

## RADIK VENTIL KOMPAKT with 8-level valve



### Overview of steel panel radiators RADIK in version VENTIL KOMPAKT:

**RADIK VK**

**RADIK PLAN VKL**

**RADIK VK - Z**

**RADIK PLAN VKM**

**RADIK VKU**

**RADIK HYGIENE VK**

**RADIK VKL**

**RADIK CLEAN VK**

**RADIK VKM**

**RADIK RC VKU**

**RADIK COMBI VK**

**RADIK RC PLAN VK**

**RADIK PLAN VK**

**RADIK RC PLAN VKL**

**RADIK LINE VK**

**RADIK LINE VKL**

**RADIK LINE VKM**

**RADIK VKM8**

**RADIK PLAN VKM8**

**RADIK LINE VKM8**

**RADIK VKM - L**

**RADIK RC LINE VK**

**RADIK RC LINE VKL**

**RADIK MATERNELLE VK**

**RADIK MATERNELLE VKL**

# RADIK VENTIL KOMPAKT



As for installation of the steel panel radiators RADIK in version VENTIL KOMPACT it is necessary to calculate, to set and to record into the project documentation the optimal level of valve setting. Consequently the installer must observe and implement the parameters calculated.

From the manufacturing plant the level 8 is preset. After rinsing and before start of a heating test, the calculated position of the valve must be adjusted using a special key.



## 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

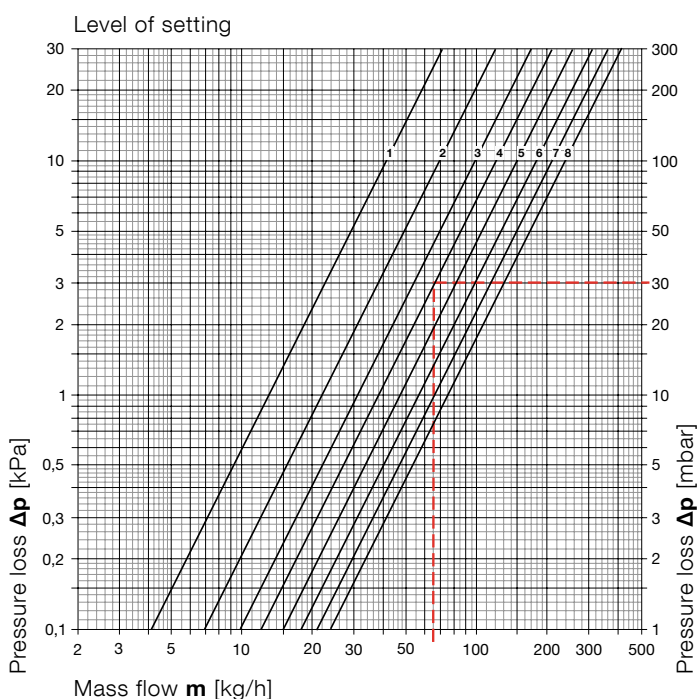
$$m = \frac{Q}{c \cdot (t_1 - t_2)} = \frac{1135}{1,163 \cdot 15} = 65 \text{ kg/h}$$

level of valve setting (see diagram): 4

## Table

Radiators in version VENTIL KOMPACT without connecting fittings		Level of valve setting								Highest allowed working temperature [°C]	Highest allowed working pressure [bar]
		1	2	3	4	5	6	7	8		
Valve with eight levels of setting and with a thermostatic head	$k_v$ [m³/h]	0,13	0,22	0,31	0,38	0,47	0,57	0,66	0,75	110	10
	$k_{vs}$ [m³/h]	0,16	0,27	0,38	0,43	0,65	0,98	1,23	1,43		

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



## Conversion table for valve setting

Setting of 8-level valve following a calculation made for a 6-level valve.

	Level of valve setting					
	1	2	3	4	5	6
<b>6-level valve</b>	1	2	3	4	5	6
<b>8-level valve</b>	1	1	2,5	4,5	6,5	8

**KORADO, a.s.**  
 Bří Hubálků 869  
 560 02 Česká Třebová  
 Czech Republic  
 e-mail: info@korado.cz  
 www.korado.com