

# COIL – PW

## CHARACTERISTICS

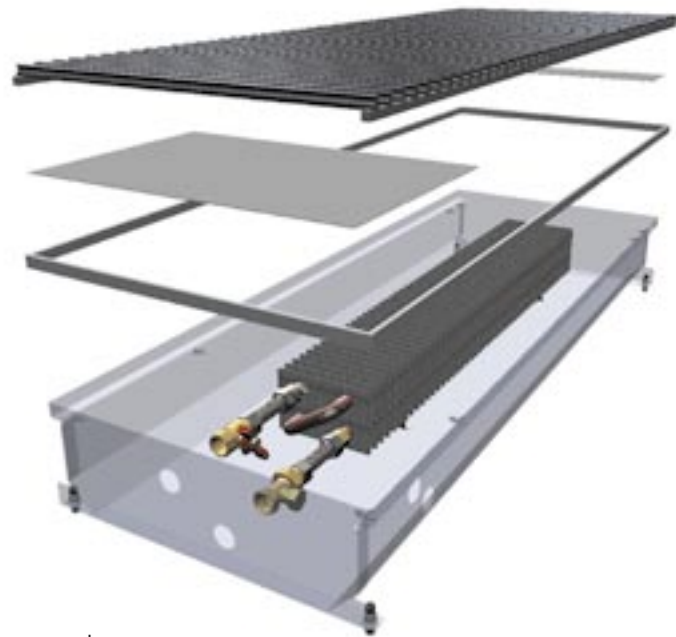
✘ high heat output convector without fan

## DIMENSIONS

total width 380 mm  
 construction height 125 mm  
 length 900 - 3000 mm

## USAGE

Designed to provide medium heat output where construction width is not a limiting factor.



## TEMPERATURE EQUATION

$$Q = \mu Q_N \left( \frac{t_w - t_A}{50} \right)^m$$

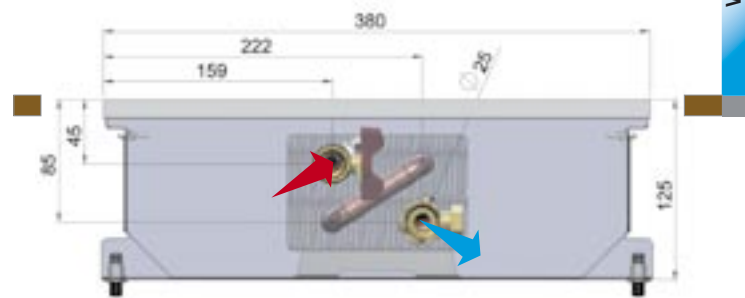
where:

- $m=1,4212$  temperature exponent
- $t_w$  mean water temperature [°C]
- $t_A$  mean air temperature [°C]
- $Q_N$  nominal heat transfer rate for difference of temperatures  $t_w - t_A = 50$  °C [W]
- $\mu$  the coefficient of water flow rate,  $\mu=1$
- $M$  mass flow rate of water [kg/h]
- $Q$  heat transfer rate for other temperatures [W]

## HEAT TRANSFER RATE - Q [W] COIL – PW

t <sub>w</sub> - mean water temperature [°C]		length L (mm) 900				length L (mm) 1750		
		t <sub>A</sub> - mean air temperature [°C]				t <sub>A</sub> - mean air temperature [°C]		
		15	20	22		15	20	22
80	415	371	353	80	1004	896	854	
70	328	<b>286</b>	270	70	792	<b>692</b>	653	
60	246	208	194	60	595	504	468	
50	172	138	126	50	417	335	303	
t <sub>w</sub> - mean water temperature [°C]		length L (mm) 1000				length L (mm) 2000		
		t <sub>A</sub> - mean air temperature [°C]				t <sub>A</sub> - mean air temperature [°C]		
		15	20	22		15	20	22
80	485	433	412	80	1177	1051	1001	
70	382	<b>334</b>	315	70	928	<b>811</b>	765	
60	287	243	226	60	698	590	549	
50	201	162	146	50	488	392	356	
t <sub>w</sub> - mean water temperature [°C]		length L (mm) 1250				length L (mm) 2500		
		t <sub>A</sub> - mean air temperature [°C]				t <sub>A</sub> - mean air temperature [°C]		
		15	20	22		15	20	22
80	658	587	559	80	1 523	1 360	1 296	
70	519	<b>453</b>	428	70	1 201	<b>1 049</b>	990	
60	390	330	307	60	903	764	710	
50	273	219	199	50	632	508	460	
t <sub>w</sub> - mean water temperature [°C]		length L (mm) 1500				length L (mm) 3000		
		t <sub>A</sub> - mean air temperature [°C]				t <sub>A</sub> - mean air temperature [°C]		
		15	20	22		15	20	22
80	831	742	707	80	1 870	1 669	1 590	
70	655	<b>572</b>	540	70	1 474	<b>1 288</b>	1 215	
60	493	417	387	60	1 109	938	872	
50	345	277	251	50	776	623	565	

## CROSS SECTION OF COIL-PW



## LONGITUDINAL SECTION

