23    | 1,25 | 1,24    | 1,27 | 1,25    | 1,25 |
| Length (mm)  | Watt    | Watt | Watt    | Watt | Watt    | Watt |
| 800          | 473     | 550  | 678     | 809  | 811     | 951  |
| 900          | 532     | 619  | 763     | 910  | 913     | 1070 |
| 1000         | 591     | 688  | 848     | 1011 | 1014    | 1189 |
| 1100         | 650     | 757  | 933     | 1112 | 1115    | 1308 |
| 1200         | 709     | 826  | 1018    | 1213 | 1217    | 1427 |
| 1300         | 768     | 894  | 1102    | 1314 | 1318    | 1546 |
| 1400         | 827     | 963  | 1187    | 1415 | 1420    | 1665 |
| 1500         | 887     | 1032 | 1272    | 1517 | 1521    | 1784 |
| 1600         | 946     | 1101 | 1357    | 1618 | 1622    | 1902 |
| 1800         | 1064    | 1238 | 1526    | 1820 | 1825    | 2140 |
| 2000         | 1182    | 1376 | 1696    | 2022 | 2028    | 2378 |
| 2200         | 1300    | 1514 | 1866    | 2224 | 2231    | 2616 |
| 2400         | 1418    | 1651 | 2035    | 2426 | 2434    | 2854 |
| 2600         | 1537    | 1789 | 2205    | 2629 | 2636    | 3091 |
| 2800         | 1655    | 1926 | 2374    | 2831 | 2839    | 3329 |
| 3000         | 1773    | 2064 | 2544    | 3033 | 3042    | 3567 |

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

|              | Type 22 |      | Type 33 |      | Type 34 |      |
|--------------|---------|------|---------|------|---------|------|
| Height (mm)  | 150     | 200  | 150     | 200  | 150     | 200  |
| W/m 70/55/20 | 484     | 562  | 693     | 822  | 828     | 970  |
| n-exponent   | 1,23    | 1,25 | 1,24    | 1,27 | 1,25    | 1,25 |
| Length (mm)  | Watt    | Watt | Watt    | Watt | Watt    | Watt |
| 800          | 387     | 449  | 555     | 658  | 662     | 776  |
| 900          | 436     | 505  | 624     | 740  | 745     | 873  |
| 1000         | 484     | 562  | 693     | 822  | 828     | 970  |
| 1100         | 532     | 618  | 763     | 905  | 910     | 1067 |
| 1200         | 581     | 674  | 832     | 987  | 993     | 1164 |
| 1300         | 629     | 730  | 901     | 1069 | 1076    | 1262 |
| 1400         | 677     | 786  | 971     | 1151 | 1159    | 1359 |
| 1500         | 726     | 842  | 1040    | 1234 | 1241    | 1456 |
| 1600         | 774     | 898  | 1109    | 1316 | 1324    | 1553 |
| 1800         | 871     | 1011 | 1248    | 1480 | 1490    | 1747 |
| 2000         | 968     | 1123 | 1386    | 1645 | 1655    | 1941 |
| 2200         | 1065    | 1235 | 1525    | 1809 | 1821    | 2135 |
| 2400         | 1161    | 1348 | 1664    | 1974 | 1986    | 2329 |
| 2600         | 1258    | 1460 | 1802    | 2138 | 2152    | 2523 |
| 2800         | 1355    | 1572 | 1941    | 2303 | 2317    | 2717 |
| 3000         | 1452    | 1685 | 2080    | 2467 | 2483    | 2911 |

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

|              | Type 22 |      | Type 33 |      | Type 34 |      |
|--------------|---------|------|---------|------|---------|------|
| Height (mm)  | 150     | 200  | 150     | 200  | 150     | 200  |
| W/m 55/45/20 | 315     | 363  | 450     | 528  | 535     | 628  |
| n-exponent   | 1,23    | 1,25 | 1,24    | 1,27 | 1,25    | 1,25 |
| Length (mm)  | Watt    | Watt | Watt    | Watt | Watt    | Watt |
| 800          | 252     | 291  | 360     | 423  | 428     | 502  |
| 900          | 284     | 327  | 405     | 476  | 482     | 565  |
| 1000         | 315     | 363  | 450     | 528  | 535     | 628  |
| 1100         | 347     | 400  | 495     | 581  | 589     | 691  |
| 1200         | 378     | 436  | 540     | 634  | 643     | 753  |
| 1300         | 410     | 472  | 585     | 687  | 696     | 816  |
| 1400         | 441     | 509  | 630     | 740  | 750     | 879  |
| 1500         | 473     | 545  | 675     | 793  | 803     | 942  |
| 1600         | 504     | 581  | 720     | 846  | 857     | 1005 |
| 1800         | 568     | 654  | 810     | 951  | 964     | 1130 |
| 2000         | 631     | 727  | 900     | 1057 | 1071    | 1256 |
| 2200         | 694     | 799  | 990     | 1163 | 1178    | 1381 |
| 2400         | 757     | 872  | 1080    | 1268 | 1285    | 1507 |
| 2600         | 820     | 945  | 1170    | 1374 | 1392    | 1632 |
| 2800         | 883     | 1017 | 1260    | 1480 | 1499    | 1758 |
| 3000         | 946     | 1090 | 1350    | 1585 | 1606    | 1884 |



## PIANO MINI 2

Watts 75/65/20 in accordance with EN442-1: 2014: radiators and convectors

|              | Type 22 |      | Type 33 |      | Type 34 |      |
|--------------|---------|------|---------|------|---------|------|
| Height (mm)  | 150     | 200  | 150     | 200  | 150     | 200  |
| W/m 75/65/20 | 573     | 684  | 827     | 999  | 965     | 1171 |
| n-exponent   | 1,23    | 1,24 | 1,22    | 1,24 | 1,22    | 1,25 |
| Length (mm)  | Watt    | Watt | Watt    | Watt | Watt    | Watt |
| 800          | 458     | 547  | 662     | 799  | 772     | 937  |
| 900          | 516     | 616  | 744     | 899  | 869     | 1054 |
| 1000         | 573     | 684  | 827     | 999  | 965     | 1171 |
| 1100         | 630     | 752  | 910     | 1099 | 1062    | 1288 |
| 1200         | 688     | 821  | 992     | 1199 | 1158    | 1405 |
| 1300         | 745     | 889  | 1075    | 1299 | 1255    | 1522 |
| 1400         | 802     | 958  | 1158    | 1399 | 1351    | 1639 |
| 1500         | 860     | 1026 | 1241    | 1499 | 1448    | 1757 |
| 1600         | 917     | 1094 | 1323    | 1598 | 1544    | 1874 |
| 1800         | 1031    | 1231 | 1489    | 1798 | 1737    | 2108 |
| 2000         | 1146    | 1368 | 1654    | 1998 | 1930    | 2342 |
| 2200         | 1261    | 1505 | 1819    | 2198 | 2123    | 2576 |
| 2400         | 1375    | 1642 | 1985    | 2398 | 2316    | 2810 |
| 2600         | 1490    | 1778 | 2150    | 2597 | 2509    | 3045 |
| 2800         | 1604    | 1915 | 2316    | 2797 | 2702    | 3279 |
| 3000         | 1719    | 2052 | 2481    | 2997 | 2895    | 3513 |

Watts 70/55/20 in accordance with EN442-1: 2014: radiators and convectors

|              | Type 22 |      | Type 33 |      | Type 34 |      |
|--------------|---------|------|---------|------|---------|------|
| Height (mm)  | 150     | 200  | 150     | 200  | 150     | 200  |
| W/m 70/55/20 | 469     | 559  | 678     | 817  | 791     | 956  |
| n-exponent   | 1,23    | 1,24 | 1,22    | 1,24 | 1,22    | 1,25 |
| Length (mm)  | Watt    | Watt | Watt    | Watt | Watt    | Watt |
| 800          | 375     | 447  | 543     | 653  | 633     | 765  |
| 900          | 422     | 503  | 610     | 735  | 712     | 860  |
| 1000         | 469     | 559  | 678     | 817  | 791     | 956  |
| 1100         | 516     | 615  | 746     | 898  | 871     | 1051 |
| 1200         | 563     | 671  | 814     | 980  | 950     | 1147 |
| 1300         | 610     | 727  | 882     | 1062 | 1029    | 1242 |
| 1400         | 657     | 783  | 950     | 1143 | 1108    | 1338 |
| 1500         | 704     | 839  | 1017    | 1225 | 1187    | 1434 |
| 1600         | 751     | 895  | 1085    | 1307 | 1266    | 1529 |
| 1800         | 845     | 1006 | 1221    | 1470 | 1425    | 1720 |
| 2000         | 938     | 1118 | 1357    | 1633 | 1583    | 1911 |
| 2200         | 1032    | 1230 | 1492    | 1797 | 1741    | 2103 |
| 2400         | 1126    | 1342 | 1628    | 1960 | 1899    | 2294 |
| 2600         | 1220    | 1454 | 1763    | 2123 | 2058    | 2485 |
| 2800         | 1314    | 1566 | 1899    | 2287 | 2216    | 2676 |
| 3000         | 1408    | 1677 | 2035    | 2450 | 2374    | 2867 |

Watts 55/45/20 in accordance with EN442-1: 2014: radiators and convectors

|              | Type 22 |      | Type 33 |      | Type 34 |      |
|--------------|---------|------|---------|------|---------|------|
| Height (mm)  | 150     | 200  | 150     | 200  | 150     | 200  |
| W/m 55/45/20 | 306     | 363  | 443     | 530  | 517     | 618  |
| n-exponent   | 1,23    | 1,24 | 1,22    | 1,24 | 1,22    | 1,25 |
| Length (mm)  | Watt    | Watt | Watt    | Watt | Watt    | Watt |
| 800          | 245     | 290  | 355     | 424  | 414     | 495  |
| 900          | 275     | 327  | 399     | 477  | 466     | 557  |
| 1000         | 306     | 363  | 443     | 530  | 517     | 618  |
| 1100         | 336     | 399  | 488     | 583  | 569     | 680  |
| 1200         | 367     | 436  | 532     | 636  | 621     | 742  |
| 1300         | 397     | 472  | 576     | 689  | 673     | 804  |
| 1400         | 428     | 508  | 621     | 742  | 724     | 866  |
| 1500         | 459     | 545  | 665     | 795  | 776     | 928  |
| 1600         | 489     | 581  | 710     | 848  | 828     | 989  |
| 1800         | 550     | 653  | 798     | 954  | 931     | 1113 |
| 2000         | 611     | 726  | 887     | 1060 | 1035    | 1237 |
| 2200         | 673     | 799  | 976     | 1167 | 1138    | 1360 |
| 2400         | 734     | 871  | 1064    | 1273 | 1242    | 1484 |
| 2600         | 795     | 944  | 1153    | 1379 | 1345    | 1608 |
| 2800         | 856     | 1017 | 1242    | 1485 | 1449    | 1731 |
| 3000         | 917     | 1089 | 1330    | 1591 | 1552    | 1855 |



## NOTES

## NOTES



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