



COIL - HC4pipe

CHARACTERISTICS

- ✘ heating and cooling of interiors cooling output higher than 1 kW for 2 metre long convector
- ✘ directed air is blown far into the space
- ✘ active demisting of window surfaces
- ✘ implied condensate outlet
- ✘ 4 pipe connection

DIMENSIONS

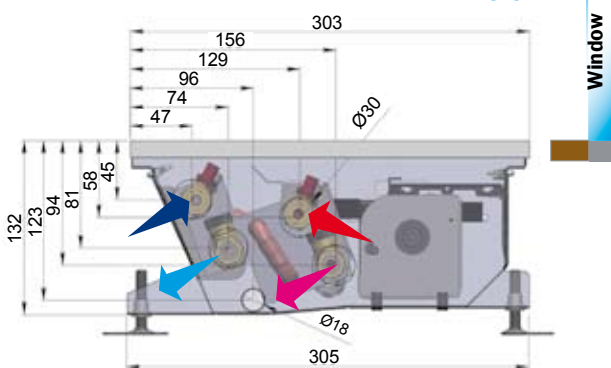
total width	303 mm
construction height	132 mm
length L	900 to 3000 mm

USAGE

COIL-HC4pipe is a MINIB floor convector specially designed for heating and cooling of the space. The convector has the 4-pipe connection and completely separated cooling and heating circuit. The air is tangentially blown to the floor of the room up to the distance of approximately 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-HC4pipe



TEMPERATURE EQUATION FOR HEATING

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

where:
m= 1,0864 temperature exponent
t_w, t_A mean heating water temperature, mean air temperature [°C]
Q_N nominal heat transfer rate for temperatures t_w/t_A = 70/20 °C [W]
Q heat transfer rate for other temperatures [W]

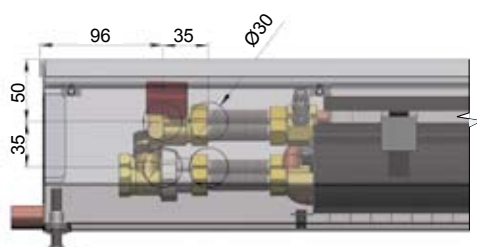
TEMPERATURE EQUATION FOR COOLING

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

where:
m= 0,907 temperature exponent
t_w, t_A mean heating water temperature, mean air temperature [°C]
Q_N nominal heat transfer rate for temperatures t_w/t_A = 9/26 °C [W]
Q heat transfer rate for other temperatures [W]

LONGITUDINAL SECTION COIL-HC4pipe

- outlet = heating circuit
- inlet = cooling circuit
- inlet = heating circuit
- outlet = cooling circuit



HEAT TRANSFER RATE Q [W] COIL - HC4P

COOLING TRANSFER RATE Q [W] COIL - HC4P

		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 t _w	90	1 100	1 020	989	90	1 202	1 115	1 081	90	1 320	1 224	1 186
	80	941	863	832	80	1 029	943	909	80	1 130	1 035	998
	70	785	708	677	70	858	774	740	70	942	849	813
	50	480	406	377	50	525	444	412	50	577	488	452
		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 t _w	90	1 283	1 190	1 153	90	1 402	1 301	1 261	90	1 539	1 428	1 384
	80	1 098	1 007	970	80	1 200	1 100	1 061	80	1 318	1 208	1 164
	70	916	826	790	70	1 001	903	863	70	1 099	991	948
	50	561	474	440	50	613	518	481	50	673	569	528
		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 t _w	90	1 741	1 615	1 565	90	1 903	1 766	1 711	90	2 089	1 938	1 878
	80	1 490	1 366	1 317	80	1 629	1 493	1 439	80	1 788	1 640	1 580
	70	1 243	1 121	1 072	70	1 359	1 225	1 172	70	1 492	1 345	1 287
	50	761	643	597	50	831	703	652	50	913	772	716
		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 t _w	90	2 199	2 040	1 977	90	2 404	2 230	2 161	90	2 639	2 449	2 373
	80	1 883	1 726	1 663	80	2 058	1 886	1 818	80	2 259	2 071	1 996
	70	1 570	1 416	1 354	70	1 716	1 547	1 480	70	1 884	1 699	1 625
	50	961	813	754	50	1 050	888	824	50	1 153	975	905
		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 t _w	90	2 657	2 465	2 389	90	2 904	2 695	2 611	90	3 189	2 959	2 867
	80	2 275	2 085	2 010	80	2 486	2 279	2 197	80	2 730	2 502	2 412
	70	1 897	1 711	1 636	70	2 074	1 870	1 789	70	2 277	2 053	1 964
	50	1 161	982	911	50	1 269	1 073	996	50	1 393	1 178	1 093
		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 t _w	90	3 116	2 891	2 801	90	3 405	3 159	3 061	90	3 739	3 469	3 361
	80	2 667	2 445	2 356	80	2 915	2 672	2 576	80	3 200	2 934	2 828
	70	2 224	2 006	1 919	70	2 431	2 192	2 097	70	2 669	2 407	2 302
	50	1 361	1 151	1 068	50	1 488	1 258	1 168	50	1 634	1 382	1 282
		length L (mm) 2500			length L (mm) 2500			length L (mm) 2500				
		mean air temperature tA			mean air temperature tA			mean air temperature tA				
		15	20	22	15	20	22	15	20	22		
mean water temperature t _w	90	4 032	3 741	3 625	90	4 407	4 089	3 962	90	4 838	4 489	4 350
	80	3 451	3 164	3 049	80	3 772	3 458	3 333	80	4 142	3 797	3 660
	70	2 879	2 595	2 483	70	3 146	2 837	2 714	70	3 454	3 115	2 979
	50	1 762	1 490	1 382	50	1 925	1 629	1 511	50	2 114	1 788	1 659
		length L (mm) 3000			length L (mm) 3000			length L (mm) 3000				
		mean air temperature tA			mean air temperature tA			mean air temperature tA				
		15	20	22	15	20	22	15	20	22		
mean water temperature t _w	90	4 948	4 591	4 449	90	5 408	5 018	4 862	90	5 938	5 509	5 338
	80	4 236	3 883	3 743	80	4 630	4 244	4 091	80	5 083	4 660	4 491
	70	3 533	3 185	3 047	70	3 861	3 481	3 330	70	4 239	3 822	3 657
	50	2 162	1 829	1 697	50	2 363	1 999	1 854	50	2 595	2 194	2 036

		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 t _w	9	314	333	351	370	9 <td>339</td> <td>359</td> <td>379</td> <td>399</td>	339	359	379	399
	11	276	295	314	333	11 <td>297</td> <td>318</td> <td>339</td> <td>359</td>	297	318	339	359
	13	237	256	276	295	13 <td>256</td> <td>277</td> <td>297</td> <td>318</td>	256	277	297	318
	15	197	217	237	256	15 <td>213</td> <td>234</td> <td>256</td> <td>277</td>	213	234	256	277
	16	177	197	217	237	16 <td>191</td> <td>213</td> <td>234</td> <td>256</td>	191	213	234	256
		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 t _w	9	366	388	410	432	9 <td>395</td> <td>419</td> <td>443</td> <td>466</td>	395	419	443	466
	11	321	344	366	388	11 <td>347</td> <td>371</td> <td>395</td> <td>419</td>	347	371	395	419
	13	276	299	321	344	13 <td>298</td> <td>323</td> <td>347</td> <td>371</td>	298	323	347	371
	15	230	253	276	299	15 <td>249</td> <td>273</td> <td>298</td> <td>323</td>	249	273	298	323
	16	207	230	253	276	16 <td>223</td> <td>249</td> <td>273</td> <td>298</td>	223	249	273	298
		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 t _w	9	497	527	556	586	9 <td>536</td> <td>568</td> <td>601</td> <td>632</td>	536	568	601	632
	11	436	467	497	527	11 <td>471</td> <td>504</td> <td>536</td> <td>568</td>	471	504	536	568
	13	375	406	436	467	13 <td>405</td> <td>438</td> <td>471</td> <td>504</td>	405	438	471	504
	15	313	344	375	406	15 <td>337</td> <td>371</td> <td>405</td> <td>438</td>	337	371	405	438
	16	281	313	344	375	16 <td>303</td> <td>337</td> <td>371</td> <td>405</td>	303	337	371	405
		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 t _w	9	627	665	703	740	9 <td>677</td> <td>718</td> <td>759</td> <td>799</td>	677	718	759	799
	11	551	589	627	665	11 <td>595</td> <td>636</td> <td>677</td> <td>718</td>	595	636	677	718
	13	474	512	551	589	13 <td>511</td> <td>553</td> <td>595</td> <td>636</td>	511	553	595	636
	15	395	434	474	512	15 <td>426</td> <td>469</td> <td>511</td> <td>553</td>	426	469	511	553
	16	355	395	434	474	16 <td>383</td> <td>426</td> <td>469</td> <td>511</td>	383	426	469	511
		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 t _w	9	758	804	849	894	9 <td>818</td> <td>868</td> <td>917</td> <td>965</td>	818	868	917	965
	11	666	712	758	804	11 <td>719</td> <td>769</td> <td>818</td> <td>868</td>	719	769	818	868
	13	572	619	666	712	13 <td>618</td> <td>668</td> <td>719</td> <td>769</td>	618	668	719	769
	15	477	525	572	619	15 <td>515</td> <td>566</td> <td>618</td> <td>668</td>	515	566	618	668
	16	429	477	525	572	16 <td>463</td> <td>515</td> <td>566</td> <td>618</td>	463	515	566	618
		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 t _w	9	889	942	996	1 049	9 <td>959</td> <td>1 017</td> <td>1 075</td> <td>1 132</td>	959	1 017	1 075	1 132
	11	781	835	889	942	11 <td>843</td> <td>901</td> <td>959</td> <td>1 017</td>	843	901	959	1 017
	13	671	726	781	835	13 <td>724</td> <td>784</td> <td>843</td> <td>901</td>	724	784	843	901
	15	559	615	671	726	15 <td>604</td> <td>664</td> <td>724</td> <td>784</td>	604	664	724	784
	16	503	559	615	671	16 <td>542</td> <td>604</td> <td>664</td> <td>724</td>	542	604	664	724
		length L (mm) 2500				length L (mm) 2500				
		mean air temperature tA				mean air temperature tA				
		24	25	26	27	24	25	26	27	
mean water temperature t _w	9	1 150	1 220	1 289	1 357	9 <td>1 241</td> <td>1 316</td> <td>1 391</td> <td>1 465</td>	1 241	1 316	1 391	1 465
	11	1 010	1 081	1 150	1 220	11 <td>1 090</td> <td>1 166</td> <td>1 241</td> <td>1 316</td>	1 090	1 166	1 241	1 316
	13	868	940	1 010	1 081	13 <td>937</td> <td>1 014</td> <td>1 090</td> <td>1 166</td>	937	1 014	1 090	1 166
	15	724	796	868	940	15 <td>781</td> <td>859</td> <td>937</td> <td>1 014</td>	781	859	937	1 014
	16	650	724	796	868	16 <td>702</td> <td>781</td> <td>859</td> <td>937</td>	702	781	859	937
		length L (mm) 3000				length L (mm) 3000				
		mean air temperature tA				mean air temperature tA				
		24	25	26	27	24	25	26	27	
mean water temperature t _w	9	1 412	1 497	1 581	1 666	9 <td>1 524</td> <td>1 615</td> <td>1 707</td> <td>1 798</td>	1 524	1 615	1 707	1 798
	11	1 240	1 326	1 412	1 497	11 <td>1 338</td> <td>1 431</td> <td>1 524</td> <td>1 615</td>	1 338	1 431	1 524	1 615
	13	1 066	1 153	1 240	1 326	13 <td>1 150</td> <td>1 244</td> <td>1 338</td> <td>1 431</td>	1 150	1 244	1 338	1 431
	15	888	977	1 066	1 153	15 <td>959</td> <td>1 055</td> <td>1 150</td> <td>1 244</td>	959	1 055	1 150	1 244
	16	798	888	977	1 066	16 <td>862</td> <td>959</td> <td>1 055</td> <td>1 150</td>	862	959	1 055	1 150

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