



RADIK



steel panel radiators





The RADIK 08/2023 catalogue
replaces all previous issues.

The new plant KORADO, a.s. is with its technological equipment and organizational structure the most modern factory for the production of radiators in Europe.

Its modern and sophisticated set-up in the area of 30 000 m² enables further increases of production capacity whenever needed. The choice of all technology was driven by the maximum effort to ensure environment protection inside the factory as well as in its surroundings.

KORADO, a.s. is the holder of the ISO 9001 and ISO 14001 quality certificate.



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RADIK VKM8

- with bottom middle or bottom right connection
(see page 14)



RADIK VKM8 - L

- with bottom middle or bottom left connection
(see page 15)



RADIK VKM8 - U

- with bottom middle, bottom right or
bottom left connection
(see page 16)



RADIK VK

- with bottom right connection
(see page 17)



RADIK VK - Z

- zinc-coated radiator
- with bottom right connection
(see page 18)



RADIK VKL

- with bottom left connection
(see page 19)



RADIK VKU

- enables both right and left bottom connection
(see page 20)



RADIK MATERNELLE VK

- for nursery schools
- with bottom right connection
(see page 21)



RADIK MATERNELLE VKL

- for nursery schools
- with bottom left connection
(see page 22)



RADIK KLASIK

- with right or left side connection
(see page 23)



RADIK KLASIK - Z

- zinc-coated radiator
- with side connection
(see page 24)



RADIK KLASIK - R

- for a quick replacement of an old sectional radiator
(see page 25)



RADIK PLAN VKM8



- with bottom middle or bottom right connection
- with a flat front panel
(see page 28)



RADIK LINE VKM8



- with bottom middle or bottom right connection
- with a flat front panel with fine horizontal grooves
(see page 28)



RADIK PLAN VKM8 - L



- with bottom middle or bottom left connection
- with a flat front panel
(see page 29)



RADIK LINE VKM8 - L



- with bottom middle or bottom left connection
- with a flat front panel with fine horizontal grooves
(see page 29)



RADIK PLAN VK

- with a flat front panel and bottom right connection
- with bottom right connection
(see page 30)



RADIK LINE VK

- with a flat front panel with fine horizontal grooves
- with bottom right connection
(see page 30)



RADIK PLAN VKL

- with a flat front panel and bottom right connection
- with bottom left connection
(see page 31)



RADIK LINE VKL

- with a flat front panel with fine horizontal grooves
- with bottom left connection
(see page 31)



RADIK PLAN KLASIK

- with a flat front panel and side connection
(see page 32)



RADIK LINE KLASIK

- with a flat front panel with fine horizontal grooves
(see page 32)



RADIK PLAN KLASIK - R

- with flat front panel
- for replacement of a sectional radiator
(see page 33)



RADIK LINE KLASIK - R

- with flat front panel with fine horizontal grooves
- for replacement of a sectional radiator
(see page 33)



RADIK PLAN VERTIKAL - M

- with bottom middle connection and flat front panel
(see page 34)



RADIK LINE VERTIKAL - M

- with bottom middle connection and grooved front panel
(see page 35)



RADIK CLEAN VKM8

- with bottom middle or bottom right connection
(see page 37)



RADIK CLEAN VK

- with bottom right connection
(see page 38)



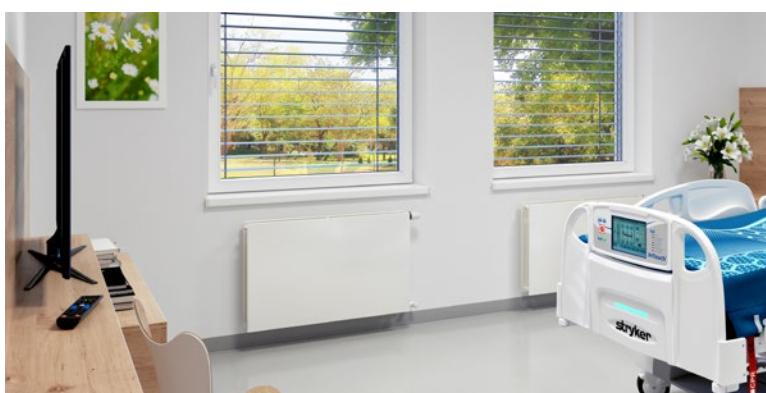
RADIK CLEAN

- enables right or left bottom connection
(see page 39)



RADIK HYGIENE VK

- with bottom right connection
(see page 40)



RADIK HYGIENE

- enables right or left side connection
(see page 41)



RADIK COMBI VK

- for combined heating
- with bottom right connection
(see page 42)



RADIK STEEL PANEL RADIATORS IN HEIGHT 200MM

- for rooms with low window sills
(see page 44)

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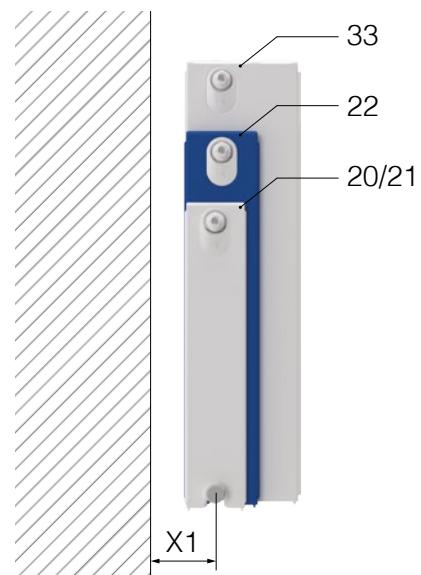
ADVANTAGES OF RADIATORS

- made to last
- [extended warranty](#)
- suitable for all energy sources
- [suitable for low temperature heating systems](#)
- high resistance to excess pressure
- [excellent finish](#)
- multifunction packaging
- [low water volume](#)
- low weight
- [ISO 9001 guarantee of quality of products and services](#)
- recyclable



RADIK VKM8

RADIATOR WITH UNIVERSAL CONNECTION



UNIVERSAL CONNECTION

- Solution for manifold connections
- VKM8 offers up to 48 ways of connection



VARIABLE

- Versions with valve on the right, on the left, as well as radiators without welded hangers which can be turned



ROOM-SAVING

- Saving of stock volume



DESIGN

- also in PLAN / LINE design
- Up to 200 RAL colours



SIZES

- For large as well as small spaces
- In lengths from 40 cm to 300 cm.



SMART SOLUTION

- Make the instalation easier and choose a universal radiator

OVERVIEW OF MODELS

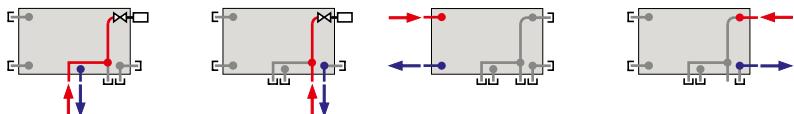
Description	Model	10	11	20	21	22	33
Models with welded hangers, profiled front panel, with vertically and horizontally aligned water channels	RADIK VKM8	X	X	X	X	X	X
RADIK VKM8 - L		X	X	X	X	X	X
Model without welded hangers, with profiled front panel, with vertically and horizontally aligned water channels	RADIK VKM8 - U			X	X	X	X
models with welded hangers and a flat front panel	RADIK PLAN VKM8	X	X	X	X	X	X
	RADIK PLAN VKM8 - L	X	X	X	X	X	X
models with welded hangers and a flat front panel with fine horizontal grooves	RADIK LINE VKM8	X	X	X	X	X	X
	RADIK LINE VKM8 - L	X	X	X	X	X	X

DELIVERED AS STANDARD

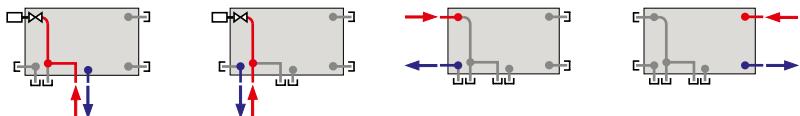
All VKM8 radiators are delivered with an integrated, continuously adjustable 8-level valve, an air vent and a respective number of blanking plugs. Except from type 10 all other radiator types are delivered with side panels and a top grill.



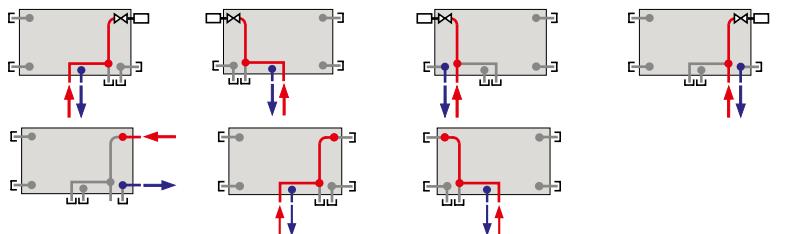
RADIK VKM8 - WAYS OF CONNECTION TO THE HEATING SYSTEM



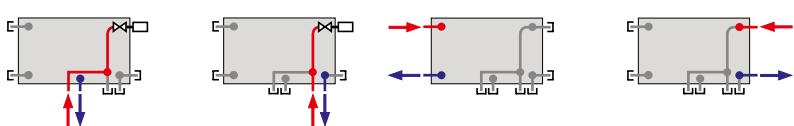
27 connection options
with welded hangers



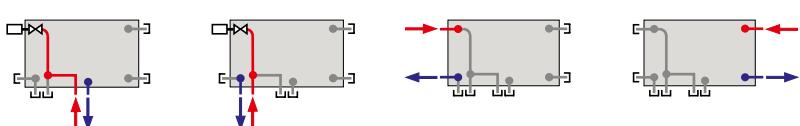
27 connection options
with welded hangers



48 connection options
without welded hangers

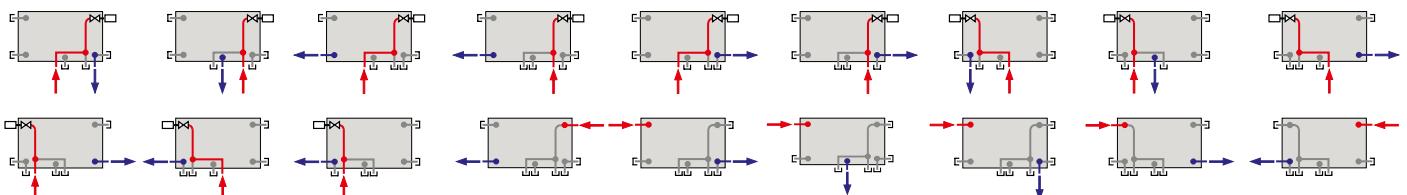


27 connection options
with welded hangers



27 connection options
with welded hangers

SOME OF OTHER WAYS OF CONNECTION TO THE HEATING SYSTEM



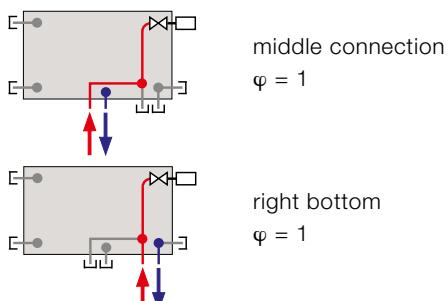
RADIK VKM8



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Depth B	
Type 10 VKM8	47 mm
Type 11 VKM8	63 mm
Type 20 VKM8	66 mm
Type 21 VKM8	66 mm
Type 22 VKM8	100 mm
Type 33 VKM8	155 mm
Connecting pitch	50 mm
Connecting thread	8 x G 1/2" inside
Highest allowed working pressure	1,0 MPa
Highest allowed working temperature	110 °C
Radiator connection	middle connection right bottom

Examples of connection to the heating system

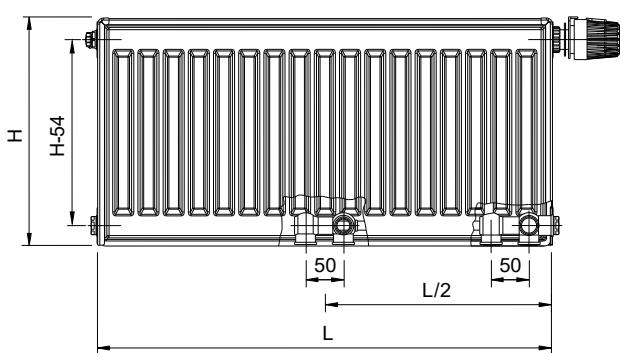


Description

Model **RADIK VKM8** is a panel radiator in version VENTIL KOMPAKT which allows **bottom middle or bottom right connection** to the heating system. The types 20, 21, 22 and 33 have the same distance of the bottom middle connection from the wall. There are two upper and two lower hangers welded to the back side of the radiator, the radiators with length of 1800 mm and more are equipped with six welded hangers.

The panel radiators RADIK VKM8 are designed as modern components of the heating systems with forced circulation of the heating media and with horizontal distribution pipes located below the radiators in the floor, in the wall or along the wall and covered with decorative strips.

Overview of types



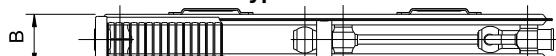
Type 10 VKM8



Type 11 VKM8



Type 20 VKM8



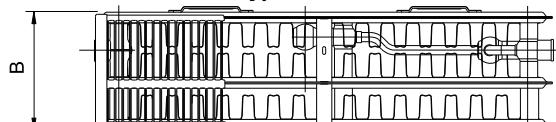
Type 21 VKM8



Type 22 VKM8



Type 33 VKM8



Thermal performances

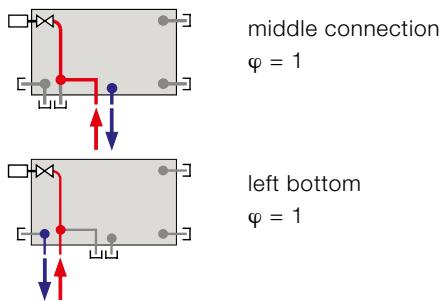
Guidelines for ordering are described on page 86.



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Depth B	
Type 10 VKM8 - L	47 mm
Type 11 VKM8 - L	63 mm
Type 20 VKM8 - L	66 mm
Type 21 VKM8 - L	66 mm
Type 22 VKM8 - L	100 mm
Type 33 VKM8 - L	155 mm
Connecting pitch	50 mm
Connecting thread	8 x G 1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	middle connection left bottom

Examples of connection to the heating system



[Thermal performances](#)

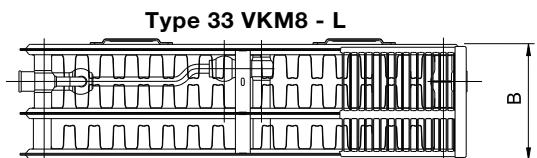
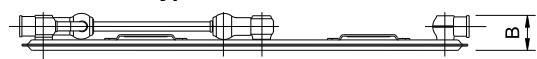
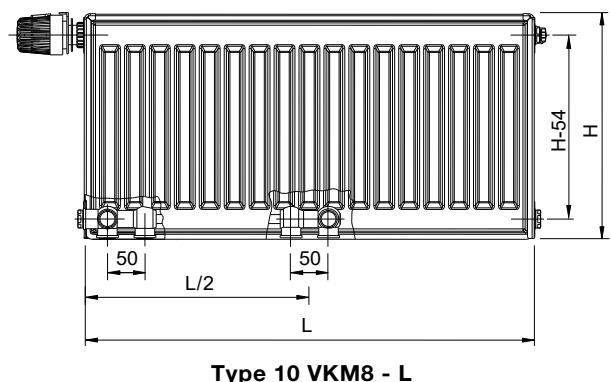
Guidelines for ordering are described on page 86.

Description

Model **RADIK VKM8 - L** is a panel radiator in version VENTIL KOMPAKT which allows **bottom middle or bottom left connection** to the heating system. The types 20, 21, 22 and 33 have the same distance of the bottom middle connection from the wall. There are two upper and two lower hangers welded to the back side of the radiator, the radiators with length of 1800mm and more are equipped with six welded hangers.

The panel radiators RADIK VKM8-L are designed as modern components of the heating systems with forced circulation of the heating media and with horizontal distribution pipes located below the radiators in the floor, in the wall or along the wall and covered with decorative strips.

Overview of types



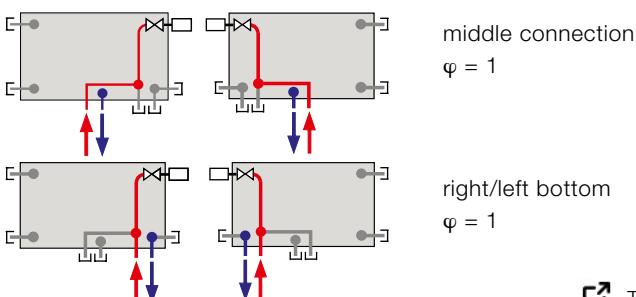
RADIK VKM8 - U



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Depth B	
Type 20 VKM8 - U	66 mm
Type 21 VKM8 - U	66 mm
Type 22 VKM8 - U	100 mm
Type 33 VKM8 - U	155 mm
Connecting pitch	50 mm
Connecting thread	8 × G 1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	middle connection right bottom left bottom

Examples of connection to the heating system

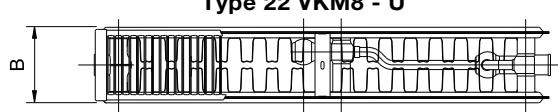
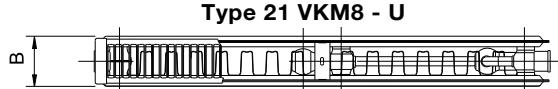
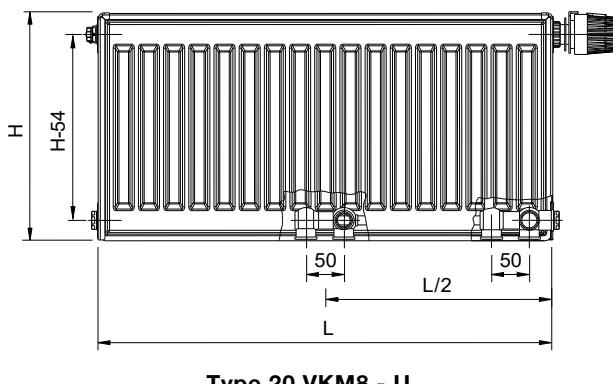


Description

Model **RADIK VKM8-U** is a panel radiator in version VENTIL KOMPAKT which allows **bottom middle, bottom right or bottom left connection** to the heating system. This model has no welded hangers to the back side.

The panel radiators RADIK VKM8-U are designed as modern components of the heating systems with forced circulation of the heating media and with horizontal distribution pipes located below the radiators in the floor, in the wall or along the wall and covered with decorative strips.

Overview of types

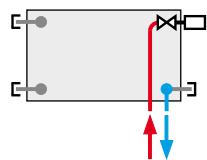




Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Depth B	
Type 10 VK	47 mm
Type 11 VK	63 mm
Type 20 VK	66 mm
Type 21 VK	66 mm
Type 22 VK	100 mm
Type 33 VK	155 mm
Connecting pitch	50 mm
Connecting thread	6 x G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	right bottom

Examples of connection to the heating system

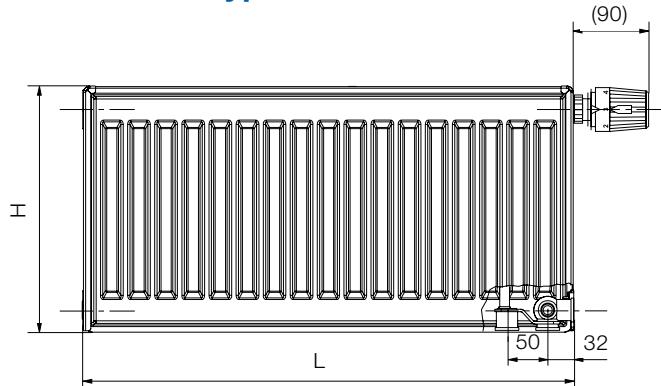


right bottom
 $\varphi = 1$

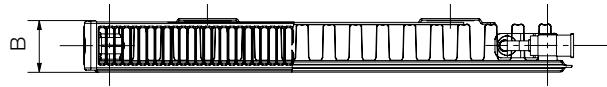
Description

RADIK VK model is a steel panel radiator in VENTIL KOMPAKT version which allows **right bottom connection** to a pressure fed heating system. Two upper and lower hangers are welded onto the back. Radiators 1800 mm and longer have six hangers.

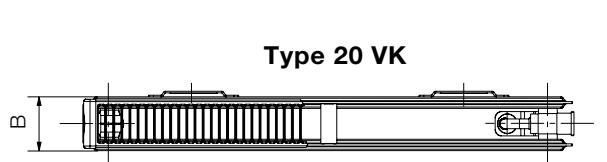
Overview of types



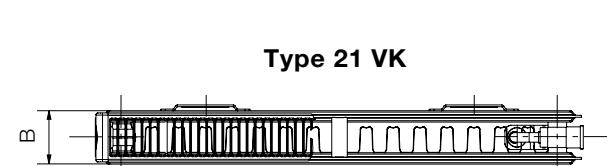
Type 10 VK



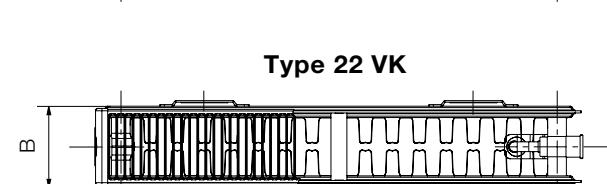
Type 11 VK



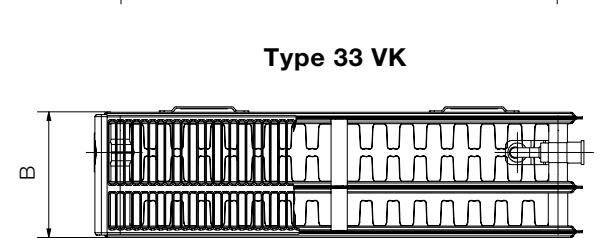
Type 20 VK



Type 21 VK



Type 22 VK



Type 33 VK

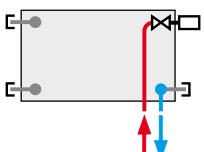
RADIK VK - Z



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000 mm
Depth B	
Type 10 VK	47 mm
Type 11 VK	63 mm
Type 21 VK	66 mm
Type 22 VK	100 mm
Type 33 VK	155 mm
Connecting pitch	50 mm
Connecting thread	6 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	right bottom

Examples of connection to the heating system



right bottom
 $\varphi = 1$

Description

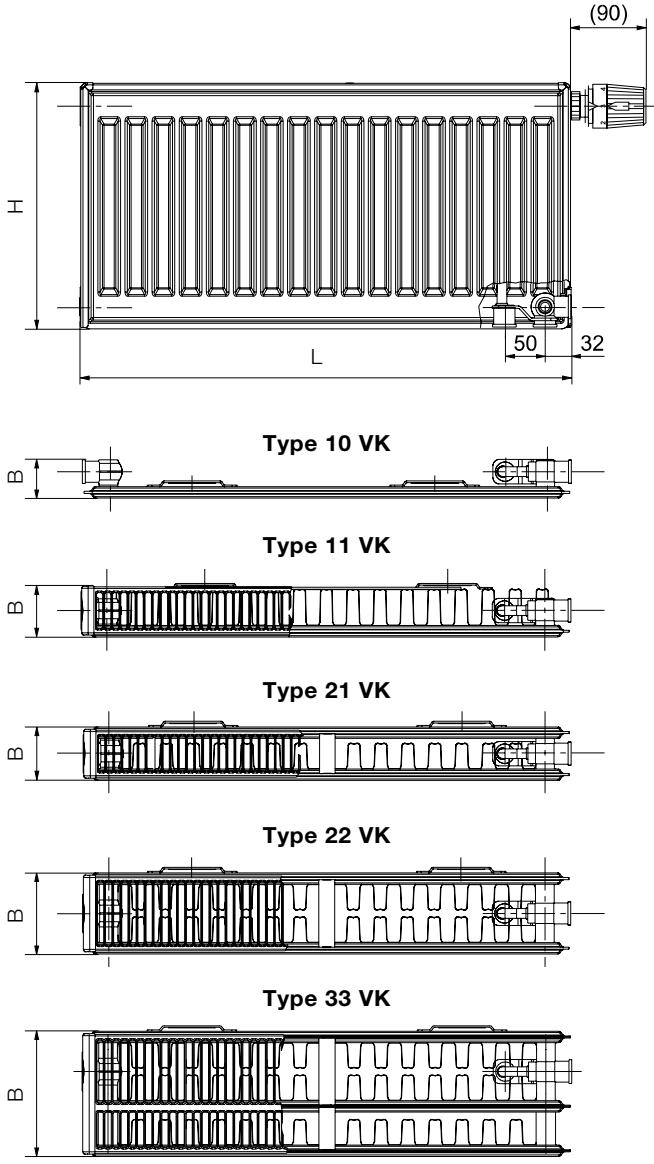
RADIK zinc-coated panel radiators are intended for rooms with a high risk of corrosion because of high humidity or chemically aggressive atmospheres. Resistance to corrosion is increased by a layer of zinc coat, which slows down the corrosion process and results in an extended life of the radiator.

RADIK VK - Z model is a steel panel radiator in VENTIL KOMPAKT version which allows **right bottom connection** to a pressure fed heating system. Two upper and lower hangers are welded onto the back. Radiators 1800 mm and longer have six hangers.

Notice:

Because of the particular qualities of the zinc-coating and the use of special polyester paint, the zinc-coated radiators are not exactly identical in appearance to the standard RADIK radiators.

Overview of types



Thermal performances

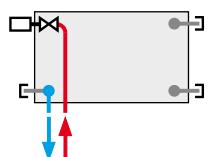
Guidelines for ordering are described on page 86.



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Depth B	
Type 10 VKL	47 mm
Type 11 VKL	63 mm
Type 21 VKL	66 mm
Type 22 VKL	100 mm
Type 33 VKL	155 mm
Connecting pitch	50 mm
Connecting thread	6 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left bottom

Examples of connection to the heating system

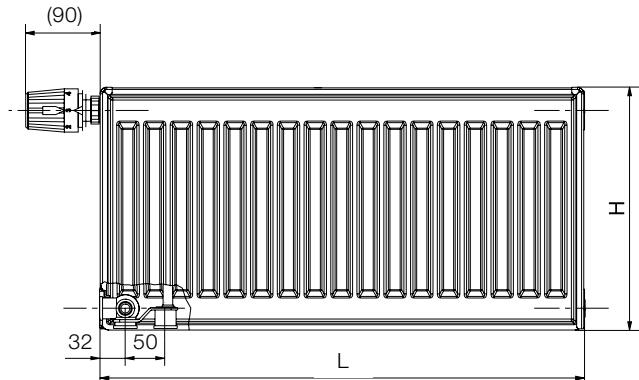


left bottom
φ = 1

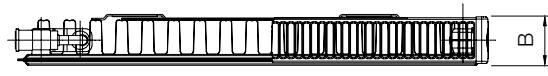
Description

RADIK VKL model is a steel panel radiator in VENTIL KOMPAKT version which allows **left bottom connection** to a heating system which is pressure fed. Two upper and lower hangers are welded onto the back. Radiators 1800 mm and longer have six hangers.

Overview of types



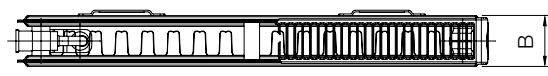
Type 10 VKL



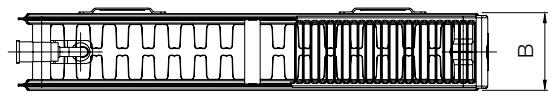
Type 11 VKL



Type 21 VKL



Type 22 VKL



Type 33 VKL

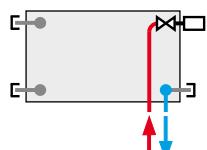
RADIK VKU



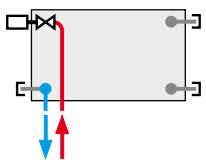
Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Depth B	
Type 21 VKU	66 mm
Type 22 VKU	100 mm
Type 33 VKU	155 mm
Connecting pitch	50 mm
Connecting thread	6 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	right or left bottom

Examples of connection to the heating system



right bottom
 $\varphi = 1$



left bottom
 $\varphi = 1$

Description

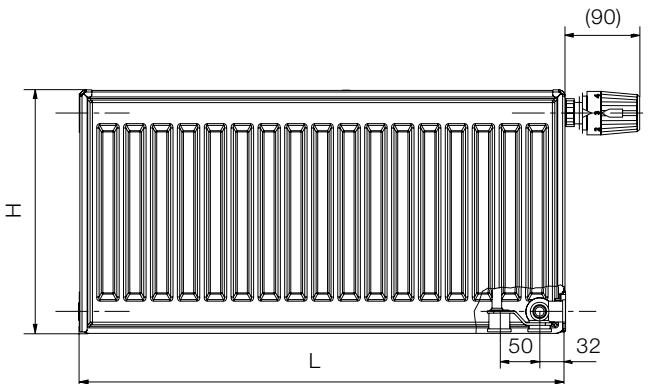
RADIK VKU model is a steel panel radiator in VENTIL KOMPAKT version which allows **left or right bottom connection** to the pressurized heating system. No hangers are welded on the back, so radiator types 21, 22, and 33 can be turned round.

Note:

Type 33 VKU does not have symmetrically placed connections with respect to the depth of the radiator.

When placing the radiator on the wall, it is necessary to use Compact Bracket Plus (see the KORAMONT catalogue).

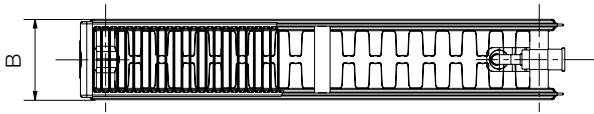
Overview of types



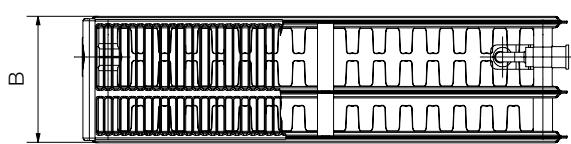
Type 21 VKU



Type 22 VKU



Type 33 VKU





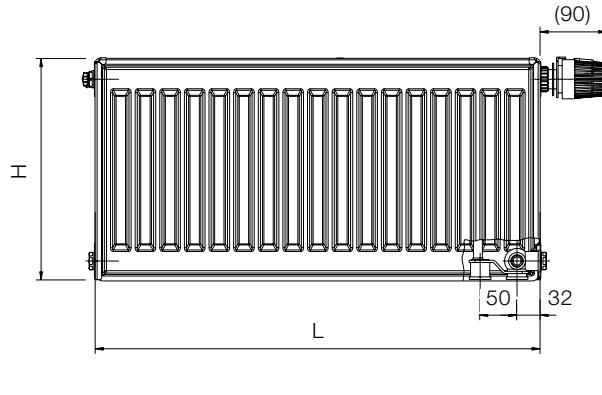
Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Depth B	
Type 32 VK	155 mm
Connecting pitch	50 mm
Connecting thread	6 x G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	right bottom

Description

The model **RADIK MATERNELLE VK** is a steel panel radiator in the VENTIL KOMPAKT version allowing a **right bottom connection** to the heating system with forced circulation of hot water. The special design of the concept MATERNELLE radiators prevents entry of hot water in the front panel. This ensures a safe surface temperature. Two upper and two lower hangers are welded on the rear side of the radiator. Radiators 1800 mm and longer have six welded hangers.

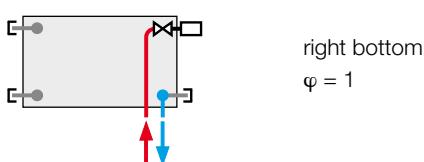
Overview of types



Type 32 VK



Examples of connection to the heating system



RADIK MATERNELLE VKL



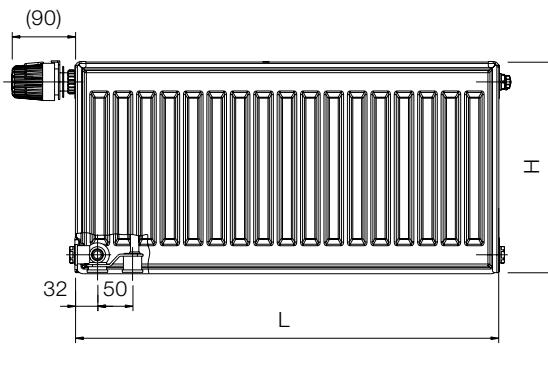
Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Depth B Type 32 VKL	155 mm
Connecting pitch	50 mm
Connecting thread	6 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left bottom

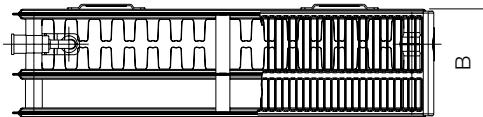
Description

The model **RADIK MATERNELLE VKL** is a steel panel radiator in the VENTIL KOMPAKT version allowing a **left bottom connection** to the heating system with forced circulation of hot water. The special design of the concept MATERNELLE radiators prevents entry of hot water in the front panel. This ensures a safe surface temperature. Two upper and two lower hangers are welded on the rear side of the radiator. Radiators 1800 mm and longer have six welded hangers.

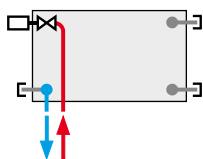
Overview of types



Type 32 VKL



Examples of connection to the heating system



left bottom
 $\varphi = 1$



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Connecting pitch	$h = H - 54$ mm
Connecting thread	4 x G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left or right side

Examples of connection to the heating system



side - one side
 $\varphi = 1$



side - two sides diagonal
 $\varphi = 1$
recommended for: $L \geq 3 \times H$



side - two sides direct
 $\varphi = 0,9$

[Thermal performances](#)

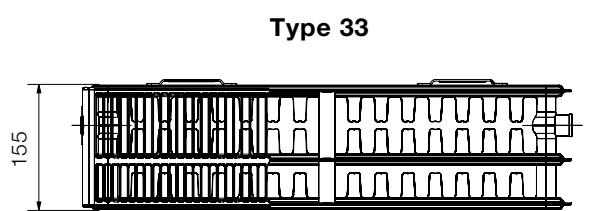
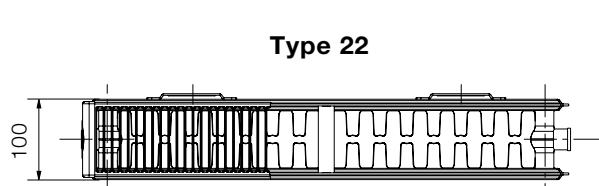
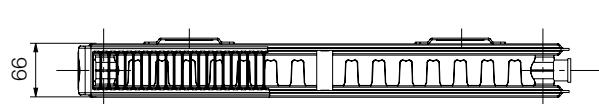
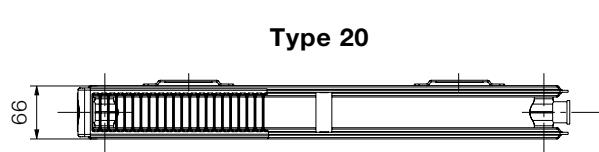
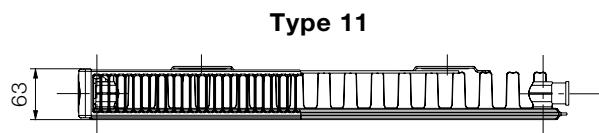
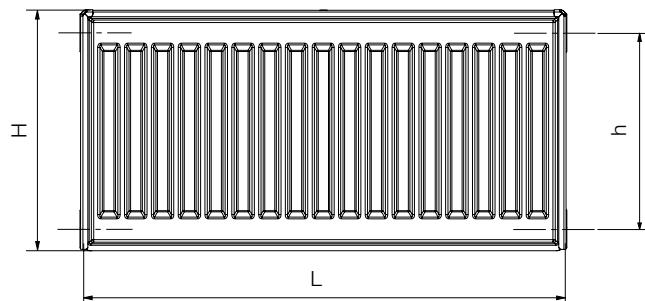
The company reserves the right to make technical changes.

Description

RADIK KLASIK model is a steel panel radiator in KLASIK version which allows **left or right side connection** to the heating system circuit. It is intended for heating systems which are gravity or pressure fed.

Two upper and lower hangers are welded at the back of the radiator. Radiators 1800 mm long and longer have six welded hangers.

Overview of types



Guidelines for ordering are described on page 86.

RADIK KLASIK - Z



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000 mm
Connecting pitch	$h = H - 54 \text{ mm}$
Connecting thread	4 x G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left or right side

Examples of connection to the heating system



side - one side
 $\varphi = 1$



side - two sides diagonal
 $\varphi = 1$
recommended for: $L \geq 3 \times H$



side - two sides direct
 $\varphi = 0,9$

Description

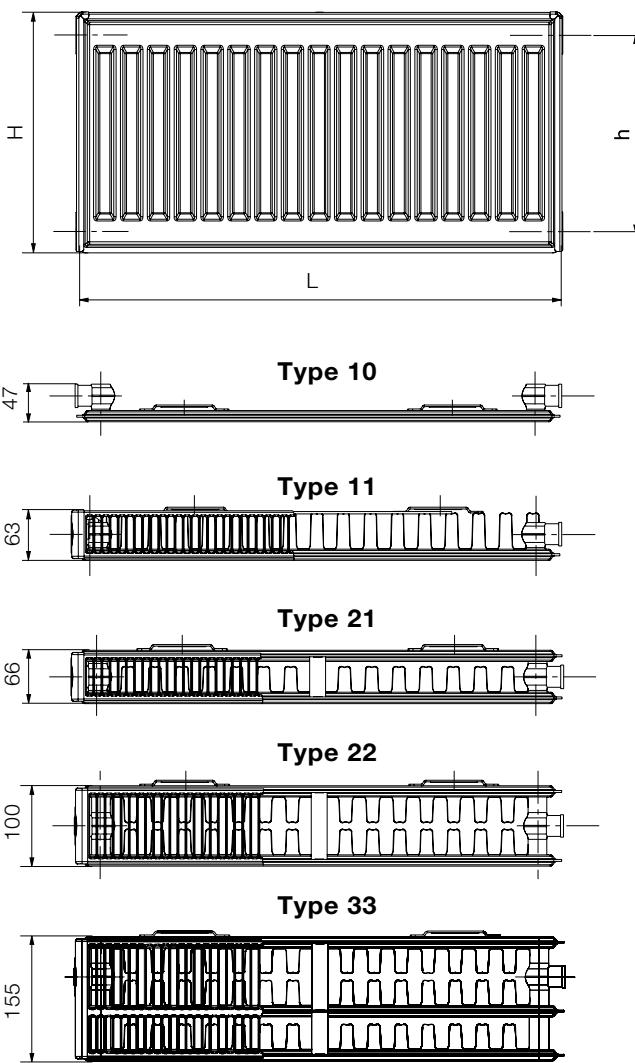
RADIK zinc-coated panel radiators are intended for rooms with a high risk of corrosion because of high humidity or chemically aggressive atmospheres. Resistance to corrosion is increased by a layer of zinc coat, which slows down the corrosion process and results in an extended life of the radiator.

RADIK KLASIK - Z model is a steel panel radiator in KLASIK version which allows **left or right side connection** to the heating system circuit. It is intended for heating systems which are gravity or pressure fed. Two upper and lower hangers are welded at the back of the radiator. Radiators 1800 mm long and longer have six welded hangers.

Notice:

Because of the particular qualities of the zinc-coating and the use of special polyester paint, the zinc-coated radiators are not exactly identical in appearance to the standard RADIK radiators.

Overview of types





Technical data

Height H	554 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000 mm
Depth B	
Type 20 R	66 mm
Type 21 R	66 mm
Type 22 R	100 mm
Type 33 R	155 mm
Connecting pitch	500 mm
Connecting thread	4 x G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left or right side

Examples of connection to the heating system



side - one side
 $\varphi = 1$



side - two sides diagonal
 $\varphi = 1$
recommended for: $L \geq 3 \times H$



side - two sides direct
 $\varphi = 0,9$

[Thermal performances](#)

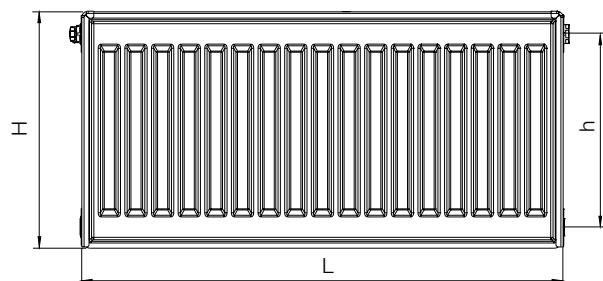
Guidelines for ordering are described on page 86.

Description

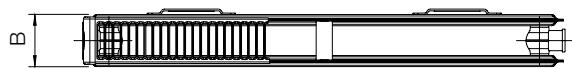
The **RADIK KLASIK - R** model is a steel panel radiator in KLASIK design, modified for swift **replacement of cast-iron or steel sectional radiators with a Connecting pitch of 500 mm**.

The height $H = 554$ mm guarantees its problem-free fitting in place of the old radiator. It allows for **left or right side connection** to the heating system distribution mains and is designed for heating systems with forced or gravity circulation. Two upper and lower fixing hangers are welded onto the back, radiators 1800 mm in length or longer have six welded fixing hangers.

Overview of types



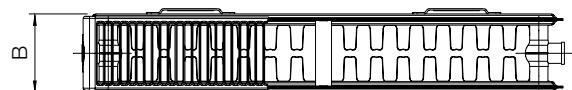
Type 20 R



Type 21 R



Type 22 R



Type 33 R

RADIK KLASIK - R

You can find a replacement for your cast-iron and steel sectional radiators yourself in the RADIK KLASIK – R steel panel radiator range

Sectional radiators						[mm]	Steel panel radiators			
cast-iron			steel				H	RADIK KLASIK - R		
575 ÷ 610			575 ÷ 610			h	554			
500			500			B	500			
110	160	220	200	150	200	Type	20 R	21 R	22 R	33 R
500/110	500/160	500/220	500/200	500/150	500/200					
number of sections n [pcs]			number of sections n [pcs]				appropriate length of the radiator L [mm]			
5	3	3	3	5	4		→ 400			
6	4	3	4	6	5		→ 500	400		
7	5	4	4	7	5		→ 600	400	400	
8	6	5	5	8	7		→ 700	500	400	
10	7	6	7	10	8		→ 800	600	500	
11	8	6	7	11	9		→ 900	700	500	400
12	9	7	8	12	10		→ 1000	800	600	400
13	10	8	9	13	11		→ 1100	800	700	500
15	11	9	10	15	12		→ 1200	900	700	500
16	12	10	11	16	14		→ 1400	1000	800	600
17	13	10	12	17	14		→ 1400	1100	800	600
18	14	11	12	18	15		→ 1600	1100	900	600
20	15	12	13	20	16		→ 1600	1200	900	700
22	16	13	15	22	18		→ 1800	1400	1000	700
24	18	14	16	24	19		→ 2000	1400	1100	800
25	19	15	17	25	21		→ 2000	1600	1200	800
26	20	15	17	26	22		→ 1600	1200	900	
29	22	17	20	29	24		→ 1800	1400	1000	
30	23	18	20	30	25		→ 1800	1400	1000	
33	25	20	22	33	27		→ 2000	1600	1100	
35	26	21	23	35	28		→	1600	1100	
38	28	23	26	38	31		→	1800	1200	
38	29	23	26	38	31		→	1800	1400	
40	30	23	26	40	32		→	1800	1400	
44	33	26	29	44	36		→	2000	1400	
50	38	30	34	50	41		→		1600	
57	43	34	38	57	46		→		1800	
64	48	38	43	64	51		→		2000	

Example of completing a table

Room	Type of the radiator	Length of the radiator	Code for ordering
Living room, cast-iron, depth 160, 19 ribs	22 R	1200	22055120-R0-0010
2. Bedroom, cast-iron, depth 220, 8 ribs	21 R	800	21055080-R0-0010
Children's room, steel, depth 150, 20 ribs	33 R	700	33055070-R0-0010
		..055...-R0-0010	

* The standard radiator colour is RAL 9016. If you wish to have a different colour from KORADO or RAL colour card please specify this in your order.

Heat output of sectional radiators

material of radiator	Connecting pitch h [mm]	depth B [mm]	heat output [W/section] (90/70/20 °C)
steel	500	150	90
		160	93
		200	110
		220	121
cast-iron	500	110	92
		150	107
		160	120
		200	134
		220	151
		250	169

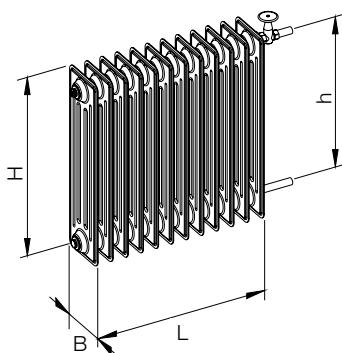
Source of information: Czechoslovak catalogue for construction 14/5 Radiators, basic advice for 1991

Identify your old radiator according to the material and dimensions:

1. Identify the material (cast iron / steel). If the surface of your radiator is rough then you have a cast iron radiator.
2. Measure the radiator height **H**.
3. Check if the connecting pitch is really 500 mm.
4. Measure the radiator depth **B**.
5. Count the elements ("ribs").
6. We have finished the identification of your radiator. Now look up a column in the left side of the table which corresponds to your old radiator.
7. We have finished the identification of your radiator. Now look up a column in the left side of the table which corresponds to your old radiator.

Selection of the new radiator:

8. In the line with corresponding number of elements on the right (blue) side of the table choose the most corresponding convenient length of the new radiator **L**. The length is dependent on the radiator type.
9. After selecting the radiator type check its depth **B** to make sure it meets your requirements.
10. Find your nearest one on our website-sales outlet.



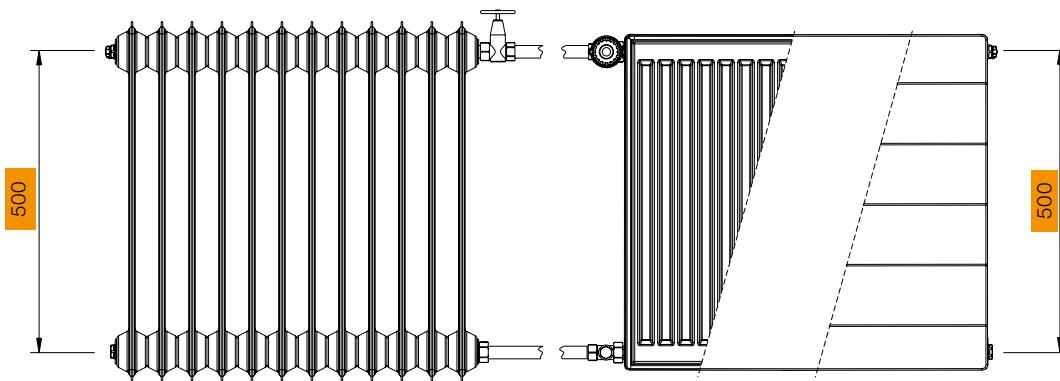
H [mm] - height of the radiator

h [mm] - Connecting pitch

L [mm] - length of the radiator

B [mm] - depth of the radiator

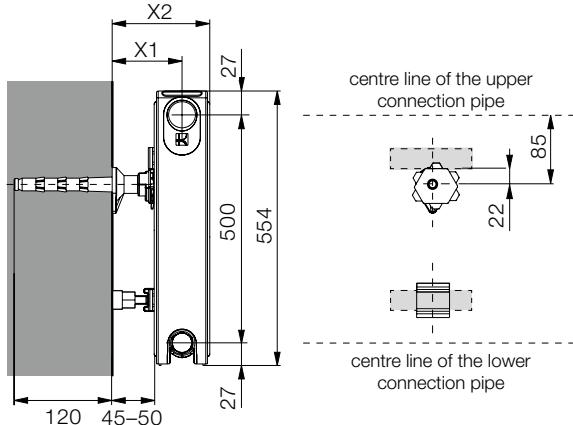
* If the surface of your radiator is rough then you have a cast iron radiator.



Mounting data

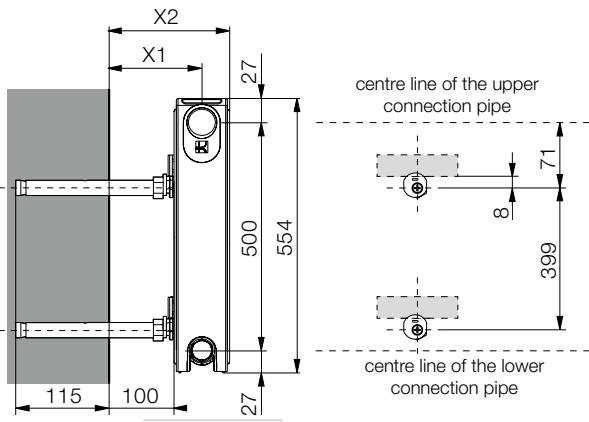
The Z-U140 bracket can be used for fixing the radiator at a fixed distance of the radiator from the wall of 45 ÷ 50 mm, or the Z-U290 bracket with variable distance of up to 100 mm from the wall.

Z-U140 bracket



Type	20 R	21 R	22 R	33 R
X1	78 ÷ 83	78 ÷ 83	95 ÷ 100	150 ÷ 155
X2	111 ÷ 116	111 ÷ 116	145 ÷ 150	200 ÷ 205

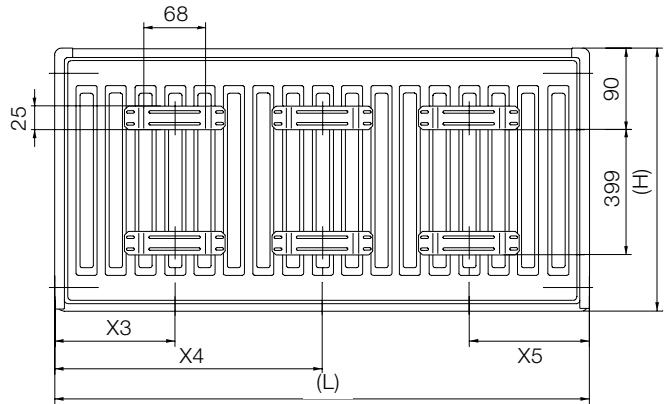
The X2 figures are increased by 2 mm for PLAN/LINE radiators.



Type	20 R	21 R	22 R	33 R
X1	133	133	150	205
X2	166	166	200	255

The X2 figures are increased by 2 mm for PLAN/LINE radiators.

Mounting data



Length L [mm]	400	500 ÷ 1600	1800	2000
X3	133	133	133	133
X4	-	-	900	1000
X5	133	133	133	133

Basic technical data

Type	20 R 20 PLAN R 20 LINE R	21 R 21 PLAN R 21 LINE R	22 R 22 PLAN R 22 LINE R	33 R 33 PLAN R 33 LINE R
Height H [mm]	554	554	554	554
Radiator weight [kg/m]	21,4 25,8 *	25,9 30,3 *	31,9 36,3 *	47,5 51,9 *
Water volume [l/m]	5,5	5,5	5,5	8,2
Flow coefficient A _r [m ²]	1,0 × 10 ⁻⁴ (DN 15)	1,0 × 10 ⁻⁴ (DN 15)	1,0 × 10 ⁻⁴ (DN 15)	1,18 × 10 ⁻⁴ (DN 15)
Resistance coefficient ε _r [-]	8,5 (DN 15)	8,5 (DN 15)	8,5 (DN 15)	5,8 (DN 15)
Nominal heat output [W/m]	914 846 *	1210 1148 *	1576 1532 *	2257 2196 *
Temperature exponent n [-]	1,3010 1,2801 *	1,3300 1,3217 *	1,3344 1,3226 *	1,3364 1,3202 *
K _M	5,6310 5,6561 *	6,6551 6,5224 *	8,5202 8,6736 *	12,1068 12,5502 *

*These values are valid for PLAN-R and LINE-R radiators

Characteristic equation: $\phi = K_M \cdot \Delta T^n \left[\frac{W}{m} \right], \quad \Delta T = \frac{t_1 + t_2}{2} - t_i [K]$

t₁ – temperature water-in, t₂ – temperature water-out,
t_i – relative air temperature

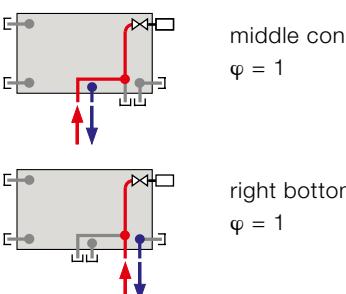
RADIK PLAN VKM8, LINE VKM8



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000 mm
Depth B	65 mm
Type 11 PLAN VKM8	65 mm
Type 20 PLAN VKM8	68 mm
Type 21 PLAN VKM8	68 mm
Type 22 PLAN VKM8	102 mm
Type 33 PLAN VKM8	157 mm
Connecting pitch	50 mm
Connecting thread	8 x G 1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	middle connection right bottom

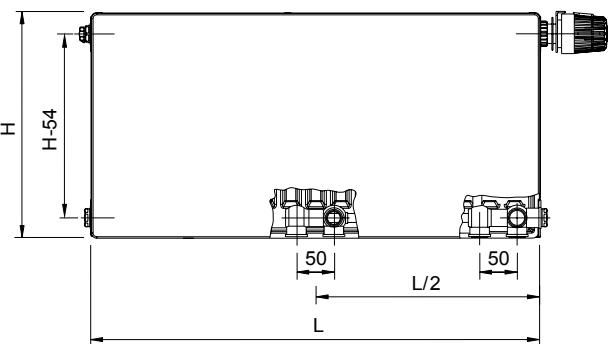
Examples of connection to the heating system



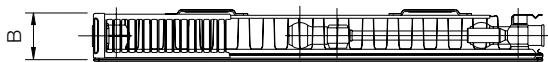
Description

Model **RADIK PLAN VKM8 (RADIK LINE VKM8)** is a panel radiator with flat front panel PLAN (LINE) and at the same time it is in version VENTIL KOMPAKT. This design allows **bottom middle or bottom right connection** of the radiator to the heating system with forced circulation. The types 20, 21, 22 and 33 have the same distance of the bottom middle connection from the wall. Two upper and two lower hangers are welded to the back side of the radiator, the radiators with length of 1800 mm and more are equipped with six welded hangers.

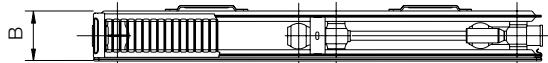
Overview of types



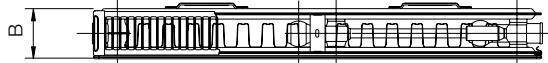
Type 11 PLAN VKM8



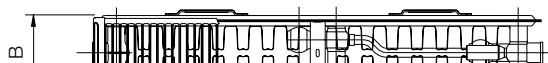
Type 20 PLAN VKM8



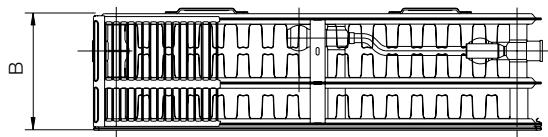
Type 21 PLAN VKM8



Type 22 PLAN VKM8



Type 33 PLAN VKM8



Thermal performances

Guidelines for ordering are described on page 87.

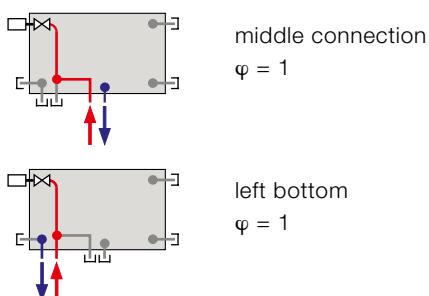
RADIK PLAN VKM8 - L, LINE VKM8 - L



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000 mm
Depth B	
Type 11 PLAN VKM8 - L	65 mm
Type 20 PLAN VKM8 - L	68 mm
Type 21 PLAN VKM8 - L	68 mm
Type 22 PLAN VKM8 - L	102 mm
Type 33 PLAN VKM8 - L	157 mm
Connecting pitch	50 mm
Connecting thread	8 x G 1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	middle connection left bottom

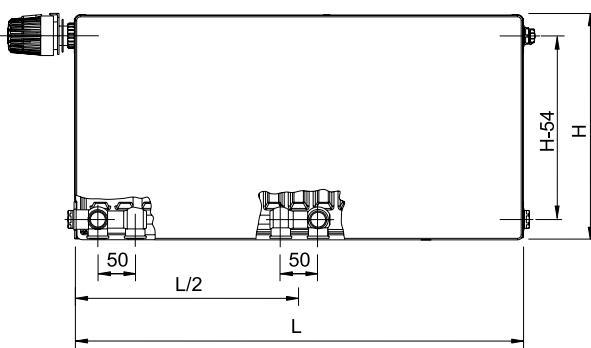
Examples of connection to the heating system



Description

Model **RADIK PLAN VKM8 - L (RADIK LINE VKM8-L)** is a panel radiator with flat front panel PLAN (LINE) and at the same time it is in version VENTIL KOMPAKT. This design allows **bottom middle or bottom left connection** of the radiator to the heating system with forced circulation. The types 20, 21, 22 and 33 have the same distance of the bottom middle connection from the wall. Two upper and two lower hangers are welded to the back side of the radiator, the radiators with length of 1800 mm and more are equipped with six welded hangers.

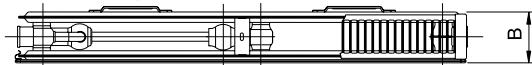
Overview of types



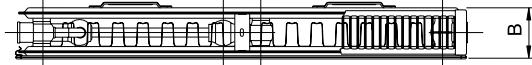
Type 11 PLAN VKM8 - L



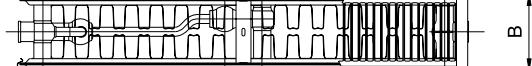
Type 20 PLAN VKM8 - L



Type 21 PLAN VKM8 - L



Type 22 PLAN VKM8 - L



Type 33 PLAN VKM8 - L

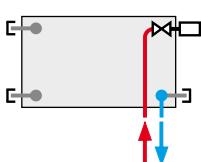
RADIK PLAN VK, LINE VK



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000mm
Depth B	
Type 11 PLAN VK/LINE VK	65 mm
Type 21 PLAN VK/LINE VK	68 mm
Type 22 PLAN VK/LINE VK	102 mm
Type 33 PLAN VK/LINE VK	157 mm
Connecting pitch	50 mm
Connecting thread	6 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	right bottom

Examples of connection to the heating system

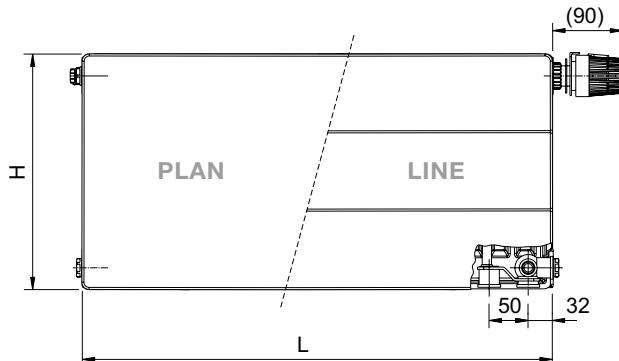


right bottom
 $\varphi = 1$

Description

RADIK PLAN VK (RADIK LINE VK) model is a steel panel radiator in VENTIL KOMPAKT version and in PLAN (LINE) version which allows **right bottom connection** to a pressure fed heating system. Two upper and lower hangers are welded onto the back. Radiators 1800 mm and longer have six hangers.

Overview of types



Type 11 PLAN VK/LINE VK



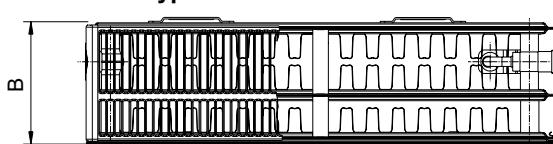
Type 21 PLAN VK/LINE VK



Type 22 PLAN VK/LINE VK



Type 33 PLAN VK/LINE VK

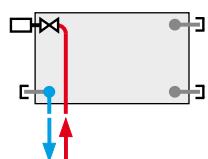




Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000mm
Depth B	
Type 11 PLAN VKL/LINE VKL	65 mm
Type 21 PLAN VKL/LINE VKL	68 mm
Type 22 PLAN VKL/LINE VKL	102 mm
Type 33 PLAN VKL/LINE VKL	157 mm
Connecting pitch	50 mm
Connecting thread	6 x G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left bottom

Examples of connection to the heating system

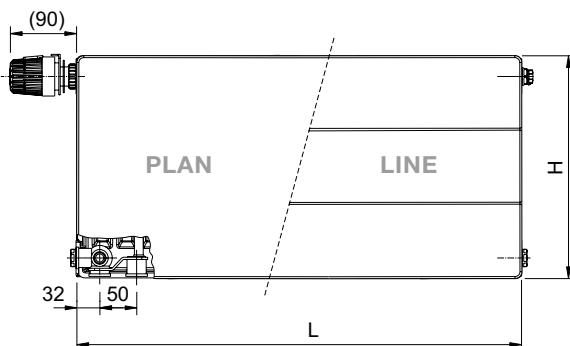


left bottom
 $\varphi = 1$

Description

RADIK PLAN VKL (RADIK LINE VKL) model is a steel panel radiator in VENTIL KOMPAKT version and in PLAN (LINE) version which allows **left bottom connection** to a pressure fed heating system. Two upper and lower hangers are welded onto the back. Radiators 1800 mm and longer have six hangers.

Overview of types



Type 11 PLAN VKL/LINE VKL



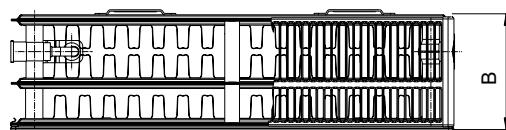
Type 21 PLAN VKL/LINE VKL



Type 22 PLAN VKL/LINE VKL



Type 33 PLAN VKL/LINE VKL



RADIK PLAN KLASIK, LINE KLASIK



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000mm
Connecting pitch	$h = H - 54$ mm
Connecting thread	4 x G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left or right side

Examples of connection to the heating system



side - one side
 $\varphi = 1$



side - two sides diagonal
 $\varphi = 1$
recommended for: $L \geq 3 \times H$



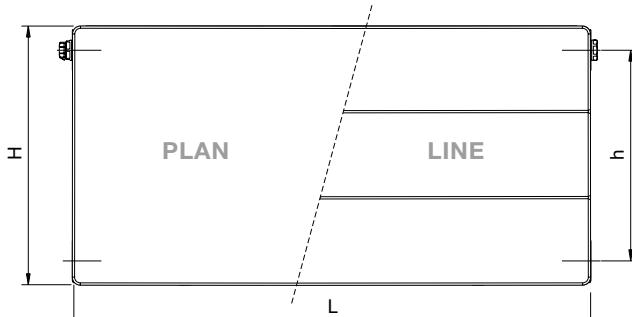
side - two sides direct
 $\varphi = 0,9$

Description

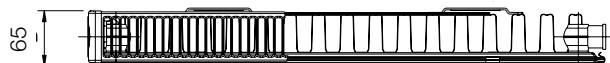
RADIK PLAN KLASIK (RADIK LINE KLASIK) is a steel panel radiator in KLASIK version and in PLAN (LINE) version which allows **left or right side connection** to the heating system circuit. It is intended for heating systems which are gravity or pressure fed.

Two upper and lower hangers are welded at the back of the radiator. Radiators 1800 mm long and longer have six welded hangers.

Overview of types



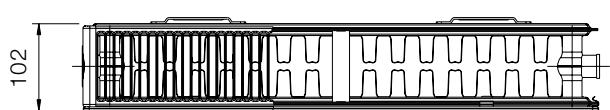
Type 11 PLAN/LINE



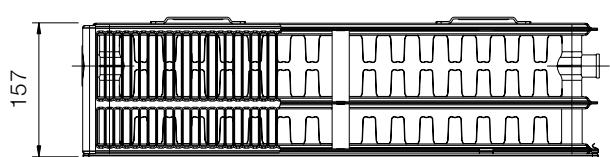
Type 21 PLAN/LINE



Type 22 PLAN/LINE



Type 33 PLAN/LINE



Thermal performances

Guidelines for ordering are described on page 87.

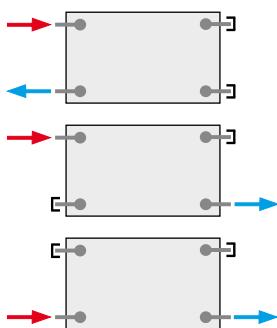
The company reserves the right to make technical changes.



Technical data

Height H	554 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000 mm
Depth B	
Type 20 PLAN - R /LINE KLASIK-R	68 mm
Type 21 PLAN - R /LINE KLASIK-R	68 mm
Type 22 PLAN - R /LINE KLASIK-R	102 mm
Type 33 PLAN - R /LINE KLASIK-R	157 mm
Connecting pitch	500 mm
Connecting thread	4 x G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left or right side

Examples of connection to the heating system



side - one side
 $\varphi = 1$

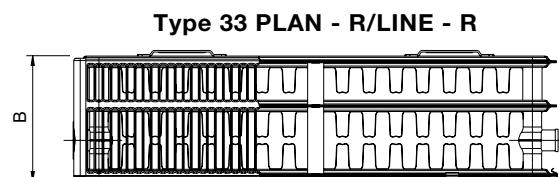
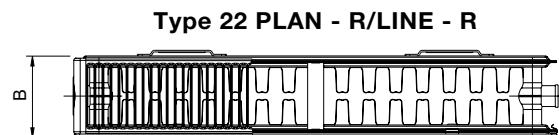
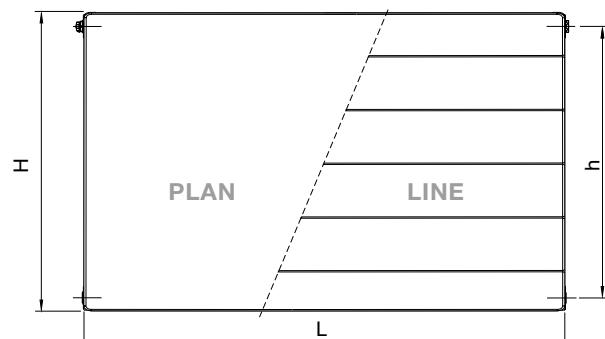
side - two sides diagonal
 $\varphi = 1$
 recommended for: $L \geq 3 \times H$

side - two sides direct
 $\varphi = 0,9$

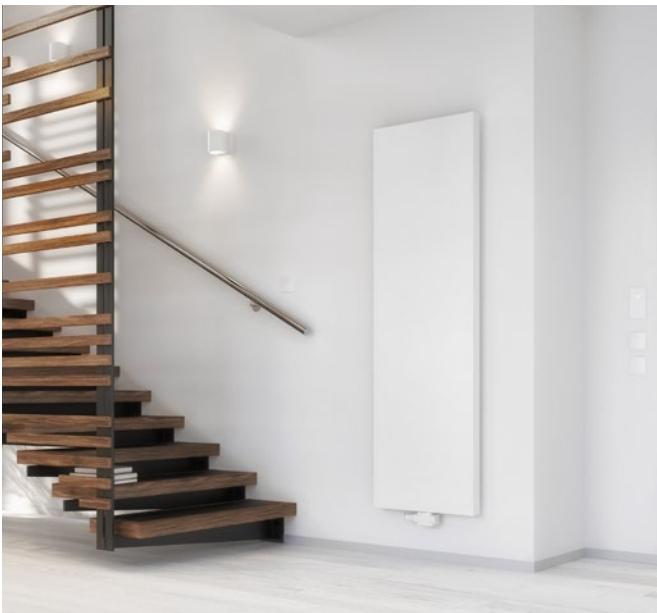
Description

RADIK PLAN KLASIK - R (RADIK LINE KLASIK-R) model is a PLAN (LINE) panel radiator with flat front panel modified for swift **replacement of cast-iron or steel sectional radiators with a connection pitch of 500 mm**. Height H = 554 mm guarantees its problem-free fitting in place of the old radiator. It allows for left or right side connection to the heating system distribution mains and is designed for heating systems with forced or gravity circulation. Two upper and lower fixing hangers are welded onto the back, radiators 1800 mm in length or longer have six welded hangers.

Overview of types



RADIK PLAN VERTIKAL - M



Description

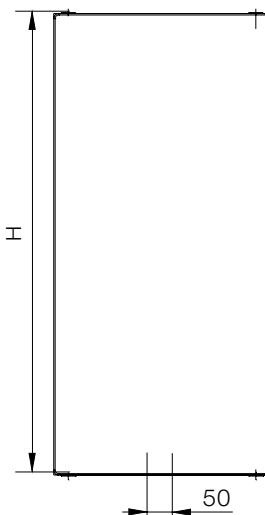
The **RADIK PLAN VERTIKAL - M** model is a vertically aligned panel radiator with a flat front panel. Its design allows for **bottom middle connection** to a pressurised heating system. It is equipped with a total of 6 outlets with a G1/2" internal thread. Two upper and two lower fixing hangers are welded to the back. Type 20 radiators in lengths of 600 and 900 mm have one extra fixing hanger at the top.

For connecting to the heating system we recommend using the Integrated Fitting HM supplied with a thermostatic head (see page 89)

Technical data

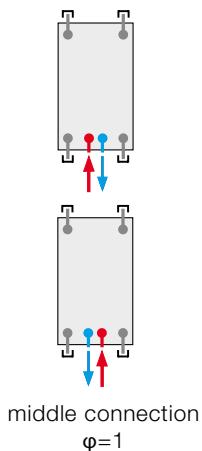
Height H	1600, 1800, 2000 mm
Length L	400, 600, 900 mm
Depth B	
Type 10	52 mm
Type 20	68 mm
Connecting pitch	50 mm
Connecting thread	6 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	middle connection

Overview of types



Type 10 Type 20

Examples of connection to the heating system



Thermal performances

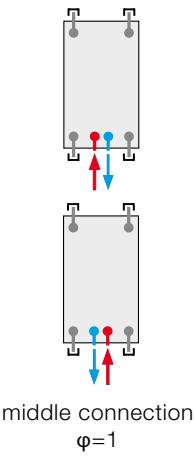
Guidelines for ordering are described on page 87.



Technical data

Height H	1600, 1800, 2000 mm
Length L	400, 600, 900 mm
Depth B	
Type 10	52 mm
Type 20	68 mm
Connecting pitch	50 mm
Connecting thread	6 x G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	middle connection

Examples of connection to the heating system

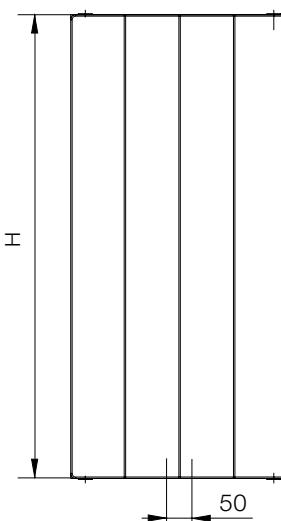


Description

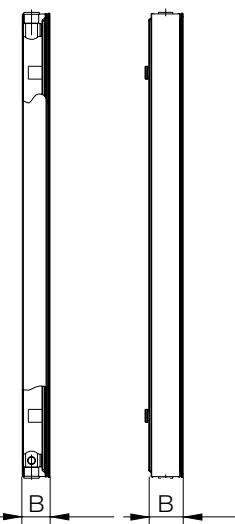
The **RADIK LINE VERTIKAL - M** model is a vertically aligned panel radiator with moulded front panel. Its design allows for **bottom middle connection** to a pressurised heating system. It is equipped with a total of 6 outlets with a G1/2" internal thread. Two upper and two lower fixing hangers are welded to the back. Type 20 radiators in lengths of 600 and 900 mm have one extra fixing hanger at the top.

For connecting to the heating system we recommend using the Integrated Fitting HM supplied with a thermostatic head (see page 89)

Overview of types



Type 10 Type 20



[Thermal performances](#) Guidelines for ordering are described on page 87.

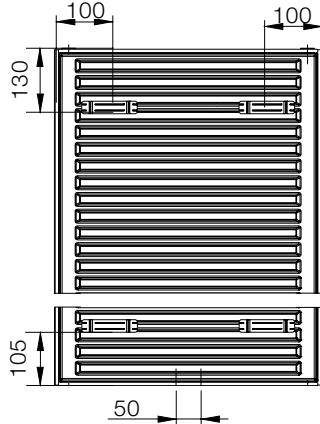
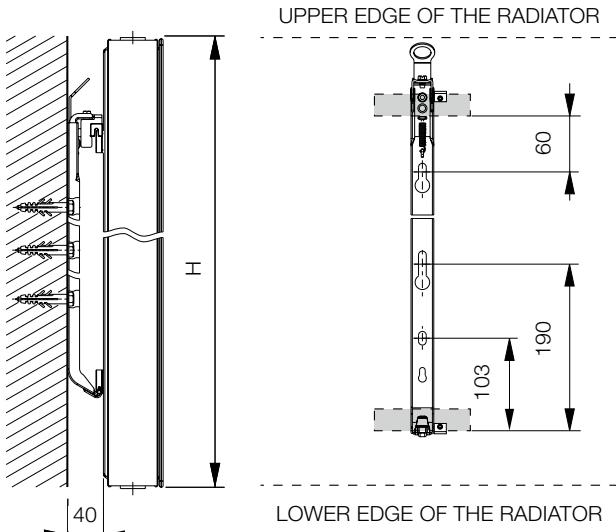
RADIK PLAN VERTIKAL - M, LINE VERTIKAL - M

Fixation

For fixing to the wall use the Split Bracket VERTIKAL (Z-U558) which is included in the radiator packaging.

Fixation

Type of bracket	Code for ordering	Type 10	Type 20
Split Bracket VERTIKAL	Z-U558	X	X



Heat output and basic technical parameters

20°C		Type 10			Type 20		
Length L [mm]		Height H [mm]					
		1600	1800	2000	1600	1800	2000
400	Q [W] 75/65 [°C]	602	661	717	847	927	1004
	Q [W] 70/55 [°C]	491	540	587	684	749	812
	Q [W] 55/45 [°C]	318	351	382	432	474	515
	Q [W] 45/40 [°C]	222	246	268	296	325	354
	Water volume [l]	3,7	4,1	4,6	7,0	7,9	8,8
	Radiator weight [kg]	19,0	21,3	23,6	31,7	35,7	39,6
	Temp. exponent n [-]	1,2512	1,2400	1,2334	1,3160	1,3115	1,3056
600	K _M	4,5066	5,1699	5,7545	4,9208	5,4813	6,0752
	Q [W] 75/65 [°C]	829	909	986	1185	1297	1404
	Q [W] 70/55 [°C]	676	742	806	959	1050	1138
	Q [W] 55/45 [°C]	436	480	523	609	668	725
	Q [W] 45/40 [°C]	303	336	366	418	460	500
	Water volume [l]	5,0	5,6	6,2	9,3	10,4	11,6
	Radiator weight [kg]	27,6	31,2	34,4	46,2	51,7	57,7
900	Temp. exponent n [-]	1,2595	1,2482	1,2415	1,3036	1,2991	1,2932
	K _M	6,0076	6,8851	7,6667	7,2267	8,0502	8,9178
	Q [W] 75/65 [°C]	1141	1252	1358	1659	1815	1965
	Q [W] 70/55 [°C]	929	1021	1109	1341	1468	1591
	Q [W] 55/45 [°C]	598	660	719	850	932	1012
	Q [W] 45/40 [°C]	416	461	502	583	640	696
	Water volume [l]	6,9	7,7	8,6	13,3	15,0	16,6
Resistance coefficient ξ_r [-]		140,0			82,0		
Flow coefficient A _r [m ²]		$2,4 \times 10^{-5}$			$3,14 \times 10^{-5}$		

$$\text{Characteristic equation: } \phi = K_M \cdot \Delta T^n \left[\frac{W}{m} \right], \quad \Delta T = \frac{t_1 + t_2}{2} - t_i [K]$$

t₁ – temperature water-in, t₂ – temperature water-out, t_i – relative air temperature

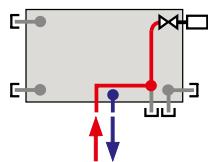
Guidelines for ordering are described on page 87.



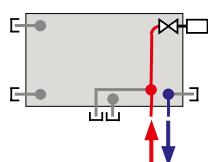
Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Depth B	47 mm 100 mm 155 mm
Connecting pitch	50 mm
Connecting thread	8 x G1/2 inside
Highest allowed working pressure	1,0 MPa
Highest allowed working temperature	110 °C
Radiator connection	middle connection right bottom

Examples of connection to the heating system



middle connection
 $\varphi = 1$



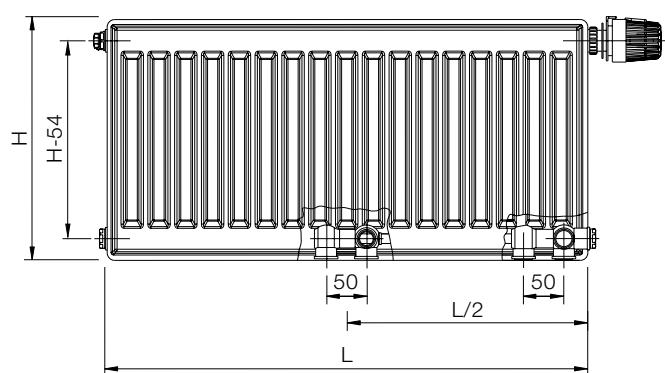
middle connection
 $\varphi = 1$

Description

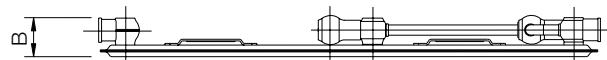
Model **RADIK VKM8** is a steel panel radiator in version VENTIL KOMPAKT which allows **bottom middle or bottom right connection** to the heating system. The types 20, 21, 22 and 33 have the same distance of the bottom middle connection from the wall. There are two upper and two lower hangers welded to the back side of the radiator, the radiators with length of 1800mm and more are equipped with six welded hangers.

The panel radiators RADIK VKM8 are designed as modern components of the heating systems with forced circulation of the heating media and with horizontal distribution pipes located below the radiators in the floor, in the wall or along the wall and covered with decorative strips.

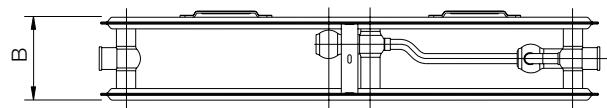
Overview of types



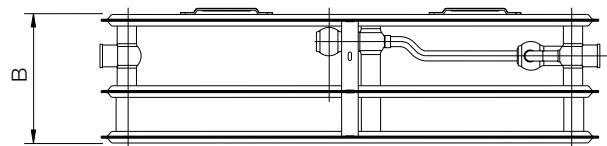
Type 10



Type 20S



Type 30



[Thermal performances](#) Guidelines for ordering are described on page 87.

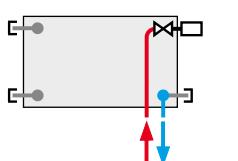
RADIK CLEAN VK



Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000 mm
Depth B	
Type 10 CLEAN VK	47 mm
Type 20S CLEAN VK	100 mm
Type 30 CLEAN VK	155 mm
Connecting pitch	50 mm
Connecting thread	6 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	right bottom

Examples of connection to the heating system



Description

The **RADIK CLEAN VK** model is a steel panel radiator in the VENTIL KOMPAKT version, which allows for **bottom right connection** to the heating system. It is designed for pressurised heating systems.

It is intended for installation and operation in rooms with high demands on hygiene and cleanliness. All types are supplied without convector fins, grilles and side covers.

Two upper and two lower fixing hangers are welded to the back, radiators 1800 mm in length or longer have six fixing hangers welded to the back. Basic equipment includes air vent and blanking plug.

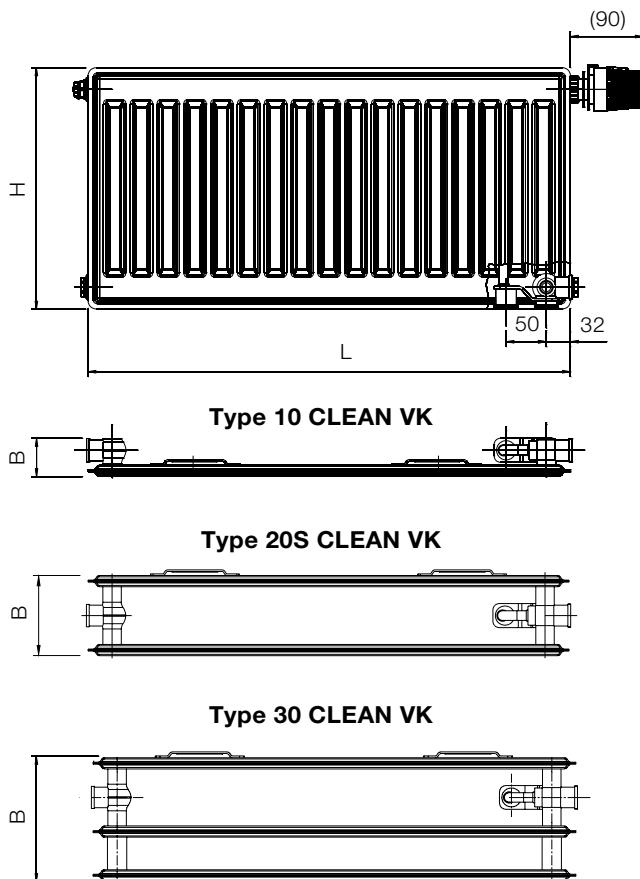
Notice:

If a distance from the wall 65 ÷ 80 mm is required, the same type of bracket can be used, but the bracket must also be used on the lower pair of fixing hangers (not just the plastic support). In this case it is necessary to order the additional brackets separately, they are not part of delivery.

Note:

The RADIK CLEAN VK type 10 and RADIK VK type 10 radiators are identical.

Overview of types





Technical data

Height H	300, 400, 500, 600, 700, 900 mm
Length L	400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000 mm
Depth B	47 mm
Type 10 CLEAN	100 mm
Type 20S CLEAN	155 mm
Type 30 CLEAN	
Connecting pitch	$\mathbf{h} = \mathbf{H} - 54$ mm
Connecting thread	4 x G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left or right side

Examples of connection to the heating system



side - one side
 $\varphi = 1$



side - two sides diagonal
 $\varphi = 1$
recommended for: $L \geq 3 \times H$



side - two sides direct
 $\varphi = 0,9$

[Thermal performances](#)

Guidelines for ordering are described on page 87.

Description

The **RADIK CLEAN** model is a steel panel radiator in the KLASIK version, which allows for **left or right side connection** to the heating system. It is designed for pressurised heating systems or those with gravity circulation. It is intended for installation and operation in rooms with high demands on hygiene and cleanliness. All types are supplied without convector fins, grilles and side covers.

Two upper and two lower fixing hangers are welded to the back, radiators 1800mm in length or longer have six fixing hangers welded to the back. Basic equipment includes an air vent and blanking plug.

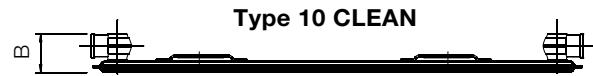
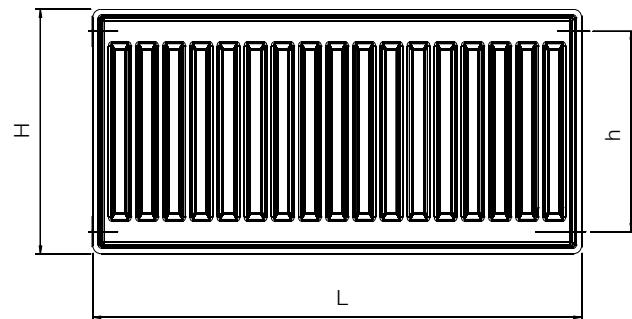
Notice:

If a distance from the wall 65 ÷ 80 mm is required, the same type of bracket can be used, but the bracket must also be used on the lower pair of fixing hangers (not just the plastic support). In this case it is necessary to order the additional brackets separately, they are not part of delivery.

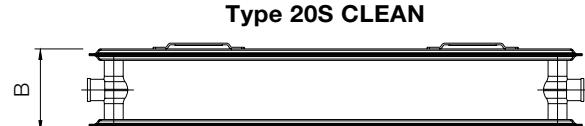
Note:

The RADIK CLEAN type 10 and RADIK KLASIK type 10 radiators are identical.

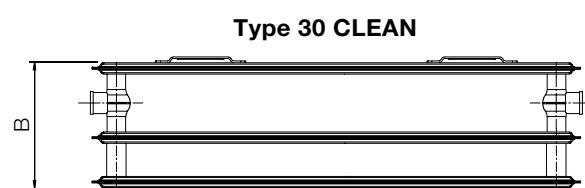
Overview of types



Type 10 CLEAN



Type 20S CLEAN



Type 30 CLEAN

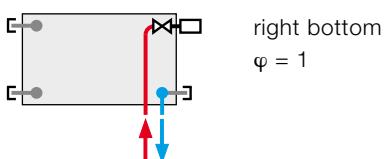
RADIK HYGIENE VK



Technical data

Height H	503, 603, 703 mm
Length L	404, 504, 604, 704, 804, 904, 1004, 1104, 1204, 1404, 1604, 1804, 2004 mm
Depth B	49 mm Type 20S HYGIENE VK 102 mm Type 30 HYGIENE VK 157 mm
Connecting pitch	50 mm
Connecting thread	6 x G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	right bottom

Examples of connection to the heating system



Description

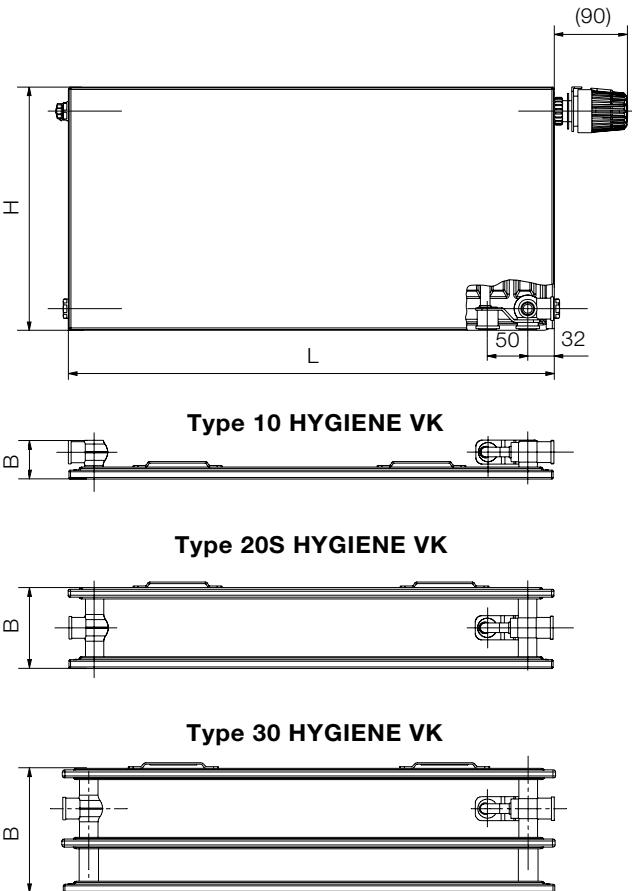
RADIK HYGIENE VK is a panel radiator, in design VENTIL KOMPAKT, which enables the **right bottom connection** to the heating system. It is designed for pressurized heating systems.

It is suitable for installation and operation in rooms with high demands on hygiene and cleanliness. All types are without convector fins; they have a smooth front panel and the weld seams are covered with a special flat strip. The type 20S is typical for a greater spacing between the panels (radiator depth B = 102 mm) compared with the traditional design of type 20 (B = 66 mm).

Notice:

On the rear side, two upper and two lower hangers are welded. Radiators with the length of 1800 mm and longer have six welded hangers. The standard product equipment includes an air-vent and a blanking plug.

Overview of types

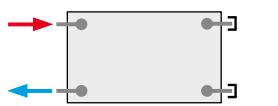




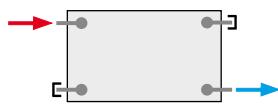
Technical data

Height H	503, 603, 703 mm
Length L	404, 504, 604, 704, 804, 904, 1004, 1104, 1204, 1404, 1604, 1804, 2004 mm
Depth B	
Type 10 HYGIENE	49 mm
Type 20S HYGIENE	102 mm
Type 30 HYGIENE	157 mm
Connecting pitch	$h = H - 57 \text{ mm}$
Connecting thread	4 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left or right side

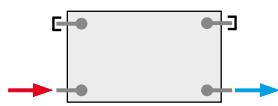
Examples of connection to the heating system



side - one side
 $\varphi = 1$



side - two sides diagonal
 $\varphi = 1$
 recommended for: $L \geq 3 \times H$



side - two sides direct
 $\varphi = 0,9$

[Thermal performances](#)

Guidelines for ordering are described on page 87.

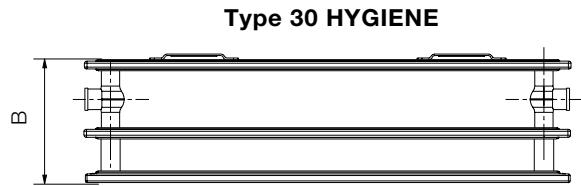
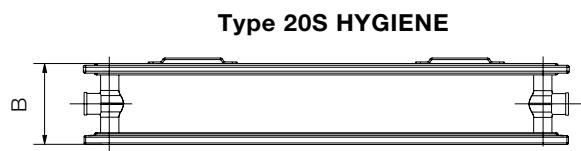
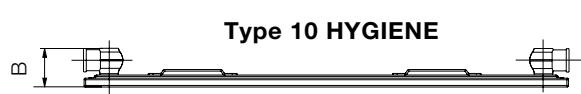
Description

RADIK HYGIENE is a panel radiator, in design KLASIK, which can be connected to the heating system either from the **left or from the right side**. It is designed to be used in the pressurized or gravity fed heating systems.

It is suitable for installation and operation in rooms with high demands on hygiene and cleanliness. All types are without convector fins; they have a smooth front panel and the weld seams are covered with a special flat strip. The type 20S is typical for a greater spacing between the panels (radiator depth B = 102 mm) compared with the traditional design of type 20 (B = 66 mm).

On the rear side, two upper and two lower hangers are welded. Radiators with the length of 1800 mm and longer have six welded hangers. The standard product equipment includes an air-vent and a blanking plug.

Overview of types



RADIK COMBI VK

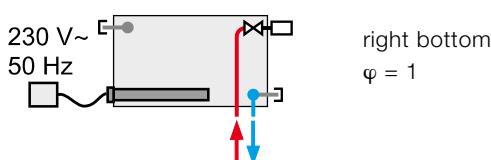


Technical data

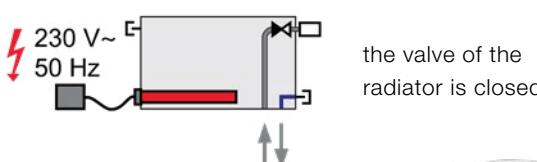
Height H	600 mm
Length L	800, 1000, 1200, 1400, 1600 mm
Connecting pitch	50 mm
Connecting thread	5 x G1/2 inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	right bottom

Examples of connection to the heating system

Connection to the water heating system



Usage as a direct electric radiator



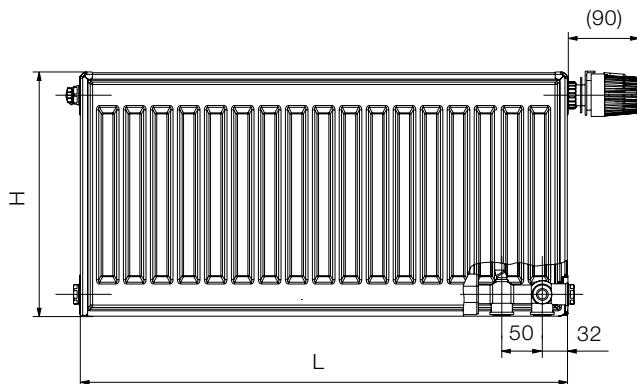
Description

RADIK COMBI VK is a steel panel radiator in a VENTIL KOMPAKT design allowing a **right bottom connection** to the heating system distribution. It is designed for the pressurized heating systems.

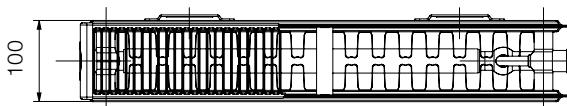
RADIK COMBI VK is designed for a combined installation with the electric heater. This combination creates a panel radiator suitable for combined heating (hot water – electricity) and can be used independently of the operation of the heating system. From the view of the electric installation the electric heater does not require any special arrangements in the heated room. It is recommended to install it together with the installation of the radiator.

There are two upper and two bottom hangers welded on the rear side. The standard set contains an air vent, 2 pieces of blanking plugs, a valve with a pre-set flow rate covered by a plastic cap..

Overview of types



Typ 22 COMBI VK



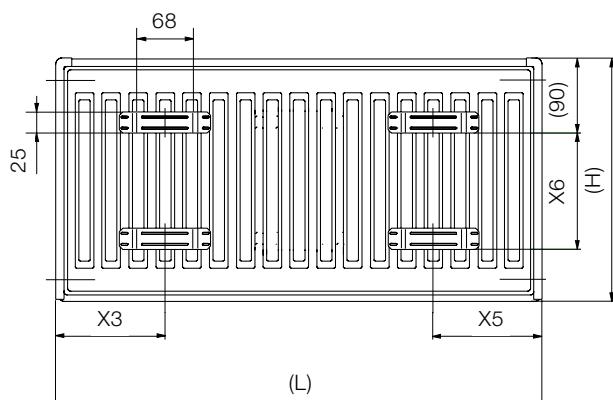
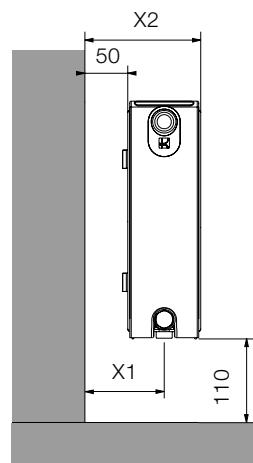


Direct electric heating

Before the radiator is set in electric operation we recommend to close the regulation valve and check whether the radiator is properly vented.

Elements for the electric operation, operation signalling and regulation based on temperature or time are not a part of delivery.

Position of radiator



Size chart

Length L [mm]	800 ÷ 1600
X1	100
X2	150
X3	133
X5	133
Height H [mm]	600
X6	445

Notice:

The values X1 and X2 are dependent on the type of the actually used mounting bracket.

Electric heating element



Technical data	Electric heating element
Temperature limiter	yes
Output range	700 ÷ 1200 W
Working voltage	230 V / 50 Hz
Coverage	IP 44
Consumer class	1
Connecting cable	1,5 m
Connecting thread	G 1/2
Working position	horizontal

Description of the heating element ordering

Output [W]	Ordering code	Length [mm]
700	Z-KT7-0700-10	570
900	Z-KT7-0900-10	740
1000	Z-KT7-1000-10	740
1200	Z-KT7-1200-10	895

Table for creation of a code

Z-KT7 - XXXX - 10



Notice:

When ordering the RADIK COMBI VK it is necessary to quote the article code of the radiator (see please p. 86) and of the electrical heating element. (see please p. 43).

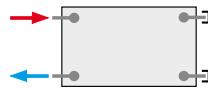
STEEL PANEL RADIATORS IN HEIGHT 200 mm

RADIK KLASIK

Technical data

Height H	200 mm
Length L	800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Depth B	
Type 22	100 mm
Type 33	155 mm
Connecting pitch	$h = H - 54 \text{ mm}$
Connecting thread	4 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left or right side

Examples of connection to the heating system

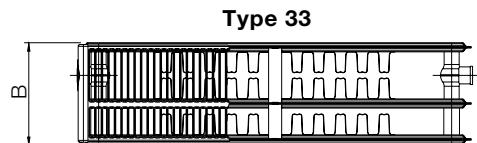
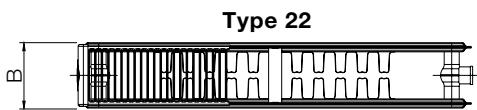
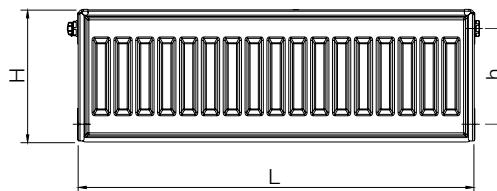


side - one side
 $\varphi = 1$

Description

RADIK KLASIK model is a steel panel radiator in KLASIK version which allows **left or right side connection** to the heating system. It is intended for heating systems which are gravity or pressure fed. No hangers are welded on the back of the radiator.

Overview of types

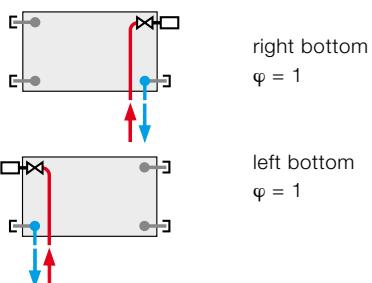


RADIK VKU

Technical data

Height H	200 mm
Length L	800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000 mm
Depth B	
Type 22 VKU	100 mm
Type 33 VKU	155 mm
Connecting pitch	50 mm
Connecting thread	6 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left or right bottom

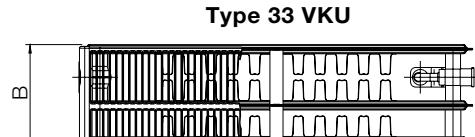
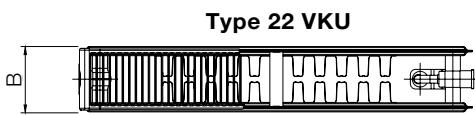
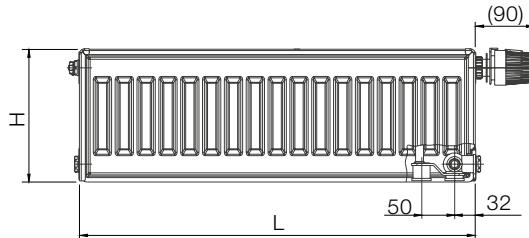
Examples of connection to the heating system



Description

RADIK VKU model is a steel panel radiator in VENTIL KOMPAKT version which allows **left or right bottom connection** to a pressurized heating system. No hangers are welded on the back of the radiator.

Overview of types



Guidelines for ordering are described on page 87.

The company reserves the right to make technical changes.

STEEL PANEL RADIATORS IN HEIGHT 200mm



RADIK PLAN KLASIK, LINE KLASIK

Technical data

Height H	200 mm
Length L	800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000mm
Depth B	102 mm
Type 22 PLAN	102 mm
Type 33 PLAN	157 mm
Connecting pitch	$h = H - 54$ mm
Connecting thread	4 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	left or right side

Examples of connection to the heating system

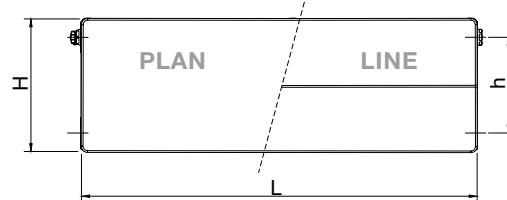


side - one side
 $\varphi = 1$

Description

RADIK PLAN KLASIK (RADIK LINE KLASIK) model is a steel panel radiator in KLASIK version and PLAN (LINE) version which allows **left or right side connection** to the heating system. It is intended for heating systems which are gravity or pressure fed. No hangers are welded on the back of the radiator.

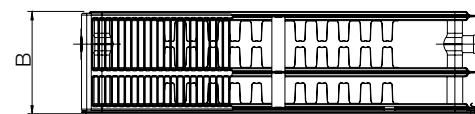
Overview of types



Type 22 PLAN/LINE



Type 33 PLAN/LINE

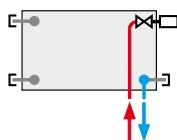


RADIK PLAN VK, LINE VK

Technical data

Height H	200 mm
Length L	800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000mm
Depth B	102 mm
Type 22 PLAN VK	102 mm
Type 33 PLAN VK	157 mm
Connecting pitch	50 mm
Connecting thread	6 × G1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Highest allowed working temperature	110 °C
Radiator connection	right bottom

Examples of connection to the heating system

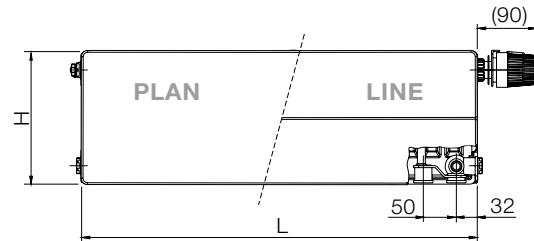


right bottom
 $\varphi = 1$

Description

RADIK PLAN VK (RADIK LINE VK) model is a steel panel radiator in VENTIL KOMPAKT version and PLAN (LINE) version which allows **right bottom connection** to a pressurized heating system. No hangers are welded on the back of the radiator.

Overview of types



Type 22 PLAN VK/LINE VK



Type 33 PLAN VK/LINE VK



MOUNTING OF STEEL PANEL RADIATORS IN HEIGHT 200 mm

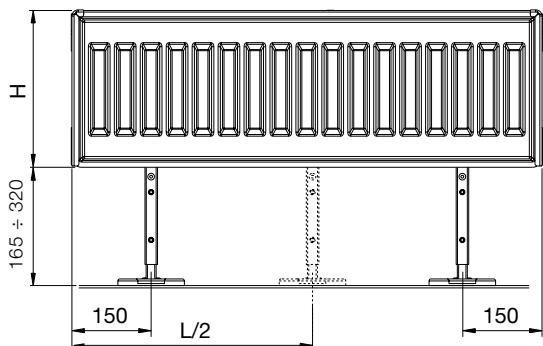
Mounting

Steel panel radiators RADIK in height 200mm can be mounted on the wall as well as on the floor. Radiators are delivered with the necessary number of „Split brackets Plus“ designed for wall mounting as standard.

Mounting on the floor can be carried out with special stand brackets Z-U400 which are not delivered as standard, and must be ordered separately.

Radiators in lengths up to 1800 mm are mounted with two brackets, radiators in length 1800 mm and longer are mounted with three brackets.

Mounting on the floor



NEW RADIATOR DESIGN



Description

If you want to facelift the design of your radiator you can install an additional front panel. The front panel is available in flat design PLAN, or with fine horizontal grooves LINE. To make a complete facelift you can also replace all other visible parts, such as top grill and side panels. The standard colour of front panel is white but you can choose from 18 KORADO colours or from 200 RAL colours.

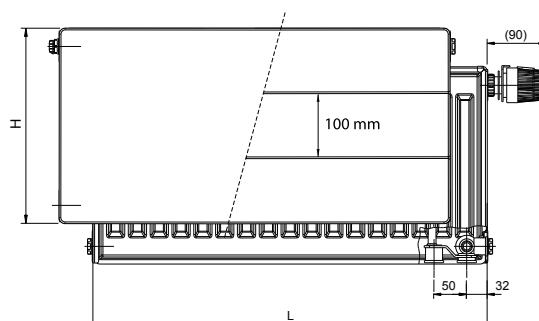
Front panels are suitable for the following RADIK models: VKM8, VKM8-L, VKM8-U, VKL, VKM, VKM-L, VK, VKU, VKL, MM, KLASIK, KLASIK-R, COMBI VK.

Note: By using the additional front panel you can cause a reduction of the heat output of your radiator by up to 7%..

Order code:

PLAN: **Z-DCP-HHLLL-10K**
LINE: **Z-DCL-HHLLL-10K**

Front panel length in cm
Front panel height in cm



RADIK MATERNELLE VK, MATERNELLE VKL

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

20 °C		32 VK 32 VKL					
Length L [mm]	t ₁ /t ₂ [°C]	Height H [mm]					
		300	400	500	600	700	900
400	75/65	397	492	582	670	756	926
	70/55	321	398	471	541	610	743
	55/45	204	252	298	343	384	463
	45/40	140	173	205	235	262	313
500	75/65	496	615	728	838	946	1158
	70/55	401	497	588	677	762	928
	55/45	255	315	373	429	480	579
	45/40	175	217	256	294	328	392
600	75/65	595	737	873	1005	1135	1389
	70/55	482	596	706	812	915	1114
	55/45	306	379	448	515	576	694
	45/40	210	260	307	353	393	470
700	75/65	694	860	1019	1173	1324	1621
	70/55	562	696	823	948	1067	1300
	55/45	357	442	522	600	672	810
	45/40	245	303	358	412	459	548
800	75/65	794	983	1164	1340	1513	1852
	70/55	642	795	941	1083	1219	1485
	55/45	408	505	597	686	768	926
	45/40	281	347	410	471	525	626
900	75/65	893	1106	1310	1508	1702	2084
	70/55	722	895	1059	1218	1372	1671
	55/45	459	568	671	772	864	1041
	45/40	316	390	461	529	590	705
1000	75/65	992	1229	1455	1675	1891	2315
	70/55	803	994	1176	1354	1524	1857
	55/45	510	631	746	858	960	1157
	45/40	351	433	512	588	656	783
1100	75/65	1091	1352	1601	1843	2080	2547
	70/55	883	1094	1294	1489	1677	2042
	55/45	561	694	821	943	1056	1273
	45/40	386	477	563	647	721	861
1200	75/65	1190	1475	1746	2010	2269	2778
	70/55	963	1193	1412	1624	1829	2228
	55/45	612	757	895	1029	1152	1389
	45/40	421	520	614	706	787	940
1400	75/65	1389	1721	2037	2345	2647	3241
	70/55	1124	1392	1647	1895	2134	2599
	55/45	714	883	1044	1201	1345	1620
	45/40	491	607	717	823	918	1096
1600	75/65	1587	1966	2328	2680	3026	3704
	70/55	1284	1591	1882	2166	2439	2971
	55/45	816	1010	1194	1372	1537	1852
	45/40	561	694	819	941	1049	1253
1800	75/65	1786	2212	2619	3015	3404	4167
	70/55	1445	1789	2117	2437	2744	3342
	55/45	918	1136	1343	1544	1729	2083
	45/40	631	780	922	1059	1180	1410
2000	75/65	1984	2458	2910	3350	3782	4630
	70/55	1606	1988	2353	2707	3049	3713
	55/45	1020	1262	1492	1715	1921	2314
	45/40	701	867	1024	1176	1312	1566
2300	75/65	2282	2827	3347	3853	4349	
	70/55	1846	2286	2706	3113	3506	
	55/45	1173	1451	1716	1972	2209	
	45/40	807	997	1178	1353	1508	
2600	75/65	2579	3195	3783	4355	4917	
	70/55	2087	2585	3059	3519	3963	
	55/45	1326	1641	1939	2230	2497	
	45/40	912	1127	1331	1529	1705	
3000	75/65	2976	3687	4365	5025	5673	
	70/55	2408	2982	3529	4061	4573	
	55/45	1530	1893	2238	2573	2881	
	45/40	1052	1300	1536	1764	1967	

Heat output: ↗ MATERNELLE VK, ↘ MATERNELLE VKL

The company reserves the right to make technical changes.

RADIK PLAN VKL, LINE VKL



HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

20 °C		Type 22 PLAN VKL Type 22 LINE VKL						Type 33 PLAN VKL Type 33 LINE VKL					
Length L [mm]	t ₁ /t ₂ [°C]	Height H [mm]											
		300	400	500	600	700	900	300	400	500	600	700	900
400	75/65	379	475	566	652	736	897	535	676	809	936	1059	1292
	70/55	306	383	456	526	594	723	431	545	652	756	853	1037
	55/45	194	242	288	332	374	454	271	343	412	477	537	646
	45/40	133	166	197	227	255	310	185	234	281	327	366	438
500	75/65	474	594	707	816	921	1122	669	845	1011	1171	1324	1616
	70/55	383	479	570	658	742	903	539	681	816	945	1066	1296
	55/45	242	303	360	415	467	568	339	429	515	597	671	808
	45/40	166	207	246	283	319	387	231	293	352	408	457	547
600	75/65	569	712	848	979	1105	1346	802	1013	1213	1405	1589	1939
	70/55	459	575	685	789	890	1084	646	817	979	1134	1280	1555
	55/45	291	363	432	498	561	682	407	515	618	716	805	970
	45/40	199	249	296	340	383	465	278	352	422	490	549	656
700	75/65	664	831	990	1142	1289	1570	936	1182	1415	1639	1854	2262
	70/55	536	671	799	921	1039	1265	754	953	1142	1323	1493	1814
	55/45	339	424	504	580	654	795	475	601	720	836	939	1131
	45/40	232	290	345	397	447	542	324	410	493	572	640	766
800	75/65	758	950	1131	1305	1473	1794	1070	1351	1618	1873	2118	2585
	70/55	613	767	913	1052	1187	1445	862	1089	1305	1512	1706	2073
	55/45	388	484	576	663	748	909	543	687	823	955	1073	1293
	45/40	266	332	394	453	511	620	370	469	563	653	732	875
900	75/65	853	1068	1273	1468	1657	2019	1203	1520	1820	2107	2383	2908
	70/55	689	862	1027	1184	1336	1626	970	1226	1468	1700	1920	2333
	55/45	436	545	648	746	841	1023	610	772	926	1074	1207	1454
	45/40	299	373	443	510	574	697	417	528	633	735	823	984
1000	75/65	948	1187	1414	1631	1841	2243	1337	1689	2022	2341	2648	3231
	70/55	766	958	1141	1315	1484	1807	1077	1362	1631	1889	2133	2592
	55/45	484	606	720	829	935	1136	678	858	1029	1194	1341	1616
	45/40	332	415	493	567	638	775	463	586	704	817	915	1094
1100	75/65	1043	1306	1555	1794	2025	2467	1471	1858	2224	2575	2913	3554
	70/55	842	1054	1255	1447	1632	1987	1185	1498	1794	2078	2346	2851
	55/45	533	666	792	912	1028	1250	746	944	1132	1313	1476	1777
	45/40	365	456	542	623	702	852	509	645	774	898	1006	1203
1200	75/65	1138	1424	1697	1957	2209	2692	1604	2027	2426	2809	3178	3877
	70/55	919	1150	1369	1578	1781	2168	1293	1634	1957	2267	2559	3110
	55/45	581	727	864	995	1122	1363	814	1030	1235	1432	1610	1939
	45/40	398	497	591	680	766	930	555	703	844	980	1098	1313
1400	75/65	1327	1662	1980	2283	2577	3140	1872	2365	2831	3277	3707	4523
	70/55	1072	1342	1597	1841	2078	2529	1508	1906	2284	2645	2986	3628
	55/45	678	848	1008	1161	1309	1591	950	1202	1441	1671	1878	2262
	45/40	465	580	690	793	894	1085	648	821	985	1143	1280	1531
1600	75/65	1517	1899	2262	2610	2946	3589	2139	2702	3235	3746	4237	5170
	70/55	1225	1533	1825	2104	2374	2891	1724	2179	2610	3023	3413	4147
	55/45	775	969	1152	1327	1496	1818	1085	1373	1647	1910	2146	2585
	45/40	531	663	788	907	1021	1239	741	938	1126	1307	1463	1750
1800	75/65	1706	2137	2545	2936	3314		2407	3040	3640	4214	4766	
	70/55	1378	1725	2054	2367	2671		1939	2451	2936	3401	3839	
	55/45	872	1090	1296	1493	1683		1221	1545	1853	2148	2415	
	45/40	598	746	887	1020	1149		833	1055	1267	1470	1646	
2000	75/65	1896	2374	2828	3262	3682		2674	3378	4044	4682	5296	
	70/55	1531	1916	2282	2630	2968		2155	2723	3262	3779	4266	
	55/45	969	1211	1440	1659	1870		1357	1717	2058	2387	2683	
	45/40	664	829	985	1133	1277		926	1172	1407	1634	1829	

RADIK HYGIENE, HYGIENE VK

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

20 °C		Type 10 HYGIENE Type 10 HYGIENE VK			Type 20S HYGIENE Type 20S HYGIENE VK			Type 30 HYGIENE Type 30 HYGIENE VK		
Length L [mm]	t _{1/t₂} [°C]	Height H [mm]								
		503	603	703	503	603	703	503	603	703
404	75/65	174	200	225	326	380	433	466	539	607
	70/55	142	163	183	266	310	353	379	438	493
	55/45	91	105	118	172	201	228	244	282	316
	45/40	63	73	82	120	140	158	169	196	219
504	75/65	217	250	280	407	474	540	581	672	758
	70/55	177	203	228	332	387	440	473	547	615
	55/45	114	131	147	214	250	284	304	352	394
	45/40	79	91	102	149	175	198	211	244	273
604	75/65	260	300	336	488	568	647	696	805	908
	70/55	212	244	274	398	464	528	567	655	737
	55/45	136	157	176	257	300	340	364	421	472
	45/40	95	109	123	179	209	237	253	293	327
704	75/65	303	349	391	569	662	755	812	938	1058
	70/55	247	284	319	464	541	615	660	764	860
	55/45	159	183	205	300	350	396	424	491	551
	45/40	110	127	143	209	244	276	295	341	381
804	75/65	347	399	447	650	757	862	927	1072	1208
	70/55	282	324	364	530	617	702	754	872	982
	55/45	182	208	235	342	399	453	485	561	629
	45/40	126	145	163	238	279	315	336	389	435
904	75/65	390	448	503	730	851	969	1042	1205	1359
	70/55	317	365	409	596	694	790	848	981	1104
	55/45	204	234	264	385	449	509	545	631	707
	45/40	142	163	184	268	313	354	378	438	490
1004	75/65	433	498	558	811	945	1076	1158	1338	1509
	70/55	352	405	455	661	771	877	942	1089	1226
	55/45	227	260	293	427	499	565	605	700	785
	45/40	158	181	204	298	348	394	420	486	544
1104	75/65	476	548	614	892	1039	1183	1273	1472	1659
	70/55	387	446	500	727	848	964	1036	1198	1348
	55/45	249	286	322	470	548	622	665	770	864
	45/40	173	199	224	327	383	433	462	535	598
1204	75/65	519	597	669	973	1133	1291	1388	1605	1810
	70/55	422	486	545	793	924	1052	1129	1306	1470
	55/45	272	312	351	512	598	678	726	840	942
	45/40	189	217	244	357	417	472	504	583	652
1404	75/65	605	696	781	1134	1321	1505	1619	1872	2110
	70/55	493	567	636	925	1078	1226	1317	1523	1714
	55/45	317	364	410	597	697	791	846	979	1098
	45/40	220	253	285	416	486	550	587	680	760
1604	75/65	691	796	892	1296	1509	1719	1849	2138	2411
	70/55	563	647	726	1057	1232	1401	1505	1740	1959
	55/45	362	416	468	682	797	903	967	1119	1255
	45/40	252	289	326	476	556	629	671	777	869
1804	75/65	778	895	1003	1458	1698	1934	2080	2405	2711
	70/55	633	728	817	1189	1385	1576	1692	1957	2203
	55/45	407	468	527	767	896	1016	1087	1258	1411
	45/40	283	325	366	535	625	707	755	874	977
2004	75/65	864	994	1114	1619	1886	2148	2311	2671	3012
	70/55	703	809	908	1320	1539	1750	1880	2174	2447
	55/45	452	520	585	853	995	1129	1208	1398	1568
	45/40	314	361	407	594	694	785	838	971	1085

Heat output: RADIKE HYGIENE, RADIKE HYGIENE VK

The company reserves the right to make technical changes.

RADIK COMBI VK



HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

		15 °C	20 °C	22 °C	Radiator weight M_T [kg]	Water volume V_T [l]	Max. output of the el. heating element P [W]
Length L [mm]	t_1/t_2 [°C]	Height H [mm]					
		600				600	
800	90/70	1856	1672	1599	27,4	5,7	700
	75/65	1492	1317	1248			
	70/55	1231	1065	999			
	55/45	826	675	617			
1000	90/70	2320	2089	1999	34,2	7,1	900
	75/65	1865	1646	1560			
	70/55	1539	1331	1249			
	55/45	1032	844	771			
1200	90/70	2784	2507	2399	40,8	8,5	1000
	75/65	2238	1975	1872			
	70/55	1847	1597	1499			
	55/45	1239	1012	925			
1400	90/70	3248	2925	2798	47,5	9,9	1200
	75/65	2610	2304	2185			
	70/55	2155	1863	1749			
	55/45	1445	1181	1079			
1600	90/70	3712	3343	3198	54,3	11,4	1200
	75/65	2983	2634	2497			
	70/55	2463	2129	1999			
	55/45	1651	1350	1233			

Notice:

The maximum output of the electrical heating element P [W] is dependent on the particular type and size of the radiator and must not be exceeded in any case.

	Type 22 COMBI VK
Height H [mm]	600
Nominal heat output [W/m]	1646
Temp. exponent n [-]	1,3085
K_M	9,8475
Radiator weight [kg/m]	34,2
Water volume [l/m]	7,1

BASIC TECHNICAL PARAMETERS



RADIK MATERNELLE VK, RADIK MATERNELLE VKL

	Type 32 VK Type 32 VKL					
Height H [mm]	300	400	500	600	700	900
Nominal heat output [W/m]	992	1229	1455	1675	1891	2315
Temp. exponent n [-]	1,3023	1,3051	1,3079	1,3107	1,3263	1,3574
K _M	6,0806	7,4512	8,7253	9,9352	10,5523	11,4385
Radiator weight [kg/m]	23,4	31,0	34,4	41,4	48,4	62,3
Water volume [l/m]	3,7	4,4	5,1	5,8	6,6	8,3

RADIK PLAN KLASIK, RADIK PLAN VK, RADIK PLAN VKL, RADIK LINE KLASIK, RADIK LINE VK, RADIK LINE VKL

	Type 11 PLAN Type 11 PLAN VK Type 11 PLAN VKL						Type 21 PLAN Type 21 PLAN VK Type 21 PLAN VKL					
	300	400	500	600	700	900	300	400	500	600	700	900
Height H [mm]	300	400	500	600	700	900	300	400	500	600	700	900
Nominal heat output [W/m]	533	678	818	953	1084	1337	727	896	1060	1222	1384	1711
Temp. exponent n [-]	1,2683	1,2683	1,2682	1,2682	1,2793	1,3015	1,3098	1,3145	1,3192	1,3239	1,3311	1,3455
K _M	3,7318	4,7471	5,7295	6,6751	7,2700	8,2209	4,3274	5,2361	6,0817	6,8834	7,5794	8,8570
Radiator weight [kg/m]	12,6	15,8	19,7	23,5	28,2	36,0	16,8	22,1	26,1	31,1	36,1	47,8
Water volume [l/m]	1,9	2,3	2,7	3,1	3,5	4,3	3,7	4,4	5,1	5,8	6,6	8,3
Flow coefficient A _T [m ²]	6,5 x 10 ⁻⁴ (DN 15)						1,0 x 10 ⁻⁴ (DN 15)					
Resistance coefficient ξ _T [-]	19,0 (DN 15)						8,5 (DN 15)					

Stated values for the flow coefficient A_T and the coefficient of resistance ξ_T apply only to the model RADIK PLAN KLASIK.

RADIK PLAN KLASIK, RADIK PLAN VK, RADIK PLAN VKL, RADIK LINE KLASIK, RADIK LINE VK, RADIK LINE VKL

	Type 22 PLAN Type 22 PLAN VK Type 22 PLAN VKL							Type 33 PLAN Type 33 PLAN VK Type 33 PLAN VKL						
	200	300	400	500	600	700	900	200	300	400	500	600	700	900
Nominal heat output [W/m]	626	948	1187	1414	1631	1841	2243	918	1337	1689	2022	2341	2648	3231
Temp. exponent n [-]	1,2401	1,3141	1,3174	1,3208	1,3241	1,3265	1,3314	1,2590	1,3284	1,3252	1,3219	1,3187	1,3313	1,3565
K _M	4,8942	5,5487	6,8585	8,0621	9,1801	10,2653	12,2693	6,6656	7,3998	9,4657	11,4792	13,4577	14,4904	16,0208
Radiator weight [kg/m]	12,1	19,6	25,9	29,7	35,7	41,7	54,8	17,1	28,2	37,4	42,9	51,5	59,9	78,7
Water volume [l/m]	3,1	3,7	4,4	5,1	5,8	6,6	8,4	4,6	5,3	6,4	7,6	8,7	10,0	12,6
Flow coefficient A _T [m ²]	1,0 x 10 ⁻⁴ (DN 15)							1,18 x 10 ⁻⁴ (DN 15)						
Resistance coefficient ξ _T [-]	8,5 (DN 15)							5,8 (DN 15)						

Stated values for the flow coefficient A_T and the coefficient of resistance ξ_T apply only to the model RADIK PLAN KLASIK.

$$\text{Characteristic equation: } \phi = K_M \cdot \Delta T^n \left[\frac{W}{m} \right], \quad \Delta T = \frac{t_1 + t_2}{2} - t_i [\text{K}]$$

t₁ – temperature water-in, t₂ – temperature water-out, t_i – relative air temperature

BASIC TECHNICAL PARAMETERS

RADIK PLAN VKM8, PLAN VKM8 - L, LINE VKM8, LINE VKM8 - L

	Type 11						Type 20			Type 21					
	300	400	500	600	700	900	500	600	700	300	400	500	600	700	900
Nominal heat output [W/m]	530	658	780	897	1011	1231	848	969	1085	720	904	1072	1226	1367	1617
Temp. exponent n [-]	1,2617	1,2698	1,2778	1,2859	1,2989	1,3249	1,2895	1,2924	1,2988	1,3019	1,3144	1,3268	1,3393	1,3446	1,3553
K _M	3,8079	4,5801	5,2620	5,8626	6,2800	6,9071	5,4648	6,1741	6,7423	4,4202	5,2850	5,9704	6,5022	7,1012	8,0556
Radiator weight [kg/m]	13,4	16,6	20,6	24,4	29,1	37,0	25,2	30	35	17,6	22,9	27,0	32,0	37	48,8
Water volume [l/m]	1,9	2,3	2,7	3,1	3,5	4,5	5,3	6,2	7,0	3,7	4,5	5,3	6,2	7,0	8,7

	Type 22						Type 33					
	300	400	500	600	700	900	300	400	500	600	700	900
Nominal heat output [W/m]	914	1165	1400	1621	1830	2215	1337	1689	2022	2341	2648	3231
Temp. exponent n [-]	1,2863	1,2990	1,3117	1,3244	1,3327	1,3493	1,3284	1,3252	1,3219	1,3187	1,3313	1,3565
K _M	5,9643	7,2338	8,2716	9,1131	9,9594	11,2967	7,3998	9,4657	11,4792	13,4577	14,4904	16,0208
Radiator weight [kg/m]	20,4	26,7	30,6	36,6	42,6	55,8	29,0	38,2	43,8	52,4	60,8	79,7
Water volume [l/m]	3,7	4,5	5,3	6,2	7,1	8,9	5,4	6,7	8,0	9,3	10,5	13,0

RADIK CLEAN, RADIK CLEAN VK

	Type 10 CLEAN Type 10 CLEAN VK						Type 20S CLEAN Type 20S CLEAN VK				Type 30 CLEAN Type 30 CLEAN VK			
	300	400	500	600	700	900	500	600	700	900	500	600	700	900
Nominal heat output [W/m]	330	423	514	604	694	875	897	1043	1186	1463	1279	1482	1682	2084
Temp. exponent n [-]	1,3319	1,3193	1,3068	1,2942	1,2989	1,3083	1,3127	1,3181	1,3140	1,3058	1,3212	1,3299	1,3318	1,3355
K _M	1,8016	2,4260	3,0956	3,8215	4,3109	5,2390	5,2790	6,0100	6,9445	8,8456	7,2810	8,1543	9,1862	11,2182
Radiator weight [kg/m]	5,8	7,6	9,5	11,5	14,3	16,7	20,1	23,9	27,6	35,5	28,8	34,4	40,0	51,2
Water volume [l/m]	1,9	2,3	2,7	3,1	3,5	4,3	5,1	5,8	6,6	8,3	7,6	8,7	10,0	12,6
Flow coefficient A _T [m ²]	6,5 × 10 ⁻⁵ (DN 15)						1,0 × 10 ⁻⁴ (DN 15)				1,18 × 10 ⁻⁴ (DN 15)			
Resistance coefficient ξ _T [-]	19,0 (DN 15)						8,5 (DN 15)				5,8 (DN 15)			

Stated values for the flow coefficient A_T and the coefficient of resistance ξ_T apply only to the model RADIK CLEAN.

$$\text{Characteristic equation: } \phi = K_M \cdot \Delta T^n \left[\frac{\text{W}}{\text{m}} \right], \quad \Delta T = \frac{t_1 + t_2}{2} - t_i [\text{K}]$$

t₁ – temperature water-in, t₂ – temperature water-out, t_i – relative air temperature

BASIC TECHNICAL PARAMETERS



RADIK CLEAN VKM8

	Type 10 CLEAN VKM8						Type 20S CLEAN VKM8						Type 30 CLEAN VKM8					
	300	400	500	600	700	900	300	400	500	600	700	900	300	400	500	600	700	900
Q_n [W/m]	330	423	514	604	694	875	590	746	897	1043	1186	1463	858	1072	1279	1482	1682	2084
n [-]	1,3319	1,3193	1,3068	1,2942	1,2989	1,3083	1,3018	1,3072	1,3127	1,3181	1,3140	1,3058	1,3037	1,3124	1,3212	1,3299	1,3318	1,3355
K_M	1,8016	2,4260	3,0956	3,8215	4,3109	5,2390	3,6235	4,4859	5,2790	6,0100	6,9445	8,8456	5,2305	6,3164	7,2810	8,1543	9,1862	11,2182
Radiator weight [kg/m]	6,5	8,3	10,1	11,8	13,6	17,1	12,1	15,5	19,1	22,6	26,0	33,2	17,6	22,5	27,6	32,6	37,7	50,9
Water volume [l/m]	1,9	2,3	2,7	3,1	3,5	4,5	3,7	4,5	5,3	6,2	7,0	8,9	5,4	6,7	8,0	9,3	10,5	13,0

RADIK HYGIENE, RADIK HYGIENE VK

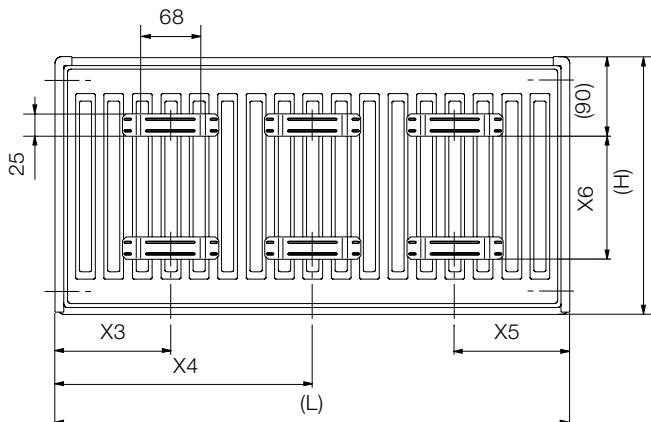
	Type 10 HYGIENE Type 10 HYGIENE VK			Type 20S HYGIENE Type 20S HYGIENE VK			Type 30 HYGIENE Type 30 HYGIENE VK		
	503	603	703	503	603	703	503	603	703
Nominal heat output [W/m]	431	496	556	808	941	1072	1153	1333	1503
Temp. exponent n [-]	1,2656	1,2695	1,2617	1,2557	1,2512	1,2600	1,2697	1,2677	1,2785
K_M	3,0497	3,4565	3,9947	5,9431	7,0443	7,7534	8,0287	9,3550	10,1117
Radiator weight [kg/m]	13,4	16,0	20,4	23,3	27,8	33,1	34,6	40,6	45,5
Water volume [l/m]	2,7	3,1	3,5	5,1	5,8	6,6	7,6	8,7	10
Flow coefficient A_T [m²]	$6,5 \times 10^{-5}$ (DN 15)			$1,0 \times 10^{-4}$ (DN 15)			$1,18 \times 10^{-4}$ (DN 15)		
Resistance coefficient ε_r [-]	19,0 (DN 15)			8,5 (DN 15)			5,8 (DN 15)		

Characteristic equation: $\phi = K_M \cdot \Delta T^n \left[\frac{W}{m} \right], \quad \Delta T = \frac{t_1 + t_2}{2} - t_i [K]$

t₁ – temperature water-in, t₂ – temperature water-out, t_i – relative air temperature

DATA FOR MOUNTING

Location of hangers



Position of radiator

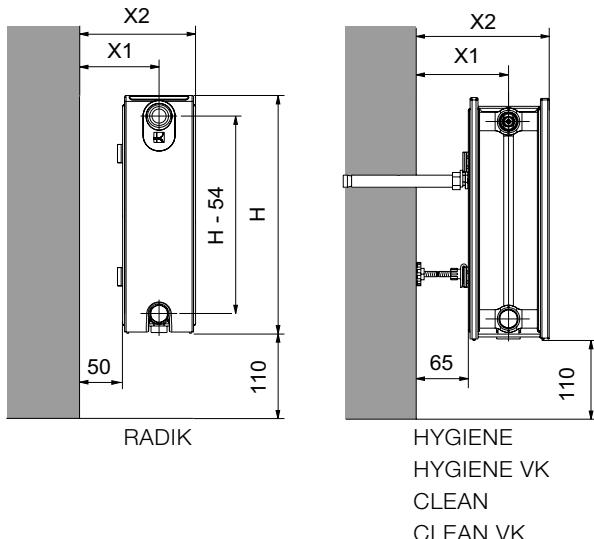


Table of sizes

	Length L [mm]	400	500 - 1600	1800	2000	2300	2600	3000
X3	A	133	133	133	133	133	133	133
	B	167	167	167	167	167	167	167
	C	117	150	150	150	150	150	150
	D	100	133	133	133	133	133	133
X4	A	-	-	900	1000	1133	1300	1500
	B	-	-	900	1000	1133	1300	1500
	C	-	-	883	983	1150	1283	1483
	D	-	-	900	1000	1133	1300	1500
X5	A	133	133	133	133	133	133	133
	B	100	133	133	133	133	133	133
	C	117	150	150	150	150	150	150
	D	167	167	167	167	167	167	167

A - for Types 10, 20, 20S, 21, 22, 30, 33, 20 VK, 20S VK, 21 VK, 21 VKL, 22 VK, 22 VKL, 30 VK, 32 VK, 32 VKL, 33 VK, 33 VKL

B - for Types 10 VK

C - for Types 11, 11 VK, 11 VKL

D - for Types 10 VKL

PLAN KLASIK = LINE KLASIK = HYGIENE = CLEAN = KLASIK

PLAN VK = LINE VK = HYGIENE VK = CLEAN VK = VK

PLAN VKL = LINE VKL = VKL

Height H [mm]	300	400	500	554	600	700	900
X6	145	245	345	399	445	545	745

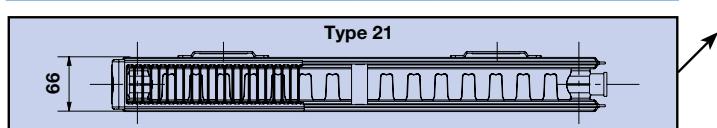


Table of sizes

Type	10 10 VK 10 VKL	11 11 VK 11 VKL	20 20 R 20 VK	21 21 R 21 VK 21 VKL	22 22 R 22 VK 22 VKL	32 32 VK 32 VKL	33 33 R 33 VK 33 VKL
X1	32	75	83	83	100	100	100
X2	64	107	116	116	150	205	205

The values of parameters **X1** and **X2** depend on Type of brackets applied.

The **X2** figure is increased by 2 mm for PLAN and LINE radiators.

¹⁾ Value **X1** for the model RADIK KLASIK – R Type 33 = 155 mm.

Table of sizes HYGIENE, HYGIENE VK, CLEAN, CLEAN VK

Type	10 10 VK	20 S 20 S VK	30 30 VK
X1	47	115	115
X2	79	165	220

The **X2** figure is increased by 2 mm for models HYGIENE, HYGIENE VK.

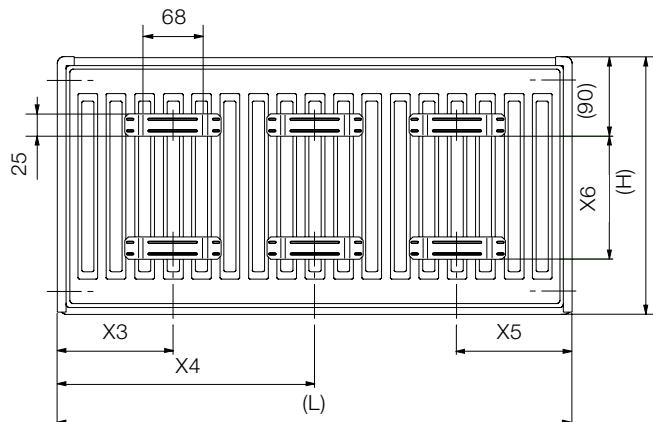
Overview of Types

Type	Number of panels	Number of convector plates
Type 10	1	0
Type 11	1	1
Type 20	2	0
Type 21	2	1
Type 22	2	2
Type 30	3	0
Type 32	3	2
Type 33	3	3

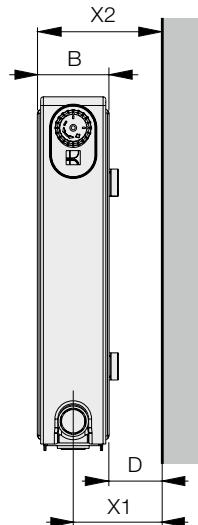
DATA FOR MOUNTING - Type VKM8



Location of hangers



Position of radiator



Tables of sizes

Type	L [mm]							
	400	500 - 1600	1800	2000	2300	2600	3000	
X3 [mm]	A	167	167	167	167	167	167	
	B	100	133	133	133	133	133	
	C	117	150	150	150	150	150	
	D	133	133	133	133	133	133	
X4 [mm]	A	-	-	900	1000	1133	1300	1500
	B	-	-	900	1000	1133	1300	1500
	C	-	-	900	1000	1133	1300	1500
	D	-	-	900	1000	1133	1300	1500
X5 [mm]	A	100	133	133	133	133	133	
	B	167	167	167	167	167	167	
	C	117	150	150	150	150	150	
	D	133	133	133	133	133	133	

A - for types: 10 VKM8

B - for types: 10 VKM8 - L

C - for types: 11 VKM8, 11 VKM8 - L, 11 PLAN VKM8, 11 PLAN VKM8 - L, 11 LINE VKM8, 11 LINE VKM8 - L

D - for types: 20 VKM8, 20 VKM8 - L, 20 PLAN VKM8, 20 PLAN VKM8 - L, 20 LINE VKM8, 20 LINE VKM8 - L, 21 VKM8, 21 VKM8 - L, 21 PLAN VKM8, 21 PLAN VKM8 - L, 21 LINE VKM8, 21 LINE VKM8 - L, 22 VKM8, 22 VKM8 - L, 22 PLAN VKM8, 22 PLAN VKM8 - L, 22 LINE VKM8, 22 LINE VKM8 - L, 33 VKM8, 33 VKM8 - L, 33 PLAN VKM8, 33 PLAN VKM8 - L, 33 LINE VKM8, 33 LINE VKM8 - L

Height H [mm]	300	400	500	600	700	900
X6	145	245	345	445	545	745

Type	10 VKM8	11 VKM8 11 PLAN VKM8 11 LINE VKM8	20 VKM8 20 PLAN VKM8 20 LINE VKM8 20 VKM8 - U	21 VKM8 21 PLAN VKM8 21 LINE VKM8 21 VKM8 - U	22 VKM8 22 PLAN VKM8 22 LINE VKM8 22 VKM8 - U	33 VKM8 33 PLAN VKM8 33 LINE VKM8 33 VKM8 - U
Bottom middle	D - 18	D + 25	D + 33	D + 33	D + 33	D + 33
X1 [mm]						
Right bottom connection	D - 18	D + 25	D + 33	D + 33	D + 50	D + 50
X2 [mm]	D + 14	D + 57	D + 66	D + 66	D + 100	D + 155

Type	10 VKM8 - L	11 VKM8 - L 11 PLAN VKM8 - L 11 LINE VKM8 - L	20 VKM8 - L 20 PLAN VKM8 - L 20 LINE VKM8 - L 20 VKM8 - U*	21 VKM8 - L 21 PLAN VKM8 - L 21 LINE VKM8 - L 21 VKM8 - U*	22 VKM8 - L 22 PLAN VKM8 - L 22 LINE VKM8 - L 22 VKM8 - U*	33 VKM8 - L 33 PLAN VKM8 - L 33 LINE VKM8 - L	33 VKM8 - U*
Bottom middle	D - 18	D + 25	D + 33	D + 33	D + 33	D + 67	D + 33
X1 [mm]							
Left bottom connection	D - 18	D + 25	D + 33	D + 33	D + 50	D + 50	D + 105
X2 [mm]	D + 14	D + 57	D + 66	D + 66	D + 100	D + 100	D + 155

Notice: * VKM8-U connected with the valve on the left side.

Values **X2** related to the radiators in versions PLAN and LINE are by 2 mm larger.

GENERAL INFORMATION

Description

RADIK are steel panel radiators with a natural air convection around their heat-transfer surface. They are produced in single, double or triple panel version. The basic heat-transfer surface is created by a profiled panel with horizontally and vertically aligned channels. For an increase of heat output there is an additional convective fin welded on the inside of the panel of some of the radiator types.

The panel is made from two moulded steel shells which are spot-welded in vertical profiles and seam-welded on all four sides of the panel. A cold-rolled low-carbon content steel is used.

Use

RADIK steel panel radiators are designed for central heating systems in buildings with the highest allowed working pressure of 10 bar (1,0 MPa) where water or water solutions are used as the heating medium. The highest allowed working temperature is 110 °C. RADIK radiators are designed for single-pipe or twin-pipe systems with pressurized or gravity-fed circulation. Radiators must be installed in a professional way in hot water systems which are carried out professionally according to VDI 2035 with regard to the protection against damage caused by corrosion and scale.

The following main water quality attributes must be adhered to:

- pH range 8.5 - 9.5 (this applies for systems which do not contain aluminium)
- overall water hardness (content of Ca + Mg ions) up to 1mmol/l
- salinity within the range 300 - 500 µS/cm
- oxygen content max. 0.1 mg/l.

Low water content in the radiator enables a flexible reaction of the heating system to the required room temperature and an effective thermoregulation.

RADIK steel panel radiators in the PLAN and VERTIKAL version have a special design which will fit in with every room interior and will satisfy even the most demanding customer and home designer.

RADIK steel panel radiators in the version HYGIENE are designed for rooms with high demands on hygiene and cleanliness. These radiators have been tested in an accredited laboratory and obtained the hygiene certificate for usage in health service and similar services.

Identification

Our products are identified by:

- a printed label on the radiator packaging
- a label with bar code on the radiator packaging
- a company logo stamped on the end panels
- an inkjet print with the manufacturing date and time on the rear side of the plate of the radiator

Type number	Number of panels	Number of convector plates
Type 10	1	0
Type 11	1	1
Type 20	2	0
Type 21	2	1
Type 22	2	2
Type 30	3	0
Type 32	3	2
Type 33	3	3

Versions

RADIK steel panel radiators are manufactured in 6 basic versions which come in individual models.

Basic versions of RADIK steel panel radiators:

- KLASIK
 - radiators with side connections and a profiled front panel.
- VENTIL KOMPAKT
 - radiators with built-in inside distribution tappings and valve, with bottom connections and profiled front panel.
- PLAN
 - radiators with side connections (KLASIK version) or bottom connections (VENTIL KOMPAKT version) with a flat front panel.
- LINE
 - radiators with side connections (KLASIK version) or with bottom connection (VENTIL KOMPAKT version) and a flat front panel with fine horizontal grooves
- VERTIKAL
 - vertically aligned radiators without valve with bottom middle connection and a flat or grooved front panel
- HYGIENE
 - radiators without convective fins, side panels and top grill, with side or bottom connections and with a flat front panel

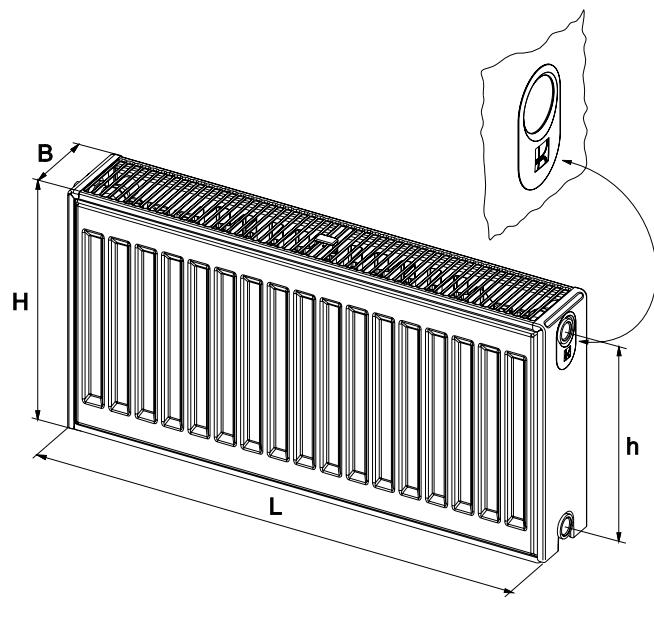
Overview of RADIK models

- VENTIL KOMPAKT
 - model RADIK VKM8
 - model RADIK VKM8 - L
 - model RADIK VKM8 - U
 - model RADIK VK
 - model RADIK VKU
 - model RADIK VKL
 - model RADIK COMBI VK
 - model RADIK MATERNELLE VK
 - model RADIK MATERNELLE VKL
 - model RADIK VK - Z
- KLASIK
 - model RADIK KLASIK
 - model RADIK KLASIK - R
 - model RADIK KLASIK - Z
- PLAN
 - model RADIK PLAN VKM8
 - model RADIK PLAN VKM8 - L
 - model RADIK PLAN VK
 - model RADIK PLAN VKL
 - model RADIK PLAN KLASIK
 - model RADIK PLAN KLASIK - R
- LINE
 - model RADIK LINE VKM8
 - model RADIK LINE VKM8 - L
 - model RADIK LINE VK
 - model RADIK LINE VKL
 - model RADIK LINE KLASIK
 - model RADIK LINE KLASIK - R
- VERTIKAL
 - model RADIK PLAN VERTIKAL - M
 - model RADIK LINE VERTIKAL - M
- Provedení HYGIENE
 - model RADIK CLEAN VKM8
 - model RADIK CLEAN VK
 - model RADIK CLEAN
 - model RADIK HYGIENE
 - model RADIK HYGIENE VK

GENERAL INFORMATION



Technical data



Height	$H = 200 \div 900 \text{ mm}$
Length	$L = 400 \div 3000 \text{ mm}$
Depth	$B = 47 \div 155 \text{ mm}$ (differs according to the type)
Connecting pitch	$h = H - 54 \text{ mm}$
Connecting thread	G 1/2" inside
Highest allowed working pressure	10 bar (1,0 MPa)
Test pressure	13 bar
Highest allowed working temperature	110 °C
Axial distance of the vertical stampings	33,33 mm
Basic paint	cataphoretic paint (KTL)
Surface finish	white RAL 9016
LGA	for types 11, 20, 21, 22, 33
Guarantee period	10 years

Finish

The technology used guarantees the achievement of three basic goals:

- long-term corrosion resistance and mechanical durability
- fine-quality finish
- hygienic surface

The surface finish is done in three basic phases:

- 1) Preparation of the steel surface – includes degreasing, phosphating, and rinsing in three stages.
- 2) Putting on the first layer of paint using the cataphoretic method (KTL). The layer of paint is evenly spread over the whole radiator. The KTL paint gains its final anticorrosion, adhesive, and mechanical and chemical characteristics in a drying oven. This phase of surface finishing is of decisive importance for the long life span of the radiator.
- 3) Putting on the final layer of paint – epoxy-polyester powder is applied using automatic dusting pistols in an electrostatic field of a dusting compartment. After it is oven dried and cooled, the finish of the radiator is completed.

The surface finishing of the radiators is done with a maximum effort to protect the environment, during production and use.

Radiators are delivered in white powder coat (RAL 9016) as standard, on request we also offer in other colours. For more information on the colours available please see the colour card RADIK.



1. Degreasing and phosphating
2. Cataphoretic paint
3. Epoxy-polyester powder

GENERAL INFORMATION

Basic Equipment

All RADIK steel panel radiators except the model RADIK VKU and all radiators in height 200 mm have two upper and lower hangers welded on the back. Radiators with length 1800 mm and longer have six welded hangers.

All radiators are equipped with an air vent and a respective number of blanking plugs. All connections of RADIK steel panel radiators have the same diameter with a G 1/2 internal thread.

Except the types 10 and the models RADIK HYGIENE, RADIK HYGIENE VK, RADIK CLEAN, RADIK CLEAN VK all other models are delivered with end panels and top grills fitted.

The radiators in height 200 mm are delivered with the necessary number of "Split Brackets Plus" designed for mounting on the wall. Stand brackets Z-U400 can be delivered on special order.

Transport and storage

The radiators are stored on pallets according to the manufacturer's internal guidelines. Pallets with radiators should only be transported in covered transport. Radiators which are transported unprofessionally and incorrectly can be deformed or otherwise damaged. It is especially dangerous to transport long radiators on smaller pallets or on top of radiators of a different size.

Radiators must be stored where they are protected from the effects of the weather. They are not to be stored in open, uncovered areas. If they are stored on a flat floor, a maximum of two pallets of the same size may be put on top of each other. Pallets with radiators of type 10 and 11 and all types of the PLAN version may be stored only in one layer.

Heat output and registration

Heat outputs of the steel panel radiators RADIK were measured according to EN 442 in an accredited laboratory.

Conformity with valid European regulations and standards was certified by Strojírenský zkušební ústav (Engineering Testing Institute) in Brno, notified body No. 1015.

Certified registration for using national quality marks RAL (Germany) - see p. 85.

Related norms

ČSN EN 442

DIN EN 442

ČSN 06 1101

ČSN 06 1122

ČSN 06 0310

ČSN 07 7401

DIN 55 900

Packaging

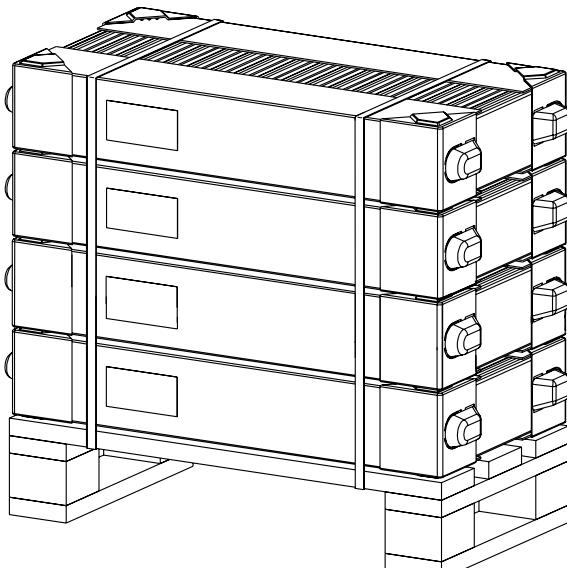
All steel panel radiators are delivered in uniform packaging, which consists of:

- corrugated cardboard
- plastic reinforcing corner covers
- polyethylene shrinking foil
- strip band
- inserted information sheet

The packaging protects the radiator during transportation, handling, assembly and after assembly. It should not be removed before the installation and other work is completed.



Packaging - pallet



GENERAL INFORMATION



Guidelines for mounting

Basic guidelines for the installation of steel panel radiators:

- centre below a window
- centre of radiator and of window at the same place
- air movement around the radiator should not be restricted

We offer an assortment of brackets for RADIK steel panel radiators. That assortment is shown in the KORAMONT catalogue and covers most installers needs and all main construction materials. Its construction allows mounting of the radiator with minimum damage of its packaging (at the place of mounting and connection of necessary parts) and the packaging can be removed after the completion of all construction and other work.

We recommend using such fittings for the connection of steel panel radiators as will secure:

- regulation of water flow through the radiator
- closing off radiator at the inlet and outlet of water flow
- emptying and filling of the radiator
- disconnecting of radiator without interruption of the heating system operation

For mounting of RADIK steel panel radiators of VENTIL KOMPAKT version, we recommend to use KORADO pre-fixing template, which will supply, in every respect, radiators presence at a construction site (see KORAMONT catalogue).

Guarantees and Quality

The manufacturer guarantees that the product is leak proof and guarantees stated heat output of RADIK steel panel radiators connected to the hot-water systems for 10 years from the date of sale. The manufacturer accepts no responsibility for deformation or damage of the radiators caused during their transport, handling, or storage. The guarantee does not apply to mechanical or other damages caused by unqualified installation of the radiators.

RADIK products guarantee the quality, as is documented by certificates issued by LGA Nürnberg (certificate on suitability of radiators for installation in schools and kindergartens) and Engineering Testing Laboratory, SZ no. 202 Brno and registration of national quality marks RAL (Germany), NF (France) - see p. 82.

The company KORADO, a.s. has held a quality certificate under the norm ISO 9001 since 1997. That quality control system describes in advance all conditions, requirements, and parameters with respect to technical, manufacturing, commercial, transport, and service issues. The customer is the main goal of the entire system and his satisfaction influences the goals and plans of the company KORADO. The ISO 9001 quality control system guarantees the customer excellent, long-lasting quality of products and services.



Multifunctional package

GENERAL INFORMATION - VENTIL KOMPAKT

Description

Models in VENTIL KOMPAKT version are equipped with a built-in distribution pipeline and valve. This construction allows **connection of the radiator from the bottom** to the heating system. The axial distance of the bottom outlet is always 50 mm and has a G 1/2" internal thread. Its construction is intended for modern heating systems with pressurized circulation of the heating medium and horizontal piping below the radiator in the floor, in the wall, or on the wall covered with a strip.

Installation to the heating system

Modern heating systems require the use of fittings, which will enable the installer to close off the radiator so that it can be changed without interrupting the operating system. The choice of fittings depend on the requirements and the material of the pipes:

1. copper, thin-wall steel, plastic or a plastic-metal-plastic combination
 - use a compact connecting fitting with a pitch of 50 mm and with reduction of G 1/2" to G 3/4" by setting appropriate clamping screws according to the material and size of connecting pipes
2. black steel pipes with tubular threading
 - use 2 closing screws

Models

VENTIL KOMPAKT version of steel panel radiators is manufactured in several models. The construction of the models varies particularly with respect to the location of the connections and position of the connection pipes.

Model	Position of connection	Description
RADIK VKM8	middle connection and right	14
RADIK VKM8 - L	middle connection and left	15
RADIK VKM8 - U	middle connection and right / left	16
RADIK VK	only right	17
RADIK VK - Z	only right	18
RADIK VKU	right or left	19
RADIK VKL	only left	20
RADIK MATERNELLE VK	only right	21
RADIK MATERNELLE VKL	only left	22
RADIK PLAN VKM8	middle connection and right	28
RADIK PLAN VKM8 - L	middle connection and left	29
RADIK PLAN VK	only right	30
RADIK PLAN VKL	only left	31
RADIK LINE VKM8	middle connection and right	28
RADIK LINE VKM8 - L	middle connection and left	29
RADIK LINE VK	only right	30
RADIK LINE VKL	only left	31
RADIK CLEAN VKM8	middle connection and right	37
RADIK CLEAN VK	only right	38
RADIK HYGIENE VK	only right	41
RADIK COMBI VK	only right	42

Valve

At the time of assembly of the radiator a valve Heimeier n. 4360 is fitted into the built-in distribution pipeline. It is characterized by the following data:

- value of coefficient kv - see page 81
- allows presetting of water flow at 8 levels -factory preset for position eight
- to preset to another position a special key is required
- if any other preset position is needed, the installer should do it after flushing the installation but before the system is turned on
- the valve is tightened at the factory to their norm
- outside connecting thread M 30 x 1.5
- the connecting thread of the valve has a white plastic cover, which gives it protection during transportation and assembly of the radiator and at the same time can be used for setting the valve in the off or on position during assembly



2.



GENERAL INFORMATION - VENTIL KOMPAKT



Thermostatic heads

To set and regulate the temperature in a room it is necessary to fit a thermostatic head on the VENTIL KOMPAKT radiators. For direct fitting only thermostatic heads can be used with connecting thread M 30 x 1.5. Below is an overview with connecting thread M 30 x 1.5.

with connecting thread M 30 x 1.5. Below is an overview of the basic types made by different manufacturers for the Czech market. For information about other makes, please, contact the manufacturer or their representative on the market concerned.

- 1.** Danfoss - Type RAE-K 5034, 013G5034
- 2.** Danfoss - Type RAX-K 013G6080
- 3.** Danfoss - living eco® 014G0052
- 4.** Eberle - Type TRV 4
- 5.** Eberle - Type RT 414
- 6.** Giacomini - Type R460H
- 7.** Heimeier - Type K
- 8.** Heimeier - Type DX
- 9.** Heimeier - Type WK
- 10.** Herz - Type 1 7260 98

- 11.** Herz - Type 1 9200 38
- 12.** Herz - Type 1 9260 98
- 13.** Honeywell - Type Thera 4
- 14.** Honeywell - Type Thera 4 Design
- 15.** Honeywell - Type Thera 200 Design
- 16.** Ivar - Type T 5000
- 17.** Ivar - Type T 3000
- 18.** Oventrop - Type Uni LH
- 19.** Oventrop - Type Uni SH
- 20.** Siemens - Type RTN 51

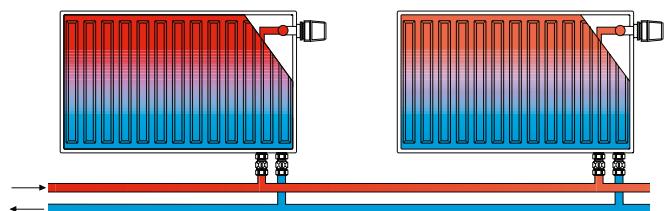


GENERAL INFORMATION - VENTIL KOMPAKT

Two-pipe heating system

When installing VENTIL KOMPAKT steel panel radiators, it is necessary to preset the valve to such a position that the radiator will perform as calculated. It is the responsibility of the installer to make sure this has been done.

At the factory the valve is preset at level 8 and after rinsing and before the start of the heating test it must be set by a special key to the desired position.



Example of calculation

Target value: level of valve setting

Values known: heat output

cooling of water

pressure loss of radiator with valve

heat capacity of water

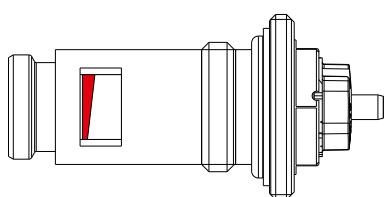
$$\begin{aligned} Q &= 1135 \text{ W} \\ t_1 - t_2 &= 15 \text{ K (65/50 °C)} \\ \Delta p &= 30 \text{ mbar} \\ c &= 1,163 \text{ Wh/kg.K} \end{aligned}$$

Solution: mass flow

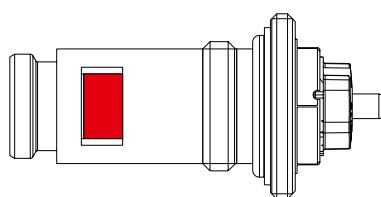
level of presetting (see diagram):

$$m = \frac{Q}{c \cdot (t_1 - t_2)} = \frac{1135}{1,163 \cdot 15} = 65 \text{ kg/h}$$

4



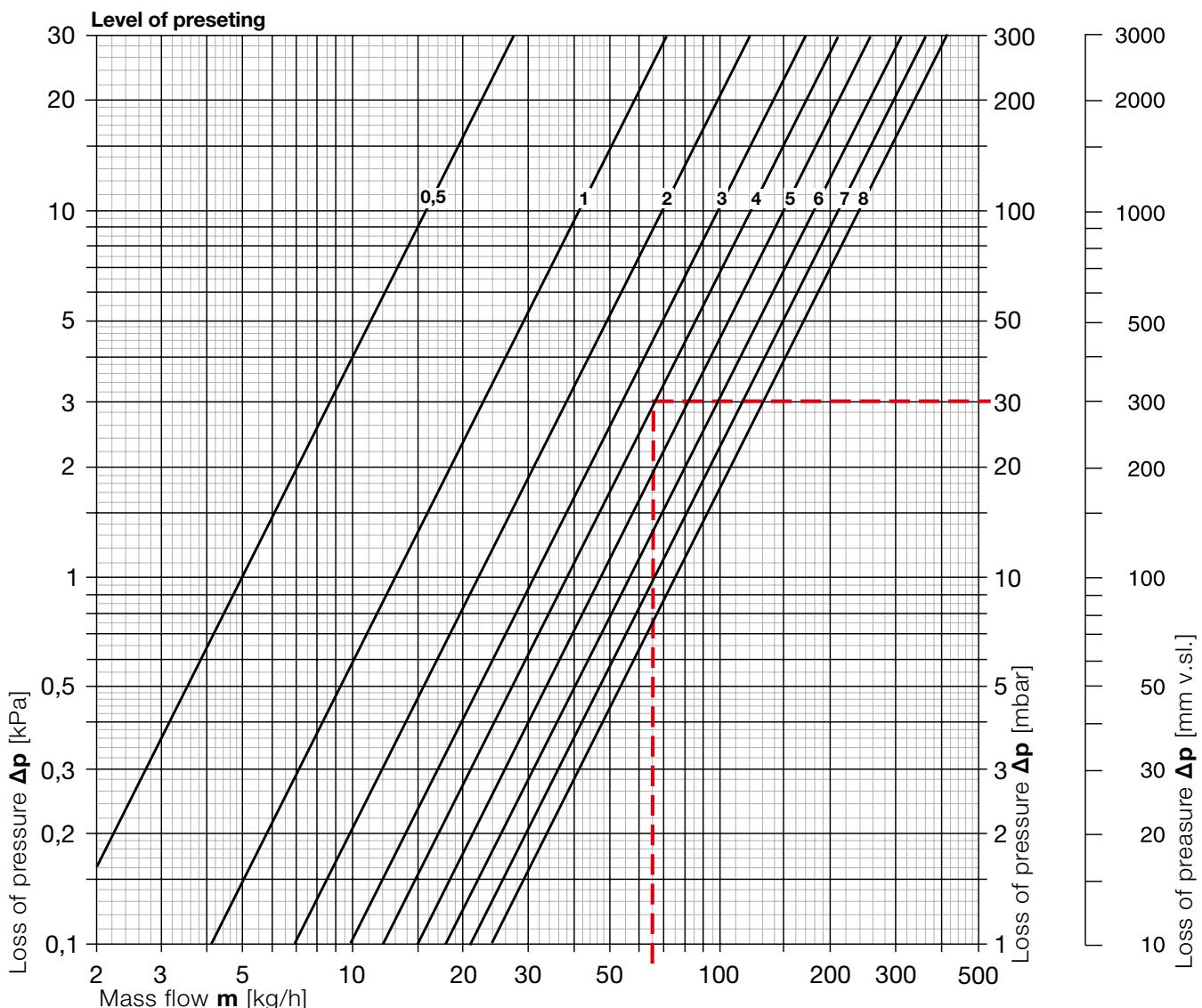
Level 4 presetting



Level 8 presetting



Two-pipe heating system



Table

Valve with thermostatic head																
Level of valve setting	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	7,5	8
k_v [m³/h]	0,05	0,13	0,18	0,22	0,27	0,31	0,35	0,38	0,42	0,47	0,52	0,57	0,62	0,66	0,71	0,75

Valve without thermostatic head																
Level of valve setting	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	7,5	8
k_{vs} [m³/h]	0,05	0,16	0,22	0,27	0,33	0,38	0,41	0,43	0,54	0,65	0,82	0,98	1,11	1,23	1,33	1,43

Highest allowed working temperature: 110 °C

Highest allowed working pressure: 10 bar (1,0 MPa)

The indicated values of k_v comply with proportionality interval of 2K.

SVÚOM PRAHA – INFORMATION

(I.E. STATE RESEARCH INSTITUTE FOR PROTECTION OF MATERIALS)

The below given information defines conditions for appropriate using steel radiators which are protected with final surface finish in accordance with DIN 55 900 standard. It also specifies critical locations, spaces and environment limiting their applications. KORADO, a.s. (joint-stock co.) recommends the below given advice to be strictly respected at all practical applications because this will be taken into consideration in case of judgement and evaluation of any future claims and/or complaints.

POSSIBILITIES AND LIMITATIONS FOR USING STEEL RADIATORS WITH SURFACE FINISH ACCORDING TO DIN 55 900 STANDARD:

(Explicit comment from the Prague State Research Institute for Protection of Materials)

1. REQUIREMENTS FOR SURFACE FINISH OF RADIATORS

1.1 General

The requirements concerning the surface finish of radiators are defined in German standard DIN 55 900 which bears the following title: "Surface finish of radiators. Terminology, requirements, tests. Surface finish made industrially." The said standard relates to materials which are used for surface finish of radiators and it is binding for industrially made surface finish of radiators for hot water heating and low pressure steam heating (temperature of the heat-carrying medium up to 120 °C). The object of the said standard is not surface finish of radiators operating with temperatures exceeding 120 °C or which are to be used in spaces with aggressive and/or humid environment air. Kitchens, bathrooms etc. and places outside the reach of water shower spraying and toilets are not considered to be spaces with aggressive and/or humid environment air.

The DIN 55 900 standard is divided into 2 parts: DIN 55 900-1 defines the base paint layer for radiators, DIN 55 900-2 defines the final surface finish of radiators. The said standard specifies requirements on paint coating materials applicable for surface finish, i.e. both their physical-mechanical properties (adhesion, impact resistance) and corrosion resistance (resistance against condensating water).

In general terms, the said standard also requires that radiators with final paint coating must be protected appropriately for and during: transportation, storage, and mounting, and it must be possible to clean the radiators surface with common detergents (non abrasive).

The said standard is the basis for definition and assessment of the surface finish quality and for compliance with all principles therein stipulated, all of which is binding both for manufacturers and users of radiators. Beyond the scope of the standard DIN 55 900 by the user may be the cause of extinction of the producer's guarantees.

2. QUALITATIVE DESCRIPTION OF TYPICAL ENVIRONMENTS

The qualitative description of typical environments with relevant grades of corrosivity is given in the table under the following title:

Qualitative description of typical environments for judgement of corrosivity grades:

Corrosivity grade	Corrosivity	Examples of typical interior environments
C-1	Very low	Heated spaces with relative low humidity (30 – 65%) and with negligible uncleanliness, e.g. office premises, schools, museums, flats, hotels, shops, etc.
C-2	Low	Unsufficiently heated spaces with changeable temperature and with relative humidity exceeding 70%. Rare occurrence of condensation and minor uncleanliness, e.g. warehouses, corridors, gym halls, etc.
C-3	Average	Spaces with average occurrence of condensation and with average uncleanliness caused by technological or other processes, e.g. food production premises, laundry plants, breweries, dairy houses, meat packing factories, etc.
C-4	High	Spaces with high occurrence of condensation and with average uncleanliness caused by technological or other processes, e.g. industrial manufacturing premises, swimming pools, bath houses, car-washing facilities, public WCs, stables, etc..
C-5	Very High	Spaces with nearly constant occurrence of condensation and/or with high uncleanliness caused by technological processes, e.g. mining premises, underground technological spaces/rooms/halls, unaired shelters in tropical humid areas.

The radiators with surface finish complying with the DIN 55 900 standard are applicable in spaces/premises with C 1 interior air environment without limitation for a long period of service.

However, pursuant to the DIN 55 900-2 standard, the radiators must not be placed in spaces with aggressive or humid environment air (C2 – C5). Any placement of such radiators in the lower defined spaces must be considered as critical.

3. POSSIBILITIES AND LIMITATIONS FOR USING STEEL RADIATORS WITH SURFACE FINISH COMPLYING WITH DIN 55 900 STANDARD:

3.1 Spaces with possible water spray or water solutions spray

In spaces/premises with the C1 interior environment air, e.g. in flats, offices, schools and other public buildings, there are also some rooms (kitchens, bathrooms, toilets) wherein some places with corrosion activity of C2 – C5 can be found. These are places within a direct reach of water spray or water solutions spray (e.g. places under kitchen sinks, under wash-basins, under showers, and some other places which are regularly sprayed with water). Such places are considered as spaces with humid or aggressive environment air and they are not suitable for placing radiators there even though the whole rooms in question (i.e. kitchens, bathrooms, toilets) are not considered to have aggressive or humid environment air.



(I.E. STATE RESEARCH INSTITUTE FOR PROTECTION OF MATERIALS)

That is why the guaranty claims resulting from the title of corrosion or from a change of the surface appearance cannot be applied on those radiators which are placed within reach of water spray or within reach of aggressive solutions (C2 – C5 spaces). In case it is necessary to place radiators within such a reach or in the middle of such an area, special protective measures must be applied (e.g. using zinc-coated or corrosion more resistant sheets, appropriate encasing etc.) which prevent corrosion damage of the surface finish of the radiators in question.

Radiators with surface finish complying with the DIN 55 900 standard can thus be installed in kitchens, bathrooms and toilets, provided they are located in the suitable place of the room.

3.2 Spaces which are unsufficiently air-ventilated

These are rooms (spaces with C2 interior environment air and higher) with windows which are never opened or rooms without windows where no sufficient air exchange can be achieved and maintained. In such spaces, humidity from air can often condensate on turned-off and therefore cold radiators. This condensed humidity can damage the protective coating due to corrosion or blistering.

Regular air-ventilation of the heated rooms/premises is the necessary protection of the surface finish of radiators against humidity and condensated water. It is not recommended, as a kind of protection against condensated humidity, to turn off radiators which are placed in unsufficiently air-ventilated rooms.

Using radiators complying with the surface finish according to DIN 55 900 inside bathrooms, toilets and launderettes (without windows) is possible only if air-ventilation is maintained in accordance with DIN 18 017 standard, Part 1 and Part 3, wherein hour exchanges of air volumes are defined. Analogically, requirements re. temperature-humidity microclimate are given in ČSN EN ISO 7730 standard.

If no regular air-ventilation is possible, or if no permanent air exchange can be achieved, radiators must be in continuous operation so that cooling down of such surfaces is prevented where air humidity would condensate.

Users of such unaired and humid rooms (e.g. bathrooms, launderettes) must respect this fact. Closed rooms with installed radiators must be heated or air-ventilated regularly. Requirements defining air-ventilation of flats or houses are given in the following table:

Room	Air exchange rate
Kitchen	50 l/s – during operation 12 l/s – with permanent air-ventilation or with opened windows
Bathroom, toilet	25 l/s – when being used 10 l/s – with permanent air-ventilation or with opened windows
Garage a) separate b) shared	50 l/s – separate 7,5 l/s car – shared

3.3 Spaces with permanent increased humidity or aggressivity of environment air

This relates to critical rooms and premises (C2 – C5), i.e. swimming pools, saunas, public toilets, car-washing facilities, laundry plants, battery recharging workshops, various premises in chemical and food processing industries, and rooms and spaces where wet cleaning is carried out by means of low or high pressure equipment etc. The radiators complying with DIN 55 900 are not suitable for application in such premises.

If the said radiators are still to be installed into such difficult conditions, it is necessary to consult the manufacturer for the best possible placement of the radiators and to set limitations for usage of these radiators with standard surface finish. Inside the above mentioned critical premises there are usually also places with the corrosion impact of grade C1, such as offices, changing rooms, workshops, dining halls etc. wherein the radiators complying with DIN 55 900 can be applied without limitations.

4. STORING OF RADIATORS AND MOUNTING OF RADIATORS

The DIN 55 900 standard requires that radiators provided with the final surface coating must be appropriately protected for and during transportation and for storage and mounting and that it must be possible to clean the radiators surface with common detergents.

The following advice is to be respected.

4.1 Transportation

During transportation but also during storage and final mounting of radiators, it is necessary to prevent any damage of the radiator coating and/or of all covering elements. No damage caused by rain or by any aggressive impurities may occur.

4.2 Storage

Radiators provided with final surface finish must be stored at the user's in dry and well air-ventilated spaces so that no corrosion damage of the radiators surface finish occurs.

4.3 Protection of the surface finish during mounting

Mounting of the radiators is to be carried out in such a manner that the protective wrapping is removed only after all building construction jobs (e.g. floor tiling, concrete works, wall painting/ decorating and cleaning) has been finished in order to prevent any damage of radiators, especially any damage of their surface finish. The radiators can be mounted and put into operation without removing the protective wrapping.

4.4 Cleaning

Radiators with final surface finish can be cleaned with such suitable water-borne detergents which are commonly used in households without any adverse impact on the painted surface. Such detergents must neither be abrasive (they would abrade the surface) nor strongly alkaline or acidic (i.e. chemically aggressive).

QUALITY AND SAFETY

Quality of steel panel radiators RADIK

The high quality of radiators has been confirmed by acquiring the right to use the national quality marks for the European markets. This marks declares that the stipulated requirements on quality of material, technology, production process and tests of radiators RADIK are strictly followed.

Our company is a proud holder of ISO 14001:2015 certification which testifies that we meet the international environmental standards. The well-established quality management system according to ISO 9001 in combination with the national quality marks guarantees the highest degree in achieving a permanent quality of products and all activities of KORADO company on European as well as world-wide markets.

• Quality management system according to ISO 9001



• Quality mark RAL for the German market

is granted for the following range of panel radiators RADIK

• Environmental management system in accordance with iso 14001



Reg. No. GZ	Model	Type
0320	RADIK HYGIENE	Type 10
	RADIK HYGIENE VK	Type 10
0321	RADIK HYGIENE	Type 20S
	RADIK HYGIENE VK	Type 20S
0322	RADIK HYGIENE	Type 30
	RADIK HYGIENE VK	Type 30
0457	RADIK COMBI VK	Type 22
0565	RADIK VKM8	Type 10
	RADIK VKM8 - L	Type 10
0566	RADIK VKM8	Type 11
	RADIK VKM8 - L	Type 11
	RADIK VKM8	Type 20
0567	RADIK VKM8 - L	Type 20
	RADIK VKM8 - U	Type 20
	RADIK VKM8	Type 21
0568	RADIK VKM8 - L	Type 21
	RADIK VKM8 - U	Type 21
	RADIK VKM8	Type 22
0569	RADIK VKM8 - L	Type 22
	RADIK VKM8 - U	Type 22
	RADIK VKM8	Type 33
0570	RADIK VKM8 - L	Type 33
	RADIK VKM8 - U	Type 33
	RADIK KLASIK	Type 10
	RADIK VK	Type 10
0571	RADIK VKL	Type 10
	RADIK CLEAN	Type 10
	RADIK CLEAN VK	Type 10
0572	RADIK KLASIK	Type 20
	RADIK VK	Type 20
0573	RADIK CLEAN	Type 20S
	RADIK CLEAN VK	Type 20S
0574	RADIK CLEAN	Type 30
	RADIK CLEAN VK	Type 30

QUALITY AND SAFETY



Reg. No. GZ	Model	Type
0578	RADIK PLAN KLASIK	Type 11
	RADIK LINE KLASIK	Type 11
	RADIK PLAN VK	Type 11
	RADIK LINE VK	Type 11
	RADIK PLAN VKL	Type 11
	RADIK LINE VKL	Type 11
0580	RADIK PLAN KLASIK	Type 21
	RADIK LINE KLASIK	Type 21
	RADIK PLAN VK	Type 21
	RADIK LINE VK	Type 21
	RADIK PLAN VKL	Type 21
	RADIK LINE VKL	Type 21
0581	RADIK PLAN KLASIK	Type 22
	RADIK LINE KLASIK	Type 22
	RADIK PLAN VK	Type 22
	RADIK LINE VK	Type 22
	RADIK PLAN VKL	Type 22
	RADIK LINE VKL	Type 22
0582	RADIK PLAN KLASIK	Type 33
	RADIK LINE KLASIK	Type 33
	RADIK PLAN VK	Type 33
	RADIK LINE VK	Type 33
	RADIK PLAN VKL	Type 33
	RADIK LINE VKL	Type 33
0583	RADIK PLAN VKM8	Type 33
	RADIK PLAN VKM8 - L	Type 33
	RADIK LINE VKM8	Type 33
	RADIK LINE VKM8 - L	Type 33
	RADIK PLAN VKM8	Type 33
	RADIK PLAN VKM8 - L	Type 11
0584	RADIK LINE VKM8	Type 11
	RADIK LINE VKM8 - L	Type 11
	RADIK LINE VKM8 - L	Type 11
	RADIK PLAN VKM8	Type 20
	RADIK PLAN VKM8 - L	Type 20
	RADIK LINE VKM8	Type 20
0585	RADIK LINE VKM8 - L	Type 20
	RADIK PLAN VKM8	Type 21
	RADIK LINE VKM8	Type 21
	RADIK LINE VKM8 - L	Type 21
	RADIK PLAN VKM8	Type 22
	RADIK PLAN VKM8 - L	Type 22
0586	RADIK LINE VKM8	Type 22
	RADIK LINE VKM8 - L	Type 22
	RADIK KLASIK	Type 11
	RADIK VK	Type 11
	RADIK VKL	Type 11
	RADIK KLASIK	Type 21
1120	RADIK VK	Type 21
	RADIK VKU	Type 21
	RADIK VKL	Type 21
	RADIK KLASIK	Type 22
	RADIK VK	Type 22
	RADIK VKU	Type 22
1121	RADIK VKL	Type 22
	RADIK KLASIK	Type 22
	RADIK VK	Type 22
	RADIK VKU	Type 22
	RADIK VKL	Type 22
	RADIK KLASIK	Type 33
1122	RADIK VK	Type 33
	RADIK VKU	Type 33
	RADIK VKL	Type 33
	RADIK KLASIK	Type 33
	RADIK VK	Type 33
	RADIK VKU	Type 33
1123	RADIK VKL	Type 33
	RADIK MATERNELLE VK	Type 32
	RADIK MATERNELLE VKL	Type 32
	RADIK MATERNELLE VK	Type 32
	RADIK MATERNELLE VKL	Type 32
	RADIK MATERNELLE VK	Type 32

Steel panel radiators RADIK - safety and conformity with the European directives and standards

• European standard EN 442 for radiators

- by using **CE mark** the producer confirms that the steel panel radiators **RADIK** are in conformity with the characteristics stated in the Declaration of Performance issued in conformity with the directive of EP and the Council (EU) No. 305/2011. This conformity was approved by the notified body No.1015, Strojirenský zkušební ústav, s.p. Brno.



DATA FOR PLACING ORDER

Steel panel radiators	Version	Model	Type	Code for ordering
RADIK	<u>RADIK VKM8</u>	10 VKM8	10HHHLLL-S0-0010	
		11 VKM8	11HHHLLL-S0-0010	
		20 VKM8	20HHHLLL-S0-0010	
		21 VKM8	21HHHLLL-S0-0010	
		22 VKM8	22HHHLLL-S0-0010	
		33 VKM8	33HHHLLL-S0-0010	
	<u>RADIK VKM8 - L</u>	10 VKM8-L	10HHHLLL-T0-0010	
		11 VKM8-L	11HHHLLL-T0-0010	
		20 VKM8-L	20HHHLLL-T0-0010	
		21 VKM8-L	21HHHLLL-T0-0010	
		22 VKM8-L	22HHHLLL-T0-0010	
	<u>RADIK VKM8 - U</u>	33 VKM8-L	33HHHLLL-T0-0010	
		20 VKM8-U	20HHHLLL-SU-0010	
		21 VKM8-U	21HHHLLL-SU-0010	
		22 VKM8-U	22HHHLLL-SU-0010	
	<u>VENTIL KOMPAKT</u>	33 VKM8-U	33HHHLLL-SU-0010	
		10 VK	10HHHLLL-60-0010	
		11 VK	11HHHLLL-60-0010	
		20 VK	20HHHLLL-60-0010	
		21 VK	21HHHLLL-60-0010	
		22 VK	22HHHLLL-60-0010	
	<u>RADIK VK</u>	33 VK	33HHHLLL-60-0010	
		10 VK	10HHHLLL-60Z0010	
		11 VK	11HHHLLL-60Z0010	
		21 VK	21HHHLLL-60Z0010	
		22 VK	22HHHLLL-60Z0010	
		33 VK	33HHHLLL-60Z0010	
KLASIK	<u>RADIK VKL</u>	10 VKL	10HHHLLL-E0-0010	
		11 VKL	11HHHLLL-E0-0010	
		21 VKL	21HHHLLL-E0-0010	
		22 VKL	22HHHLLL-E0-0010	
		33 VKL	33HHHLLL-E0-0010	
	<u>RADIK VKU</u>	21 VKU	21HHHLLL-6U-0010	
		22 VKU	22HHHLLL-6U-0010	
		33 VKU	33HHHLLL-6U-0010	
	<u>RADIK MATERNELLE VK</u>	32 VK	32HHHLLL-6S-0010	
		32 VKL	32HHHLLL-ES-0010	
	<u>RADIK COMBI VK</u>	22 COMBI VK	22HHHLLL-N0-0010	
		10	10HHHLLL-50-0010	
	<u>RADIK KLASIK</u>	11	11HHHLLL-50-0010	
		20	20HHHLLL-50-0010	
		21	21HHHLLL-50-0010	
		22	22HHHLLL-50-0010	
		33	33HHHLLL-50-0010	
		20 R	20HHHLLL-R0-0010	
	<u>RADIK KLASIK - R</u>	21 R	21HHHLLL-R0-0010	
		22 R	22HHHLLL-R0-0010	
		33 R	33HHHLLL-R0-0010	
		10	10HHHLLL-50Z0010	
	<u>RADIK KLASIK - Z</u>	11	11HHHLLL-50Z0010	
		21	21HHHLLL-50Z0010	
		22	22HHHLLL-50Z0010	
		33	33HHHLLL-50Z0010	

 Note: for the scheme of the order code see please page 88

DATA FOR PLACING ORDER



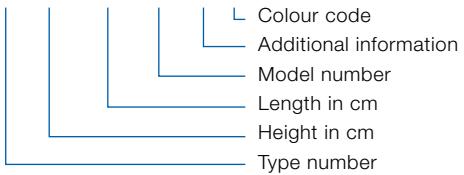
Steel panel radiators	Version	Model	Type	Code for ordering
RADIK	PLAN	<u>RADIK PLAN VKM8</u>	11 PLAN VKM8 20 PLAN VKM8 21 PLAN VKM8 22 PLAN VKM8 33 PLAN VKM8	11HHHLLL-SOP0010 20HHHLLL-SOP0010 21HHHLLL-SOP0010 22HHHLLL-SOP0010 33HHHLLL-SOP0010
		<u>RADIK PLAN VKM8 - L</u>	11 PLAN VKM8 - L 20 PLAN VKM8 - L 21 PLAN VKM8 - L 22 PLAN VKM8 - L 33 PLAN VKM8 - L	11HHHLLL-TOP0010 20HHHLLL-TOP0010 21HHHLLL-TOP0010 22HHHLLL-TOP0010 33HHHLLL-TOP0010
		<u>RADIK PLAN VK</u>	11 PLAN VK 21 PLAN VK 22 PLAN VK 33 PLAN VK	11HHHLLL-60P0010 21HHHLLL-60P0010 22HHHLLL-60P0010 33HHHLLL-60P0010
		<u>RADIK PLAN VKL</u>	11 PLAN VKL 21 PLAN VKL 22 PLAN VKL 33 PLAN VKL	11HHHLLL-EOP0010 21HHHLLL-EOP0010 22HHHLLL-EOP0010 33HHHLLL-EOP0010
		<u>RADIK PLAN KLASIK</u>	11 PLAN 21 PLAN 22 PLAN 33 PLAN	11HHHLLL-50P0010 21HHHLLL-50P0010 22HHHLLL-50P0010 33HHHLLL-50P0010
		<u>RADIK PLAN KLASIK-R</u>	20 PLAN R 21 PLAN R 22 PLAN R 33 PLAN R	20HHHLLL-R0P0010 21HHHLLL-R0P0010 22HHHLLL-R0P0010 33HHHLLL-R0P0010
		<u>LINE VKM8</u>	11 LINE VKM8 20 LINE VKM8 21 LINE VKM8 22 LINE VKM8 33 LINE VKM8	11HHHLLL-SOL0010 20HHHLLL-SOL0010 21HHHLLL-SOL0010 22HHHLLL-SOL0010 33HHHLLL-SOL0010
		<u>LINE VKM8 - L</u>	11 LINE VKM8 20 LINE VKM8 21 LINE VKM8 22 LINE VKM8 33 LINE VKM8	11HHHLLL-TOL0010 20HHHLLL-TOL0010 21HHHLLL-TOL0010 22HHHLLL-TOL0010 33HHHLLL-TOL0010
		<u>RADIK LINE VK</u>	11 LINE VK 21 LINE VK 22 LINE VK 33 LINE VK	11HHHLLL-60L0010 21HHHLLL-60L0010 22HHHLLL-60L0010 33HHHLLL-60L0010
		<u>RADIK LINE VKL</u>	11 LINE VKL 21 LINE VKL 22 LINE VKL 33 LINE VKL	11HHHLLL-E0L0010 21HHHLLL-E0L0010 22HHHLLL-E0L0010 33HHHLLL-E0L0010
		<u>RADIK LINE KLASIK</u>	11 LINE KLASIK 21 LINE KLASIK 22 LINE KLASIK 33 LINE KLASIK	11HHHLLL-50L0010 21HHHLLL-50L0010 22HHHLLL-50L0010 33HHHLLL-50L0010
		<u>RADIK LINE KLASIK - R</u>	20 LINE R 21 LINE R 22 LINE R 33 LINE R	20HHHLLL-R0L0010 21HHHLLL-R0L0010 22HHHLLL-R0L0010 33HHHLLL-R0L0010
	VERTIKAL	<u>RADIK PLAN VERTIKAL - M</u>	10 20	10HHHLLL-V0P0010 20HHHLLL-V0P0010
		<u>RADIK LINE VERTIKAL - M</u>	10 20	10HHHLLL-V0L0010 20HHHLLL-V0L0010
HYGIENE	<u>RADIK HYGIENE VK</u>	10 VK 20S VK 30 VK	10HHHLLL-6CH0010 20HHHLLL-6CH0010 30HHHLLL-6CH0010	
		10 20S 30	10HHHLLL-5CH0010 20HHHLLL-5CH0010 30HHHLLL-5CH0010	
		<u>RADIK CLEAN VKM8</u>	10 CLEAN VKM8 20SCLEAN VKM8 30 CLEAN VKM8	10HHHLLL-S0-0010 20HHHLLL-SC-0010 30HHHLLL-SC-0010
	<u>RADIK CLEAN VK</u>	10 CLEAN VK 20SCLEAN VK 30 CLEAN VK	10HHHLLL-60-0010 20HHHLLL-6C-0010 30HHHLLL-6C-0010	
		<u>RADIK CLEAN</u>	10 CLEAN 20SCLEAN 30 CLEAN	10HHHLLL-50-0010 20HHHLLL-5C-0010 30HHHLLL-5C-0010

Note: for the scheme of the order code see please page 88

ORDER CODE

Table for creation of a code

TTHHHLLL-MMM00XX



Example for creation of a code

RADIK VK steel panel radiator.

type 22, height H = 500 mm, length L = 1800 mm, Colour White
RAL 9016

General structure

Correct code until

TTHHHLLL-MMM00XX

22050180-60-0010

SERVICE

Service for business partners and customers

An expert for every situation – that is one of the basic ideas of the philosophy of the company KORADO with regard to service. The company KORADO pays great attention to communication with its partners on the market. It offers designers, merchants, and installers of heating systems broad support and complete technical documentation and information for daily work. The goal is clear and comprehensible – to create conditions allowing individual professional groups to design, sell, and fit RADIK, KORALUX and KORATHERM radiators so that the final customer can take advantage of their features to a full extent. To fulfill this philosophy, the company KORADO offers:

- technical catalogues for RADIK steel panel radiators, KORALUX towel rail radiators, KORATHERM flat panel radiators, KORAMONT mounting technology catalogue
- range of brochures and information leaflets for individual models of radiators, supplements and accessories
- Internet web page <http://www.korado.com>
- e-mail info@korado.cz
- professional lectures at the company training center
- professional consulting at specialized exhibitions in the Czech Republic and abroad
- The up-to-date offer is available and regularly updated on www.korado.com



Description

Connection fittings HM have been specially developed for steel panel radiators RADIK MM and RADIK PLAN (LINE) VERTIKAL - M, i.e. radiators without valve and with bottom connection with a Connecting pitch of 50 mm. They can also be used for all other KORALUX and KORATHERM radiators with the same type of connection to the heating system.

It is the integrated fittings, i.e. the body of the fittings has an integrated valve and an adjustable screw connection so it is possible to disconnect the radiator from the heating system without interrupting operation. **Due to its special fittings design, the outlets for connection of inlet and return piping may be chosen freely.**

The fittings enable to preset the flow rate of the radiator, its closure at the inlet and outlet and thanks to the thermostatic head also regulation of the heat output of the radiator in relation to the temperature in the heated room. The presetting level is given by the number of turns on the plug of the adjustment screw connection from the "closed" position. Presetting of the regulation level is reproducible, i.e. when the flow is closed and then opened again, there is no change in the set regulation level.

Delivery equipment

The following parts of HM fittings are delivered as standard:

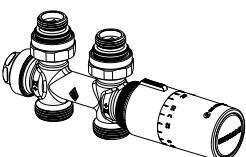
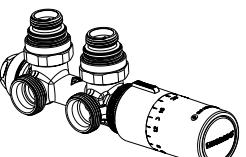
- integrated fittings in straight or angular design
- thermostatic head in white or chrome
- 2x reduction G 1/2" to G 3/4" with sealing "O" ring
- 2x flat sealing pieces from EPDM rubber
- assembly and operating instructions

Subject to special request, the following can be supplied:

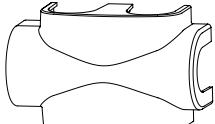
- universal cover for the fittings in white
- universal cover for the fittings in chrome

How to order

HM Fitting

	Design	Colour of the thermostatic head	Order number
	straight	white	Z-D040
		chrome	Z-D041
	angular	white	Z-D042
		chrome	Z-D043

HM Fitting Cover

	universal	white	Z-D027
		chrome	Z-D028

ACCESSORIES

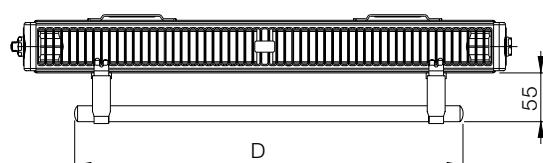
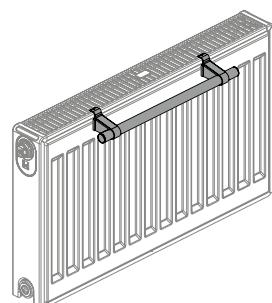
Towel dryer for RADIK

- designed to be used for all types of the following models of panel radiators RADIK:



RADIK VKM8	RADIK KLASIK
RADIK VKM8 - L	RADIK KLASIK - R
RADIK VKM8 - U	RADIK CLEAN VKM8
RADIK VK	RADIK CLEAN VK
RADIK VKL	RADIK CLEAN
RADIK VKU	RADIK COMBI VK

- easy mounting and demounting
- no need to remove the top grill
- metal parts painted in white
- the towel dryer length **D** is not dependent on the radiator length **L**
- max. vertical load of the towel dryer is **50 N** up to 5 kg



Type	Towel dryer length D [mm]	Order number
Towel dryer for RADIK 600	600	Z-D030
Towel dryer for RADIK 900	900	Z-D031
Towel dryer for RADIK 1200	1200	Z-D032

Radiator brush

- intended for cleaning all radiators KORADO
- easy and quick cleaning
- no need to remove the top grill
- bristle material – goat hair



Type	Order number
Radiator brush	Z-D029



COLOUR CARD

SATIN GLOSS



HIGH GLOSS



MATTE



DEEP MATTE



PLAN SET / LINE SET - available versions of detachable front panels

The models RADIK can be complemented with a new front panel in the version PLAN or LINE in basic white RAL 9016. Front panels are available also in other colours from RAL colour range with an extra charge. For more information see please www.korado.com or our technical brochure



PLAN SET



LINE SET

Notice:

The colour of the radiator may vary in comparison with the colour shown in the colour card. The standard paint finish is RAL 9016, other colours from KORADO colour range with an extra charge 30 %. Radiators can be ordered also in other colours from RAL colour range with an extra charge 40 %.

NOTES



NOTES



www.korado.com



The quality marks are valid for
the range listed on pages 84 and 85.



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