COIL – MT2

CHARACTERISTICS

- ✖ the most universal MINIB convector
- ✖ automatic angle of airflow
- ✖ heating of dry and wet interiors
- ✖ automatic blowing to window surfaces for demisting
- ✖ partial cooling of the space in the summer
- ✖ use possible only with the MT 2 control

DIMENSIONS

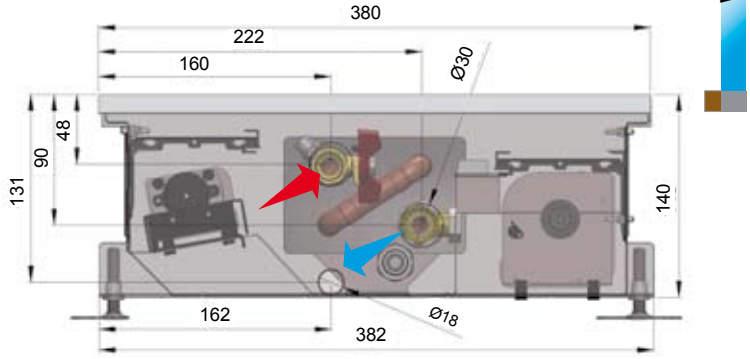
total width	380 mm
construction height	140 mm
length L	900 to 2000 mm

USAGE

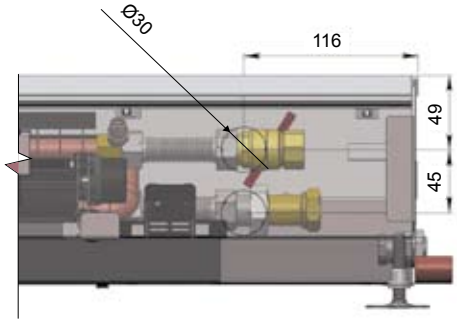
This convector includes 12 V DC motors with an extremely low power consumption and economical heating is ensured during operation. It uses the newly developed electronic IQ controller MINIB MT-2. This controller includes automatic continuous speed control of the fan (thus the heat output of the convector) via a microprocessor, automatic angle of airflow, user adjustable max. speed level, night speed reduction, user selection of the operation mode, disabling of fan at low water temperature and contactless, noiseless switching of the thermostat. The multifunctional convector enables automatic inclination of airflow with an extremely high heat output at very low speed. (At temperatures of 75/65/20 °C, the convector achieves a heat output of approx. 1600 W for 1m length at medium speed.). The inclination of the warm airflow to different directions provides (based on the pulse from the sensor) either automatic demisting of steamed up windows by warm air from the convector or intensive heating of objects in the room into the interior by declined airflow. In standard mode, the convector generates the vertical heat curtain providing either heating of the interior or demisting of the window. Thanks to an arrangement of fans the convector can be used for cooling of the space in the summer as the cool air is directed into the room at an angle and not vertically. The fast-acting heat exchanger reacts very quickly to changing requirements and provides user's optimum levels of comfort.

Cooling effect of the convector COIL – MT2:
For water flow temperatures of 6/12.C take
an estimated cooling output of 300W/per linear metre at speed 2 and approximately 400W per linear metre at speed 3.

CROSS SECTION OF COIL-MT2



LONGITUDINAL SECTION COIL-MT2



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HEAT TRANSFER RATE Q [W] COIL – MT2

		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	1 983	1 841	1 784	90	2 134	1 980	1 919	90	2 392	2 220	2 152
	80	1 699	1 558	1 502	80	1 828	1 677	1 616	80	2 050	1 880	1 812
	70	1 418	**1 280**	1 225	70	1 526	**1 377**	1 318	70	1 711	**1 544**	1 477
	50	871	737	684	50	937	793	736	50	1 050	889	825
		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	2 313	2 147	2 081	90	2 489	2 310	2 239	90	2 791	2 591	2 511
	80	1 982	1 818	1 753	80	2 133	1 956	1 886	80	2 391	2 193	2 114
	70	1 655	**1 493**	1 429	70	1 781	**1 606**	1 537	70	1 997	**1 801**	1 724
	50	1 016	860	798	50	1 093	925	859	50	1 225	1 037	963
		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	3 140	2 914	2 824	90	3 378	3 135	3 039	90	3 788	3 516	3 407
	80	2 690	2 467	2 378	80	2 894	2 655	2 559	80	3 245	2 977	2 870
	70	2 246	**2 026**	1 939	70	2 416	**2 180**	2 086	70	2 710	**2 445**	2 339
	50	1 378	1 167	1 083	50	1 483	1 256	1 165	50	1 663	1 408	1 307
		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	3 966	3 681	3 568	90	4 267	3 961	3 839	90	4 785	4 441	4 304
	80	3 398	3 116	3 004	80	3 656	3 353	3 233	80	4 099	3 760	3 625
	70	2 837	2 **559**	2 449	70	3 052	**2 754**	2 635	70	3 423	**3 088**	2 955
	50	1 741	1 474	1 368	50	1 873	1 586	1 472	50	2 101	1 778	1 651
		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	4 792	4 448	4 311	90	5 156	4 786	4 638	90	5 781	5 366	5 201
	80	4 106	3 766	3 630	80	4 418	4 052	3 906	80	4 953	4 543	4 380
	70	3 428	**3 093**	2 959	70	3 688	**3 328**	3 184	70	4 136	**3 731**	3 570
	50	2 104	1 781	1 653	50	2 264	1 916	1 779	50	2 538	2 149	1 995
		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	5 618	5 215	5 054	90	6 045	5 611	5 438	90	6 778	6 291	6 097
	80	4 814	4 415	4 256	80	5 179	4 750	4 580	80	5 807	5 326	5 135
	70	4 019	**3 626**	3 469	70	4 324	**3 901**	3 733	70	4 849	**4 374**	4 186
	50	2 467	2 088	1 938	50	2 654	2 247	2 086	50	2 976	2 519	2 339

TEMPERATURE EQUATION

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

where:

m= 1,080 temperature exponent

$t_{w, A}$ mean heating water temperature, vzduchu [°C]

Q_N nominal heat transfer rate for difference of temperatures tw - tA = 50 °C [W]

Q heat transfer rate for other temperatures [W]

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