



Cooling and heating floor convectors type PKH

- Cooling floor fan convectors are designed for secondary cooling, during the cooling season, in rooms where cooling is required close to the heat source (e.g. solar radiation through windows) to prevent room temperature raising

Application

- They are suitable for all rooms with large hot envelope surfaces (large windows, glazing, etc.). They are applied in buildings in which, due to the construction characteristics, ceiling cooling is not feasible. During the heating season, the convectors can be applied for room heating

Working principle

- Cooling floor fan convectors operate on the principle of forced convection, i.e. the air flow rate is augmented by a tangential fan. In the cooling mode, the TKH floor convector draws in warm air from the areas around windows and hot walls, cools it in the heat exchanger, and feeds it back into the room. This reduces heat gains due to heat room envelope surfaces. In the cooling process, a part of moisture is extracted from the air; this dehumidification also contributes to thermal comfort. In the heating mode, the process is inverted: draws in cold air from the window areas, heats it and feeds back into the room

Range

- Four PKH floor convector models are available:
- 2-pipe system for heating or cooling
- Condensate drain included
- Length: 1200 to 3000 mm
- Height: 130 or 150 mm
- Heat output: 1105 - 13006 W
- Cooling output: 406 - 4757 W
- Fans / Controls
- 230 V AC - 3 speed transformer
- 230 V AC - control 0-10 V
- 24 V EC - control 0-10 V
- 12 V DC - on request

Technical data				
Model		Speed	TKH-125x30x14/1	TKH-215x30x14/2
Total cooling capacity (1)	W	MAX	749	1649
		MED	590	1227
		MIN	443	791
Sensible cooling capacity (1)	W	MAX	557	1340
		MED	400	940
		MIN	270	574
Water flow	kg/h	MAX	128	283
		MED	101	210
		MIN	76	136
Pressure drop on the water side, cooling	kPa	MAX	0.44	2.09
		MED	0.30	1.29
		MIN	0.20	0.66
Heating capacity (2)	W	MAX	1981	4218
		MED	1384	2585
		MIN	935	1851
Water flow	kg/h	MAX	170	362
		MED	119	222
		MIN	80	159
Pressure drop on the water side, heating	kPa	MAX	0.67	2.92
		MED	0.36	1.20
		MIN	0.19	0.67
Standard water connectors			1/2 "	3/4 "
Standard water content in the heat exchanger		I	1.0	2.0
Number of fans			1	2
Power supply	V / Ph / Hz		230-1-50	230-1-50
Max. input power	W		19	38
Max. input current	A		0.17	0.33
Sound power (3)	dB(A)	MAX	47.1	49.0
		MED	38.2	39.3
		MIN	34.2	34.5
Sound pressure (4)	dB(A)	MAX	36.3	37.5
		MED	30.6	30.3
		MIN	25.2	26.2

		Technical data											
		PKH-130 2 TEVI						PKH-150 2 TEVI					
		90/70/20 °C	75/65/20 °C	55/45/20 °C	6/12/26 °C	10/15/26 °C	12/16/26 °C	90/70/20 °C	75/65/20 °C	55/45/20 °C	6/12/26 °C	10/15/26 °C	12/16/26 °C
		INCĂLZIRE			RĂCIRE			INCĂLZIRE			RĂCIRE		
	L = 1200 mm (1 ventilator)												
MIN	2610	1790	1105	726	517	454	2677	2231	1335	717	443	406	
MED	3016	2537	1568	841	615	525	3448	2832	1684	1026	790	689	
MAX	3683	3069	1892	1019	754	655	4600	3647	2209	1384	1013	893	
	L = 2000 mm (2 ventilatoare)												
MIN	5015	4083	2250	1309	909	876	5331	4494	2663	1364	861	843	
MED	5867	4802	3041	1682	1094	1086	6806	5644	3422	2340	1751	1356	
MAX	7366	5953	3763	2461	1596	1588	8703	7412	4402	2978	2001	1607	
	L = 2600 mm (3 ventilatoare)												
MIN	7369	6124	3375	2252	1523	1343	7832	6574	3983	2563	1749	1547	
MED	8801	7203	4561	2744	1872	1623	9920	8501	4925	3241	2264	1977	
MAX	11050	8930	5645	3462	2224	2162	12847	10529	6309	4294	3039	2697	
	L = 3000 mm (3 ventilatoare)												
MIN	7523	6201	3620	2302	1771	1538	7910	6669	3952	2808	1942	1676	
MED	8903	7346	4725	2873	2124	1918	10047	8332	5052	3527	2453	2142	
MAX	11357	9145	5921	3926	2848	2469	13006	10751	6372	4757	3306	2887	

Notes

- (1) Cooling capacity measurements are carried out in accordance with the EUROVENT 6/3 norm:
 - water inlet temperature: 7°C
 - water outlet temperature: 12°C
 - room air temperature: 27°C
 - room air relative humidity: 47 %
- (2) Heating capacity measurements are carried out in accordance with the EN 442 norm:
 - water inlet temperature: 75°C
 - water outlet temperature: 65°C
 - room air relative humidity: 20°C
- (3) Sound power level measurements are carried out in an anechoic room with reflecting floor, with a volume of 109 m³, in accordance with the ISO 3745 standard
- (4) The sound pressure measurements are carried out in an anechoic room, at the microphone distance of 1 m and at the angle of 45° above the floor convector