



## COIL - HCM

### CHARACTERISTICS

- ✘ heating output higher than 6.5 kW and cooling output higher than 2 kW for 2-meter long convector
- ✘ directed air is blown far into the space
- ✘ active demisting of window surfaces
- ✘ the most powerful MINIB floor convector
- ✘ implied condensate outlet
- ✘ 2-pipe connection

### DIMENSIONS

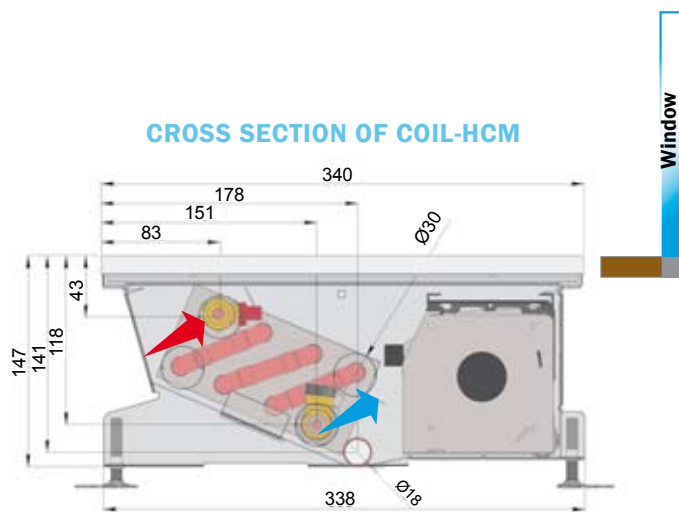
total width	340 mm
construction height	147 mm
length L	900 to 2000 mm

### USAGE

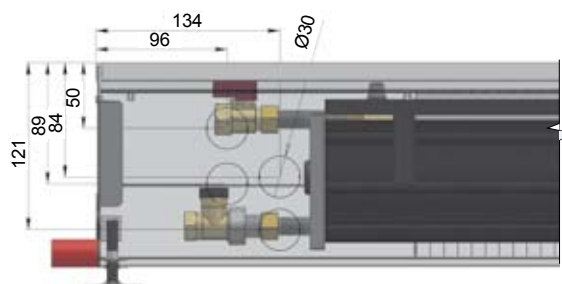
COIL-HCM is a MINIB floor convector specially designed for intensive heating and cooling of the space. The convector has the 2-pipe connection, which achieves the maximum heating and cooling output. The air is tangentially blown to the floor of the room up to a distance of 3 to 4 m - so that in summer there is a lightly flowing cool air effect in locations remote from the windows.

This convector has been supplied with connection fittings and flexible hoses "3/8" for connection of the heat exchanger since 1st May 2009.

### CROSS SECTION OF COIL-HCM



### LONGITUDINAL SECTION COIL-HCM



HEAT TRANSFER RATE Q [W] COIL - HCM

COOLING TRANSFER RATE Q [W] COIL - HCM

		1 min. speed			2 med. speed			3 max. speed				
		length L (mm) 900			length L (mm) 900			length L (mm) 900				
		mean air temperature tA			mean air temperature tA			mean air temperature tA				
		15	20	22	15	20	22	15	20	22		
mean water temperature tw	90	2 298	2 149	2 089	90	2 787	2 606	2 533	90	3 458	3 233	3 143
	80	1 999	1 849	1 789	80	2 424	2 243	2 170	80	3 008	2 782	2 692
	70	1 699	<b>1 549</b>	1 488	70	2 060	<b>1 878</b>	1 805	70	2 556	<b>2 330</b>	2 239
	50	1 094	942	880	50	1 327	1 142	1 068	50	1 646	1 417	1 325
		length L (mm) 1000			length L (mm) 1000			length L (mm) 1000				
		mean air temperature tA			mean air temperature tA			mean air temperature tA				
		15	20	22	15	20	22	15	20	22		
mean water temperature tw	90	2 681	2 507	2 437	90	3 251	3 040	2 955	90	4 034	3 772	3 667
	80	2 332	2 158	2 088	80	2 828	2 616	2 531	80	3 509	3 246	3 141
	70	1 982	<b>1 807</b>	1 736	70	2 404	<b>2 191</b>	2 105	70	2 982	<b>2 718</b>	2 612
	50	1 276	1 099	1 027	50	1 548	1 332	1 246	50	1 920	1 653	1 545
		length L (mm) 1250			length L (mm) 1250			length L (mm) 1250				
		mean air temperature tA			mean air temperature tA			mean air temperature tA				
		15	20	22	15	20	22	15	20	22		
mean water temperature tw	90	3 639	3 402	3 308	90	4 413	4 126	4 011	90	5 475	5 119	4 976
	80	3 166	2 928	2 833	80	3 839	3 551	3 435	80	4 762	4 405	4 262
	70	2 690	<b>2 452</b>	2 356	70	3 262	<b>2 973</b>	2 857	70	4 047	<b>3 689</b>	3 545
	50	1 732	1 491	1 394	50	2 101	1 808	1 690	50	2 606	2 243	2 097
		length L (mm) 1500			length L (mm) 1500			length L (mm) 1500				
		mean air temperature tA			mean air temperature tA			mean air temperature tA				
		15	20	22	15	20	22	15	20	22		
mean water temperature tw	90	4 596	4 298	4 178	90	5 574	5 212	5 066	90	6 915	6 466	6 286
	80	3 999	3 699	3 579	80	4 849	4 485	4 339	80	6 016	5 565	5 384
	70	3 398	<b>3 097</b>	2 976	70	4 121	<b>3 755</b>	3 609	70	5 113	<b>4 659</b>	4 478
	50	2 188	1 883	1 761	50	2 654	2 284	2 135	50	3 292	2 833	2 649
		length L (mm) 1750			length L (mm) 1750			length L (mm) 1750				
		mean air temperature tA			mean air temperature tA			mean air temperature tA				
		15	20	22	15	20	22	15	20	22		
mean water temperature tw	90	5 554	5 193	5 049	90	6 735	6 297	6 122	90	8 356	7 813	7 596
	80	4 832	4 469	4 324	80	5 859	5 420	5 244	80	7 269	6 724	6 506
	70	4 106	<b>3 742</b>	3 596	70	4 979	<b>4 538</b>	4 361	70	6 178	<b>5 630</b>	5 411
	50	2 644	2 276	2 128	50	3 206	2 759	2 580	50	3 978	3 424	3 201
		length L (mm) 2000			length L (mm) 2000			length L (mm) 2000				
		mean air temperature tA			mean air temperature tA			mean air temperature tA				
		15	20	22	15	20	22	15	20	22		
mean water temperature tw	90	6 512	6 089	5 919	90	7 896	7 383	7 178	90	9 797	9 160	8 905
	80	5 665	5 240	5 070	80	6 869	6 354	6 148	80	8 522	7 883	7 627
	70	4 814	<b>4 387</b>	4 216	70	5 838	<b>5 320</b>	5 113	70	7 243	<b>6 601</b>	6 344
	50	3 100	2 668	2 495	50	3 759	3 235	3 025	50	4 664	4 014	3 753

		2 med. speed				3 max. speed				
		length L (mm) 900				length L (mm) 900				
		mean air temperature tA				mean air temperature tA				
		24	25	26	27	24	25	26	27	
mean water temperature tw	9	571	609	<b>647</b>	685	9	666	711	<b>755</b>	800
	11	495	533	571	609	11	578	622	666	711
	13	419	457	495	533	13	489	533	578	622
	15	342	381	419	457	15	400	444	489	533
16	304	342	381	419	16	355	400	444	489	
		length L (mm) 1000				length L (mm) 1000				
		mean air temperature tA				mean air temperature tA				
		24	25	26	27	24	25	26	27	
mean water temperature tw	9	666	710	<b>755</b>	799	9	778	829	<b>881</b>	933
	11	577	622	666	710	11	674	726	778	829
	13	488	533	577	622	13	570	622	674	726
	15	400	444	488	533	15	467	518	570	622
16	355	400	444	488	16	415	467	518	570	
		length L (mm) 1250				length L (mm) 1250				
		mean air temperature tA				mean air temperature tA				
		24	25	26	27	24	25	26	27	
mean water temperature tw	9	904	964	<b>1 024</b>	1 084	9	1 055	1 126	<b>1 196</b>	1 266
	11	783	843	904	964	11	915	985	1 055	1 126
	13	663	723	783	843	13	774	844	915	985
	15	542	602	663	723	15	633	703	774	844
16	482	542	602	663	16	563	633	703	774	
		length L (mm) 1500				length L (mm) 1500				
		mean air temperature tA				mean air temperature tA				
		24	25	26	27	24	25	26	27	
mean water temperature tw	9	1 142	1 218	<b>1 294</b>	1 370	9	1 333	1 422	<b>1 511</b>	1 599
	11	989	1 065	1 142	1 218	11	1 155	1 244	1 333	1 422
	13	837	913	989	1 065	13	977	1 066	1 155	1 244
	15	685	761	837	913	15	800	889	977	1 066
16	609	685	761	837	16	711	800	889	977	
		length L (mm) 1750				length L (mm) 1750				
		mean air temperature tA				mean air temperature tA				
		24	25	26	27	24	25	26	27	
mean water temperature tw	9	1 379	1 471	<b>1 563</b>	1 655	9	1 611	1 718	<b>1 825</b>	1 933
	11	1 195	1 287	1 379	1 471	11	1 396	1 503	1 611	1 718
	13	1 012	1 104	1 195	1 287	13	1 181	1 288	1 396	1 503
	15	828	920	1 012	1 104	15	966	1 074	1 181	1 288
16	736	828	920	1 012	16	859	966	1 074	1 181	
		length L (mm) 2000				length L (mm) 2000				
		mean air temperature tA				mean air temperature tA				
		24	25	26	27	24	25	26	27	
mean water temperature tw	9	1 617	1 725	<b>1 833</b>	1 941	9	1 888	2 014	<b>2 140</b>	2 266
	11	1 402	1 509	1 617	1 725	11	1 637	1 762	1 888	2 014
	13	1 186	1 294	1 402	1 509	13	1 385	1 511	1 637	1 762
	15	970	1 078	1 186	1 294	15	1 133	1 259	1 385	1 511
16	863	970	1 078	1 186	16	1 007	1 133	1 259	1 385	

TEMPERATURE EQUATION FOR HEATING

TEMPERATURE EQUATION FOR COOLING

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

$$Q = Q_N \left( \frac{t_w - t_A}{17} \right)^m$$

where:

- m**= 0,9738 temperature exponent
- t<sub>w</sub> / t<sub>A</sub>** mean heating water temperature, mean air temperature [°C]
- Q<sub>N</sub>** nominal heat transfer rate for temperatures tw / tA = 70/20 °C [W]
- Q** heat transfer rate for other temperatures [W]

where:

- m**= 1 temperature exponent
- t<sub>w</sub> / t<sub>A</sub>** mean heating water temperature, mean air temperature [°C]
- Q<sub>N</sub>** nominal heat transfer rate for temperatures tw / tA = 9/26 °C [W]
- Q** heat transfer rate for other temperatures [W]