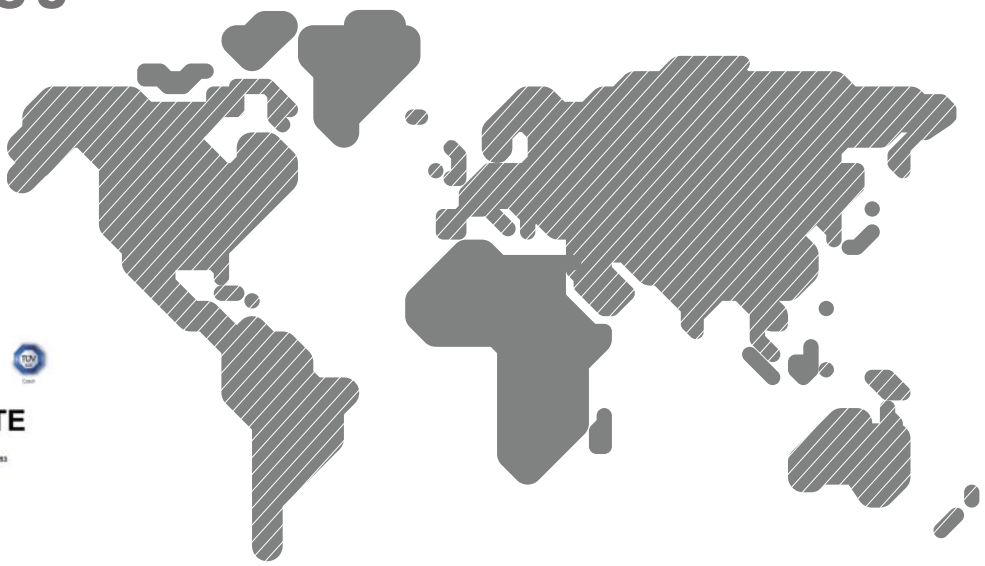
MINIB®

FLOOR CONVECTORS

more than just heat

ABOUT US



ABOUT THE COMPANY

MINIB is one of the foremost manufacturers of convectors within the Czech Republic. All MINIB products are manufactured in the Czech Republic from where they are exported to over thirty European countries, Asia, Australia and America.

Operating since 1999, the company has systematically invested in the development of its products and production techniques and continues to do so. This investment is aimed at providing customers with the ultimate in technical and aesthetic heating and cooling equipment.

MINIB operates from a strong financial base and has enjoyed strong long term growth. This strength enables MINIB to invest heavily in its people and its research and development activities to ensure its future stability and success.

ABOUT PRODUCTION

The production premises are located at Bykev near Melnik and benefit from excellent transport access. The factory is equipped with the most modern technology; CNC machinery ensures that the most stringent requirements can readily and repeatedly be achieved.

Bespoke solutions can be designed and manufactured to satisfy specific customer requirements.

The highest quality material are used in the production of convectors ensuring longevity of the finished products. Consequently, MINIB provides a ten year warranty on both the heat exchangers and stainless steel trenches of its convector units.

MINIB is ISO 9001 quality certified and holds a number of patents for its designs.

Convector outputs are independently tested in the certified test chamber of HEATEST sro in line with European standard EN 442-2. This allows MINIB to guarantee the outputs of its full range of units.

ABOUT THE PRODUCTS

The MINIB catalogue comprises over 70 convector models and ensures that there is a unit suitable for any interior.

MINIB convectors are effective, modern, energy efficient and aesthetically styled units suitable for use in both dry and wet interiors. The low water volume of the convectors ensures rapid heating and cooling of spaces and corresponding energy savings. Convectors also benefit from having extremely small requirements in terms of space compared to competing equipment. The inclusion of MINIB convectors within the space does not detract from the aesthetics of the room and can be considered to add to it. All fan-assisted MINIB units operate against 12V taken from the transformer and are inherently safe.

The product series encompasses the most varied kinds of convectors:

- FLOOR convectors or trench units without fan which operate on the principle of natural convection and fan-assisted convectors for enhanced output.
- SELF-SUPPORTING AND WALL convectors are available with and without fans. We also supply heating benches with granite or wooden covers for wet environments (swimming pools, bathrooms etc).
- DESIGNER convectors are a unique patented series that employ the principles of both radiation and convection to heat the space. These convectors have an aluminium composite front cover. The front panel can be supplied with a granite face plate or smooth, variously coloured glass.

MINIB has the facility to supply bespoke solutions according to customer requirements and can supply arc shaped or angled units to suit. MINIB always aims to provide a high standard of user comfort and ensures that all its convectors are simple to install and maintain.

A wide range of accessories are available for the individual types of condensers. MINIB has received many national and international awards for its products.

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TEMPERATURE EQUATION

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

where:

m=	temperature exponent
$t_{W,A}$	mean temperature of heating water, air temperature in the interior (°C)
Q_N	nominal thermal output for temperatures tW/tA 70/20 °C (W)
μ	μ = 1 (for other than nonimal flow values select μ from the graph)
Q	thermal output for other temperatures

TEMPERATURE EQUATION FOR COOLING

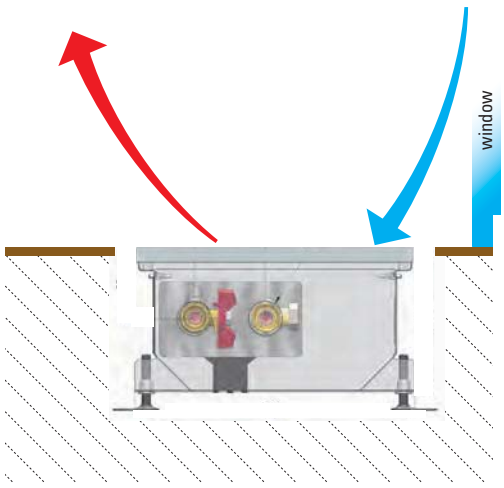
$$Q = Q_{NC} \left(\frac{t_w - t_A}{17} \right)^m$$

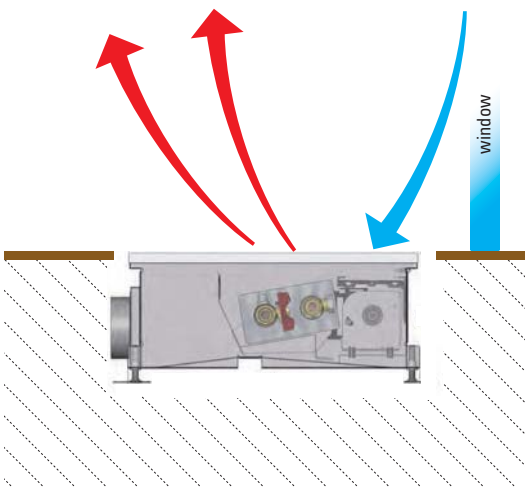
where:

m=	temperature exponent
$t_{W,A}$	mean temperature of cooling water, air (°C)
Q_{Nc}	nominal thermal output for temperatures tW/tA 9/26 °C (W)
Q	thermal output for other temperatures [W]

CALCULATION OF THE OUTPUT FOR AN INDIVIDUAL TEMPERATURE

The temperature equation is used to calculate the output for other than tabulated values of the heating water and air in the room. We enter the required mean temperature of the heating water and air in the room and calculate the thermal output. In addition, this can all be easily calculated on our web site for the particular convector, simply by entering the new values.



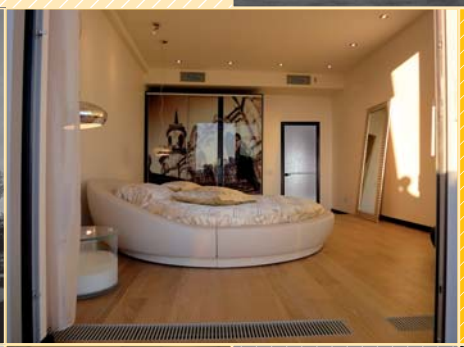


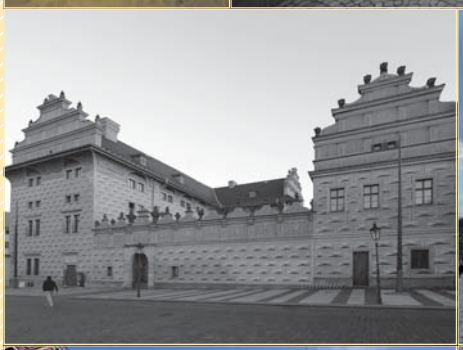
EXAMPLES OF AIR FLOW IN THE ROOM

The distance of the convector from the wall is not specified. The convector must always be located so as not to disturb free flow of air.

REFERENCES

Convectors are suitable for all types of buildings.









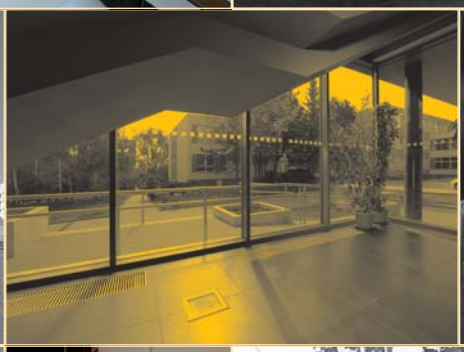








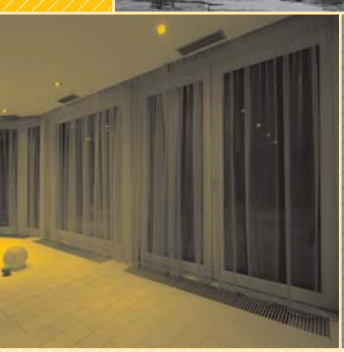


МЕТРОПОЛИС

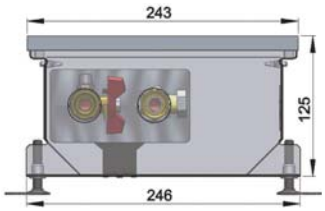
COURTYARD



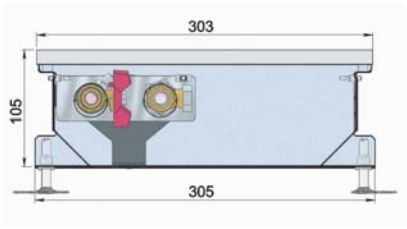


CROSS-SECTIONS OF CONVECTORS

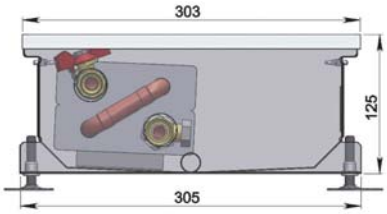
FLOOR CONVECTORS WITHOUT A FAN



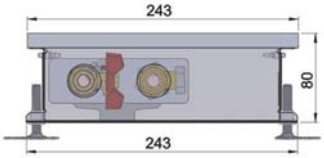
COIL – P



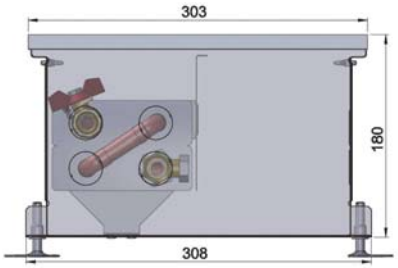
COIL – PT105



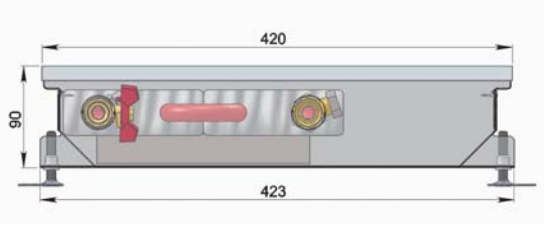
COIL – PO4



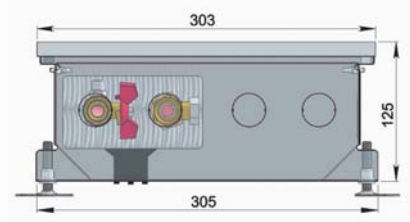
COIL – P80



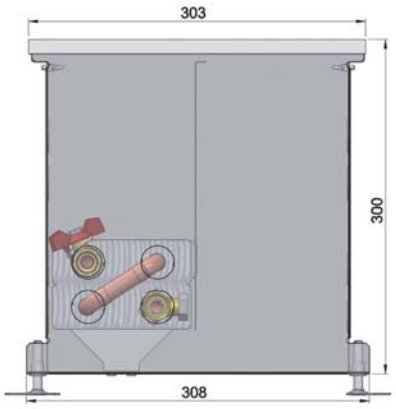
COIL – PT180



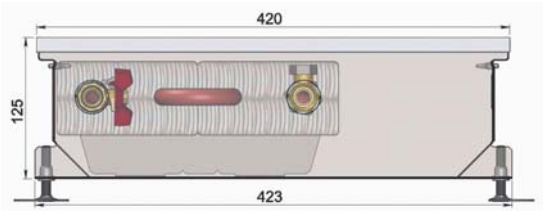
COIL – PMW90



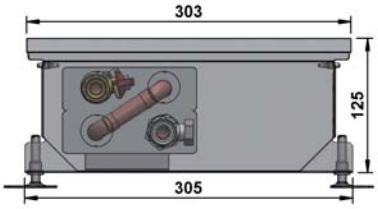
COIL – PT



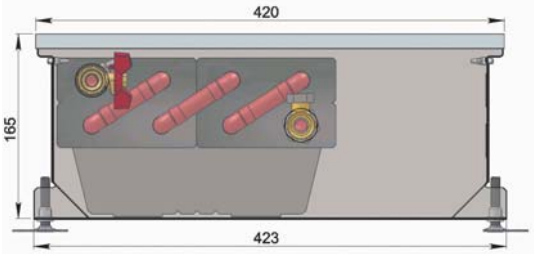
COIL – PT300



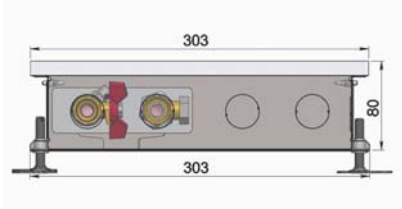
COIL – PMW125



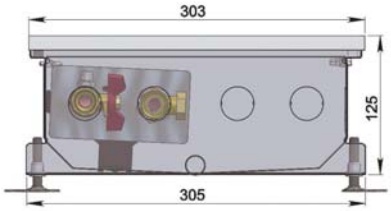
COIL – PT4



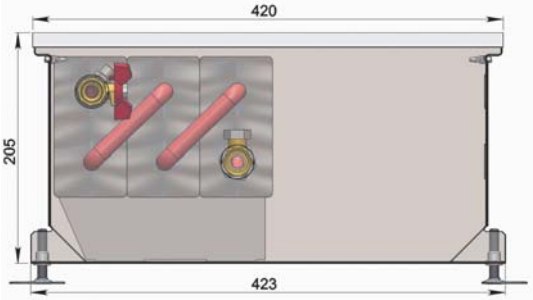
COIL – PMW165



COIL – PT80



COIL – PO



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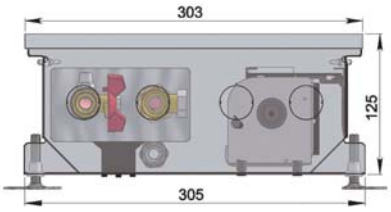
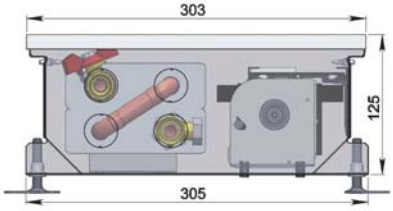
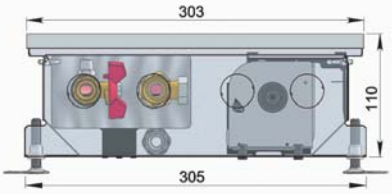


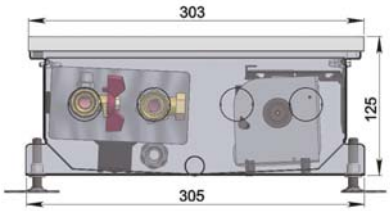
COIL – KT



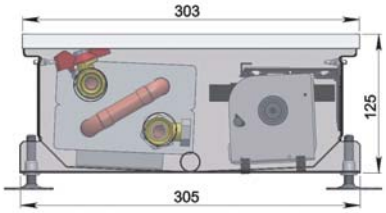
COIL – MT



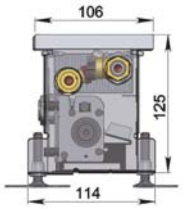
COIL – KT110



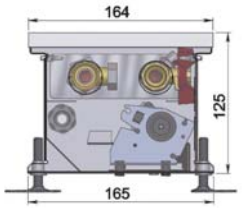
COIL – KO



COIL – MO



COIL – KTO



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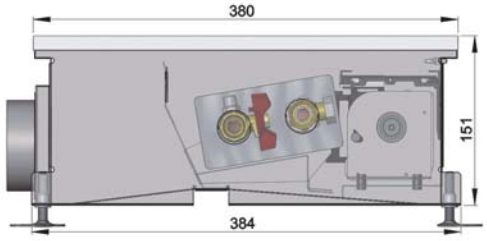
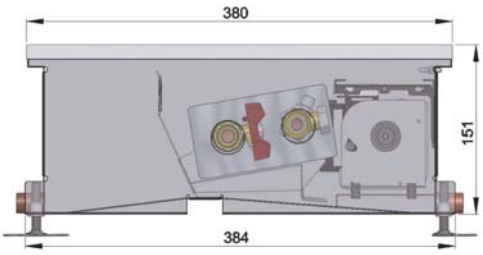
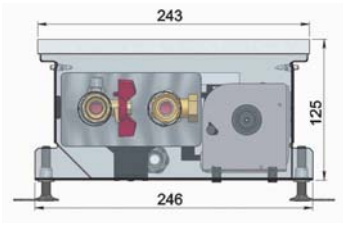


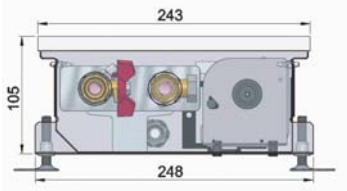
COIL – KT2



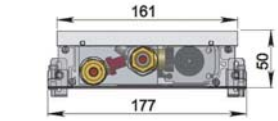
COIL – KO2



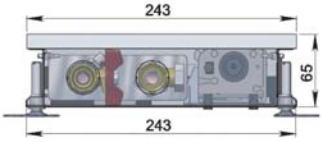
COIL – KT3



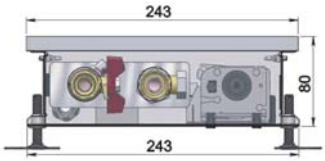
COIL – KT3 105



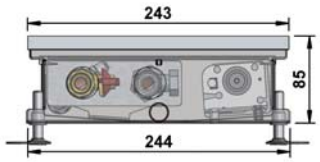
COIL – T50



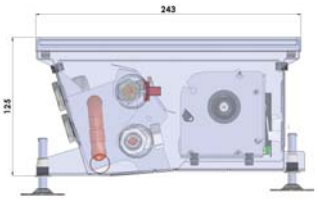
COIL – T60



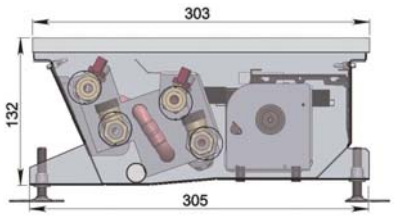
COIL – T80



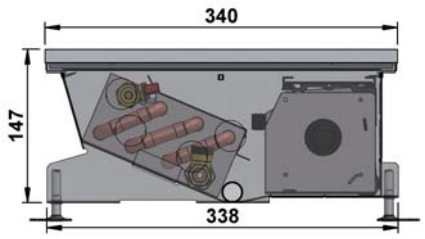
COIL – TO85



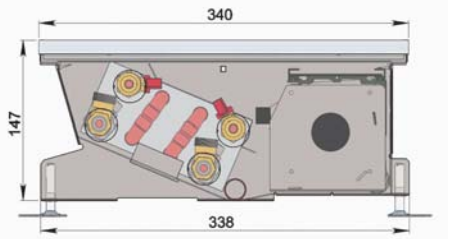
COIL – HC



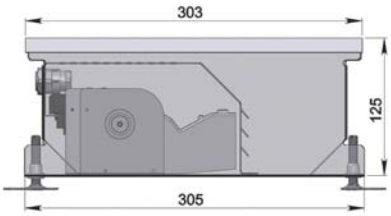
COIL – HC4pipe



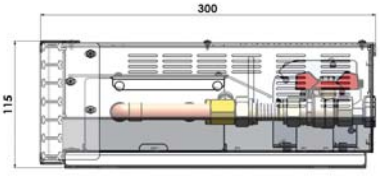
COIL – HCM



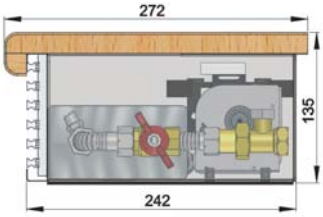
COIL – HCM4pipe



COIL – TE



COIL – SK



COIL – KP

How to properly select, install and maintain a floor convector?

1. SELECTION

- Decide whether the convector(s) will be the main or supplementary heat source for the room or if they are to be used as window heat curtains.
- Determine the heat loss from the room and how much of this needs to be offset by the convector(s).
- Take the room usage into account so that appropriate convector(s) are selected e.g. commercial area, house/ apartment, swimming pool etc.
- Decide whether a natural convector will provide the required capacity or whether fan-assisted is required.
- Take into consideration the length and cross-sectional area available for fitting the convector(s).
- Determine a suitable location for the power supply (transformer) for fan-assisted units.
- Determine a suitable location for the thermostat within the room.
- Select suitable convector(s), taking into consideration the water supply and wiring requirements and condensate removal when appropriate.

2. BEFORE INSTALLATION

- Provide sufficient space for installation and connection of the water pipe and electrical wiring (h+20mm and B+60mm).
- Provide the necessary water pipework and wiring looms to match the requirements of the particular convector(s) selected.

3. INSTALLATION

- Fit the convector in the required position.
- Anchor the fixing support in the floor using dowels.
- Adjust the trench to a horizontal level.
- Connect the electrical supply.
- Connect the water supply.
- Install the bracing pieces and cover.
- Ensure the convector remains level.
- Carefully fill around the sides up to at least 1/3rd the convector height with thin gravel concrete to ensure that noise is minimised. If the bottom is not well filled the unit could resonate! We recommend that insulation is fitted on the outside of the convector on the side where the heat exchanger is located though this is not mandatory.
- Pour the final fill of concrete around the top of the convector.

4. MAINTENANCE

- Disconnect the electrical supply.
- Close the water valves
- Remove the grille.
- Remove the fan filter if fitted.
- Lift the heat exchanger and flexible hoses to a maximum angle of 60°.
- Clean the trench below the heat exchanger/fan.
- Lubricate the fan shaft at least twice a season.

5. GENERAL PRINCIPLES

- For fan assisted convectors fitted in hollow floors anti-vibration foil should always be fitted.
- For installation in hollow floors and floors subject to expansion consideration should be given to the use of insulating material. The installer should decide on the requirement for insulation based on the features of the floor, for hollow floors insulation is recommended on the heat exchanger side of the trench. If installing in a hollow floor reinforcements should be used and anti-vibration foil is recommended for fan-assisted units.
- Anti-vibration foil is also recommended for units without fans installed in zones of high footfall.
- The orientation of the convector is decided by the customer. Standard installation is with the heat exchanger towards the room side. If the convector is being used as a supplementary heat source or as a curtain to protect the window then the heat exchanger should be on the window side.
- Grilles, fans, heat exchangers and air inlet and outlet areas should not be covered so as to ensure proper air circulation.
- Fan shafts should be lubricated twice a season.
- The heat exchanger should be cleaned regularly.
- Do not allow objects to enter the trench which could damage the fan impeller.
- Do not manually stop the rotation of the fan(s).
- If a drain connection is fitted to the trench then this should be regularly cleaned to ensure proper drainage.

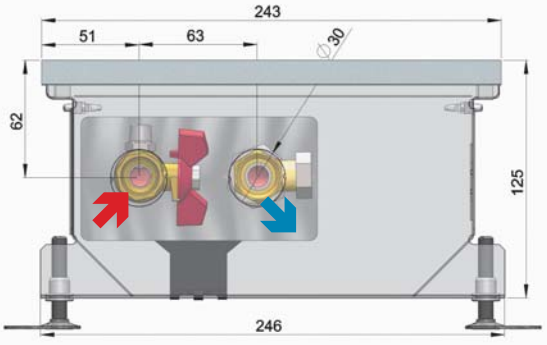
1|5|7|8|9*66

types of grille on p. 66

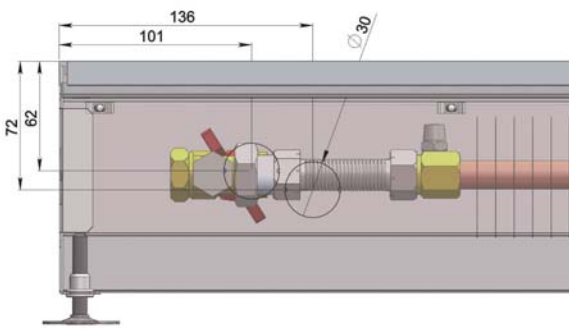
COIL-P

TEMPERATURE EXPONENT m = 1,4200

cross-section



longitudinal section



Basic type of narrowest floor convector with natural convection

CHARACTERISTICS

- high natural convection efficiency
- short reaction time

DIMENSIONS

width	243 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½“

THERMAL OUTPUT Q [W]

mean water temperature t_w	air temperature t_A 15	20	22
	length L (mm)		**900**
80	307	274	261
70	242	**211**	200
60	182	154	143
45	102	79	70
	15	**20**	**22**
	length L (mm)		**1000**
80	358	320	305
70	282	**247**	233
60	212	180	167
45	119	92	82
	15	**20**	**22**
	length L (mm)		**1250**
80	486	434	413
70	383	**335**	316
60	288	244	227
45	162	125	111
	15	**20**	**22**
	length L (mm)		**1500**
80	614	548	522
70	484	**423**	399
60	364	308	286
45	205	158	140
	15	**20**	**22**
	length L (mm)		**1750**
80	742	662	631
70	585	**511**	482
60	440	372	346
45	247	191	170
	15	**20**	**22**
	length L (mm)		**2000**
80	870	776	740
70	686	**599**	565
60	516	436	406
45	290	224	199
	15	**20**	**22**
	length L (mm)		**2500**
80	1 125	1 005	957
70	888	**775**	732
60	668	565	525
45	375	290	257
	15	**20**	**22**
	length L (mm)		**3000**
80	1 381	1 233	1 175
70	1 090	**952**	898
60	819	693	645
45	461	356	316

1|5|7|8|9*66

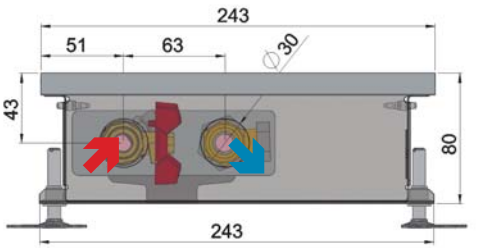
COIL-P80

THERMAL OUTPUT Q [W]

TEMPERATURE EXPONENT m = 1,4445

mean water temperature t_w	air temperature t_A		
	15	20	22
	length L (mm)		900
80	229	204	194
70	180	**156**	147
60	134	113	105
45	75	57	51
	15	20	22
	length L (mm)		1000
80	267	237	226
70	209	**183**	172
60	157	132	123
45	87	67	59
	15	20	22
	length L (mm)		1250
80	362	322	307
70	284	**248**	234
60	213	179	167
45	118	91	81
	15	20	22
	length L (mm)		1500
80	457	407	388
70	359	**313**	295
60	269	227	210
45	150	115	102
	15	20	22
	length L (mm)		1750
80	552	492	468
70	434	**378**	356
60	325	274	254
45	181	139	123
	15	20	22
	length L (mm)		2000
80	647	577	549
70	509	**443**	418
60	381	321	298
45	212	163	144
	15	20	22
	length L (mm)		2500
80	838	746	711
70	658	**574**	541
60	493	416	386
45	274	211	187
	15	20	22
	length L (mm)		3000
80	1 028	916	872
70	808	**704**	664
60	605	510	474
45	337	259	229

Floor convector with natural convection with the smallest width and height



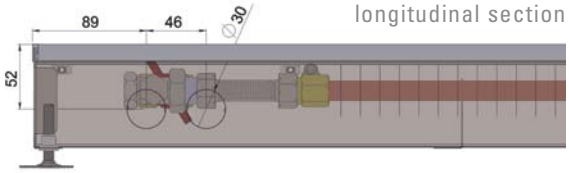
cross-section

CHARACTERISTICS

- high natural convection efficiency in relation to the dimensions
- short reaction time

DIMENSIONS

width	243 mm
structural height	80 mm
length	900 to 3000 mm
connection	G½“

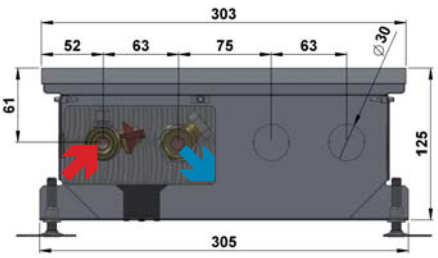


longitudinal section

1|5|7|8|9*66

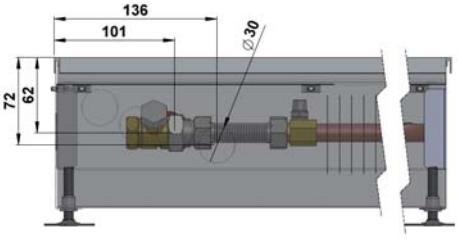
COIL-PT

TEMPERATURE EXPONENT m = 1,4085



cross-section

longitudinal section



Basic type of floor convector with natural convection with standard width in the PT series

CHARACTERISTICS

- high natural convection efficiency
- short reaction time

DIMENSIONS

width	303 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½"

THERMAL OUTPUT Q [W]

mean water temperature t_w	air temperature t_A 15	20	22
	length L (mm)		**900**
80	373	333	317
70	295	**258**	243
60	222	188	175
45	125	97	86
	15	**20**	**22**
	length L (mm)		**1000**
80	435	388	370
70	344	**300**	284
60	259	219	204
45	146	113	101
	15	**20**	**22**
	length L (mm)		**1250**
80	590	527	503
70	466	**408**	385
60	352	298	277
45	199	154	137
	15	**20**	**22**
	length L (mm)		**1500**
80	745	666	635
70	589	**515**	486
60	444	376	350
45	251	194	173
	15	**20**	**22**
	length L (mm)		**1750**
80	901	805	767
70	712	**622**	588
60	537	454	423
45	303	234	208
	15	**20**	**22**
	length L (mm)		**2000**
80	1 056	943	899
70	834	**730**	689
60	629	533	496
45	355	275	244
	15	**20**	**22**
	length L (mm)		**2500**
80	1 366	1 221	1 164
70	1 080	**944**	891
60	814	690	642
45	460	356	316
	15	**20**	**22**
	length L (mm)		**3000**
80	1 677	1 498	1 428
70	1 325	**1 159**	1 094
60	999	846	787
45	564	437	388

1|5|7|8|9*66

COIL-PT4

THERMAL OUTPUT Q [W]

mean water temperature t_w	air temperature t_A		
	15	20	22
	length L (mm)		900
80	449	400	381
70	353	**307**	289
60	264	222	206
45	146	112	99
	15	20	22
	length L (mm)		1000
80	524	467	444
70	411	**358**	338
60	307	259	241
45	171	131	116
	15	20	22
	length L (mm)		1250
80	712	634	603
70	558	**486**	458
60	417	352	326
45	232	178	157
	15	20	22
	length L (mm)		1500
80	899	800	762
70	705	**614**	579
60	527	444	412
45	293	225	199
	15	20	22
	length L (mm)		1750
80	1 086	967	921
70	852	**742**	699
60	637	537	498
45	353	271	240
	15	20	22
	length L (mm)		2000
80	1 273	1 134	1 079
70	999	**870**	820
60	747	629	584
45	414	318	282
	15	20	22
	length L (mm)		2500
80	1 648	1 467	1 397
70	1 293	**1 126**	1 061
60	966	814	756
45	536	412	365
	15	20	22
	length L (mm)		3000
80	2 023	1 801	1 714
70	1 587	**1 382**	1 302
60	1 186	999	928
45	658	505	448

TEMPERATURE EXPONENT m = 1,4519

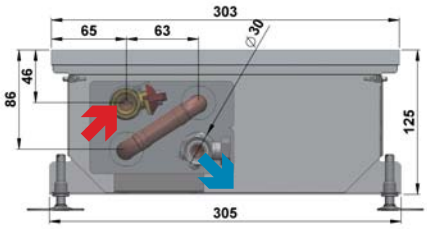
Very efficient floor convector with natural convection in the PT series

CHARACTERISTICS

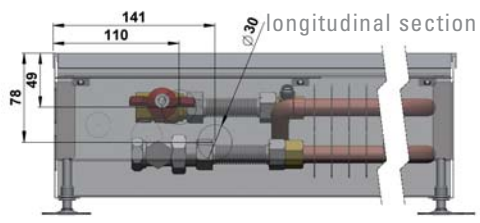
- high natural convection efficiency
- short reaction time

DIMENSIONS

width	303 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½"



cross-section

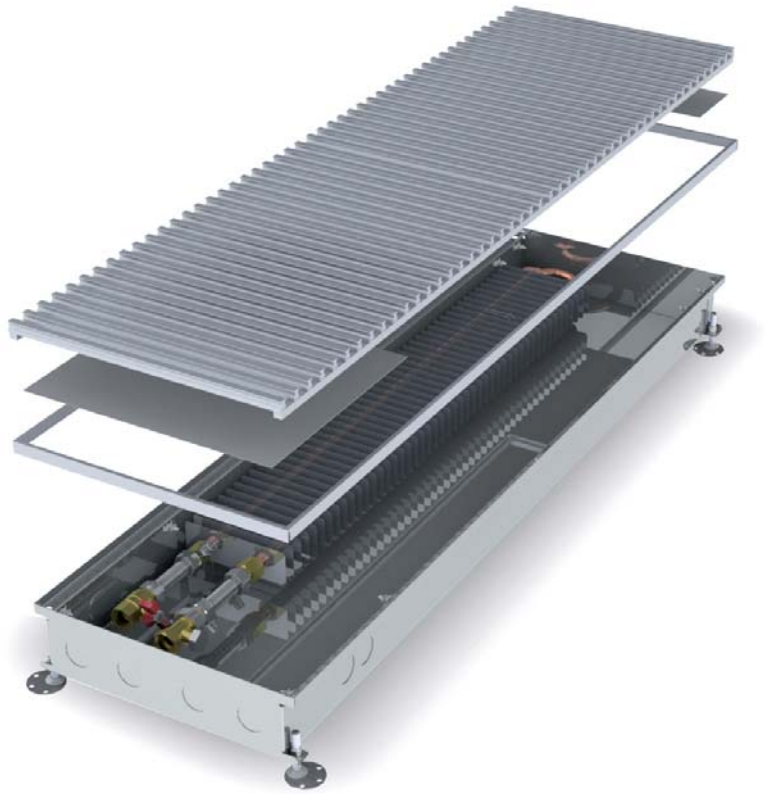


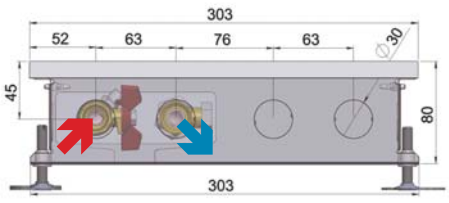
longitudinal section

1|5|7|8|9*66

COIL-PT80

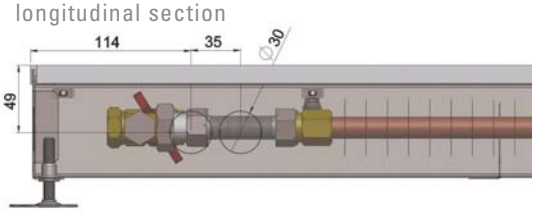
TEMPERATURE EXPONENT m = 1,4002





cross-section

longitudinal section



Lowest type of floor convector with natural convection in the PT series

CHARACTERISTICS

- high natural convection efficiency
- short reaction time

DIMENSIONS

width	303 mm
structural height	80 mm
length	900 to 3000 mm
connection	G½"

THERMAL OUTPUT Q [W]

mean water temperature t_w	air temperature t_A 15	20	22
	length L (mm)		900
80	241	215	205
70	191	**167**	158
60	144	122	114
45	82	63	56
	15	20	22
	length L (mm)		1000
80	281	251	240
70	223	**195**	184
60	168	142	133
45	95	74	66
	15	20	22
	length L (mm)		1250
80	382	341	325
70	302	**264**	250
60	228	193	180
45	129	100	89
	15	20	22
	length L (mm)		1500
80	482	431	411
70	382	**334**	315
60	288	244	227
45	163	126	113
	15	20	22
	length L (mm)		1750
80	582	521	497
70	461	**403**	381
60	348	295	275
45	197	153	136
	15	20	22
	length L (mm)		2000
80	683	611	582
70	540	**473**	447
60	408	346	322
45	231	179	159
	15	20	22
	length L (mm)		2500
80	884	790	753
70	699	**612**	578
60	528	448	417
45	299	232	206
	15	20	22
	length L (mm)		3000
80	1 085	970	925
70	858	**751**	709
60	648	550	512
45	367	285	253

1|5|7|8|9*66

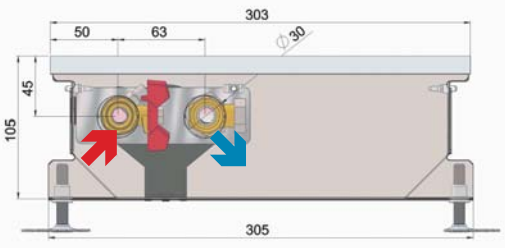
COIL-PT105

THERMAL OUTPUT Q [W]

mean water temperature t_w	air temperature t_A		
	15	20	22
	length L (mm)		900
80	311	279	266
70	248	**217**	205
60	188	160	149
45	108	84	75
	15	20	22
	length L (mm)		1000
80	363	325	311
70	289	**254**	240
60	219	187	174
45	126	98	88
	15	20	22
	length L (mm)		1250
80	493	442	422
70	392	**344**	325
60	298	253	236
45	171	133	119
	15	20	22
	length L (mm)		1500
80	622	558	533
70	495	**435**	411
60	376	320	298
45	216	168	150
	15	20	22
	length L (mm)		1750
80	752	674	643
70	598	**525**	497
60	455	387	361
45	261	203	181
	15	20	22
	length L (mm)		2000
80	882	790	754
70	702	**616**	582
60	533	454	423
45	306	238	213
	15	20	22
	length L (mm)		2500
80	1 141	1 023	976
70	908	**797**	753
60	690	587	547
45	396	308	275
	15	20	22
	length L (mm)		3000
80	1 401	1 255	1 198
70	1 114	**978**	925
60	847	720	672
45	486	379	338

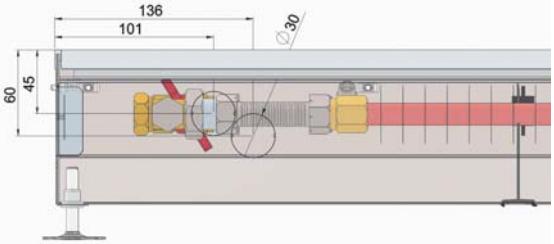
TEMPERATURE EXPONENT m = 1,3691

Variant floor convector in the PT series with structural height of 105 mm



cross-section

longitudinal section



CHARACTERISTICS

- high natural convection efficiency
- short reaction time

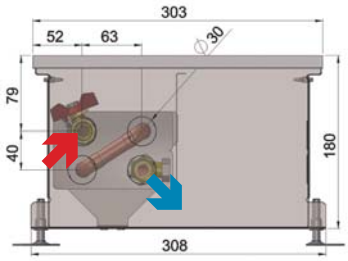
DIMENSIONS

width	303 mm
structural height	105 mm
length	900 to 3000 mm
connection	G½"

1|5|7|8|9*66

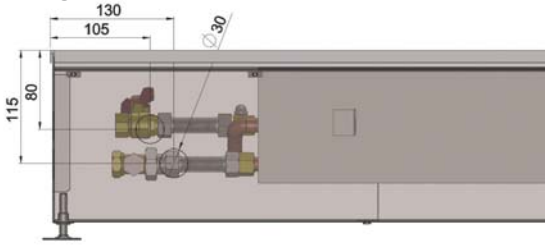
COIL-PT180

TEMPERATURE EXPONENT m = 1,4180



cross-section

longitudinal section



One of the most efficient floor convectors in the PT series with natural convection

CHARACTERISTICS

- high natural convection efficiency
- short reaction time

DIMENSIONS

width	303 mm
structural height	180 mm
length	900 to 3000 mm
connection	G½"

THERMAL OUTPUT Q [W]

mean water temperature t_w	air temperature t_A 15	20	22
	length L (mm)		**900**
80	486	434	414
70	384	**335**	316
60	289	244	227
45	162	125	111
	15	**20**	**22**
	length L (mm)		**1000**
80	567	507	483
70	448	**391**	369
60	337	285	265
45	190	146	130
	15	**20**	**22**
	length L (mm)		**1250**
80	770	688	655
70	608	**531**	501
60	457	387	360
45	257	199	177
	15	**20**	**22**
	length L (mm)		**1500**
80	973	868	828
70	768	**671**	633
60	578	489	454
45	325	251	223
	15	**20**	**22**
	length L (mm)		**1750**
80	1 175	1 049	1 000
70	928	**810**	765
60	698	591	549
45	393	303	269
	15	**20**	**22**
	length L (mm)		**2000**
80	1 378	1 230	1 173
70	1 087	**950**	897
60	818	692	644
45	460	356	316
	15	**20**	**22**
	length L (mm)		**2500**
80	1 784	1 592	1 517
70	1 407	**1 229**	1 160
60	1 059	896	833
45	596	460	409
	15	**20**	**22**
	length L (mm)		**3000**
80	2 189	1 954	1 862
70	1 727	**1 509**	1 424
60	1 299	1 100	1 022
45	731	565	502

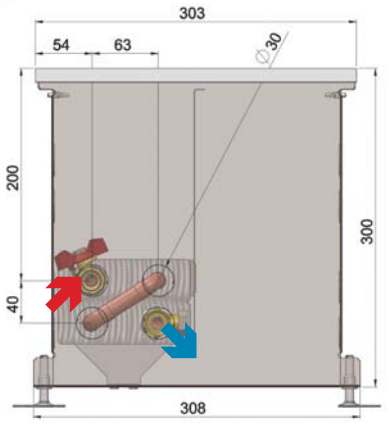
1|5|7|8|9*66

COIL-PT300

THERMAL OUTPUT Q [W]

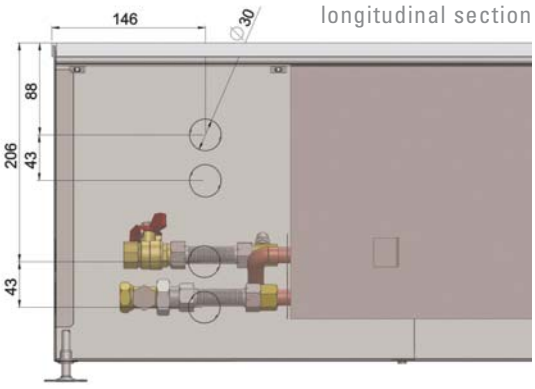
TEMPERATURE EXPONENT m = 1,3649

mean water temperature t_w	air temperature t_A		
	15	20	22
	length L (mm)		900
80	559	501	478
70	445	**391**	369
60	338	288	269
45	194	152	135
	15	20	22
	length L (mm)		1000
80	652	584	558
70	519	**456**	431
60	395	336	313
45	227	177	158
	15	20	22
	length L (mm)		1250
80	885	793	757
70	704	**618**	585
60	536	456	425
45	308	240	214
	15	20	22
	length L (mm)		1500
80	1 117	1 002	957
70	890	**781**	739
60	677	576	537
45	389	303	271
	15	20	22
	length L (mm)		1750
80	1 350	1 211	1 156
70	1 075	**944**	893
60	817	696	649
45	470	366	327
	15	20	22
	length L (mm)		2000
80	1 583	1 419	1 355
70	1 260	**1 107**	1 047
60	958	816	761
45	551	430	383
	15	20	22
	length L (mm)		2500
80	2 049	1 837	1 754
70	1 631	**1 432**	1 354
60	1 240	1 056	985
45	713	556	496
	15	20	22
	length L (mm)		3000
80	2 514	2 254	2 152
70	2 002	**1 758**	1 662
60	1 522	1 296	1 208
45	875	682	609



cross-section

longitudinal section



Most efficient floor convector with natural convection in the PT series

CHARACTERISTICS

- very high natural convection efficiency
- short reaction time

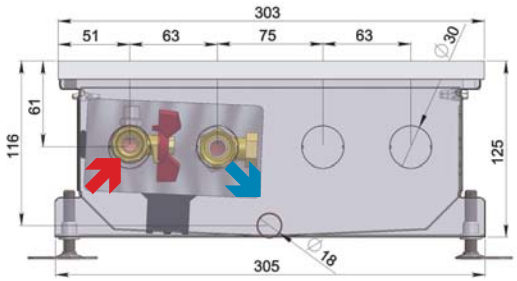
DIMENSIONS

width	303 mm
structural height	300 mm
length	900 to 3000 mm
connection	G½"

11719*66

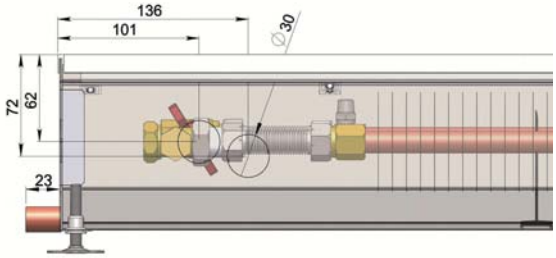
COIL-PO

TEMPERATURE EXPONENT m = 1,4147



cross-section

longitudinal section



The commonest floor convectors for a wet environment with natural convection

CHARACTERISTICS

- high natural convection efficiency
- short reaction time
- suitable primarily for swimming pools
- the convector cannot be installed for a swimming pool with salty or otherwise corrosive water

DIMENSIONS

width	303 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½"

THERMAL OUTPUT Q [W]

mean water temperature t_W	air temperature t_A 15	20	22
	length L (mm)		**900**
80	372	332	316
70	293	**256**	242
60	221	187	174
45	124	96	85
	15	**20**	**22**
	length L (mm)		**1000**
80	434	387	369
70	342	**299**	282
60	258	218	203
45	145	112	100
	15	**20**	**22**
	length L (mm)		**1250**
80	589	526	501
70	465	**406**	383
60	350	296	275
45	197	152	135
	15	**20**	**22**
	length L (mm)		**1500**
80	743	664	633
70	587	**513**	484
60	442	374	348
45	249	192	171
	15	**20**	**22**
	length L (mm)		**1750**
80	898	802	765
70	709	**620**	585
60	534	452	420
45	301	232	207
	15	**20**	**22**
	length L (mm)		**2000**
80	1 053	940	896
70	832	**727**	686
60	626	530	493
45	353	273	242
	15	**20**	**22**
	length L (mm)		**2500**
80	1 363	1 217	1 160
70	1 076	**940**	888
60	810	686	638
45	456	353	313
	15	**20**	**22**
	length L (mm)		**3000**
80	1 673	1 494	1 424
70	1 321	**1 154**	1 089
60	994	842	783
45	560	433	385

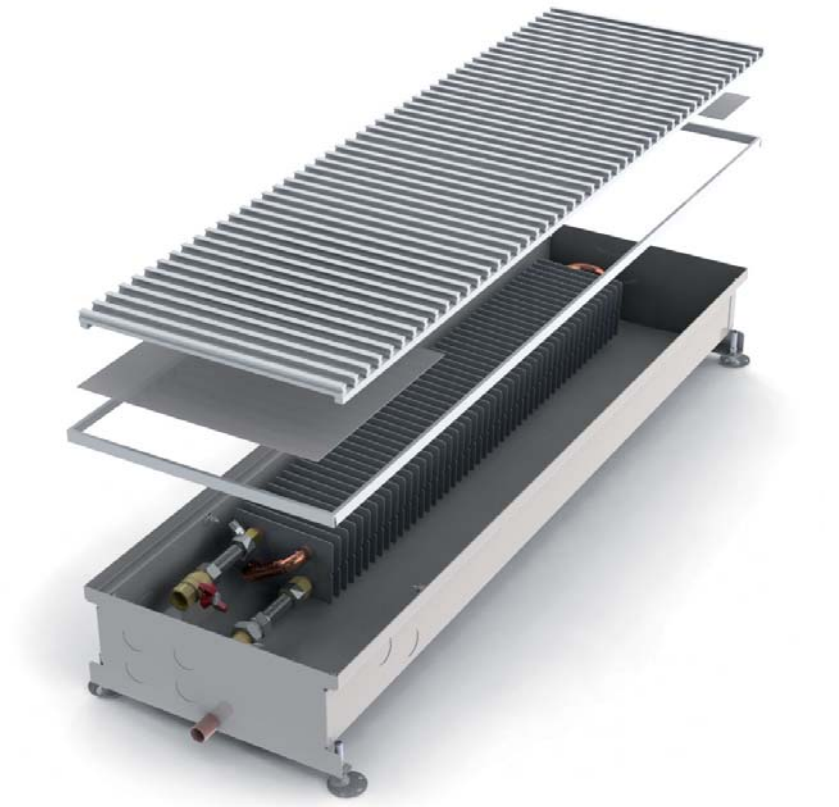
11719*66

COIL-PO4

THERMAL OUTPUT Q [W]

mean water temperature t_w	air temperature t_A 15	20	22
	length L (mm)		900
80	461	410	391
70	362	**315**	297
60	270	228	212
45	150	115	102
	15	20	22
	length L (mm)		1000
80	538	479	456
70	422	**368**	346
60	315	266	247
45	175	135	119
	15	20	22
	length L (mm)		1250
80	730	650	619
70	573	**499**	470
60	428	361	335
45	238	183	162
	15	20	22
	length L (mm)		1500
80	922	821	781
70	723	**630**	594
60	541	456	423
45	300	231	204
	15	20	22
	length L (mm)		1750
80	1 114	992	944
70	874	**761**	718
60	653	551	511
45	363	279	247
	15	20	22
	length L (mm)		2000
80	1 306	1 163	1 107
70	1 025	**893**	841
60	766	646	600
45	426	327	290
	15	20	22
	length L (mm)		2500
80	1 690	1 504	1 432
70	1 326	**1 155**	1 089
60	991	836	776
45	551	423	375
	15	20	22
	length L (mm)		3000
80	2 074	1 846	1 758
70	1 628	**1 418**	1 336
60	1 217	1 026	952
45	676	519	460

TEMPERATURE EXPONENT m = 1,4497



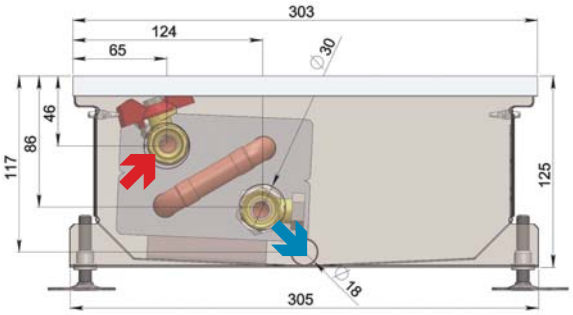
Most efficient floor convector for a wet environment with natural convection

CHARACTERISTICS

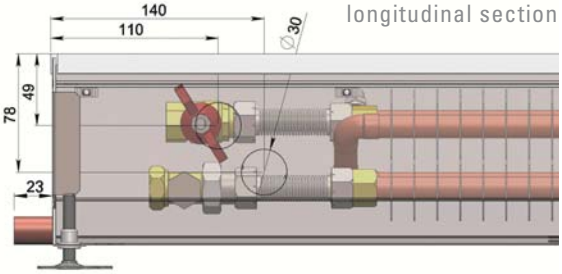
- highest natural convection efficiency in the PO series
- short reaction time
- suitable primarily for swimming pools
- the convector cannot be installed for a swimming pool with salty or otherwise corrosive water

DIMENSIONS

width	303 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½"



cross-section

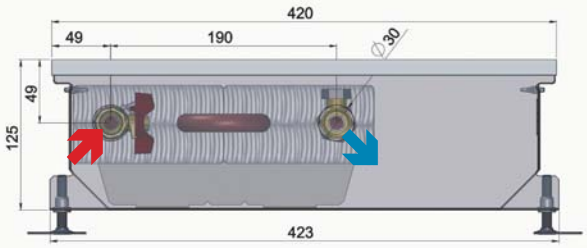


longitudinal section

71819*66

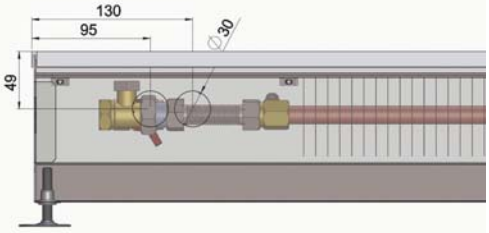
COIL-PMW125

TEMPERATURE EXPONENT m = 1,4202



cross-section

longitudinal section



Basic type of floor convector with natural convection of the most efficient PMW series

CHARACTERISTICS

- high natural convection efficiency
- short reaction time

DIMENSIONS

width	420 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½"

THERMAL OUTPUT Q [W]

mean water temperature t_w	air temperature t_A 15	20	22
	length L (mm)		**900**
80	525	469	447
70	414	**362**	341
60	311	263	245
45	175	135	120
	15	**20**	**22**
	length L (mm)		**1000**
80	613	547	521
70	483	**422**	398
60	363	307	286
45	204	158	140
	15	**20**	**22**
	length L (mm)		**1250**
80	831	742	707
70	656	**573**	540
60	493	417	388
45	277	214	190
	15	**20**	**22**
	length L (mm)		**1500**
80	1 050	937	893
70	828	**723**	683
60	623	527	490
45	350	270	240
	15	**20**	**22**
	length L (mm)		**1750**
80	1 269	1 133	1 079
70	1 001	**874**	825
60	753	637	592
45	423	327	290
	15	**20**	**22,**
	length L (mm)		**2000**
80	1 488	1 328	1 265
70	1 174	**1 025**	967
60	882	747	694
45	496	383	340
	15	**20**	**22**
	length L (mm)		**2500**
80	1 925	1 718	1 638
70	1 519	**1 326**	1 252
60	1 142	966	898
45	642	496	440
	15	**20**	**22**
	length L (mm)		**3000**
80	2 363	2 109	2 010
70	1 864	**1 628**	1 536
60	1 402	1 186	1 102
45	788	608	540

7|8|9*66

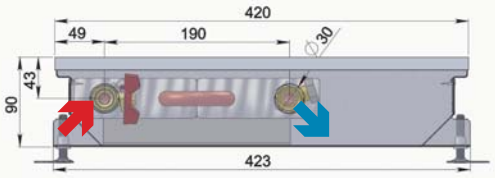
COIL-PMW90

THERMAL OUTPUT Q [W]

mean water temperature t_W	air temperature t_A		
	15	20	22
	length L (mm)		900
80	380	338	322
70	299	260	245
60	224	189	175
45	125	96	85
	15	20	22
	length L (mm)		1000
80	443	395	376
70	348	304	286
60	261	220	205
45	146	112	99
	15	20	22
	length L (mm)		1250
80	601	536	510
70	473	412	389
60	354	299	278
45	198	152	135
	15	20	22
	length L (mm)		1500
80	759	677	644
70	597	520	491
60	447	378	351
45	250	192	170
	15	20	22
	length L (mm)		1750
80	917	818	779
70	721	629	593
60	540	456	424
45	302	232	206
	15	20	22
	length L (mm)		2000
80	1 076	959	913
70	846	737	695
60	634	535	497
45	354	272	241
	15	20	22
	length L (mm)		2500
80	1 392	1 240	1 181
70	1 095	954	900
60	820	692	643
45	458	352	312
	15	20	22
	length L (mm)		3000
80	1 708	1 522	1 450
70	1 343	1 171	1 104
60	1 006	849	789
45	562	432	383

TEMPERATURE EXPONENT m = 1,4389

Lowest type of floor convector with natural convection of the most efficient PMW series

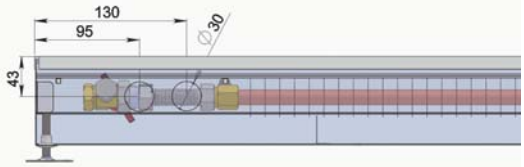


cross-section

CHARACTERISTICS

- high natural convection efficiency
- short reaction time

longitudinal section



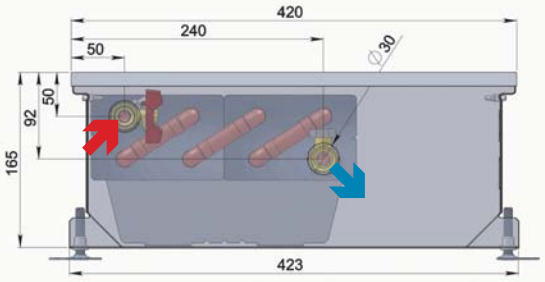
DIMENSIONS

width	420 mm
structural height	90 mm
length	900 to 3000 mm
connection	G½"

71819*66

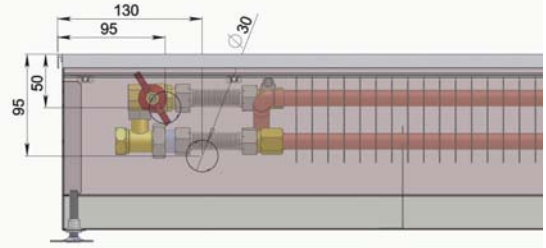
COIL-PMW165

TEMPERATURE EXPONENT m = 1,4131



cross-section

longitudinal section



Efficient floor convector with natural convection of the most efficient PMW series

CHARACTERISTICS

- very high natural convection efficiency
- short reaction time

DIMENSIONS

width	420 mm
structural height	165 mm
length	900 to 3000 mm
connection	G½"

THERMAL OUTPUT Q [W]

mean water temperature t_w	air temperature t_A 15	20	22
	length L (mm)		**900**
80	765	683	651
70	604	**528**	498
60	455	385	358
45	257	198	176
	15	**20**	**22**
	length L (mm)		**1000**
80	893	797	760
70	705	**616**	582
60	531	449	418
45	299	231	206
	15	**20**	**22**
	length L (mm)		**1250**
80	1 211	1 082	1 031
70	957	**836**	789
60	720	610	567
45	406	314	279
	15	**20**	**22**
	length L (mm)		**1500**
80	1 530	1 366	1 303
70	1 208	**1 056**	997
60	910	770	717
45	513	397	352
	15	**20**	**22**
	length L (mm)		**1750**
80	1 849	1 651	1 574
70	1 460	**1 276**	1 205
60	1 100	931	866
45	620	479	426
	15	**20**	**22**
	length L (mm)		**2000**
80	2 168	1 936	1 845
70	1 712	**1 496**	1 412
60	1 289	1 092	1 015
45	727	562	499
	15	**20**	**22**
	length L (mm)		**2500**
80	2 805	2 505	2 388
70	2 215	**1 936**	1 828
60	1 668	1 413	1 314
45	941	727	646
	15	**20**	**22**
	length L (mm)		**3000**
80	3 443	3 075	2 931
70	2 719	**2 376**	2 243
60	2 048	1 734	1 612
45	1 155	892	793

71819*66

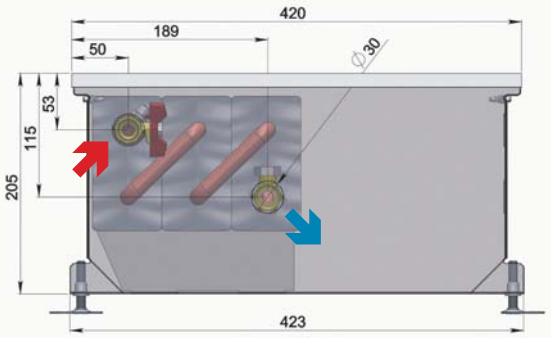
COIL-PMW205

THERMAL OUTPUT Q [W]

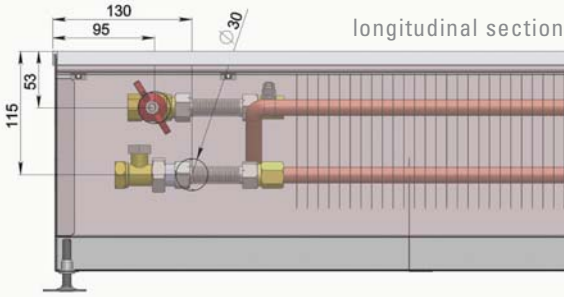
mean water temperature t_w	air temperature t_A		
	15	20	22
	length L (mm)		900
80	827	735	700
70	647	**563**	531
60	483	406	377
45	267	204	181
	15	20	22
	length L (mm)		1000
80	964	858	816
70	755	**657**	619
60	563	474	440
45	311	238	211
	15	20	22
	length L (mm)		1250
80	1 309	1 164	1 108
70	1 025	**892**	840
60	764	643	597
45	422	324	286
	15	20	22
	length L (mm)		1500
80	1 653	1 470	1 399
70	1 295	**1 126**	1 061
60	965	813	754
45	534	409	362
	15	20	22
	length L (mm)		1750
80	1 997	1 777	1 691
70	1 565	**1 361**	1 282
60	1 167	982	911
45	645	494	437
	15	20	22
	length L (mm)		2000
80	2 342	2 083	1 982
70	1 834	**1 596**	1 503
60	1 368	1 151	1 068
45	756	579	513
	15	20	22
	length L (mm)		2500
80	3 031	2 696	2 565
70	2 374	**2 065**	1 945
60	1 770	1 490	1 382
45	978	749	663
	15	20	22
	length L (mm)		3000
80	3 719	3 309	3 149
70	2 913	**2 534**	2 387
60	2 172	1 829	1 696
45	1 201	920	814

TEMPERATURE EXPONENT m = 1,4624

Highly efficient floor convector with natural convection of the most efficient PMW series



cross-section



longitudinal section

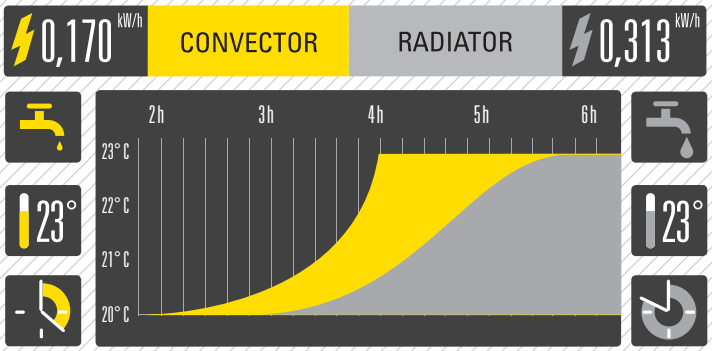
CHARACTERISTICS

- very highly efficient natural convection
- short reaction time

DIMENSIONS

width	420 mm
structural height	205 mm
length	900 to 3000 mm
connection	G½"

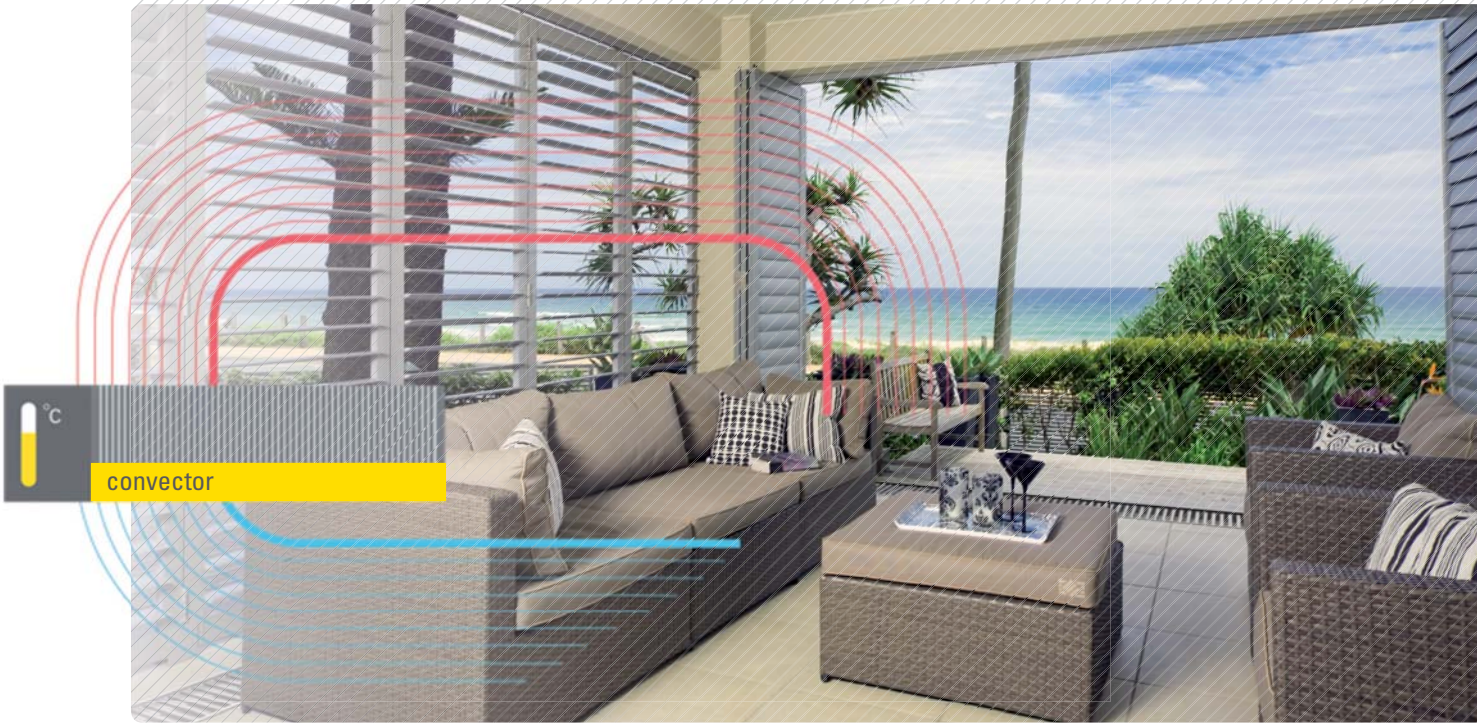
Why a MINIB convector?



Compared to a radiator, a convector provides energy savings and high dynamics of heating/cooling

MINIB convectors

- save space and add to the architectural appearance
- provide energy savings and dynamic response with a low volume of hot/chilled water
- are made of high quality materials and permit the provision of a 10 year warranty on the trench and heat exchanger
- are available in bespoke dimensions to meet the most demanding requirements and environments



COIL-KT

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	12 VA
1000	12 VA
1250	24 VA
1500	24 VA
1750	24 VA
2000	36 VA
2500	48 VA
3000	48 VA

TEMPERATURE EXPONENT m = 1,012688

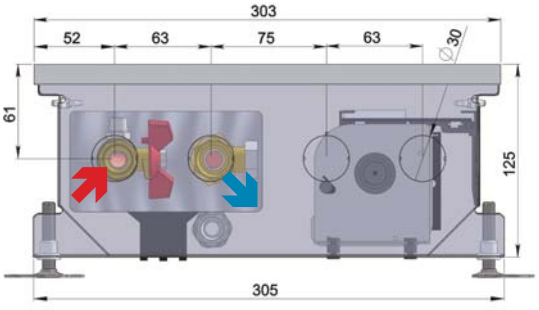
Basic and most popular floor convector with a fan of the KT/MT series

CHARACTERISTICS

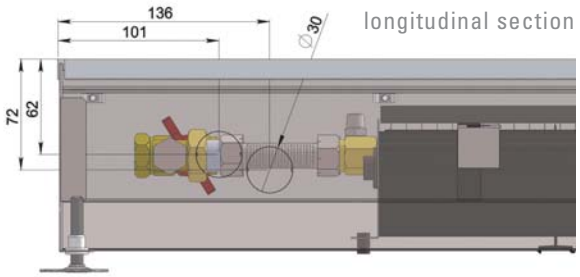
- highly efficient forced convection heating
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control

DIMENSIONS

width	303 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½"



cross-section



longitudinal section

1|5|7|8|9*66

THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.				Level 2 medium r.p.m.				Level 3 maximum r.p.m.			
	air temperature t_A				air temperature t_A				air temperature t_A			
	15	20	22		15	20	22		15	20	22	
	length L (mm)		900		length L (mm)		900		length L (mm)		900	
80	1 161	1 070	1 034	80	1 268	1 169	1 129	80	1 414	1 304	1 260	80
70	980	**890**	854	70	1 070	**972**	933	70	1 194	**1 084**	1 040	70
60	800	710	674	60	874	775	736	60	974	865	821	60
45	530	441	405	45	579	482	443	45	646	537	494	45
	15	20	22		15	20	22		15	20	22	
	length L (mm)		1000		length L (mm)		1000		length L (mm)		1000	
80	1 354	1 249	1 206	80	1 479	1 364	1 318	80	1 649	1 521	1 469	80
70	1 143	**1 038**	996	70	1 249	**1 134**	1 088	70	1 392	**1 264**	1 213	70
60	933	828	786	60	1 019	905	859	60	1 136	1 009	958	60
45	619	514	473	45	676	562	516	45	754	627	576	45
	15	20	22		15	20	22		15	20	22	
	length L (mm)		1250		length L (mm)		1250		length L (mm)		1250	
80	1 837	1 694	1 637	80	2 007	1 851	1 788	80	2 238	2 064	1 994	80
70	1 551	**1 409**	1 352	70	1 695	**1 539**	1 476	70	1 890	**1 716**	1 646	70
60	1 266	1 124	1 067	60	1 383	1 228	1 165	60	1 542	1 369	1 300	60
45	840	698	642	45	917	763	701	45	1 023	850	782	45
	15	20	22		15	20	22		15	20	22	
	length L (mm)		1500		length L (mm)		1500		length L (mm)		1500	
80	2 321	2 140	2 068	80	2 535	2 338	2 259	80	2 827	2 607	2 519	80
70	1 960	**1 779**	1 707	70	2 141	**1 944**	1 865	70	2 387	**2 167**	2 080	70
60	1 599	1 420	1 348	60	1 747	1 551	1 472	60	1 948	1 729	1 642	60
45	1 061	882	811	45	1 159	963	885	45	1 292	1 074	987	45
	15	20	22		15	20	22		15	20	22	
	length L (mm)		1750		length L (mm)		1750		length L (mm)		1750	
80	2 805	2 586	2 499	80	3 063	2 825	2 730	80	3 416	3 150	3 044	80
70	2 368	**2 150**	2 063	70	2 587	**2 349**	2 254	70	2 884	**2 619**	2 513	70
60	1 933	1 715	1 628	60	2 111	1 874	1 779	60	2 354	2 089	1 984	60
45	1 282	1 066	979	45	1 400	1 164	1 070	45	1 561	1 298	1 193	45
	15	20	22		15	20	22		15	20	22	
	length L (mm)		2000		length L (mm)		2000		length L (mm)		2000	
80	3 288	3 032	2 930	80	3 592	3 312	3 200	80	4 005	3 693	3 569	80
70	2 776	**2 521**	2 419	70	3 033	**2 754**	2 642	70	3 382	**3 071**	2 946	70
60	2 266	2 011	1 909	60	2 475	2 197	2 085	60	2 760	2 450	2 326	60
45	1 503	1 249	1 148	45	1 641	1 365	1 254	45	1 830	1 522	1 399	45
	15	20	22		15	20	22		15	20	22	
	length L (mm)		2500		length L (mm)		2500		length L (mm)		2500	
80	4 255	3 924	3 791	80	4 648	4 286	4 141	80	5 183	4 780	4 618	80
70	3 593	**3 262**	3 130	70	3 925	**3 563**	3 419	70	4 376	**3 974**	3 813	70
60	2 932	2 602	2 471	60	3 203	2 843	2 699	60	3 572	3 170	3 010	60
45	1 945	1 617	1 486	45	2 124	1 766	1 623	45	2 369	1 969	1 810	45
	15	20	22		15	20	22		15	20	22	
	length L (mm)		3000		length L (mm)		3000		length L (mm)		3000	
80	5 222	4 816	4 653	80	5 704	5 260	5 083	80	6 361	5 866	5 668	80
70	4 409	**4 004**	3 842	70	4 817	**4 373**	4 196	70	5 371	**4 877**	4 679	70
60	3 599	3 194	3 032	60	3 931	3 489	3 312	60	4 383	3 890	3 694	60
45	2 387	1 984	1 824	45	2 607	2 168	1 992	45	2 907	2 417	2 221	45

COIL-MT

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	12 VA
1000	12 VA
1250	24 VA
1500	24 VA
1750	24 VA
2000	36 VA
2500	48 VA
3000	48 VA

TEMPERATURE EXPONENT m = 1,0435

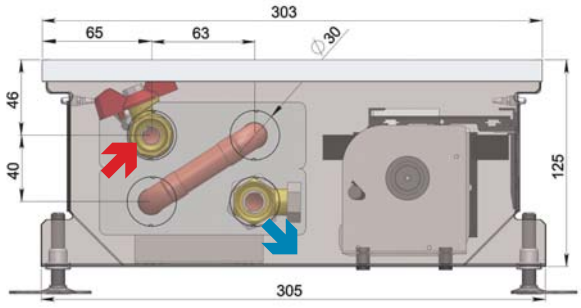
Most efficient floor convector with a fan of the KT/MT series

CHARACTERISTICS

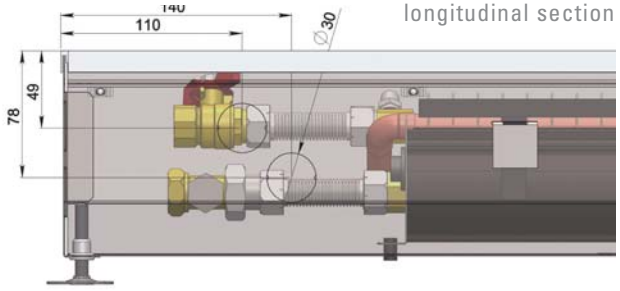
- very highly efficient forced convection heating
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control

DIMENSIONS

width	303 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½“



cross-section



longitudinal section

1|5|7|8|9*66

THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	1 499	1 379	1 331	1 571	1 445	1 395	1 718	1 580	1 525
70	1 259	**1 140**	1 092	1 320	**1 195**	1 145	1 443	**1 307**	1 252
60	1 021	903	856	1 071	947	897	1 170	1 035	981
45	669	553	507	701	580	531	767	634	581
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	1 749	1 609	1 553	1 833	1 686	1 628	2 004	1 844	1 780
70	1 469	**1 330**	1 275	1 540	**1 394**	1 336	1 684	**1 524**	1 461
60	1 192	1 054	999	1 249	1 105	1 047	1 366	1 208	1 145
45	780	645	591	818	676	620	894	739	678
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	2 373	2 183	2 107	2 488	2 289	2 209	2 720	2 502	2 415
70	1 994	**1 805**	1 730	2 090	**1 892**	1 813	2 285	**2 069**	1 982
60	1 617	1 430	1 356	1 695	1 499	1 421	1 853	1 639	1 553
45	1 059	876	803	1 110	918	841	1 214	1 004	920
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	2 998	2 758	2 662	3 143	2 891	2 790	3 436	3 161	3 051
70	2 518	**2 280**	2 185	2 640	**2 390**	2 290	2 886	**2 613**	2 504
60	2 043	1 806	1 712	2 141	1 894	1 795	2 341	2 070	1 962
45	1 338	1 106	1 014	1 402	1 160	1 063	1 533	1 268	1 162
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	3 623	3 332	3 216	3 797	3 493	3 372	4 152	3 819	3 686
70	3 043	**2 755**	2 640	3 190	**2 888**	2 767	3 488	**3 157**	3 026
60	2 468	2 183	2 069	2 587	2 288	2 169	2 829	2 502	2 371
45	1 617	1 337	1 225	1 695	1 401	1 284	1 853	1 532	1 404
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	4 247	3 907	3 771	4 452	4 095	3 953	4 868	4 477	4 322
70	3 568	**3 230**	3 095	3 740	**3 386**	3 245	4 089	**3 702**	3 547
60	2 894	2 559	2 426	3 033	2 683	2 543	3 316	2 933	2 780
45	1 895	1 567	1 436	1 987	1 643	1 506	2 172	1 796	1 646
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	5 496	5 056	4 880	5 762	5 300	5 116	6 299	5 794	5 593
70	4 617	**4 180**	4 006	4 840	**4 382**	4 199	5 291	**4 791**	4 591
60	3 745	3 312	3 139	3 925	3 471	3 291	4 292	3 795	3 598
45	2 453	2 028	1 859	2 571	2 126	1 949	2 811	2 324	2 130
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	6 746	6 205	5 989	7 071	6 504	6 278	7 731	7 111	6 864
70	5 666	**5 130**	4 916	5 940	**5 378**	5 153	6 494	**5 879**	5 634
60	4 596	4 064	3 853	4 818	4 260	4 038	5 267	4 658	4 415
45	3 010	2 489	2 281	3 156	2 609	2 391	3 450	2 852	2 615

COIL-KT110

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	12 VA
1000	12 VA
1250	24 VA
1500	24 VA
1750	24 VA
2000	36 VA
2500	48 VA
3000	48 VA

TEMPERATURE EXPONENT m = 1,0543

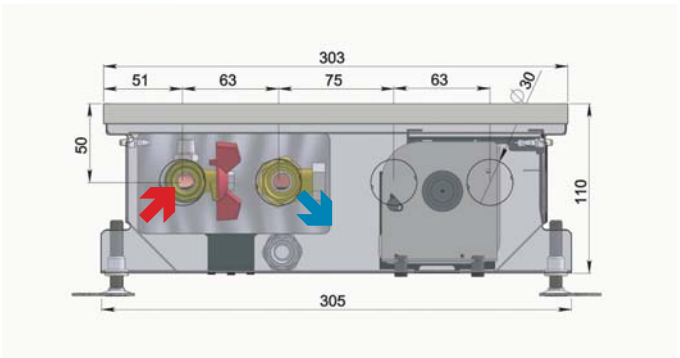
Lowest floor convector with a fan of the KT/MT series

CHARACTERISTICS

- high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control

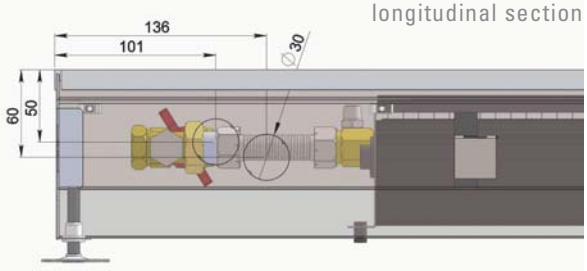
DIMENSIONS

width	303 mm
structural height	110 mm
length	900 to 3000 mm
connection	G½“



cross-section

longitudinal section



1|5|7|8|9*66

THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	958	881	850	1 049	964	930	1 182	1 086	1 048
70	804	**727**	696	880	**796**	762	991	**896**	858
60	650	574	544	712	629	596	802	708	671
45	424	350	320	464	383	351	523	432	395
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	1 118	1 028	991	1 224	1 125	1 086	1 379	1 267	1 223
70	937	**848**	812	1 026	**928**	889	1 156	**1 046**	1 002
60	759	670	635	831	734	695	936	826	783
45	495	408	374	542	447	409	610	503	461
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	1 517	1 394	1 346	1 661	1 527	1 473	1 871	1 720	1 659
70	1 272	**1 151**	1 102	1 393	**1 260**	1 207	1 569	**1 419**	1 359
60	1 030	909	862	1 127	996	943	1 270	1 122	1 062
45	671	554	507	735	607	556	828	683	626
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	1 917	1 761	1 700	2 098	1 929	1 861	2 364	2 172	2 096
70	1 607	**1 453**	1 392	1 760	**1 591**	1 524	1 982	**1 792**	1 717
60	1 301	1 149	1 088	1 424	1 258	1 192	1 604	1 417	1 342
45	848	700	641	929	766	702	1 046	863	790
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	2 316	2 128	2 054	2 536	2 330	2 249	2 856	2 625	2 533
70	1 942	**1 756**	1 682	2 126	**1 923**	1 842	2 395	**2 166**	2 075
60	1 572	1 388	1 315	1 721	1 520	1 440	1 938	1 712	1 622
45	1 025	846	774	1 122	926	848	1 264	1 043	955
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	2 715	2 495	2 408	2 973	2 732	2 636	3 348	3 077	2 969
70	2 277	**2 059**	1 972	2 493	**2 254**	2 159	2 808	**2 539**	2 432
60	1 843	1 627	1 542	2 017	1 782	1 688	2 272	2 007	1 901
45	1 202	991	908	1 316	1 086	994	1 482	1 223	1 120
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	3 514	3 229	3 116	3 847	3 536	3 412	4 333	3 982	3 843
70	2 946	**2 665**	2 552	3 226	**2 917**	2 795	3 633	**3 286**	3 148
60	2 384	2 106	1 995	2 611	2 306	2 184	2 941	2 597	2 460
45	1 555	1 283	1 175	1 703	1 405	1 287	1 918	1 582	1 449
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	4 312	3 963	3 824	4 721	4 339	4 187	5 318	4 888	4 716
70	3 616	**3 270**	3 132	3 959	**3 581**	3 430	4 459	**4 033**	3 863
60	2 926	2 585	2 449	3 204	2 830	2 681	3 609	3 187	3 020
45	1 908	1 575	1 442	2 090	1 724	1 579	2 354	1 942	1 779

COIL-KO

ELECTRICAL POWER FOR FANS

AC MOTOR

length	power
900	32 VA
1000	37 VA
1250	37 VA
1500	64 VA
1750	74 VA
2000	74 VA
2500	106 VA
3000	111 VA

TEMPERATURE EXPONENT m = 1,012688

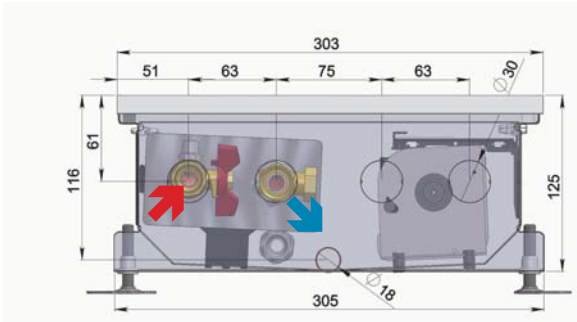
Most common floor convector with a fan for an interior with a wet environment

CHARACTERISTICS

- high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- safe 12V AC voltage
- suitable primarily for swimming pools
- simple control

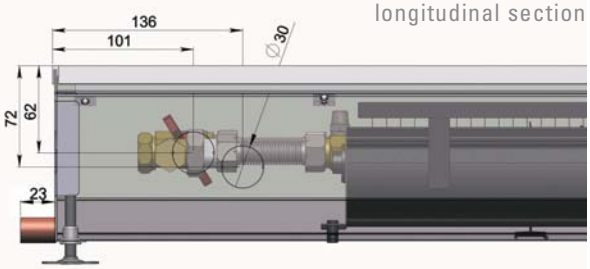
DIMENSIONS

width	303 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½"



cross-section

longitudinal section



1|7|9*66

THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	1 161	1 070	1 034	1 268	1 169	1 129	1 414	1 304	1 260
70	980	**890**	854	1 070	**972**	933	1 194	**1 084**	1 040
60	800	710	674	874	775	736	974	865	821
45	530	441	405	579	482	443	646	537	494
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	1 354	1 249	1 206	1 479	1 364	1 318	1 649	1 521	1 469
70	1 143	**1 038**	996	1 249	**1 134**	1 088	1 392	**1 264**	1 213
60	933	828	786	1 019	905	859	1 136	1 009	958
45	619	514	473	676	562	516	754	627	576
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	1 837	1 694	1 637	2 007	1 851	1 788	2 238	2 064	1 994
70	1 551	**1 409**	1 352	1 695	**1 539**	1 476	1 890	**1 716**	1 646
60	1 266	1 124	1 067	1 383	1 228	1 165	1 542	1 369	1 300
45	840	698	642	917	763	701	1 023	850	782
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	2 321	2 140	2 068	2 535	2 338	2 259	2 827	2 607	2 519
70	1 960	**1 779**	1 707	2 141	**1 944**	1 865	2 387	**2 167**	2 080
60	1 599	1 420	1 348	1 747	1 551	1 472	1 948	1 729	1 642
45	1 061	882	811	1 159	963	885	1 292	1 074	987
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	2 805	2 586	2 499	3 063	2 825	2 730	3 416	3 150	3 044
70	2 368	**2 150**	2 063	2 587	**2 349**	2 254	2 884	**2 619**	2 513
60	1 933	1 715	1 628	2 111	1 874	1 779	2 354	2 089	1 984
45	1 282	1 066	979	1 400	1 164	1 070	1 561	1 298	1 193
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	3 288	3 032	2 930	3 592	3 312	3 200	4 005	3 693	3 569
70	2 776	**2 521**	2 419	3 033	**2 754**	2 642	3 382	**3 071**	2 946
60	2 266	2 011	1 909	2 475	2 197	2 085	2 760	2 450	2 326
45	1 503	1 249	1 148	1 641	1 365	1 254	1 830	1 522	1 399
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	4 255	3 924	3 791	4 648	4 286	4 141	5 183	4 780	4 618
70	3 593	**3 262**	3 130	3 925	**3 563**	3 419	4 376	**3 974**	3 813
60	2 932	2 602	2 471	3 203	2 843	2 699	3 572	3 170	3 010
45	1 945	1 617	1 486	2 124	1 766	1 623	2 369	1 969	1 810
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	5 222	4 816	4 653	5 704	5 260	5 083	6 361	5 866	5 668
70	4 409	**4 004**	3 842	4 817	**4 373**	4 196	5 371	**4 877**	4 679
60	3 599	3 194	3 032	3 931	3 489	3 312	4 383	3 890	3 694
45	2 387	1 984	1 824	2 607	2 168	1 992	2 907	2 417	2 221

COIL-MO

ELECTRICAL POWER FOR FANS

AC MOTOR

length	power
900	32 VA
1000	37 VA
1250	37 VA
1500	64 VA
1750	74 VA
2000	74 VA
2500	106 VA
3000	111 VA

TEMPERATURE EXPONENT m = 1,0435

Most efficient floor convector with a fan for an interior with a wet environment

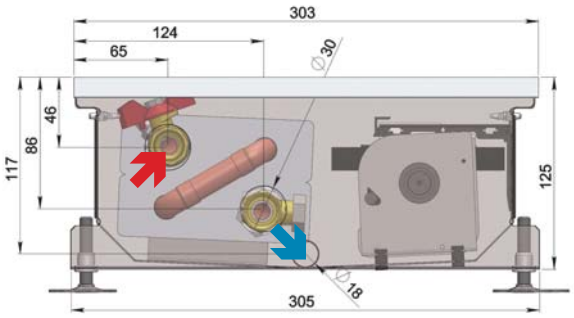
CHARACTERISTICS

- very high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- safe 12V AC voltage
- suitable primarily for swimming pools
- simple control

The convector cannot be installed for a swimming pool with salty or otherwise corrosive water

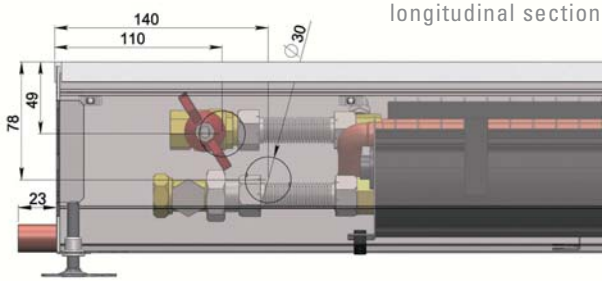
DIMENSIONS

width	303 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½"



cross-section

longitudinal section



THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	1 499	1 379	1 331	1 571	1 445	1 395	1 718	1 580	1 525
70	1 259	**1 140**	1 092	1 320	**1 195**	1 145	1 443	**1 307**	1 252
60	1 021	903	856	1 071	947	897	1 170	1 035	981
45	669	553	507	701	580	531	767	634	581
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	1 749	1 609	1 553	1 833	1 686	1 628	2 004	1 844	1 780
70	1 469	**1 330**	1 275	1 540	**1 394**	1 336	1 684	**1 524**	1 461
60	1 192	1 054	999	1 249	1 105	1 047	1 366	1 208	1 145
45	780	645	591	818	676	620	894	739	678
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	2 373	2 183	2 107	2 488	2 289	2 209	2 720	2 502	2 415
70	1 994	**1 805**	1 730	2 090	**1 892**	1 813	2 285	**2 069**	1 982
60	1 617	1 430	1 356	1 695	1 499	1 421	1 853	1 639	1 553
45	1 059	876	803	1 110	918	841	1 214	1 004	920
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	2 998	2 758	2 662	3 143	2 891	2 790	3 436	3 161	3 051
70	2 518	**2 280**	2 185	2 640	**2 390**	2 290	2 886	**2 613**	2 504
60	2 043	1 806	1 712	2 141	1 894	1 795	2 341	2 070	1 962
45	1 338	1 106	1 014	1 402	1 160	1 063	1 533	1 268	1 162
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	3 623	3 332	3 216	3 797	3 493	3 372	4 152	3 819	3 686
70	3 043	**2 755**	2 640	3 190	**2 888**	2 767	3 488	**3 157**	3 026
60	2 468	2 183	2 069	2 587	2 288	2 169	2 829	2 502	2 371
45	1 617	1 337	1 225	1 695	1 401	1 284	1 853	1 532	1 404
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	4 247	3 907	3 771	4 452	4 095	3 953	4 868	4 477	4 322
70	3 568	**3 230**	3 095	3 740	**3 386**	3 245	4 089	**3 702**	3 547
60	2 894	2 559	2 426	3 033	2 683	2 543	3 316	2 933	2 780
45	1 895	1 567	1 436	1 987	1 643	1 506	2 172	1 796	1 646
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	5 496	5 056	4 880	5 762	5 300	5 116	6 299	5 794	5 593
70	4 617	**4 180**	4 006	4 840	**4 382**	4 199	5 291	**4 791**	4 591
60	3 745	3 312	3 139	3 925	3 471	3 291	4 292	3 795	3 598
45	2 453	2 028	1 859	2 571	2 126	1 949	2 811	2 324	2 130
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	6 746	6 205	5 989	7 071	6 504	6 278	7 731	7 111	6 864
70	5 666	**5 130**	4 916	5 940	**5 378**	5 153	6 494	**5 879**	5 634
60	4 596	4 064	3 853	4 818	4 260	4 038	5 267	4 658	4 415
45	3 010	2 489	2 281	3 156	2 609	2 391	3 450	2 852	2 615

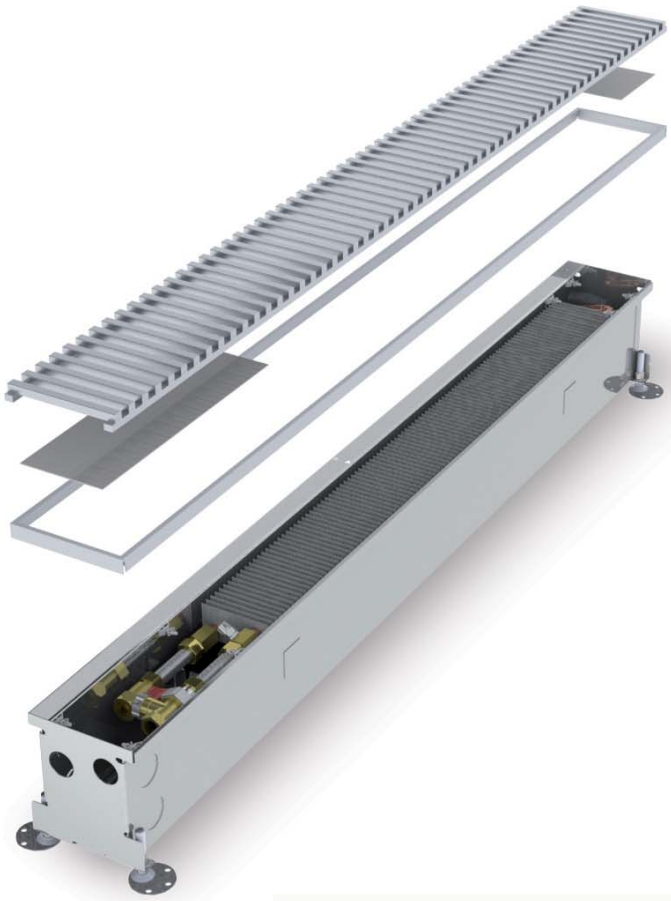
COIL-KTO

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	4 VA
1000	4 VA
1250	8 VA
1500	8 VA
1750	8 VA
2000	12 VA
2500	12 VA
3000	16 VA

TEMPERATURE EXPONENT m = 1,107577



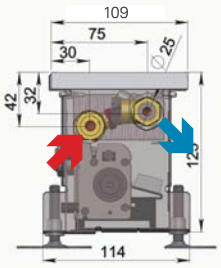
Narrowest floor convector with a fan of the MINIB company

CHARACTERISTICS

- high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control

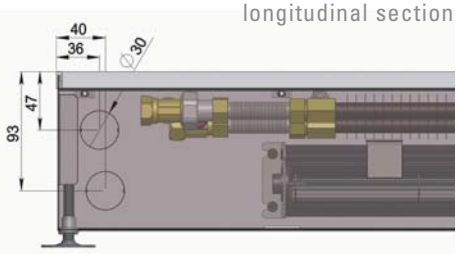
DIMENSIONS

width	109 mm
structural height	125 mm
length	900 to 3000 mm
connection	G 3/8"



cross-section

longitudinal section



THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	400	366	353	478	437	421	617	565	544
70	333	**299**	286	397	**357**	342	513	**462**	441
60	266	234	221	318	279	264	411	360	341
45	170	139	127	203	166	151	262	214	195
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	467	427	412	557	510	491	720	659	635
70	388	**349**	334	463	**417**	398	598	**538**	515
60	311	273	258	371	326	308	479	421	397
45	198	162	148	237	193	176	306	250	228
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	634	580	559	757	692	667	977	894	861
70	527	**474**	453	629	**566**	541	812	**731**	698
60	422	370	350	503	442	418	650	571	539
45	269	220	201	321	263	239	415	339	309
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	801	733	706	956	875	842	1 234	1 130	1 088
70	665	**599**	572	794	**715**	683	1 026	**923**	882
60	533	468	442	636	558	527	821	721	681
45	340	278	253	406	332	302	524	428	391
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	967	885	853	1 155	1 057	1 018	1 492	1 365	1 315
70	804	**723**	691	960	**864**	825	1 240	**1 115**	1 066
60	644	565	534	768	674	637	993	871	823
45	411	336	306	490	401	365	633	518	472
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	1 134	1 038	1 000	1 354	1 239	1 193	1 749	1 600	1 541
70	943	**848**	811	1 125	**1 012**	968	1 453	**1 308**	1 250
60	755	662	626	901	791	747	1 164	1 021	965
45	482	394	359	575	470	428	743	607	553
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	1 468	1 343	1 294	1 752	1 603	1 544	2 263	2 071	1 995
70	1 220	**1 098**	1 049	1 456	**1 310**	1 252	1 881	**1 692**	1 618
60	977	857	810	1 166	1 023	967	1 506	1 322	1 249
45	623	509	464	744	608	554	961	785	716
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	1 801	1 649	1 588	2 150	1 968	1 895	2 777	2 542	2 448
70	1 497	**1 347**	1 288	1 787	**1 608**	1 537	2 308	**2 077**	1 985
60	1 199	1 052	994	1 431	1 256	1 187	1 848	1 622	1 533
45	765	625	570	913	746	680	1 180	964	879

COIL-KT1

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	4 VA
1000	4 VA
1250	8 VA
1500	8 VA
1750	8 VA
2000	12 VA
2500	12 VA
3000	16 VA

TEMPERATURE EXPONENT m = 1,1887

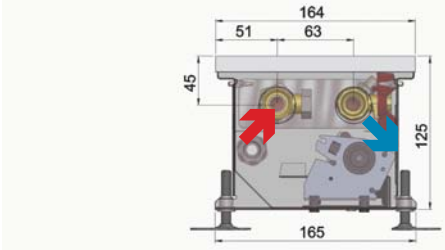
Narrow floor convector with a fan

CHARACTERISTICS

- high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control

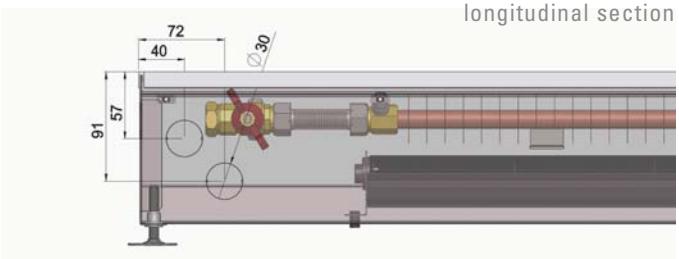
DIMENSIONS

width	164 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½"



cross-section

longitudinal section



1|5|7|8|9*66

THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	600	546	524	639	581	558	727	661	635
70	492	**440**	419	524	**468**	445	596	**532**	507
60	388	337	317	412	359	337	469	408	384
45	239	193	175	255	205	186	290	233	211
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	700	637	612	745	677	651	848	771	740
70	574	**513**	488	611	**545**	520	695	**621**	591
60	452	393	370	481	418	394	548	476	448
45	279	225	204	297	239	217	338	272	247
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	951	864	830	1 011	919	883	1 151	1 046	1 005
70	779	**696**	663	829	**740**	705	943	**842**	802
60	614	534	502	653	568	534	743	646	608
45	379	305	276	403	325	294	459	370	335
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	1 201	1 092	1 049	1 277	1 161	1 115	1 453	1 321	1 269
70	984	**879**	837	1 047	**935**	891	1 192	**1 064**	1 014
60	776	674	634	825	717	675	939	816	768
45	479	386	349	509	410	371	580	467	423
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	1 451	1 319	1 267	1 543	1 403	1 348	1 756	1 597	1 534
70	1 190	**1 062**	1 012	1 265	**1 130**	1 076	1 440	**1 286**	1 225
60	937	815	766	997	867	815	1 134	986	928
45	579	466	422	616	496	449	701	564	511
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	1 701	1 547	1 486	1 809	1 645	1 580	2 059	1 872	1 798
70	1 395	**1 245**	1 186	1 483	**1 325**	1 262	1 688	**1 507**	1 436
60	1 099	955	899	1 169	1 016	956	1 330	1 156	1 088
45	678	546	495	722	581	526	821	661	599
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	2 201	2 001	1 922	2 342	2 129	2 045	2 665	2 423	2 327
70	1 805	**1 612**	1 535	1 920	**1 714**	1 633	2 185	**1 951**	1 858
60	1 422	1 236	1 163	1 512	1 315	1 237	1 721	1 496	1 408
45	878	707	640	934	752	681	1 063	856	775
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	2 702	2 456	2 359	2 874	2 613	2 510	3 270	2 973	2 856
70	2 215	**1 978**	1 884	2 356	**2 104**	2 004	2 681	**2 394**	2 281
60	1 745	1 517	1 427	1 856	1 614	1 518	2 112	1 836	1 728
45	1 078	868	786	1 146	923	836	1 304	1 050	951

COIL-KT2

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	12 VA
1000	12 VA
1250	24 VA
1500	24 VA
1750	24 VA
2000	36 VA
2500	48 VA

TEMPERATURE EXPONENT m = 1,012688

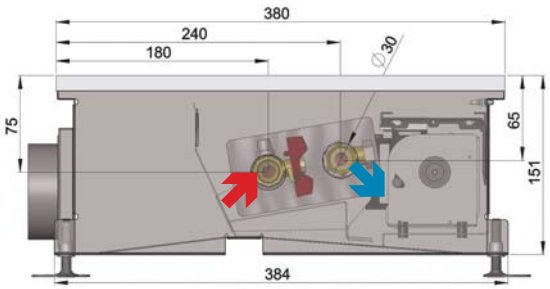
Floor convector with a fan with optional input of fresh air

CHARACTERISTICS

- connection to ventilation outlet
- very high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control

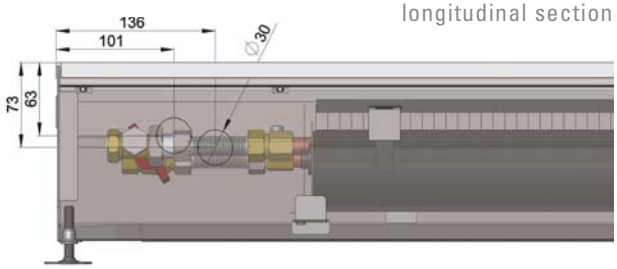
DIMENSIONS

width	380 mm
structural height	151 mm
spiggot	Ø 80mm
length	900 to 2500 mm
connection	G½"



cross-section

longitudinal section



7|8|9*66

THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	1 161	1 070	1 034	1 268	1 169	1 129	1 414	1 304	1 260
70	980	**890**	854	1 070	**972**	933	1 194	**1 084**	1 040
60	800	710	674	874	775	736	974	865	821
45	530	441	405	579	482	443	646	537	494
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	1 354	1 249	1 206	1 479	1 364	1 318	1 649	1 521	1 469
70	1 143	**1 038**	996	1 249	**1 134**	1 088	1 392	**1 264**	1 213
60	933	828	786	1 019	905	859	1 136	1 009	958
45	619	514	473	676	562	516	754	627	576
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	1 837	1 694	1 637	2 007	1 851	1 788	2 238	2 064	1 994
70	1 551	**1 409**	1 352	1 695	**1 539**	1 476	1 890	**1 716**	1 646
60	1 266	1 124	1 067	1 383	1 228	1 165	1 542	1 369	1 300
45	840	698	642	917	763	701	1 023	850	782
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	2 321	2 140	2 068	2 535	2 338	2 259	2 827	2 607	2 519
70	1 960	**1 779**	1 707	2 141	**1 944**	1 865	2 387	**2 167**	2 080
60	1 599	1 420	1 348	1 747	1 551	1 472	1 948	1 729	1 642
45	1 061	882	811	1 159	963	885	1 292	1 074	987
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	2 805	2 586	2 499	3 063	2 825	2 730	3 416	3 150	3 044
70	2 368	**2 150**	2 063	2 587	**2 349**	2 254	2 884	**2 619**	2 513
60	1 933	1 715	1 628	2 111	1 874	1 779	2 354	2 089	1 984
45	1 282	1 066	979	1 400	1 164	1 070	1 561	1 298	1 193
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	3 288	3 032	2 930	3 592	3 312	3 200	4 005	3 693	3 569
70	2 776	**2 521**	2 419	3 033	**2 754**	2 642	3 382	**3 071**	2 946
60	2 266	2 011	1 909	2 475	2 197	2 085	2 760	2 450	2 326
45	1 503	1 249	1 148	1 641	1 365	1 254	1 830	1 522	1 399
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	4 255	3 924	3 791	4 648	4 286	4 141	5 183	4 780	4 618
70	3 593	**3 262**	3 130	3 925	**3 563**	3 419	4 376	**3 974**	3 813
60	2 932	2 602	2 471	3 203	2 843	2 699	3 572	3 170	3 010
45	1 945	1 617	1 486	2 124	1 766	1 623	2 369	1 969	1 810

COIL-KO2

ELECTRICAL POWER FOR FANS

AC MOTOR

length	power
900	32 VA
1000	37 VA
1250	37 VA
1500	64 VA
1750	74 VA
2000	74 VA
2500	106 VA

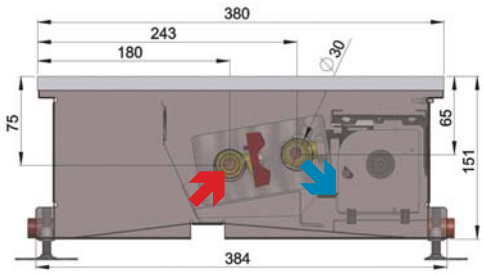
TEMPERATURE EXPONENT m = 1,012688

Most suitable floor convector with a fan for an interior with a swimming pool.

CHARACTERISTICS

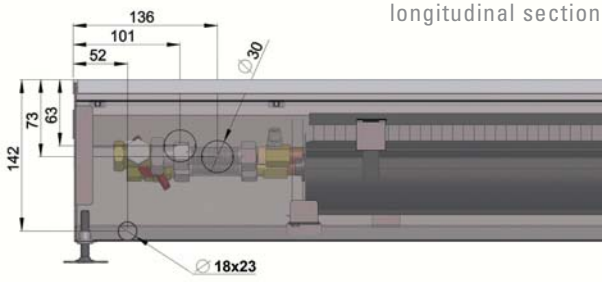
- high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- safe 12V AC voltage
- suitable primarily for swimming pools
- simple control

The convector cannot be installed for a swimming pool with salty or otherwise corrosive water.



cross-section

longitudinal section



DIMENSIONS

width	380 mm
structural height	151 mm
length	900 to 2500 mm
connection	G½“

719*66

THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	1 161	1 070	1 034	1 268	1 169	1 129	1 414	1 304	1 260
70	980	**890**	854	1 070	**972**	933	1 194	**1 084**	1 040
60	800	710	674	874	775	736	974	865	821
45	530	441	405	579	482	443	646	537	494
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	1 354	1 249	1 206	1 479	1 364	1 318	1 649	1 521	1 469
70	1 143	**1 038**	996	1 249	**1 134**	1 088	1 392	**1 264**	1 213
60	933	828	786	1 019	905	859	1 136	1 009	958
45	619	514	473	676	562	516	754	627	576
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	1 837	1 694	1 637	2 007	1 851	1 788	2 238	2 064	1 994
70	1 551	**1 409**	1 352	1 695	**1 539**	1 476	1 890	**1 716**	1 646
60	1 266	1 124	1 067	1 383	1 228	1 165	1 542	1 369	1 300
45	840	698	642	917	763	701	1 023	850	782
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	2 321	2 140	2 068	2 535	2 338	2 259	2 827	2 607	2 519
70	1 960	**1 779**	1 707	2 141	**1 944**	1 865	2 387	**2 167**	2 080
60	1 599	1 420	1 348	1 747	1 551	1 472	1 948	1 729	1 642
45	1 061	882	811	1 159	963	885	1 292	1 074	987
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	2 805	2 586	2 499	3 063	2 825	2 730	3 416	3 150	3 044
70	2 368	**2 150**	2 063	2 587	**2 349**	2 254	2 884	**2 619**	2 513
60	1 933	1 715	1 628	2 111	1 874	1 779	2 354	2 089	1 984
45	1 282	1 066	979	1 400	1 164	1 070	1 561	1 298	1 193
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	3 288	3 032	2 930	3 592	3 312	3 200	4 005	3 693	3 569
70	2 776	**2 521**	2 419	3 033	**2 754**	2 642	3 382	**3 071**	2 946
60	2 266	2 011	1 909	2 475	2 197	2 085	2 760	2 450	2 326
45	1 503	1 249	1 148	1 641	1 365	1 254	1 830	1 522	1 399
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	4 255	3 924	3 791	4 648	4 286	4 141	5 183	4 780	4 618
70	3 593	**3 262**	3 130	3 925	**3 563**	3 419	4 376	**3 974**	3 813
60	2 932	2 602	2 471	3 203	2 843	2 699	3 572	3 170	3 010
45	1 945	1 617	1 486	2 124	1 766	1 623	2 369	1 969	1 810

COIL-KT3

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	12 VA
1000	12 VA
1250	24 VA
1500	24 VA
1750	24 VA
2000	36 VA
2500	48 VA
3000	48 VA

TEMPERATURE EXPONENT m = 1,1059

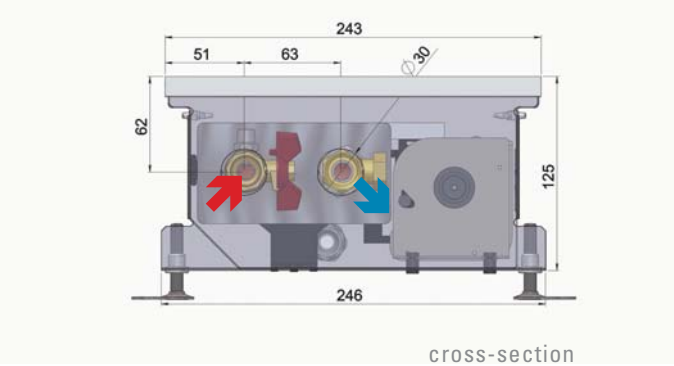
Basic and most popular floor convector with a fan of the KT3 series

CHARACTERISTICS

- very high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control

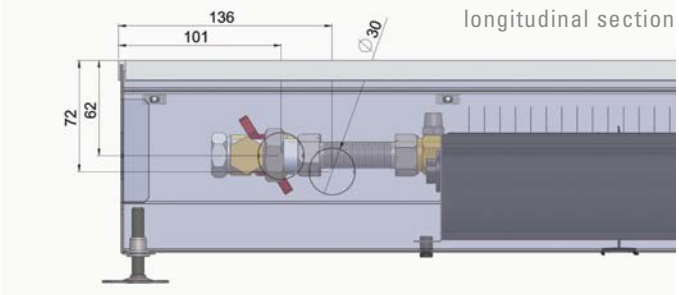
DIMENSIONS

width	243 mm
structural height	125 mm
length	900 to 3000 mm
connection	G½"



cross-section

longitudinal section



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THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	778	712	686	835	764	736	971	888	856
70	647	**582**	556	694	**625**	597	807	**726**	694
60	518	455	430	556	488	461	646	567	536
45	331	270	247	355	290	265	413	337	308
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	908	831	800	974	891	859	1 133	1 037	998
70	754	**679**	649	810	**729**	697	941	**847**	810
60	604	531	501	649	569	538	754	662	626
45	386	315	288	414	339	309	482	394	359
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	1 232	1 127	1 086	1 322	1 210	1 165	1 537	1 407	1 355
70	1 024	**922**	881	1 099	**989**	945	1 278	**1 150**	1 099
60	820	720	680	880	773	730	1 023	898	849
45	524	428	390	562	459	419	654	534	487
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	1 556	1 424	1 372	1 670	1 528	1 472	1 941	1 777	1 712
70	1 293	**1 164**	1 113	1 388	**1 249**	1 194	1 614	**1 453**	1 388
60	1 036	909	859	1 112	976	922	1 293	1 135	1 072
45	662	541	493	710	580	529	826	675	615
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	1 880	1 721	1 657	2 018	1 847	1 779	2 346	2 147	2 068
70	1 563	**1 407**	1 344	1 677	**1 509**	1 443	1 950	**1 755**	1 678
60	1 252	1 099	1 038	1 343	1 179	1 114	1 562	1 371	1 296
45	799	653	596	858	701	640	998	815	744
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	2 204	2 017	1 943	2 365	2 165	2 085	2 750	2 517	2 425
70	1 832	**1 649**	1 576	1 966	**1 770**	1 692	2 286	**2 058**	1 967
60	1 468	1 288	1 217	1 575	1 383	1 306	1 831	1 608	1 519
45	937	766	699	1 006	822	750	1 170	956	872
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	2 852	2 611	2 515	3 061	2 802	2 699	3 559	3 258	3 138
70	2 371	**2 134**	2 040	2 545	**2 290**	2 189	2 959	**2 663**	2 545
60	1 899	1 667	1 575	2 038	1 789	1 691	2 370	2 081	1 966
45	1 213	991	904	1 302	1 064	970	1 514	1 237	1 128
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	3 501	3 204	3 086	3 757	3 439	3 312	4 368	3 998	3 851
70	2 910	**2 619**	2 503	3 123	**2 811**	2 687	3 631	**3 268**	3 124
60	2 331	2 046	1 933	2 502	2 196	2 075	2 909	2 553	2 413
45	1 489	1 217	1 110	1 598	1 306	1 191	1 858	1 518	1 385

COIL-KT3 105

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	12 VA
1000	12 VA
1250	24 VA
1500	24 VA
1750	24 VA
2000	36 VA
2500	48 VA
3000	48 VA

TEMPERATURE EXPONENT m = 1,10542

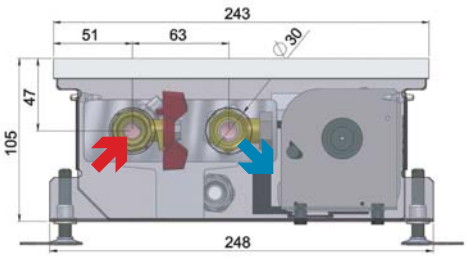
Very efficient convector with a fan of the KT3 series

CHARACTERISTICS

- very high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control

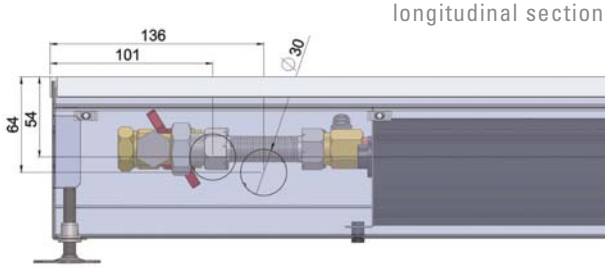
DIMENSIONS

width	243 mm
structural height	105 mm
length	900 to 3000 mm
connection	G½"



cross-section

longitudinal section



216171819*66

THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	1 019	936	903	1 157	1 064	1 026	1 368	1 257	1 213
70	854	**773**	740	970	**878**	841	1 147	**1 037**	993
60	691	611	579	785	694	657	928	820	777
45	451	372	341	512	423	387	605	499	457
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	1 189	1 092	1 054	1 350	1 241	1 197	1 595	1 466	1 415
70	997	**901**	863	1 132	**1 024**	981	1 338	**1 210**	1 159
60	807	712	675	916	809	767	1 083	956	906
45	526	434	398	598	493	452	706	583	534
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	1 613	1 483	1 431	1 832	1 684	1 625	2 165	1 990	1 920
70	1 353	**1 223**	1 172	1 537	**1 390**	1 331	1 816	**1 642**	1 573
60	1 095	967	916	1 244	1 098	1 041	1 469	1 298	1 230
45	714	589	540	811	669	613	958	791	724
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	2 038	1 873	1 807	2 315	2 127	2 053	2 735	2 514	2 426
70	1 709	**1 545**	1 480	1 941	**1 755**	1 681	2 293	**2 074**	1 987
60	1 383	1 221	1 157	1 571	1 387	1 314	1 856	1 639	1 553
45	902	744	682	1 024	845	774	1 211	999	915
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	2 462	2 263	2 183	2 797	2 571	2 480	3 305	3 038	2 931
70	2 065	**1 867**	1 789	2 345	**2 121**	2 032	2 771	**2 506**	2 401
60	1 671	1 476	1 398	1 898	1 676	1 588	2 243	1 981	1 877
45	1 090	899	824	1 238	1 021	935	1 463	1 207	1 105
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	2 887	2 653	2 560	3 279	3 014	2 908	3 875	3 561	3 436
70	2 420	**2 189**	2 097	2 750	**2 487**	2 382	3 249	**2 939**	2 815
60	1 959	1 730	1 639	2 225	1 966	1 862	2 630	2 323	2 200
45	1 278	1 054	965	1 451	1 198	1 097	1 715	1 415	1 296
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	3 736	3 433	3 313	4 244	3 900	3 763	5 014	4 609	4 447
70	3 132	**2 833**	2 714	3 558	**3 218**	3 083	4 205	**3 803**	3 643
60	2 535	2 239	2 121	2 880	2 544	2 410	3 403	3 006	2 847
45	1 653	1 364	1 249	1 878	1 550	1 419	2 219	1 831	1 677
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	4 585	4 214	4 066	5 208	4 787	4 619	6 154	5 656	5 457
70	3 844	**3 477**	3 330	4 367	**3 950**	3 783	5 160	**4 667**	4 470
60	3 111	2 748	2 603	3 534	3 122	2 957	4 176	3 689	3 495
45	2 029	1 674	1 533	2 305	1 902	1 742	2 724	2 247	2 058

COIL-T50

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	4 VA
1000	4 VA
1250	8 VA
1500	8 VA
1750	8 VA
2000	12 VA
2500	12 VA
3000	16 VA

TEMPERATURE EXPONENT m = 0,995571

Unique convector in the global market. Unsurpassed height of only 50 mm.

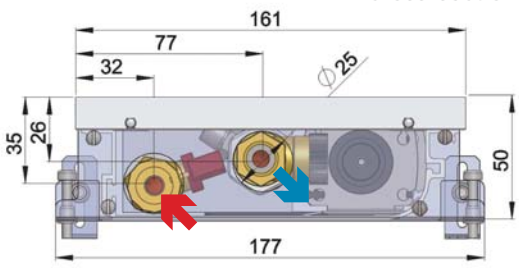
CHARACTERISTICS

- suitable for interiors with the requirement of lowest structural height
- very high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control

DIMENSIONS

width	161 mm
structural height	50 mm
length	900 to 3000 mm
connection	G 3/8"

cross-section



THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	390	360	348	503	464	449	729	673	651
70	330	**300**	288	426	**387**	372	617	**561**	539
60	270	240	228	349	310	295	506	450	427
45	180	150	138	233	194	179	338	282	259
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	454	420	406	586	541	524	851	785	759
70	385	**350**	336	497	**452**	434	720	**655**	629
60	315	280	266	407	362	344	590	525	498
45	210	176	162	272	226	208	394	329	302
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	617	570	551	796	735	710	1 154	1 066	1 030
70	522	**475**	456	674	**613**	588	977	**889**	854
60	428	380	361	552	491	466	800	712	676
45	286	238	219	369	307	283	535	446	410
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	779	719	696	1 005	928	897	1 458	1 346	1 302
70	660	**600**	576	851	**774**	743	1 235	**1 123**	1 078
60	540	480	457	697	620	589	1 011	899	854
45	361	301	277	466	388	357	675	563	518
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	941	869	840	1 215	1 122	1 084	1 762	1 627	1 573
70	797	**725**	696	1 029	**935**	898	1 492	**1 357**	1 303
60	653	581	552	842	749	712	1 222	1 087	1 032
45	436	364	335	563	469	432	816	680	626
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	1 104	1 019	985	1 424	1 315	1 271	2 066	1 907	1 844
70	935	**850**	816	1 206	**1 097**	1 053	1 749	**1 591**	1 527
60	765	681	647	988	878	835	1 432	1 274	1 210
45	511	426	392	660	550	506	957	798	734
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	1 428	1 319	1 275	1 843	1 702	1 645	2 673	2 468	2 386
70	1 209	**1 100**	1 056	1 561	**1 419**	1 363	2 263	**2 059**	1 977
60	990	881	837	1 278	1 137	1 080	1 854	1 648	1 566
45	661	552	508	854	712	655	1 238	1 032	950
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	1 753	1 619	1 565	2 262	2 089	2 019	3 281	3 029	2 929
70	1 484	**1 350**	1 296	1 915	**1 742**	1 673	2 778	**2 526**	2 426
60	1 216	1 081	1 027	1 568	1 395	1 325	2 275	2 023	1 922
45	812	677	623	1 047	874	804	1 519	1 267	1 166

COIL-T60

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	4 VA
1000	4 VA
1250	8 VA
1500	8 VA
1750	8 VA
2000	12 VA
2500	12 VA
3000	16 VA

TEMPERATURE EXPONENT m = 1,09663

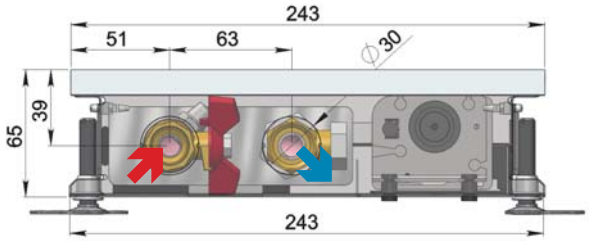
Lowest floor convector with a fan and width of 243 mm

CHARACTERISTICS

- very high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control

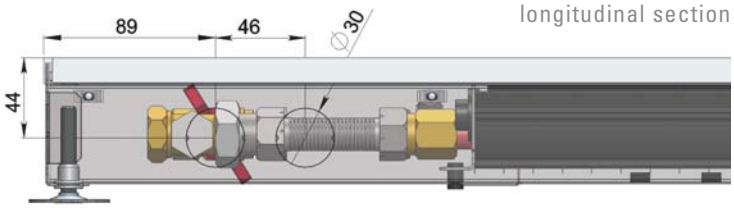
DIMENSIONS

width	243 mm
structural height	65 mm
length	900 to 3000 mm
connection	G½"



cross-section

longitudinal section



THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	728	667	643	877	804	774	1 131	1 036	998
70	606	**546**	522	730	**658**	629	941	**848**	811
60	486	427	404	586	515	487	755	664	628
45	312	255	233	376	308	281	484	397	362
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	849	778	750	1 024	938	903	1 319	1 208	1 164
70	707	**637**	609	852	**768**	734	1 098	**989**	946
60	567	499	471	684	601	568	881	775	732
45	364	298	272	438	359	328	565	463	422
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	1 153	1 056	1 017	1 389	1 272	1 226	1 790	1 640	1 580
70	960	**865**	827	1 157	**1 042**	996	1 491	**1 343**	1 284
60	770	677	640	928	816	771	1 196	1 051	994
45	494	404	369	595	487	445	767	628	573
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	1 456	1 334	1 285	1 755	1 607	1 549	2 261	2 071	1 996
70	1 212	**1 092**	1 044	1 461	**1 316**	1 258	1 883	**1 696**	1 622
60	973	855	808	1 172	1 030	974	1 511	1 328	1 255
45	624	511	466	752	615	562	969	793	724
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	1 759	1 612	1 553	2 120	1 942	1 871	2 733	2 503	2 412
70	1 465	**1 320**	1 262	1 765	**1 590**	1 521	2 275	**2 049**	1 960
60	1 176	1 033	977	1 417	1 245	1 177	1 826	1 604	1 517
45	754	617	563	908	744	679	1 170	958	875
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	2 063	1 889	1 820	2 486	2 277	2 194	3 204	2 934	2 827
70	1 717	**1 547**	1 479	2 070	**1 864**	1 783	2 667	**2 403**	2 297
60	1 378	1 211	1 145	1 661	1 460	1 380	2 140	1 881	1 778
45	883	723	660	1 065	872	796	1 372	1 124	1 025
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	2 669	2 445	2 356	3 217	2 947	2 839	4 146	3 798	3 659
70	2 223	**2 002**	1 914	2 678	**2 413**	2 307	3 452	**3 109**	2 973
60	1 784	1 567	1 482	2 149	1 889	1 786	2 770	2 434	2 301
45	1 143	936	854	1 378	1 128	1 030	1 776	1 454	1 327
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	3 276	3 001	2 891	3 948	3 616	3 484	5 088	4 661	4 491
70	2 728	**2 457**	2 349	3 287	**2 961**	2 831	4 236	**3 816**	3 649
60	2 189	1 924	1 818	2 638	2 318	2 191	3 400	2 988	2 824
45	1 403	1 149	1 049	1 691	1 385	1 264	2 179	1 784	1 628

COIL-T80

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	4 VA
1000	4 VA
1250	8 VA
1500	8 VA
1750	8 VA
2000	12 VA
2500	12 VA
3000	16 VA

TEMPERATURE EXPONENT m = 1,096629

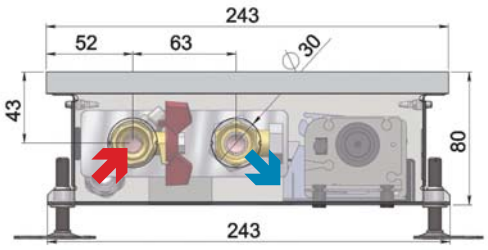
Very popular and efficient floor convector with width of 243 mm.

CHARACTERISTICS

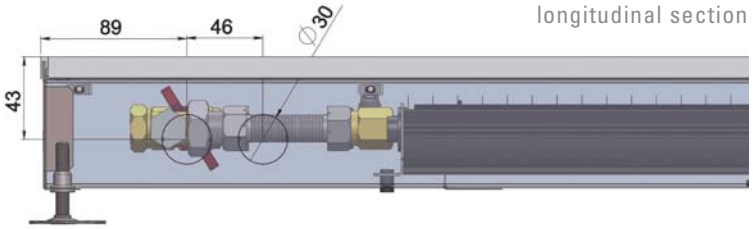
- very high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control

DIMENSIONS

width	243 mm
structural height	80 mm
length	900 to 3000 mm
connection	G½"



cross-section



longitudinal section

216171819*66

THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	870	797	767	1 047	959	924	1 350	1 237	1 192
70	724	**652**	624	872	**786**	751	1 124	**1 013**	968
60	581	511	483	700	615	581	902	793	750
45	372	305	278	449	367	335	578	474	432
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	1 015	929	895	1 222	1 119	1 078	1 576	1 443	1 390
70	845	**761**	728	1 017	**916**	876	1 312	**1 182**	1 130
60	678	596	563	816	718	678	1 053	925	875
45	435	356	325	523	429	391	675	553	504
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	1 377	1 261	1 215	1 658	1 519	1 464	2 138	1 959	1 887
70	1 146	**1 033**	987	1 381	**1 244**	1 189	1 780	**1 604**	1 533
60	920	808	764	1 108	974	921	1 429	1 256	1 187
45	590	483	441	710	582	531	916	750	684
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	1 739	1 593	1 535	2 095	1 919	1 849	2 701	2 474	2 384
70	1 448	**1 304**	1 247	1 744	**1 571**	1 502	2 249	**2 026**	1 937
60	1 162	1 021	965	1 400	1 230	1 163	1 805	1 586	1 499
45	745	610	557	897	735	670	1 157	947	864
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	2 102	1 925	1 855	2 531	2 319	2 234	3 264	2 989	2 880
70	1 750	**1 576**	1 507	2 108	**1 898**	1 815	2 717	**2 448**	2 340
60	1 404	1 234	1 167	1 691	1 486	1 405	2 181	1 916	1 811
45	900	737	673	1 084	888	810	1 398	1 145	1 045
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	2 464	2 257	2 175	2 968	2 718	2 619	3 826	3 505	3 377
70	2 051	**1 848**	1 767	2 471	**2 226**	2 128	3 186	**2 870**	2 744
60	1 646	1 447	1 368	1 983	1 743	1 647	2 556	2 247	2 124
45	1 055	864	789	1 271	1 041	950	1 639	1 342	1 225
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	3 189	2 921	2 814	3 841	3 518	3 389	4 952	4 536	4 370
70	2 655	**2 391**	2 287	3 198	**2 880**	2 754	4 123	**3 714**	3 551
60	2 130	1 872	1 770	2 566	2 255	2 132	3 308	2 908	2 748
45	1 366	1 118	1 021	1 645	1 347	1 229	2 121	1 737	1 585
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	3 913	3 584	3 454	4 713	4 317	4 160	6 077	5 566	5 363
70	3 258	**2 935**	2 806	3 924	**3 535**	3 380	5 060	**4 558**	4 358
60	2 615	2 298	2 172	3 149	2 768	2 616	4 060	3 568	3 373
45	1 676	1 372	1 252	2 019	1 653	1 509	2 603	2 131	1 945

COIL-TO85

ELECTRICAL POWER FOR FANS

AC MOTOR

length	power
900	33 VA
1000	33 VA
1250	33 VA
1500	66 VA
1750	66 VA
2000	66 VA
2500	99 VA
3000	99 VA

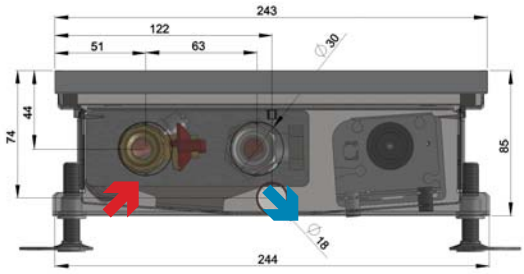
TEMPERATURE EXPONENT m = 1,1523

Floor convector with a fan for an interior with wet environment with smallest height and width

CHARACTERISTICS

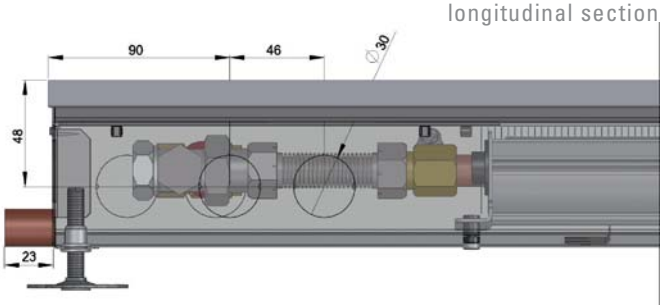
- high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- safe 12V AC voltage
- suitable primarily for swimming pools
- simple control

The convector cannot be installed for a swimming pool with salty or otherwise corrosive water.



cross-section

longitudinal section



DIMENSIONS

width	243 mm
structural height	85 mm
length	900 to 3000 mm
connection	G½“

21719*66

THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 minimum r.p.m.			Level 2 medium r.p.m.			Level 3 maximum r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	669	610	587	954	870	837	1 085	990	952
70	552	**495**	472	787	**705**	673	895	**802**	765
60	438	382	360	625	545	514	711	620	585
45	275	223	202	392	317	288	445	361	328
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	781	712	685	1 114	1 015	977	1 266	1 155	1 111
70	644	**577**	550	919	**823**	785	1 045	**936**	893
60	511	446	421	729	636	600	829	724	682
45	320	260	236	457	370	336	520	421	383
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	1 059	966	929	1 511	1 378	1 325	1 719	1 567	1 507
70	874	**783**	747	1 247	**1 117**	1 066	1 418	**1 270**	1 212
60	694	606	571	989	864	814	1 125	982	926
45	435	352	320	620	503	456	705	572	519
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	1 338	1 220	1 174	1 909	1 741	1 674	2 171	1 980	1 904
70	1 104	**989**	944	1 575	**1 411**	1 346	1 791	**1 605**	1 531
60	876	765	721	1 250	1 091	1 028	1 421	1 241	1 170
45	549	445	404	783	635	577	891	722	656
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	1 617	1 475	1 418	2 307	2 103	2 023	2 623	2 392	2 300
70	1 334	**1 195**	1 140	1 903	**1 705**	1 626	2 164	**1 939**	1 850
60	1 059	924	871	1 510	1 318	1 243	1 717	1 499	1 413
45	663	538	488	946	767	697	1 076	872	792
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	1 896	1 729	1 663	2 704	2 466	2 372	3 076	2 805	2 697
70	1 564	**1 401**	1 337	2 231	**1 999**	1 907	2 537	**2 273**	2 169
60	1 241	1 084	1 021	1 770	1 546	1 457	2 013	1 758	1 657
45	778	630	573	1 109	899	817	1 262	1 023	929
	15	20	22	15	20	22	15	20	22
	length L (mm)		2500	length L (mm)		2500	length L (mm)		2500
80	2 454	2 237	2 152	3 500	3 191	3 069	3 980	3 629	3 490
70	2 024	**1 813**	1 730	2 887	**2 587**	2 468	3 283	**2 942**	2 807
60	1 606	1 402	1 322	2 291	2 000	1 885	2 605	2 275	2 144
45	1 007	816	741	1 436	1 164	1 057	1 633	1 323	1 202
	15	20	22	15	20	22	15	20	22
	length L (mm)		3000	length L (mm)		3000	length L (mm)		3000
80	3 011	2 746	2 641	4 295	3 917	3 767	4 885	4 454	4 284
70	2 484	**2 226**	2 123	3 543	**3 174**	3 029	4 029	**3 610**	3 444
60	1 971	1 721	1 622	2 812	2 455	2 314	3 198	2 792	2 631
45	1 235	1 001	910	1 762	1 428	1 297	2 004	1 624	1 475

COIL-HC

TEMPERATURE EXPONENT FOR HEATING/COOLING

m = 1,0456/ 0,864

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	12 VA
1000	12 VA
1250	24 VA
1500	24 VA
1750	24 VA
2000	36 VA
2500	48 VA
3000	48 VA

AC MOTOR

length	power
900	32 VA
1000	37 VA
1250	37 VA
1500	64 VA
1750	74 VA
2000	74 VA
2500	106 VA
3000	111 VA

Very efficient single circuit floor convector with a fan for heating and cooling.

Suitable for all types of interiors. This convector is standardly supplied with a DC fan motor or, for use in a wet environment, with an AC motor.

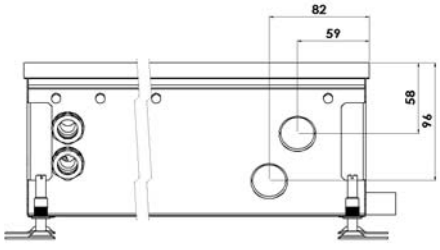
CHARACTERISTICS

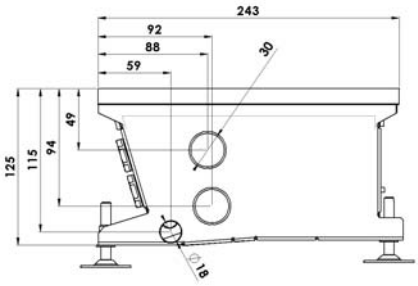
- single circuit connection
- high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- simple control

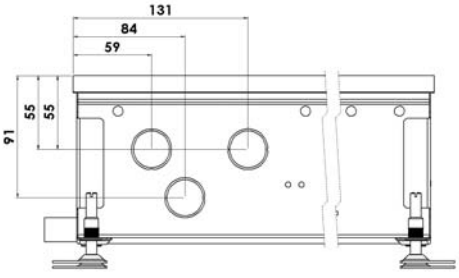
DIMENSIONS

width	243 mm
structural height	125 mm
length	900 to 3000 mm
connection	G$^{3}/_{8}$“

Connection scheme







21719*66

THERMAL OUTPUT Q [W]

Level 1 min. r.p.m.

mean water temperature t_W	air temperature t_A 15	20	22
	length L (mm)		900
80	1 134	1 043	1 007
70	952	**862**	826
60	772	683	647
45	505	418	383
	length L (mm)		1000
80	1 323	1 217	1 175
70	1 111	**1 006**	964
60	901	796	755
45	590	487	447
	length L (mm)		1250
80	1 796	1 652	1 594
70	1 508	**1 365**	1 308
60	1 223	1 081	1 024
45	800	661	606
	length L (mm)		1500
80	2 268	2 086	2 013
70	1 905	**1 724**	1 652
60	1 544	1 365	1 294
45	1 011	835	765
	length L (mm)		1750
80	2 741	2 521	2 433
70	2 302	**2 083**	1 996
60	1 866	1 650	1 564
45	1 221	1 009	925
	length L (mm)		2000
80	3 213	2 955	2 852
70	2 698	**2 442**	2 340
60	2 188	1 934	1 833
45	1 432	1 183	1 084
	length L (mm)		2500
80	4 158	3 825	3 691
70	3 492	**3 161**	3 029
60	2 831	2 503	2 372
45	1 853	1 531	1 403
	length L (mm)		3000
80	5 104	4 694	4 530
70	4 286	**3 879**	3 717
60	3 474	3 072	2 912
45	2 274	1 879	1 722

Level 2 medium r.p.m.

mean water temperature t_W	air temperature t_A 15	20	22
	length L (mm)		900
80	1 245	1 145	1 105
70	1 045	**946**	907
60	848	749	710
45	555	458	420
	length L (mm)		1000
80	1 452	1 336	1 289
70	1 220	**1 104**	1 058
60	989	874	829
45	647	535	490
	length L (mm)		1250
80	1 971	1 813	1 750
70	1 655	**1 498**	1 436
60	1 342	1 187	1 125
45	878	726	665
	length L (mm)		1500
80	2 490	2 290	2 210
70	2 091	**1 893**	1 813
60	1 695	1 499	1 420
45	1 109	917	840
	length L (mm)		1750
80	3 009	2 767	2 671
70	2 526	**2 287**	2 191
60	2 048	1 811	1 716
45	1 341	1 108	1 015
	length L (mm)		2000
80	3 527	3 244	3 131
70	2 962	**2 681**	2 569
60	2 401	2 123	2 012
45	1 572	1 299	1 190
	length L (mm)		2500
80	4 565	4 198	4 052
70	3 833	**3 470**	3 325
60	3 108	2 748	2 604
45	2 034	1 681	1 541
	length L (mm)		3000
80	5 602	5 153	4 973
70	4 704	**4 258**	4 080
60	3 814	3 372	3 196
45	2 496	2 063	1 891

Level 3 max. r.p.m.

mean water temperature t_W	air temperature t_A 15	20	22
	length L (mm)		900
80	1 493	1 373	1 325
70	1 253	**1 135**	1 087
60	1 016	898	852
45	665	550	504
	length L (mm)		1000
80	1 741	1 602	1 546
70	1 462	**1 324**	1 268
60	1 186	1 048	993
45	776	641	588
	length L (mm)		1250
80	2 363	2 174	2 098
70	1 985	**1 796**	1 721
60	1 609	1 423	1 348
45	1 053	870	798
	length L (mm)		1500
80	2 985	2 746	2 650
70	2 507	**2 269**	2 174
60	2 032	1 797	1 703
45	1 330	1 099	1 007
	length L (mm)		1750
80	3 607	3 318	3 202
70	3 029	**2 742**	2 627
60	2 456	2 171	2 058
45	1 607	1 328	1 217
	length L (mm)		2000
80	4 229	3 890	3 754
70	3 551	**3 214**	3 080
60	2 879	2 546	2 413
45	1 884	1 557	1 427
	length L (mm)		2500
80	5 473	5 034	4 858
70	4 596	**4 160**	3 986
60	3 726	3 294	3 122
45	2 439	2 015	1 847
	length L (mm)		3000
80	6 717	6 177	5 962
70	5 640	**5 105**	4 892
60	4 573	4 043	3 832
45	2 993	2 473	2 267

COOLING OUTPUT Q [W]

Level 2 medium r.p.m.

mean water temperature t_W	air temperature t_A 24	25	26	27
	length L (mm)			900
9	306	324	**341**	359
11	271	289	306	324
13	234	253	271	289
15	197	216	234	253
16	178	197	216	234
	length L (mm)			1000
9	357	378	**398**	418
11	316	337	357	378
13	273	295	316	337
15	230	252	273	295
16	208	230	252	273
	length L (mm)			1250
9	485	513	**540**	568
11	429	457	485	513
13	371	400	429	457
15	312	342	371	400
16	282	312	342	371
	length L (mm)			1500
9	613	648	**682**	717
11	541	577	613	648
13	469	505	541	577
15	394	431	469	505
16	356	394	431	469
	length L (mm)			1750
9	740	783	**825**	866
11	654	697	740	783
13	566	610	654	697
15	476	521	566	610
16	430	476	521	566
	length L (mm)			2000
9	868	917	**967**	1 016
11	767	818	868	917
13	664	716	767	818
15	558	611	664	716
16	504	558	611	664
	length L (mm)			2500
9	1 123	1 187	**1 251**	1 315
11	992	1 058	1 123	1 187
13	859	926	992	1 058
15	722	791	859	926
16	652	722	791	859
	length L (mm)			3000
9	1 378	1 457	**1 536**	1 613
11	1 218	1 298	1 378	1 457
13	1 054	1 136	1 218	1 298
15	886	971	1 054	1 136
16	801	886	971	1 054

Level 3 max. r.p.m.

mean water temperature t_W	air temperature t_A 24	25	26	27
	length L (mm)			900
9	340	360	**379**	398
11	301	321	340	360
13	260	281	301	321
15	219	240	260	281
16	198	219	240	260
	length L (mm)			1000
9	397	420	**442**	465
11	351	374	397	420
13	304	327	351	374
15	255	280	304	327
16	231	255	280	304
	length L (mm)			1250
9	539	570	**600**	631
11	476	508	539	570
13	412	444	476	508
15	347	380	412	444
16	313	347	380	412
	length L (mm)			1500
9	681	720	**758**	797
11	602	641	681	720
13	521	561	602	641
15	438	480	521	561
16	395	438	480	521
	length L (mm)			1750
9	822	870	**916**	963
11	727	775	822	870
13	629	678	727	775
15	529	579	629	678
16	478	529	579	629
	length L (mm)			2000
9	964	1 020	**1 074**	1 129
11	852	908	964	1 020
13	738	795	852	908
15	620	679	738	795
16	560	620	679	738
	length L (mm)			2500
9	1 248	1 319	**1 390**	1 461
11	1 103	1 176	1 248	1 319
13	955	1 029	1 103	1 176
15	803	879	955	1 029
16	725	803	879	955
	length L (mm)			3000
9	1 531	1 619	**1 706**	1 793
11	1 353	1 443	1 531	1 619
13	1 171	1 263	1 353	1 443
15	985	1 079	1 171	1 263
16	890	985	1 079	1 171

COIL-HC4pipe

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	12 VA
1000	12 VA
1250	24 VA
1500	24 VA
1750	24 VA
2000	36 VA
2500	48 VA
3000	48 VA

AC MOTOR

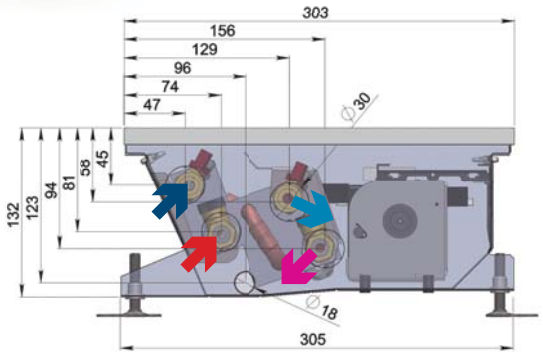
length	power
900	32 VA
1000	37 VA
1250	37 VA
1500	64 VA
1750	74 VA
2000	74 VA
2500	106 VA
3000	111 VA

TEMPERATURE EXPONENT FOR HEATING/COOLING

m = 1,0864/ 0,907

Very efficient two-circuit floor convector with a fan for heating and cooling.

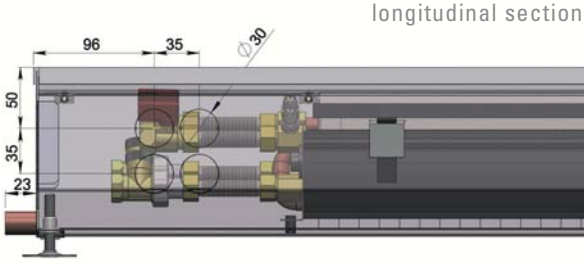
The two-circuit connection permits use of the cooling and heating circuits separately. Consequently, it is suitable for all types of interiors. This convector is supplied as standard with a DC fan motor and, for use in a wet environment, with an AC motor.



cross-section

- output – heating circuit
- input – cooling circuit
- input – heating circuit
- output – cooling circuit

longitudinal section



CHARACTERISTICS

- double circuit connection
- high forced convection output
- rapidly reacting heating/cooling output
- heats even when the fan is turned off
- simple control

DIMENSIONS

width	303 mm
structural height	132 mm
length	900 to 3000 mm
connection	G3/8"

11719*66

THERMAL OUTPUT Q [W]

Level 1 min. r.p.m.

mean water temperature t_W	air temperature t_A 15	20	22
	length L (mm)		900
80	941	863	832
70	785	**708**	677
60	631	555	525
45	406	333	304
	length L (mm)		1000
80	1 098	1 007	970
70	916	**826**	790
60	736	648	613
45	474	389	355
	length L (mm)		1250
80	1 490	1 366	1 317
70	1 243	**1 121**	1 072
60	1 000	879	832
45	643	528	482
	length L (mm)		1500
80	1 883	1 726	1 663
70	1 570	**1 416**	1 354
60	1 263	1 111	1 051
45	813	667	609
	length L (mm)		1750
80	2 275	2 085	2 010
70	1 897	**1 711**	1 636
60	1 526	1 342	1 270
45	982	806	736
	length L (mm)		2000
80	2 667	2 445	2 356
70	2 224	**2 006**	1 919
60	1 789	1 574	1 488
45	1 151	944	863
	length L (mm)		2500
80	3 451	3 164	3 049
70	2 879	**2 595**	2 483
60	2 315	2 037	1 926
45	1 490	1 222	1 116
	length L (mm)		3000
80	4 236	3 883	3 743
70	3 533	**3 185**	3 047
60	2 841	2 500	2 364
45	1 829	1 500	1 370

Level 2 medium r.p.m.

mean water temperature t_W	air temperature t_A 15	20	22
	length L (mm)		900
80	1 029	943	909
70	858	**774**	740
60	690	607	574
45	444	364	333
	length L (mm)		1000
80	1 200	1 100	1 061
70	1 001	**903**	863
60	805	708	670
45	518	425	388
	length L (mm)		1250
80	1 629	1 493	1 439
70	1 359	**1 225**	1 172
60	1 092	961	909
45	703	577	527
	length L (mm)		1500
80	2 058	1 886	1 818
70	1 716	**1 547**	1 480
60	1 380	1 214	1 148
45	888	729	666
	length L (mm)		1750
80	2 486	2 279	2 197
70	2 074	**1 870**	1 789
60	1 667	1 467	1 388
45	1 073	880	804
	length L (mm)		2000
80	2 915	2 672	2 576
70	2 431	**2 192**	2 097
60	1 955	1 720	1 627
45	1 258	1 032	943
	length L (mm)		2500
80	3 772	3 458	3 333
70	3 146	**2 837**	2 714
60	2 530	2 226	2 105
45	1 629	1 336	1 220
	length L (mm)		3000
80	4 630	4 244	4 091
70	3 861	**3 481**	3 330
60	3 105	2 732	2 584
45	1 999	1 640	1 498

Level 3 max. r.p.m.

mean water temperature t_W	air temperature t_A 15	20	22
	length L (mm)		900
80	1 130	1 035	998
70	942	**849**	813
60	758	667	630
45	488	400	365
	length L (mm)		1000
80	1 318	1 208	1 164
70	1 099	**991**	948
60	884	778	736
45	569	467	426
	length L (mm)		1250
80	1 788	1 640	1 580
70	1 492	**1 345**	1 287
60	1 199	1 055	998
45	772	633	579
	length L (mm)		1500
80	2 259	2 071	1 996
70	1 884	**1 699**	1 625
60	1 515	1 333	1 261
45	975	800	731
	length L (mm)		1750
80	2 730	2 502	2 412
70	2 277	**2 053**	1 964
60	1 831	1 611	1 524
45	1 178	967	883
	length L (mm)		2000
80	3 200	2 934	2 828
70	2 669	**2 407**	2 302
60	2 146	1 889	1 786
45	1 382	1 133	1 035
	length L (mm)		2500
80	4 142	3 797	3 660
70	3 454	**3 115**	2 979
60	2 778	2 444	2 312
45	1 788	1 467	1 340
	length L (mm)		3000
80	5 083	4 660	4 491
70	4 239	**3 822**	3 657
60	3 409	3 000	2 837
45	2 194	1 800	1 644

COOLING OUTPUT Q [W]

Level 2 medium r.p.m.

mean water temperature t_W	air temperature t_A 24	25	26	27
	length L (mm)			900
9	314	333	**351**	370
11	276	295	314	333
13	237	256	276	295
15	197	217	237	256
16	177	197	217	237
	length L (mm)			1000
9	366	388	**410**	432
11	321	344	366	388
13	276	299	321	344
15	230	253	276	299
16	207	230	253	276
	length L (mm)			1250
9	497	527	**556**	586
11	436	467	497	527
13	375	406	436	467
15	313	344	375	406
16	281	313	344	375
	length L (mm)			1500
9	627	665	**703**	740
11	551	589	627	665
13	474	512	551	589
15	395	434	474	512
16	355	395	434	474
	length L (mm)			1750
9	758	804	**849**	894
11	666	712	758	804
13	572	619	666	712
15	477	525	572	619
16	429	477	525	572
	length L (mm)			2000
9	889	942	**996**	1 049
11	781	835	889	942
13	671	726	781	835
15	559	615	671	726
16	503	559	615	671
	length L (mm)			2500
9	1 150	1 220	**1 289**	1 357
11	1 010	1 081	1 150	1 220
13	868	940	1 010	1 081
15	724	796	868	940
16	650	724	796	868
	length L (mm)			3000
9	1 412	1 497	**1 581**	1 666
11	1 240	1 326	1 412	1 497
13	1 066	1 153	1 240	1 326
15	888	977	1 066	1 153
16	798	888	977	1 066

Level 3 max. r.p.m.

mean water temperature t_W	air temperature t_A 24	25	26	27
	length L (mm)			900
9	339	359	**379**	399
11	297	318	339	359
13	256	277	297	318
15	213	234	256	277
16	191	213	234	256
	length L (mm)			1000
9	395	419	**443**	466
11	347	371	395	419
13	298	323	347	371
15	249	273	298	323
16	223	249	273	298
	length L (mm)			1250
9	536	568	**601**	632
11	471	504	536	568
13	405	438	471	504
15	337	371	405	438
16	303	337	371	405
	length L (mm)			1500
9	677	718	**759**	799
11	595	636	677	718
13	511	553	595	636
15	426	469	511	553
16	383	426	469	511
	length L (mm)			1750
9	818	868	**917**	965
11	719	769	818	868
13	618	668	719	769
15	515	566	618	668
16	463	515	566	618
	length L (mm)			2000
9	959	1 017	**1 075**	1 132
11	843	901	959	1 017
13	724	784	843	901
15	604	664	724	784
16	542	604	664	724
	length L (mm)			2500
9	1 241	1 316	**1 391**	1 465
11	1 090	1 166	1 241	1 316
13	937	1 014	1 090	1 166
15	781	859	937	1 014
16	702	781	859	937
	length L (mm)			3000
9	1 524	1 615	**1 707**	1 798
11	1 338	1 431	1 524	1 615
13	1 150	1 244	1 338	1 431
15	959	1 055	1 150	1 244
16	862	959	1 055	1 150

COIL-HCM

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	26 VA
1000	51 VA
1250	51 VA
1500	51 VA
1750	76 VA
2000	76 VA

TEMPERATURE EXPONENT FOR HEATING/COOLING

m = 0,9738/ 1

Most efficient floor convector of the MINIB company

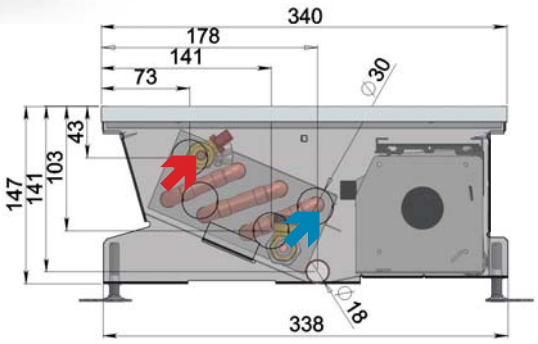
Suitable for interiors with requirements of high heating output or for cooling

CHARACTERISTICS

- single circuit connection
- rapidly reacting heating unit
- heats even when the fan is turned off
- very high forced convection heating efficiency
- safe 12 V DC voltage
- simple control

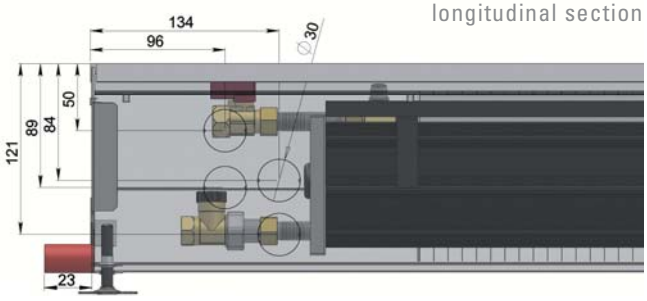
DIMENSIONS

width	340 mm
structural height	147 mm
length	900 to 2000 mm
connection	G 3/8"



cross-section

longitudinal section



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THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 min. r.p.m.			Level 2 medium r.p.m.			Level 3 max. r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	1 999	1 849	1 789	2 424	2 243	2 170	3 008	2 782	2 692
70	1 699	**1 549**	1 488	2 060	**1 878**	1 805	2 556	**2 330**	2 239
60	1 398	1 246	1 185	1 695	1 511	1 437	2 103	1 875	1 783
45	942	788	727	1 142	956	882	1 417	1 186	1 094
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	2 332	2 158	2 088	2 828	2 616	2 531	3 509	3 246	3 141
70	1 982	**1 807**	1 736	2 404	**2 191**	2 105	2 982	**2 718**	2 612
60	1 630	1 454	1 383	1 977	1 763	1 677	2 453	2 187	2 081
45	1 099	920	848	1 332	1 115	1 028	1 653	1 384	1 276
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	3 166	2 928	2 833	3 839	3 551	3 435	4 762	4 405	4 262
70	2 690	**2 452**	2 356	3 262	**2 973**	2 857	4 047	**3 689**	3 545
60	2 213	1 973	1 877	2 683	2 392	2 276	3 329	2 968	2 824
45	1 491	1 248	1 151	1 808	1 514	1 396	2 243	1 878	1 732
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	3 999	3 699	3 579	4 849	4 485	4 339	6 016	5 565	5 384
70	3 398	**3 097**	2 976	4 121	**3 755**	3 609	5 113	**4 659**	4 478
60	2 795	2 492	2 371	3 389	3 022	2 875	4 205	3 749	3 567
45	1 883	1 577	1 454	2 284	1 912	1 763	2 833	2 372	2 187
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	4 832	4 469	4 324	5 859	5 420	5 244	7 269	6 724	6 506
70	4 106	**3 742**	3 596	4 979	**4 538**	4 361	6 178	**5 630**	5 411
60	3 377	3 011	2 865	4 095	3 652	3 474	5 081	4 531	4 310
45	2 276	1 905	1 757	2 759	2 311	2 130	3 424	2 867	2 643
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	5 665	5 240	5 070	6 869	6 354	6 148	8 522	7 883	7 627
70	4 814	**4 387**	4 216	5 838	**5 320**	5 113	7 243	**6 601**	6 344
60	3 960	3 531	3 359	4 801	4 281	4 073	5 957	5 312	5 053
45	2 668	2 234	2 060	3 235	2 709	2 498	4 014	3 361	3 099

COOLING OUTPUT Q [W]

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

COIL-HCM4pipe

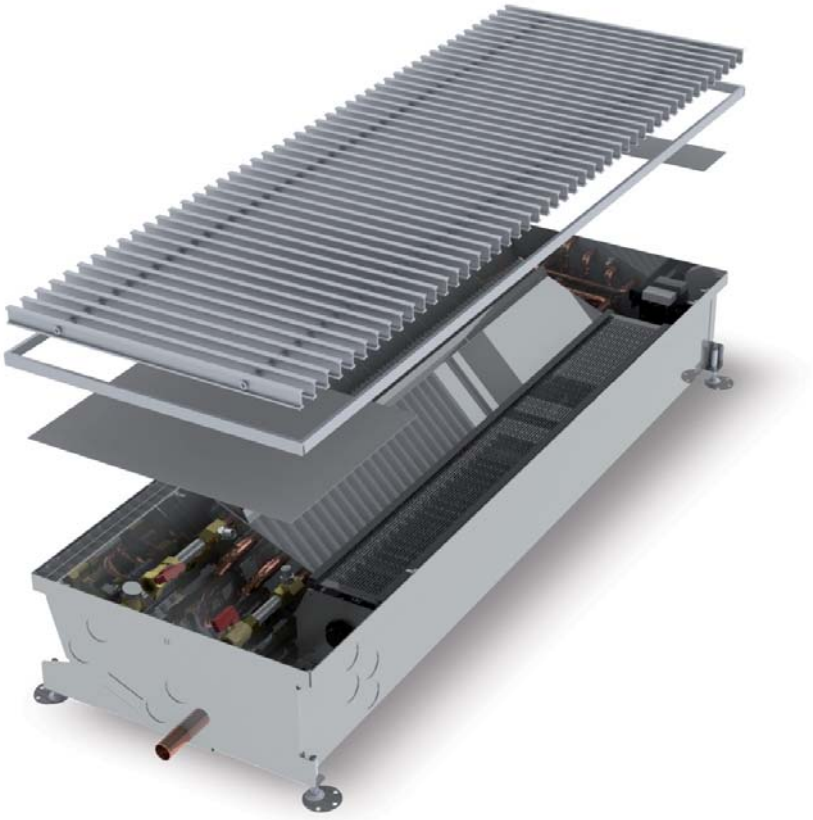
ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	26 VA
1000	51 VA
1250	51 VA
1500	51 VA
1750	76 VA
2000	76 VA

TEMPERATURE EXPONENT FOR HEATING/COOLING

m = 1,0592/ 1



Most efficient floor convector of the MINIB range with two-circuit separated system for the heating and cooling circuit.

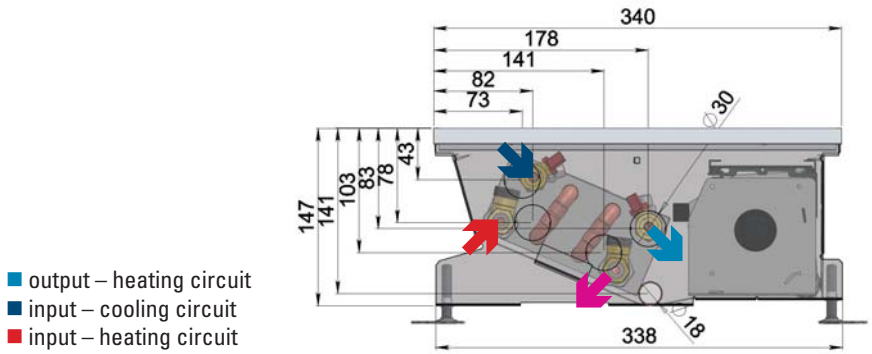
The two-circuit connection permits use of the heating and cooling circuits separately.

CHARACTERISTICS

- two-circuit connection
- rapidly reacting heating unit
- heats even when the fan is turned off
- very high forced convection heating efficiency
- safe 12 V DC voltage
- simple control

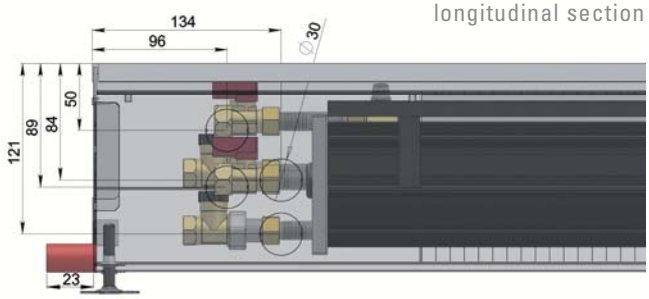
DIMENSIONS

width	340 mm
structural height	147 mm
length	900 to ˝2000 mm
connection	G 3/8 "



cross-section

longitudinal section



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THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 min. r.p.m.			Level 2 medium r.p.m.			Level 3 max. r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	1 110	1 020	984	1 242	1 141	1 101	1 396	1 283	1 237
70	930	**841**	805	1 040	**941**	901	1 170	**1 057**	1 013
60	752	664	629	841	743	703	946	835	791
45	490	404	369	548	451	413	616	507	465
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	1 295	1 190	1 148	1 449	1 331	1 284	1 629	1 496	1 444
70	1 085	**981**	940	1 214	**1 097**	1 051	1 365	**1 234**	1 181
60	877	775	734	981	866	821	1 103	974	922
45	672	571	531	752	639	594	845	718	668
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	1 758	1 615	1 558	1 966	1 806	1 743	2 210	2 031	1 959
70	1 473	**1 331**	1 275	1 647	**1 489**	1 426	1 852	**1 674**	1 603
60	1 191	1 051	996	1 332	1 176	1 114	1 497	1 322	1 252
45	775	639	585	867	715	654	975	803	736
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	2 221	2 040	1 968	2 484	2 282	2 201	2 792	2 565	2 475
70	1 861	**1 682**	1 611	2 081	**1 881**	1 801	2 339	**2 115**	2 025
60	1 504	1 328	1 258	1 682	1 485	1 407	1 891	1 670	1 581
45	979	807	739	1 095	903	826	1 231	1 015	929
	15	20	22	15	20	22	15	20	22
	length L (mm)		1750	length L (mm)		1750	length L (mm)		1750
80	2 683	2 465	2 378	3 001	2 757	2 660	3 374	3 100	2 990
70	2 248	**2 032**	1 946	2 514	**2 273**	2 177	2 827	**2 555**	2 447
60	1 818	1 604	1 520	2 033	1 795	1 700	2 285	2 017	1 911
45	1 183	975	893	1 323	1 091	999	1 488	1 226	1 123
	15	20	22	15	20	22	15	20	22
	length L (mm)		2000	length L (mm)		2000	length L (mm)		2000
80	3 146	2 890	2 788	3 519	3 233	3 119	3 956	3 634	3 506
70	2 636	**2 383**	2 282	2 948	**2 665**	2 552	3 314	**2 996**	2 869
60	2 131	1 881	1 782	2 383	2 104	1 993	2 680	2 365	2 240
45	1 387	1 143	1 047	1 551	1 279	1 171	1 744	1 438	1 316

COOLING OUTPUT Q [W]

	Level 2 medium r.p.m.				Level 3 max. r.p.m.			
	air temperature t_A				air temperature t_A			
	24	25	26	27	24	25	26	27
	length L (mm)			900	length L (mm)			900
9	479	511	**543**	575	624	666	**708**	749
11	415	447	479	511	541	583	624	666
13	351	383	415	447	458	499	541	583
15	287	319	351	383	375	416	458	499
16	255	287	319	351	333	375	416	458
	24	25	26	27	24	25	26	27
	length L (mm)			1000	length L (mm)			1000
9	559	596	**633**	670	728	777	**826**	874
11	484	521	559	596	631	680	728	777
13	410	447	484	521	534	583	631	680
15	335	372	410	447	437	486	534	583
16	298	335	372	410	388	437	486	534
	24	25	26	27	24	25	26	27
	length L (mm)			1250	length L (mm)			1250
9	758	809	**859**	910	989	1 054	**1 120**	1 186
11	657	708	758	809	857	923	989	1 054
13	556	606	657	708	725	791	857	923
15	455	505	556	606	593	659	725	791
16	404	455	505	556	527	593	659	725
	24	25	26	27	24	25	26	27
	length L (mm)			1500	length L (mm)			1500
9	958	1 021	**1 085**	1 149	1 249	1 332	**1 415**	1 498
11	830	894	958	1 021	1 082	1 165	1 249	1 332
13	702	766	830	894	916	999	1 082	1 165
15	575	638	702	766	749	832	916	999
16	511	575	638	702	666	749	832	916
	24	25	26	27	24	25	26	27
	length L (mm)			1750	length L (mm)			1750
9	1 157	1 234	**1 311**	1 389	1 509	1 609	**1 710**	1 811
11	1 003	1 080	1 157	1 234	1 308	1 408	1 509	1 609
13	849	926	1 003	1 080	1 106	1 207	1 308	1 408
15	694	771	849	926	905	1 006	1 106	1 207
16	617	694	771	849	805	905	1 006	1 106
	24	25	26	27	24	25	26	27
	length L (mm)			2000	length L (mm)			2000
9	1 357	1 447	**1 538**	1 628	1 769	1 887	**2 005**	2 123
11	1 176	1 266	1 357	1 447	1 533	1 651	1 769	1 887
13	995	1 085	1 176	1 266	1 297	1 415	1 533	1 651
15	814	904	995	1 085	1 061	1 179	1 297	1 415
16	724	814	904	995	943	1 061	1 179	1 297

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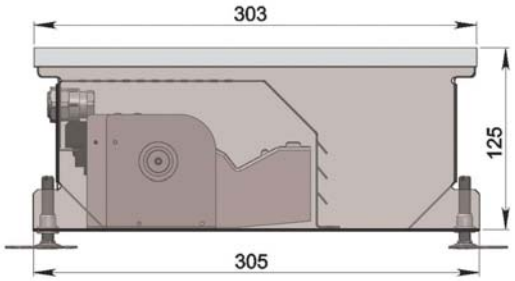
COIL-TE

THERMAL OUTPUT

length	Q (W)
500	750
1000	1500
1500	2250
2000	3000
2500	3750

230 V

cross-section



Direct convector heater with a fan with 230 V connection

CHARACTERISTICS

- high power
- very short reaction time
- suitable for interiors where there is no hot water supply
- unsuitable for wooden interiors and wooden structures

DIMENSIONS

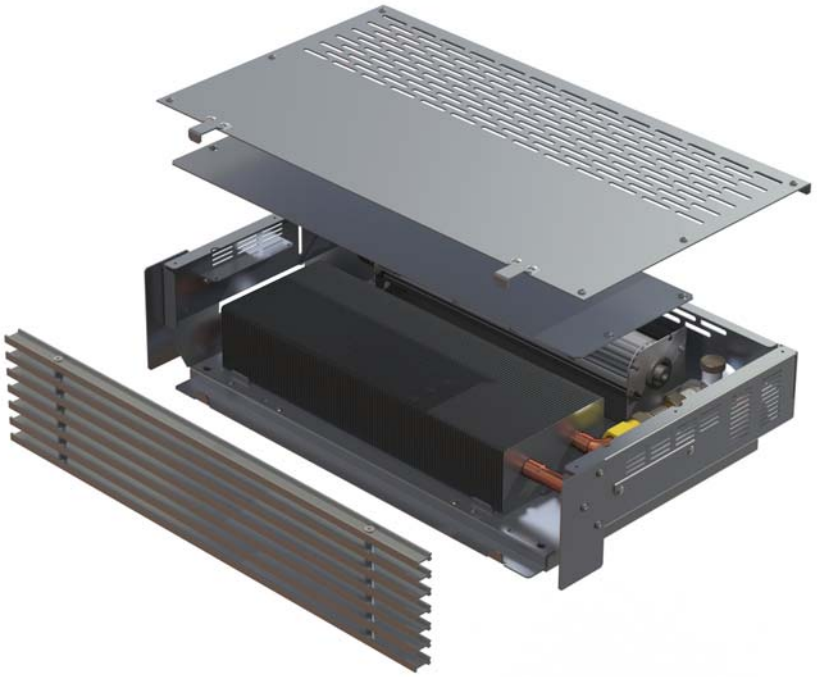
width	303 mm
structural height	125 mm
length	500 to 2500 mm

COIL-SK

THERMAL OUTPUT

DC MOTOR

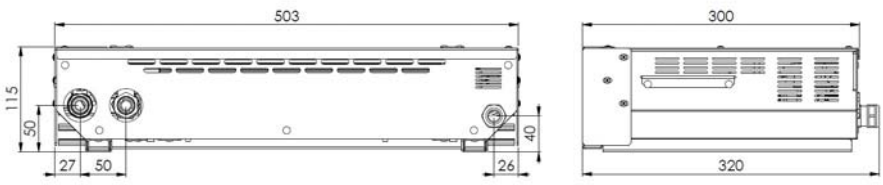
length	power
500	7,2 VA



Wainscoting convector with fan

For multi-purpose use in kitchen counters, stairway steps, wainscoting in bathrooms, hall closets and other similar areas.

Connection scheme



mean water temperature t_W	Level 1 min. r.p.m. air temperature t_A 15	20	22	Level 2 medium r.p.m. air temperature t_A 15	20	22	Level 3 max. r.p.m. air temperature t_A 15	20	22
	length L (mm)		556	length L (mm)		556	length L (mm)		556
80	456	422	408	481	444	430	620	573	554
70	387	**352**	338	408	**371**	356	525	**478**	459
60	317	282	268	334	297	283	431	383	364
45	212	177	163	224	187	172	288	241	222

CHARACTERISTICS

- high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when fan turned off
- low electrical energy consumption
- safe 12V DC voltage
- simple control
- inlet/outlet are at the front of unit

DIMENSIONS

width	320 mm
structural height	115 mm
length	503 mm
connection	G½"

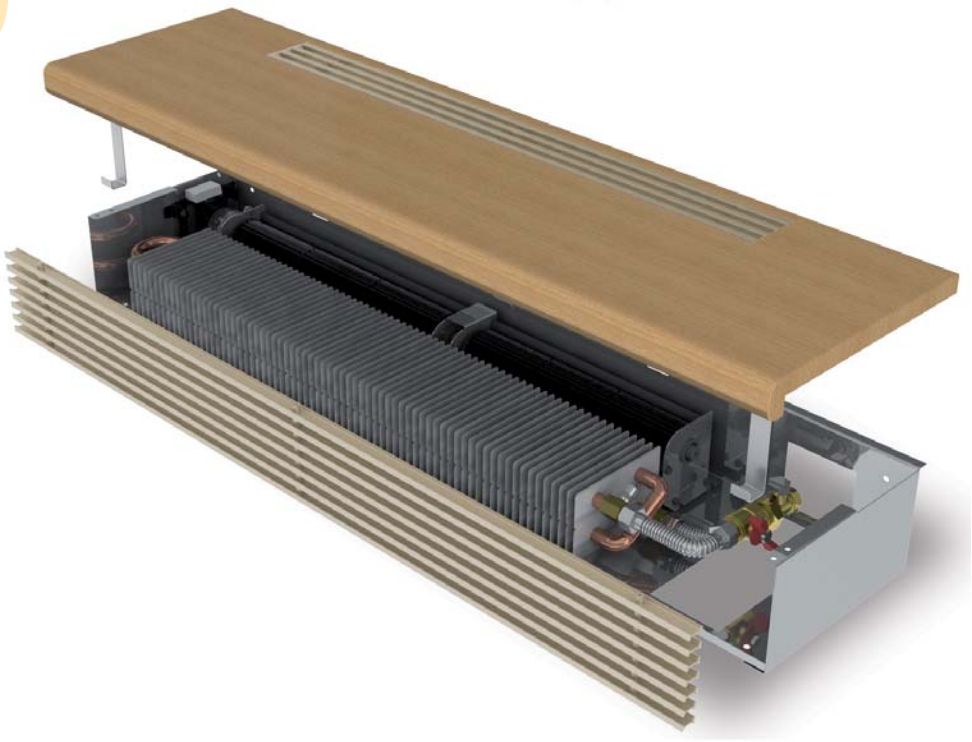
COIL-KP

ELECTRICAL POWER FOR FANS

DC MOTOR

length	power
900	12 VA
1000	12 VA
1250	24 VA
1500	24 VA

TEMPERATURE EXPONENT m = 1,0365



Windowsill convector with a fan

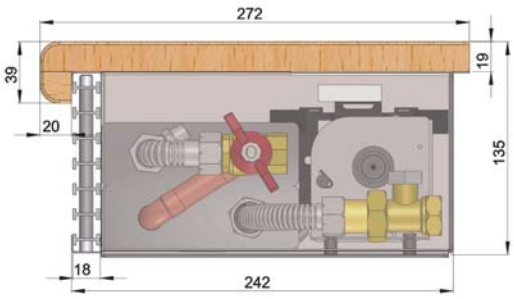
Suitable for use in windowsills according to the given dimensions

CHARACTERISTICS

- high forced convection heating efficiency
- rapidly reacting heating unit
- heats even when the fan is turned off
- low electrical energy consumption
- safe 12V DC power
- simple control

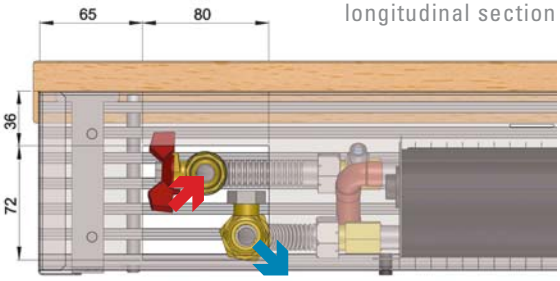
DIMENSIONS

width	272 mm
structural height	135 mm
length	900 to 1500 mm
connection	G½"



cross-section

longitudinal section

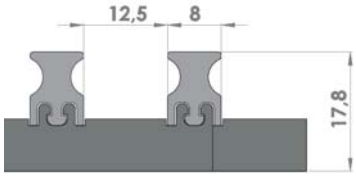


THERMAL OUTPUT Q [W]

mean water temperature t_W	Level 1 min. r.p.m.			Level 2 medium r.p.m.			Level 3 max. r.p.m.		
	air temperature t_A			air temperature t_A			air temperature t_A		
	15	20	22	15	20	22	15	20	22
	length L (mm)		900	length L (mm)		900	length L (mm)		900
80	986	907	876	1 235	1 136	1 097	1 525	1 404	1 355
70	829	**751**	720	1 038	**941**	902	1 282	**1 162**	1 114
60	673	596	565	843	746	708	1 042	922	874
45	442	366	336	554	459	421	684	566	520
	15	20	22	15	20	22	15	20	22
	length L (mm)		1000	length L (mm)		1000	length L (mm)		1000
80	1 150	1 059	1 022	1 441	1 326	1 280	1 779	1 637	1 581
70	967	**876**	840	1 212	**1 098**	1 052	1 496	**1 355**	1 299
60	786	695	659	984	871	826	1 215	1 076	1 020
45	516	427	392	646	535	491	798	661	606
	15	20	22	15	20	22	15	20	22
	length L (mm)		1250	length L (mm)		1250	length L (mm)		1250
80	1 561	1 437	1 387	1 955	1 799	1 737	2 414	2 222	2 146
70	1 313	**1 189**	1 140	1 644	**1 490**	1 428	2 031	**1 840**	1 763
60	1 066	944	895	1 335	1 182	1 121	1 649	1 460	1 384
45	700	580	532	877	726	666	1 083	897	823
	15	20	22	15	20	22	15	20	22
	length L (mm)		1500	length L (mm)		1500	length L (mm)		1500
80	1 972	1 815	1 752	2 469	2 273	2 194	3 050	2 807	2 710
70	1 658	**1 502**	1 440	2 077	**1 882**	1 804	2 565	**2 324**	2 227
60	1 347	1 192	1 130	1 687	1 493	1 416	2 083	1 844	1 748
45	885	732	672	1 108	917	841	1 368	1 133	1 039

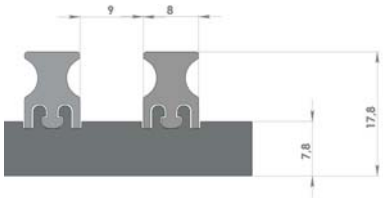
*Grilles

1| SEGMENTED – AL



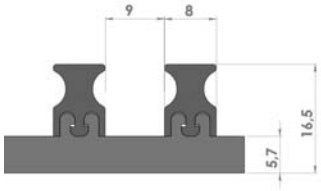
P, P80,PT, PT80, PT105, PT4, PT180, PT300,PO, PO4, KT, MT, KT110, KO, MO, KT1, HC4pipe, TE

2| SEGMENTED – AL



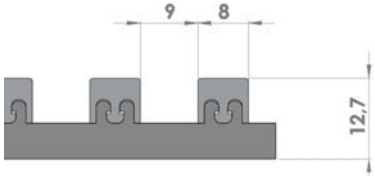
KT3, KT3 105, T80, TO85, HC

3| SEGMENTED – AL



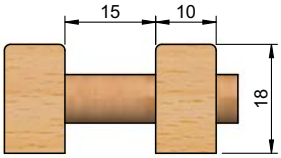
T60

4| SEGMENTED – AL



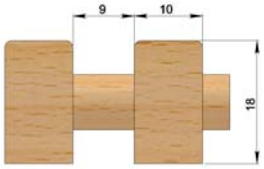
T50, KT0

5| SEGMENTED – WOOD SPARSE



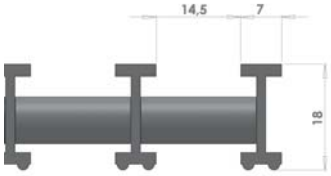
P, P80,PT, PT80, PT105, PT4, PT180, PT300, KT, MT, KT110, KT1

6| SEGMENTED – WOOD DENSE



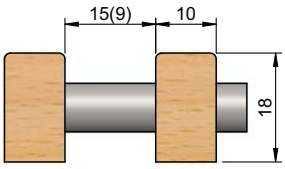
KT3, KT3 105, T80

7| ROLLABLE – ALUMINIUM DENSE/ SPARSE



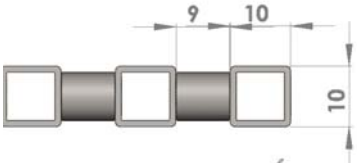
P, P80,PT, PT80, PT105, PT4, PT180, PT300,PO, PO4, PMW90, PMW125, PMW165, PMW205, KT, MT, KT110, KO, MO, KT1, KT3, KT3 105, T80, TO85, KT2, KO2, HC, HC4pipe, HCM, HCM4pipe, TE.

8| ROLLABLE – WOOD DENSE/SPARSE



P, P80,PT, PT80, PT105, PT4, PT180, PT300, PMW90, PMW125, PMW165, PMW205, KT, MT, KT110, KT1, KT3, KT3 105, T80, KT2.

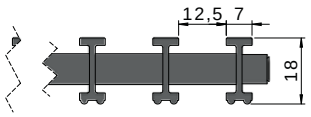
9|* ROLLABLE – STAINLESS STEEL



ALL except T50

*this grille must be ordered together with the convector

AL LONGITUDINAL



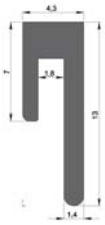
A longitudinal grille can be supplied following prior agreement or consultation. (Only in Al version.) All types of floor convectors require that the trough for use of the longitudinal grille be adjusted in height (to support the grille) and that the inner part of the convector be shifted. The longitudinal grille must be ordered together with the convector or this variant must be anticipated in advance in the order.

Frames

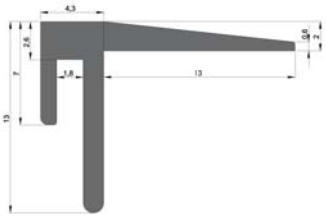
EXAMPLES OF FRAMES

(the shades of grilles and frames in the photographs are only illustrative)

Standard frame with wooden grille



Covering frame with aluminium grille



Grilles

MATERIAL OF WALKABLE FLOOR GRILLES

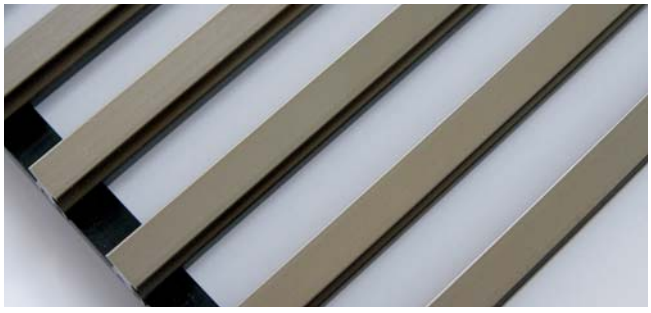
(the shades in the photographs are only illustrative)

OAK/WOOD

MAPLE/WOOD

BEECH/WOOD

DARK BRONZE/ALUMINIUM (AL)



LIGHT BRONZE/ALUMINIUM (AL)

SILVER/ALUMINIUM (AL)

Physical properties

ACOUSTIC PRESSURE

The experimental and calculated values of the acoustic pressure (noise) were obtained by measuring selected MINIB convectors samples at a distance of 1 m from the measured object at an angle of 45o from the floor. The convector was fixed in the floor with concrete in an acoustically hard room. When the convector is installed for example in a residential room with furniture or a carpet, a subsequent noise level of 1 to 2 dB lower than that given here can be considered because of the noise absorptivity of the furnished area. For completeness, we point out that the noise of a personal computer in the same room was also measured for comparison and the determined noise level corresponded to 40.8 dB.

It follows from the given approximate graphical dependences, which are depicted separately in each case for a certain group of convectors, that the minimum r.p.m. 1 and medium r.p.m. 2 of the fan conform in all cases to the requirements of the standard for day (to 40 dB) and night (to 30 dB) operation for all convector lengths. Consequently, we recommend planning MINIB convectors for r.p.m. 2, i.e. medium revolutions of the fan. For areas with requirements on noise minimization or where a larger number of convectors are located, we recommend that the convectors be planned for minimum convector revolutions, 1, where the acoustic pressure is negligible if the convector is properly installed, compared to the normal noise background in the interior.

TYPICAL AIR FLOW RATE OF MINIB CONVECTORS, m³/h

fan wheel diameter	convector length	low r.p.m.	medium r.p.m.	max. r.p.m.
30 mm	1000 mm	100	120	250
50 mm	1000 mm	200	220	300

Note:
The values of the air flow rate given in the table are valid for a convector length of 1000 mm. For other lengths, multiply these individual flow rates by the relevant convector length in metres (e.g. COIL-KT, with a length of 2500 mm has an air flow rate of 220 x 2.5 = 550 m³/h for medium r.p.m.)

WATER VOLUME IN MINIB CONVECTORS, dm³

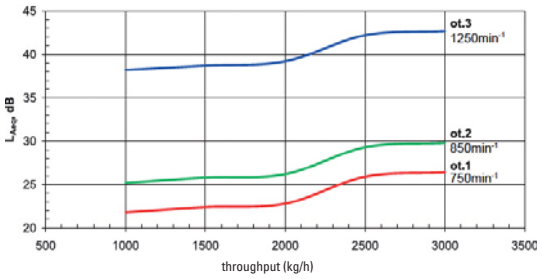
Average water volume of MINIB convectors (two-pipe exchangers):								
convector length, m	0,9	1,0	1,25	1,5	1,75	2,0	2,5	3,0
heat exchanger water volume, dm³ (for average pipe diameter of 15 mm)	0,2	0,25	0,3	0,4	0,5	0,6	0,7	0,9
heat exchanger water volume, dm³ (for average pipe diameter of 12 mm)	0,13	0,15	0,2	0,25	0,3	0,35	0,4	0,5

CHARACTERISTICS OF THE REGULATING VALVE ADJUSTMENT
(for MINIB convectors)

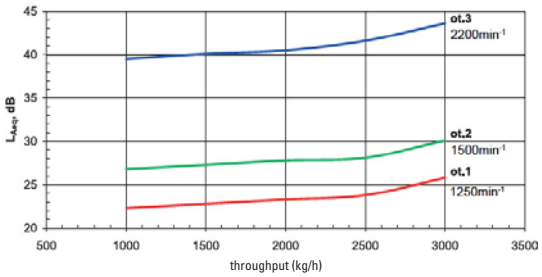
Adjustment (turns)	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	5,75
Kv [m³.h-1]	0	0,09	0,18	0,37	0,54	0,72	0,93	1,13	1,23	1,31	1,35	1,38

Example of how to determine of the necessary adjustment of the fitting:
Given: Flow rate q = 180 kg/h
Requirement: Adjusted for differential pressure p – 10,000 Pa
Solution: The required adjustment is the point of intersection of the values plotted on the flow rate axes and the pressure losses. The result is adjustment by 2.5 turns.

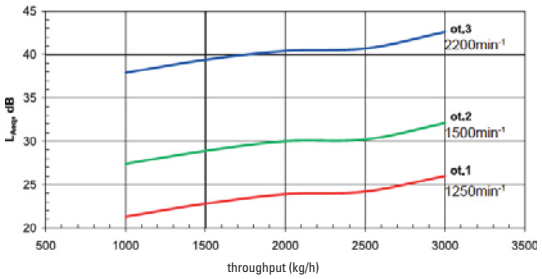
COIL-KT/KO, COIL-MT/MO, KT-2/KO-2, HC-4P



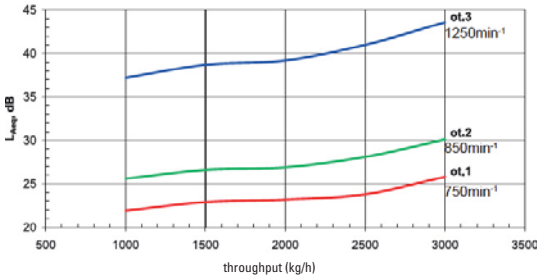
COIL-T50



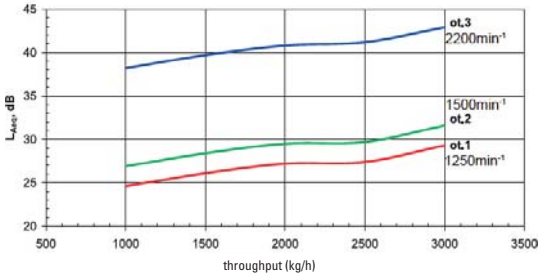
COIL-KT-0



COIL-KT-3, HC, SK-1, NK-2, SK, KP

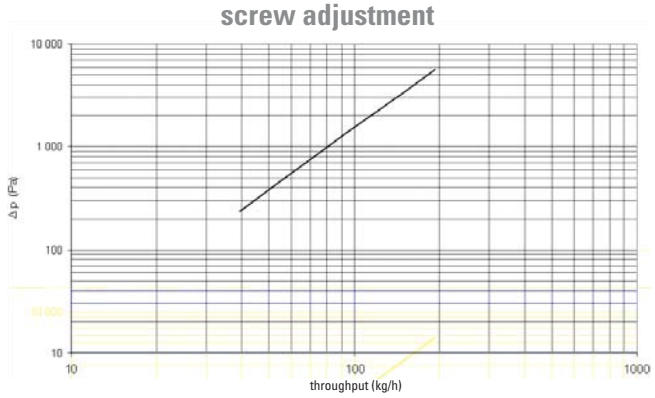


COIL-KT-1

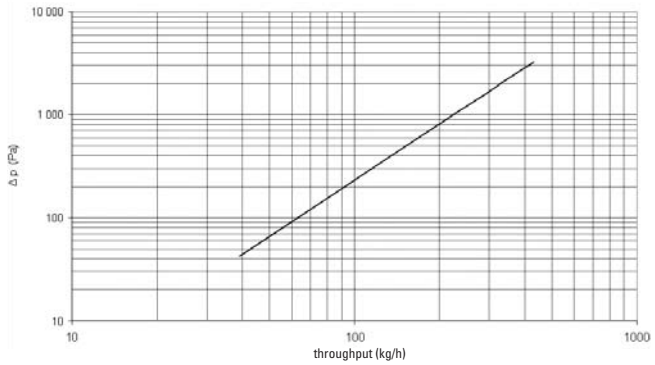


Pressure losses in regulating valves and heat exchangers with 3/8" connection

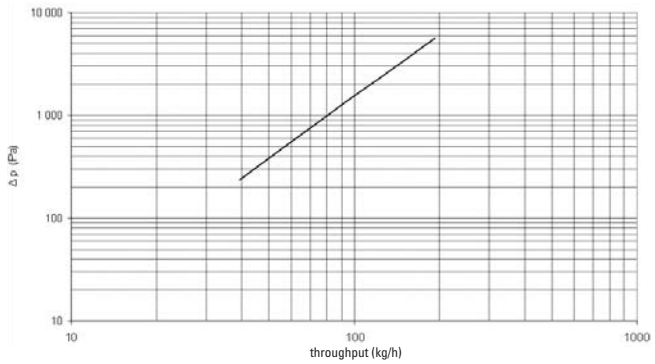
Pressure losses in regulation direct 3/8" screw adjustment



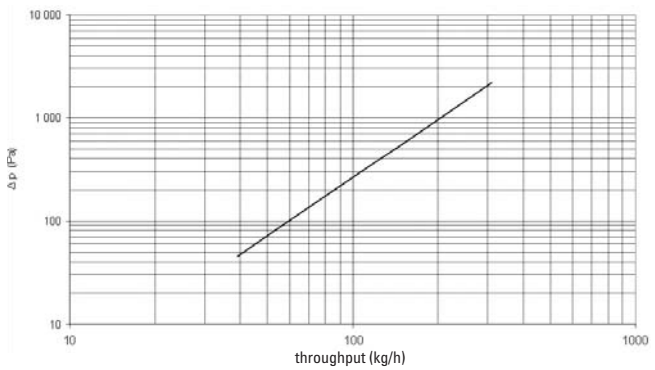
Pressure losses in regulation corner 3/8" screw adjustment



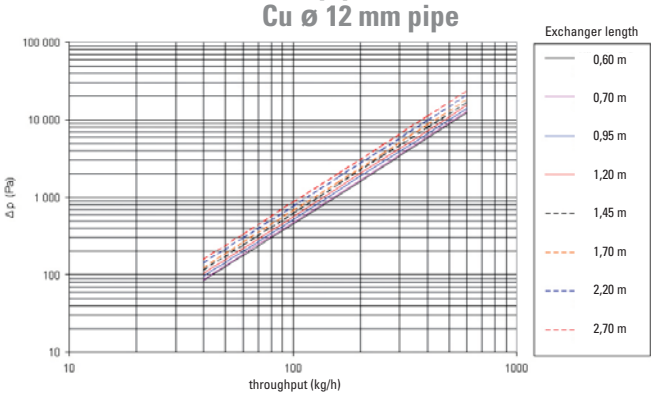
Pressure losses in direct 3/8" spherical valve



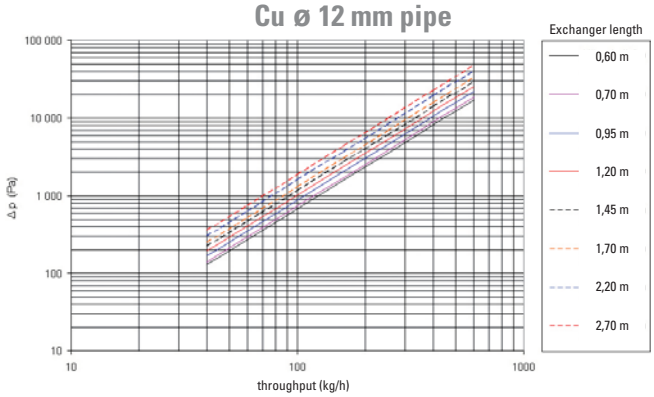
Pressure losses in stainless steel pipe AZ 3/8" – 65 mm



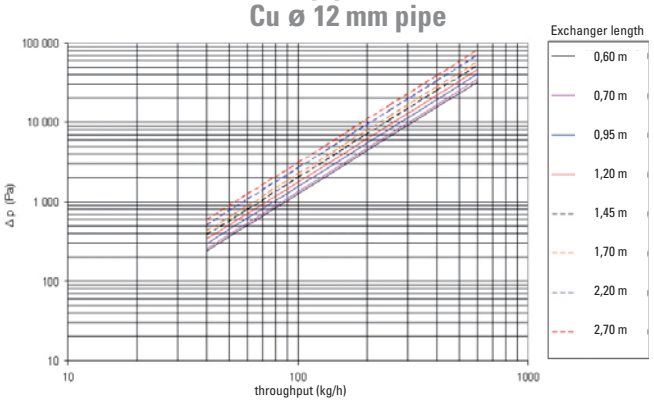
Pressure losses in 2-pipe MINIB heat exchanger Cu ø 12 mm pipe



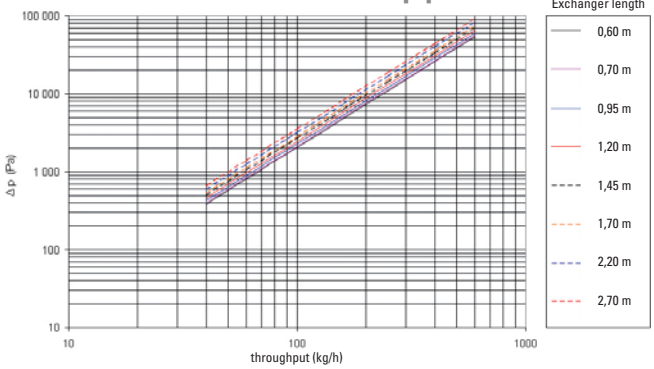
Pressure losses in 4-pipe MINIB heat exchanger Cu ø 12 mm pipe



Pressure losses in 6-pipe MINIB heat exchanger Cu ø 12 mm pipe

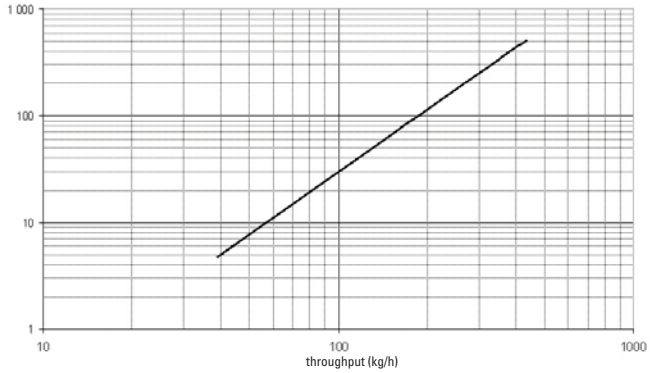


Pressure losses in 8-pipe MINIB heat exchanger Cu ø 12 mm pipe

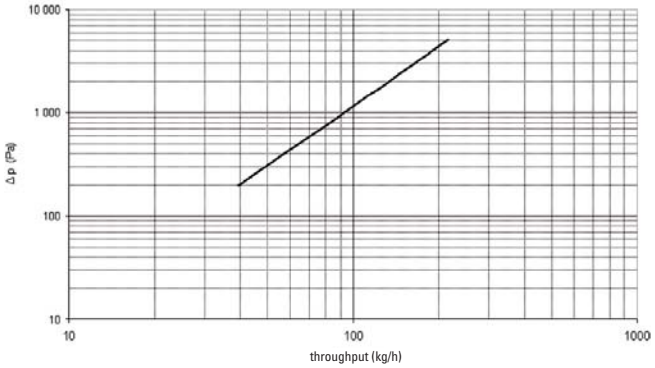


Pressure losses in regulating valves and heat exchangers with 1/2" connection

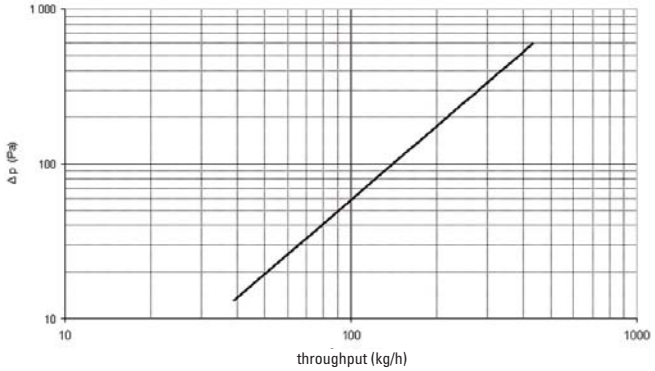
Pressure losses in regulation direct 1/2" spherical valve



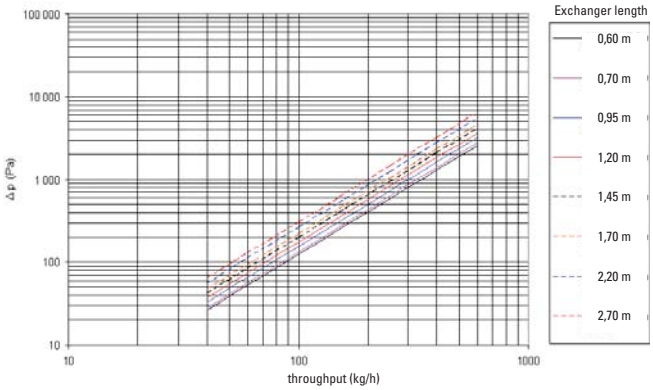
Pressure losses in corner ARCO 1/2" regulation direct screw adjustment



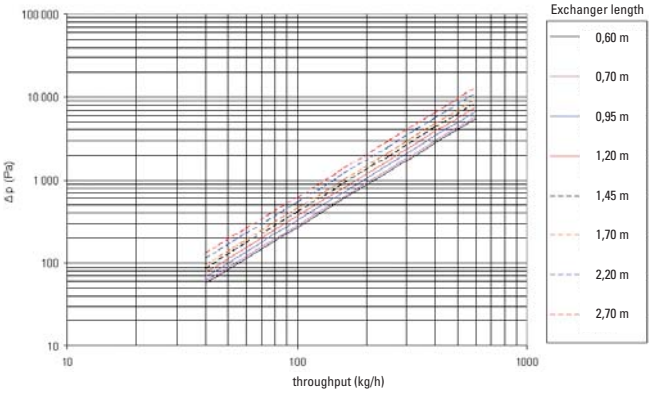
Pressure losses in stainless steel pipe AZ 1/2" – 65 mm



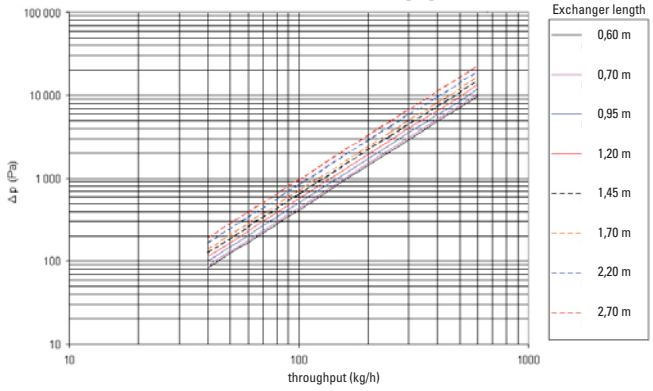
Pressure losses in 2-pipe MINIB heat exchanger Cu ø 15 mm pipe



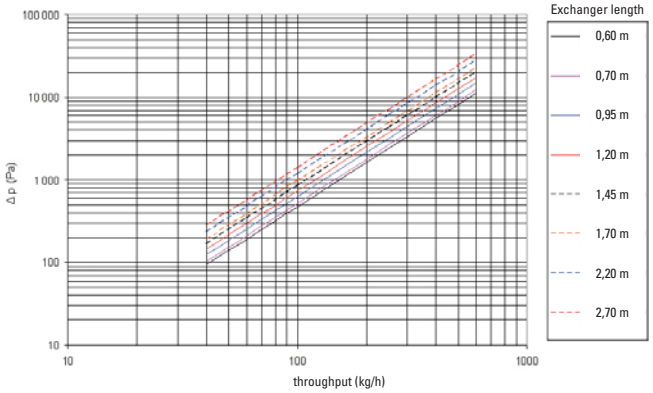
Pressure losses in 4-pipe MINIB heat exchanger Cu ø 15 mm pipe



Pressure losses in 6-pipe MINIB heat exchanger Cu ø 15 mm pipe

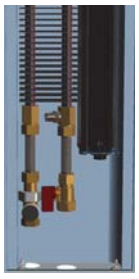
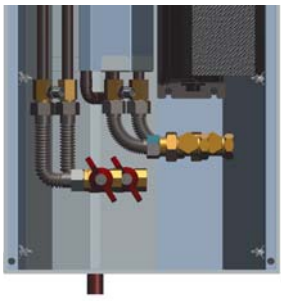
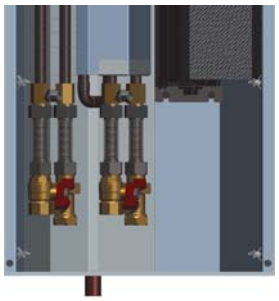
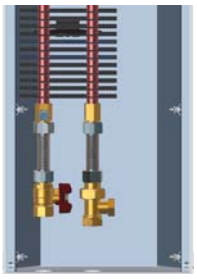
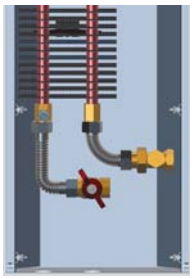


Pressure losses in 8-pipe MINIB heat exchanger Cu ø 15 mm pipe

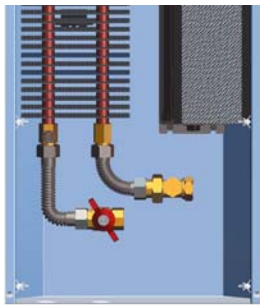
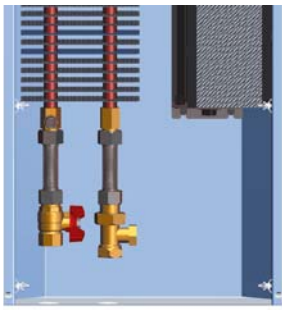


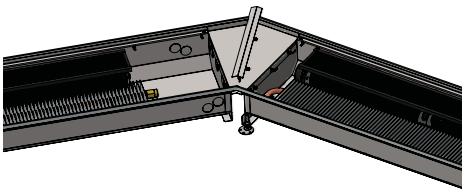
Types of connections

COIL KT0 COIL T50 COIL HC 4PIPE – side/straight COIL P – straight/side

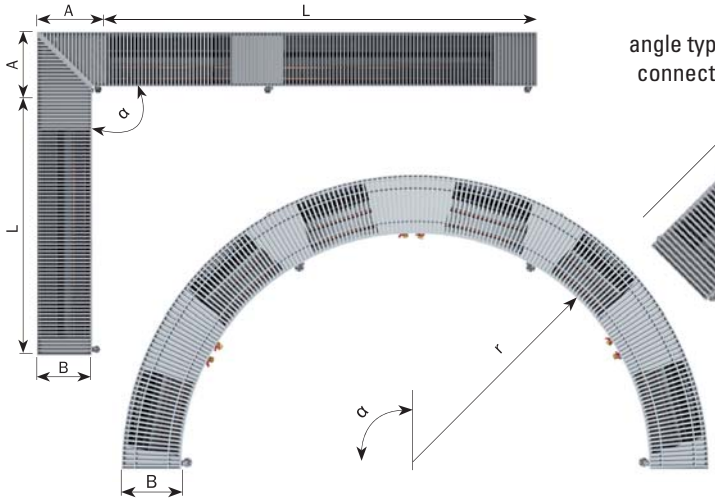







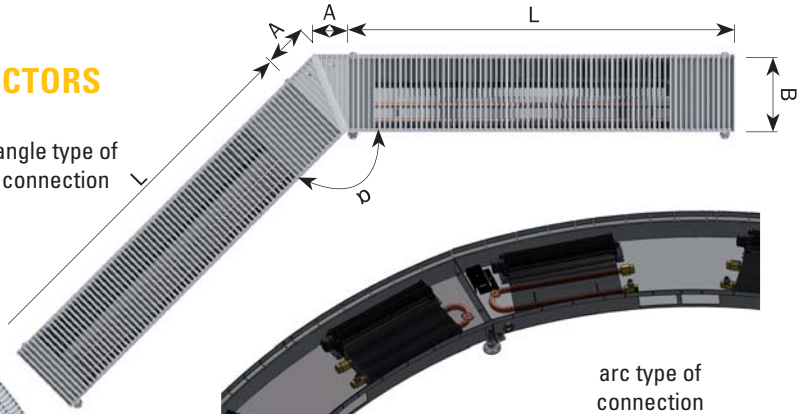
COIL KT – side/straight connection to room



POSSIBLE ANGLES AND ARCS OF CONVECTORS

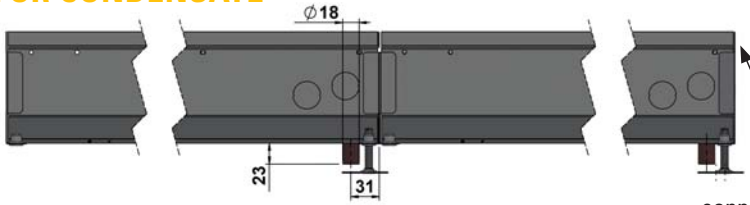


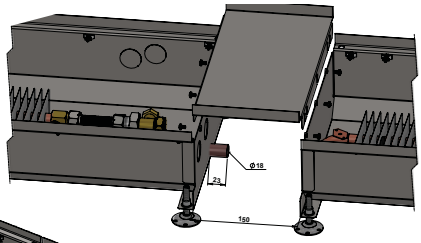


angle type of connection

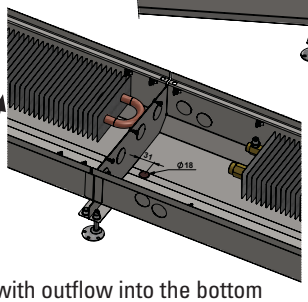
arc type of connection

LOCATION OF OPENINGS FOR OUTFLOW FOR CONDENSATE





connection with bridge and outflow



connection with outflow into the bottom

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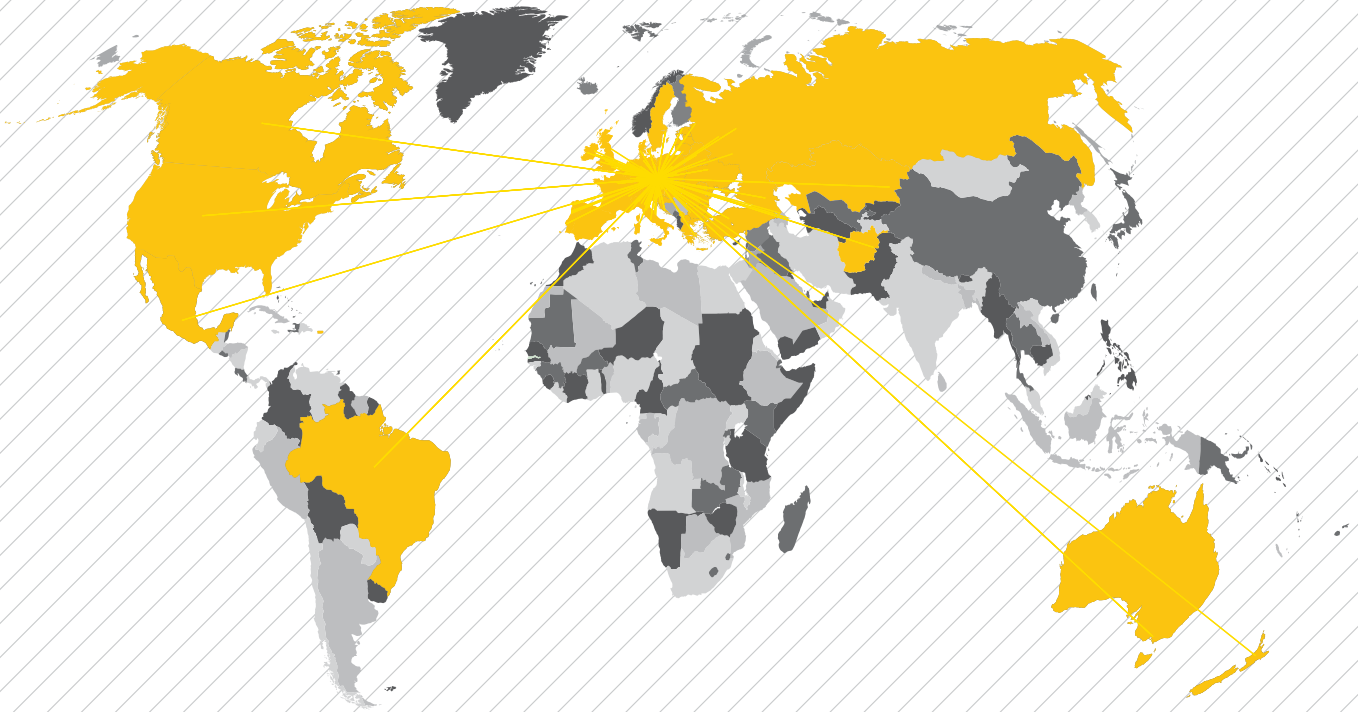
more than just heat



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