

MINIB[®]



WALL MOUNTED AND FREE STANDING CONVECTORS

●●● more than just heat

ABOUT US



CERTIFICATE

The Certification Body for the Quality Management System No. 3053
TÜV SÜD Czech s.r.o.

certifies that

MINIB

MINIB s.r.o.
Spatkovice 40049
CZ - 162 09 Praha 6
Ident. No.: 2272153

has established and applies
a Quality Management System for

fan coil manufacture

An audit was performed, Report No. 00612019/08MAZIC

Proof has been furnished that the requirements
according to

ČSN EN ISO 9001:2009

are fulfilled. The certificate is valid until 11.02.2013
Certificate Registration No. 01.281.455



TÜV SÜD Certifikat - a trademark of TÜV SÜD Group in Czech Republic

TÜV



ABOUT THE COMPANY

MINIB, a.s. is a Czech business through and through, and it ranks among the leading manufacturers of convectors in the Czech Republic. It currently exports to thirty countries in Europe, Asia, Australia, and America.

Since 1999, MINIB has been systematically innovating production technology and its products and has invested considerable sums in proprietary development and design, with the goal of offering our customers solutions that are mature both from the technical and esthetic points of view.

MINIB's business is economically sound and the company consistently turns a profit. This allows us to invest in R&D, technology, and above all, human capital, so as to ensure our long-term prosperity.

ABOUT THE MANUFACTURING PROCESS

The manufacturing facility is located in Býkev near Mělník and has excellent transport connections. It is furnished with state-of-the-art production technology. Most manufacturing operations are carried out on CNC machines, which allows us to accommodate even the most sophisticated wishes of our exacting customers.

In response to individual calls for customization, we are able to create a great variety of non-standard, one-of-a-kind products that satisfy specific needs.

All products are made from high-grade material with a useful life of many years, which is why we offer a 10-year warranty on heat exchangers and on our stainless-steel convector vats.

MINIB holds an ISO 9001:2009 certificate in addition to numerous utility models and patents.

The entire range of products is submitted to testing in an independent, accredited test chamber of HEATEST, s.r.o. pursuant to the European Standard EN 442-2, which is why we are able to guarantee the advertised heating and cooling output.

ABOUT THE PRODUCTS

MINIB's production portfolio consists of over 70 convector types. Customers can thus choose the right convector for any interior.

The main advantage of convectors is that they are efficient, modern, economical, and esthetic heaters suitable for both dry and humid environments. Significant power savings are achieved thanks to low water requirements for the immediate heating or cooling of a given area. This leads to low consumption of electricity required for its heating. In addition to water and energy savings, a great heating and cooling dynamics is also important. The space saving design is another important feature of these products. Our convectors do not disturb interior esthetics, have a modern design, and - last but not least - are safe thanks to their 12V power supply.

The product range comprises various types of convectors:

- › **FLOOR** convectors without fans that work on the natural convection principle. Convectors with fans utilize the principle of forced convection.
- › **FREE STANDING AND WALL MOUNTED** convectors with and without fans are also available. Heating benches with granite and wooden top panels are available for humid environments (swimming pools, bathrooms).
- › The unique patent series are the **DESIGN** convectors that use both the convection and heat radiation principle for heating. These convectors have aluminum composite front panels available in a number of modern designs from smooth glass with various colors or from glass with sand blasted decorations. The company also offers granite front panels.

MINIB can satisfy even individual, non-standard requirements of its customers such as angular or arc-shaped convectors with various connections and tailor them to their demands. MINIB emphasizes the high user comfort standard. All products place low demands on installation and maintenance.

Numerous accessories are available for individual convector types. MINIB products have won a number of national and foreign awards.

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FREE STANDING CONVECTORS

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dry
environment

humid
environment

fan

panel
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HOW TO CHOOSE THE RIGHT WALL MOUNTED OR FREE STANDING CONVECTOR

- Identify thermal losses in the room as calculated in the design.
- Identify the mean heating water temperature.
- Determine the required temperatures in the room.
- Select the suitable convector type with regard to space limitations and check its required output in the relevant tables.
- Determine the lengths and number of convectors.
- Select top grille and panel colors.
- Choose the suitable regulation and thermostat.

* dry and humid environments are defined by standard ČSN 038900, Electric Appliances Design, Classification of Environmental Conditions

THERMAL EQUATION

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

where:

- n = thermal exponent
- t_w, t_A = mean heating water temperature, interior air temperature [°C]
- Q_N = nominal heat output for temperatures $t_w, t_A = 50$ °C [W]
- μ = 1 (for other than nominal flow values, identify μ from the graph)
- Q = heat output for other temperatures [W]

OUTPUT CALCULATION FOR INDIVIDUAL TEMPERATURE:

A thermal equation is available for output calculation based on other than tabulated heating water and room air temperature. Enter the required mean heating water / room air temperature to calculate the heat output. **All calculations can be comfortably made at our website on the pages of individual convectors. Just enter the new values.**

STANDARD CONVECTOR PRICE COMPRISES:

- Aluminum panel - white, silver, light or dark bronze.
- 1 stainless bellows connection hose - WALL MOUNTED design only.
- Thermostatic valve with head and closing thread.
- Mounting accessories.

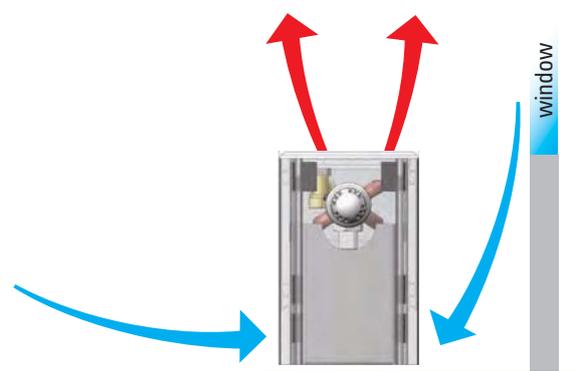
OPTIONAL ACCESSORIES:

Examples of optional accessories are shown on page 31.

COLOR VERSIONS ARE SHOWN ON PAGE 31

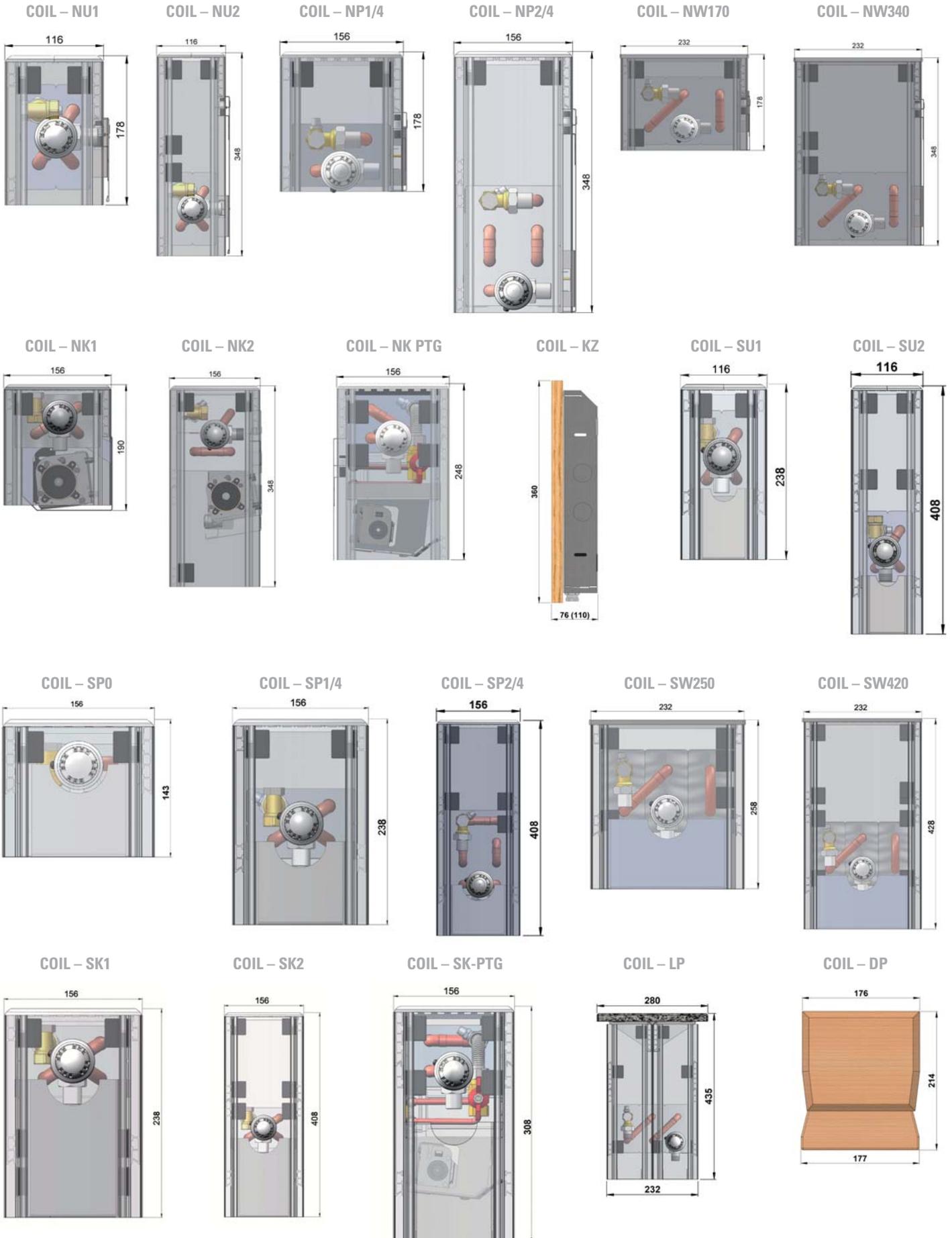
PRESSURE LOSSES, ACOUSTIC PRESSURE, AND OTHER PHYSICAL PARAMETERS ARE LISTED ON PAGE 32

EXAMPLE OF AIR FLOW IN THE ROOM



CROSS-SECTIONS OF CONVECTORS

WALL MOUNTED AND FREE
STANDING CONVECTORS





COIL-NU1

THERMAL EXPONENT $n = 1,3667$ 

Narrowest wall mounted
convector without fan.

CHARACTERISTICS

- high natural convection output
- short response time

DIMENSIONS

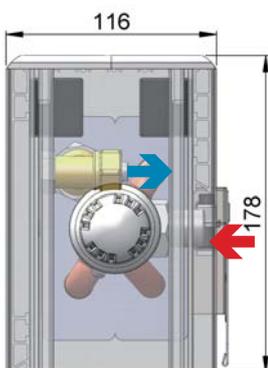
width	116 mm
design height	178 mm
length	900 do 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille
must not be loaded or covered.

cross section



HEAT OUTPUT Q [W]

	air temperature t_A		
	15	20	22
	length L (mm) 900		
80	675	605	577
70	537	471	446
60	408	347	324
45	234	183	163
	length L (mm) 1000		
80	769	689	658
70	612	537	508
60	465	396	369
45	267	208	186
	length L (mm) 1250		
80	1 005	901	860
70	800	702	664
60	608	517	482
45	349	272	243
	length L (mm) 1500		
80	1 241	1 112	1 062
70	987	867	820
60	751	639	596
45	431	336	300
	length L (mm) 1750		
80	1 477	1 324	1 264
70	1 175	1 032	976
60	893	760	709
45	513	400	357
	length L (mm) 2000		
80	1 712	1 535	1 465
70	1 363	1 196	1 131
60	1 036	882	822
45	595	464	414

mean water temperature t_w

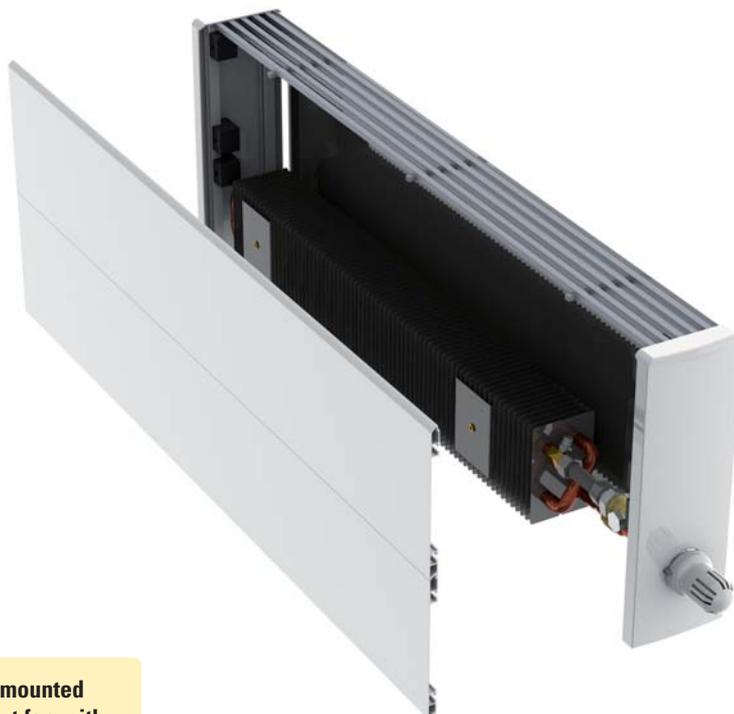


COIL-NU2

THERMAL EXPONENT $n = 1,3667$

HEAT OUTPUT Q [W]

	air temperature t_A			
	15	20	22	
	length L (mm)		900	
mean water temperature t_w	80	873	782	747
	70	695	610	577
	60	528	449	419
	45	303	236	211
		15	20	22
		length L (mm)		1000
	80	995	892	851
	70	792	695	657
	60	602	512	478
	45	346	270	240
		15	20	22
		length L (mm)		1250
80	1 300	1 165	1 113	
70	1 035	908	859	
60	786	670	624	
45	452	352	314	
	15	20	22	
	length L (mm)		1500	
80	1 605	1 439	1 374	
70	1 277	1 121	1 061	
60	971	827	771	
45	558	435	388	
	15	20	22	
	length L (mm)		1750	
80	1 910	1 712	1 635	
70	1 520	1 335	1 262	
60	1 156	984	917	
45	664	518	462	
	15	20	22	
	length L (mm)		2000	
80	2 215	1 986	1 896	
70	1 763	1 548	1 464	
60	1 340	1 141	1 064	
45	770	600	536	



Narrowest wall mounted convector without fan with higher heating output.

CHARACTERISTICS

- high natural convection output
- short response time

DIMENSIONS

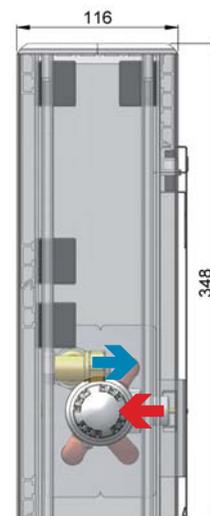
width	116 mm
design height	348 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

cross section





COIL-NP1/4

THERMAL EXPONENT $n = 1,3581$ 

Standard wall mounted
convector without fan.

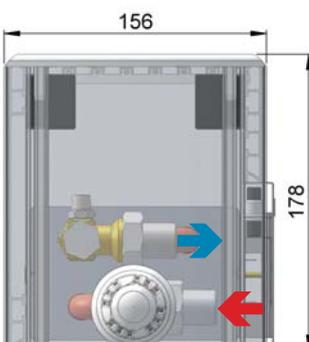
CHARACTERISTICS

- high natural convection output
- short response time

DIMENSIONS

width	156 mm
design height	178 mm
length	900 to 2000 mm
connection	G½"

cross section



COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille
must not be loaded or covered.

HEAT OUTPUT Q [W]

	air temperature t_a		
	15	20	22
	length L (mm) 900		
80	869	780	745
70	693	609	576
60	528	450	419
45	304	237	212
	length L (mm) 1000		
80	992	890	849
70	790	694	657
60	602	513	478
45	347	271	242
	length L (mm) 1250		
80	1 298	1 164	1 112
70	1 034	909	860
60	788	671	626
45	454	354	317
	length L (mm) 1500		
80	1 604	1 439	1 374
70	1 278	1 123	1 062
60	973	829	774
45	561	438	391
	length L (mm) 1750		
80	1 910	1 713	1 636
70	1 522	1 337	1 265
60	1 159	988	921
45	668	522	466
	length L (mm) 2000		
80	2 216	1 988	1 898
70	1 766	1 552	1 468
60	1 345	1 146	1 069
45	775	605	541

mean water temperature t_w



COIL-NP2/4

THERMAL EXPONENT $n = 1,4153$

HEAT OUTPUT Q [W]

	air temperature t_A		
	15	20	22
	length L (mm)		900
80	1 324	1 182	1 127
	1 045	913	862
	787	666	619
	443	342	304
70	1 509	1 347	1 284
	1 191	1 041	983
	897	759	706
	505	390	347
60	1 972	1 761	1 678
	1 557	1 360	1 284
	1 172	992	922
	660	510	453
45	2 435	2 174	2 072
	1 922	1 680	1 585
	1 447	1 225	1 139
	815	630	560
80	2 898	2 587	2 466
	2 288	1 999	1 887
	1 722	1 458	1 356
	970	749	666
70	3 361	3 001	2 860
	2 653	2 318	2 188
	1 997	1 690	1 572
	1 125	869	772



Standard wall mounted convector without fan with higher heating output.

CHARACTERISTICS

- high natural convection output
- short response time

DIMENSIONS

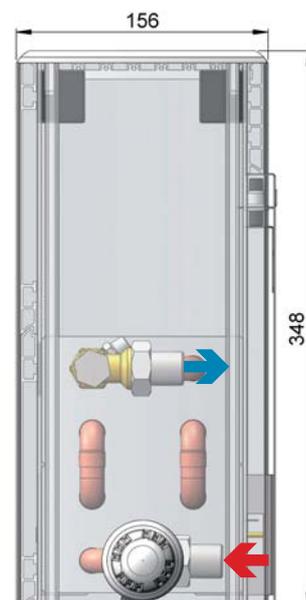
width	156 mm
design height	348 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss
	(white)

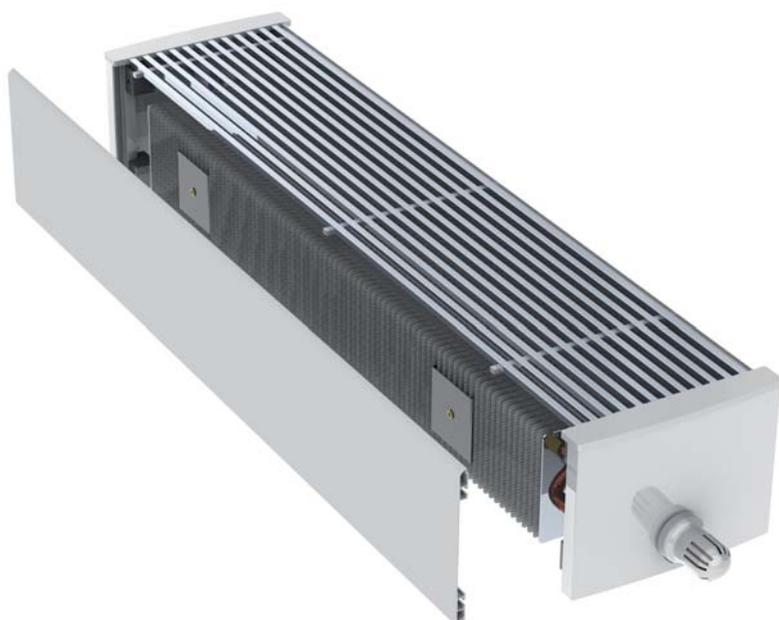
INFO: decorative convector grille must not be loaded or covered.

cross section





COIL-NW170

THERMAL EXPONENT $n = 1,4173$ 

The most powerful wall mounted convector without fan with a height of 178 mm.

CHARACTERISTICS

- very high natural convection output
- short response time

DIMENSIONS

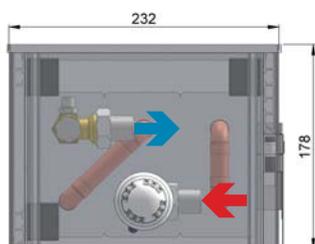
width	232 mm
design height	178 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

cross section



HEAT OUTPUT Q [W]

	air temperature t_A		
	15	20	22
	length L (mm) 900		
80	1 533	1 369	1 305
70	1 210	1 057	998
60	910	770	716
45	512	396	352
	length L (mm) 1000		
80	1 748	1 560	1 487
70	1 379	1 205	1 137
60	1 038	878	817
45	584	451	401
	length L (mm) 1250		
80	2 284	2 039	1 943
70	1 802	1 575	1 486
60	1 356	1 148	1 067
45	763	590	524
	length L (mm) 1500		
80	2 820	2 517	2 399
70	2 225	1 944	1 835
60	1 675	1 417	1 318
45	943	728	647
	length L (mm) 1750		
80	3 356	2 996	2 856
70	2 648	2 314	2 184
60	1 993	1 686	1 568
45	1 122	866	770
	length L (mm) 2000		
80	3 892	3 475	3 312
70	3 072	2 683	2 533
60	2 311	1 956	1 819
45	1 301	1 005	893



COIL-NW340

THERMAL EXPONENT $n = 1,3651$

HEAT OUTPUT Q [W]

	air temperature t_A		
	15	20	22
	length L (mm)		
80	900		
	1 854	1 662	1 587
	70	1 476	1 296
	60	1 122	956
	45	645	503
1000	15 20 22		
	length L (mm)		
	80	2 113	1 894
	70	1 682	1 477
	60	1 279	1 089
1250	15 20 22		
	length L (mm)		
	80	2 761	2 476
	70	2 198	1 930
	60	1 672	1 423
1500	15 20 22		
	length L (mm)		
	80	3 410	3 057
	70	2 714	2 383
	60	2 064	1 757
1750	15 20 22		
	length L (mm)		
	80	4 058	3 638
	70	3 230	2 836
	60	2 456	2 091
2000	15 20 22		
	length L (mm)		
	80	4 706	4 219
	70	3 746	3 289
	60	2 849	2 426
45	1 638	1 277	1 140



The most powerful wall mounted convector without fan with a height of 348 mm.

CHARACTERISTICS

- very high natural convection output
- short response time

DIMENSIONS

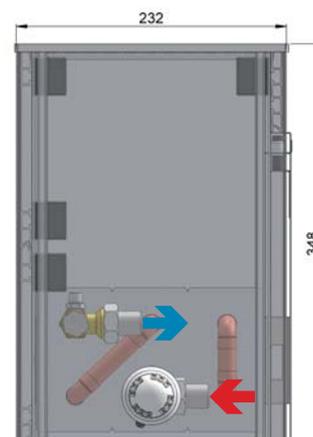
width	232 mm
design height	348 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

cross section

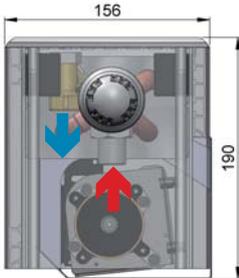




Recommended regulation
EB-A, EB-B, or EB-C

COIL-NK1

THERMAL EXPONENT $n = 1,09525$



INFO: decorative convector grille must not be loaded or covered.

cross section



HEAT OUTPUT Q [W]

ELECTRIC POWER INPUT FOR FANS

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



Lowest wall mounted convector with fan.

CHARACTERISTICS

- high forced convection heating output
- quick response heating element
- heating even with fan switched off
- low power consumption
- safe voltage 12 V DC
- easy control

DIMENSIONS

width	156 mm
design height	190 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

mean water temperature t_w	1st degree minimum speed			2nd degree medium speed			3rd degree maximum speed					
	air temperature t_a			air temperature t_a			air temperature t_a					
	15	20	22	15	20	22	15	20	22			
80	length L (mm) 900			length L (mm) 900			length L (mm) 900					
	80	1 159	1 061	1 023	80	1 239	1 135	1 094	80	1 614	1 478	1 425
	70	965	869	831	70	1 032	930	889	70	1 344	1 211	1 158
	60	774	681	644	60	829	728	689	60	1 079	948	896
	45	497	407	371	45	531	435	397	45	692	567	517
80	length L (mm) 1000			length L (mm) 1000			length L (mm) 1000					
	80	1 352	1 238	1 193	80	1 446	1 325	1 276	80	1 883	1 725	1 662
	70	1 126	1 014	970	70	1 204	1 085	1 037	70	1 568	1 413	1 351
	60	904	794	751	60	967	850	803	60	1 259	1 106	1 046
	45	580	475	433	45	620	508	463	45	807	661	603
80	length L (mm) 1250			length L (mm) 1250			length L (mm) 1250					
	80	1 834	1 680	1 619	80	1 963	1 798	1 732	80	2 555	2 341	2 255
	70	1 528	1 376	1 316	70	1 634	1 472	1 408	70	2 128	1 917	1 833
	60	1 226	1 078	1 019	60	1 312	1 153	1 090	60	1 708	1 501	1 419
	45	787	644	588	45	841	689	629	45	1 096	897	819
80	length L (mm) 1500			length L (mm) 1500			length L (mm) 1500					
	80	2 317	2 123	2 045	80	2 479	2 271	2 188	80	3 228	2 957	2 849
	70	1 930	1 738	1 662	70	2 064	1 860	1 779	70	2 688	2 422	2 316
	60	1 549	1 362	1 287	60	1 657	1 457	1 377	60	2 158	1 897	1 793
	45	994	814	743	45	1 063	871	795	45	1 384	1 133	1 035
80	length L (mm) 1750			length L (mm) 1750			length L (mm) 1750					
	80	2 800	2 565	2 471	80	2 995	2 744	2 644	80	3 900	3 573	3 443
	70	2 332	2 101	2 009	70	2 495	2 247	2 149	70	3 248	2 926	2 798
	60	1 872	1 645	1 555	60	2 002	1 760	1 664	60	2 607	2 292	2 166
	45	1 201	983	897	45	1 284	1 052	960	45	1 672	1 370	1 250
80	length L (mm) 2000			length L (mm) 2000			length L (mm) 2000					
	80	3 283	3 007	2 898	80	3 512	3 217	3 100	80	4 573	4 189	4 036
	70	2 734	2 463	2 355	70	2 925	2 635	2 520	70	3 808	3 431	3 281
	60	2 194	1 929	1 823	60	2 348	2 063	1 951	60	3 057	2 687	2 540
	45	1 408	1 153	1 052	45	1 506	1 233	1 126	45	1 961	1 606	1 466



Recommended regulation
EB-A, EB-B, or EB-C

COIL-NK2



INFO: decorative convector grille must not be loaded or covered.

HEAT OUTPUT Q [W]

THERMAL EXPONENT $\eta = 1,17097$

ELECTRIC POWER INPUT FOR FANS



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

mean water temperature t_w	1st degree minimum speed			2nd degree medium speed			3rd degree maximum speed							
	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	1714	1560	1500	80	1802	1641	1577	80	2042	1859	1787			
	70	1409	1260	1202	70	1482	1326	1264	70	1679	1502	1432		
	60	1114	971	914	60	1172	1021	961	60	1328	1157	1089		
	45	693	560	508	45	729	589	534	45	826	667	605		
	70	1522	1370	1312	70	1610	1459	1395	70	1850	1667	1595		
		60	1227	1076	1018	60	1315	1164	1100	60	1499	1316	1244	
		45	806	655	597	45	861	710	646	45	959	776	714	
		60	1335	1184	1126	60	1423	1272	1208	60	1664	1481	1409	
			50	1040	889	831	50	1128	977	913	50	1313	1130	1058
			45	745	594	536	45	833	682	618	45	962	779	717
			45	553	402	344	45	641	490	426	45	790	607	545
				45	462	311	253	45	550	399	335	45	700	517
35				371	220	162	35	459	308	244	35	610	427	365
30				280	129	71	30	368	217	153	30	520	337	275
				20	189	60	62	20	277	126	62	430	246	184
				10	98	1	11	10	186	37	11	340	155	92
	20			99	48	-48	20	95	-56	-92	20	250	64	0
				10	57	-107	10	44	-115	-151	10	160	-27	-61
				0	6	-176	0	-46	-184	-217	0	70	-86	-115
		10		-43	-135	-245	10	-97	-253	-299	10	20	-145	-174
				-132	-204	-314	10	-156	-322	-368	10	30	-214	-243
				-221	-273	-383	10	-215	-391	-437	10	40	-283	-312
			0	-310	-342	-452	0	-274	-460	-506	0	50	-352	-381
				-399	-411	-521	0	-333	-529	-575	0	60	-421	-450
				-488	-480	-590	0	-392	-598	-644	0	70	-490	-519
-10				-577	-549	-659	-10	-451	-667	-713	-10	80	-559	-588
				-666	-618	-728	-10	-510	-736	-782	-10	90	-628	-657
				-755	-687	-797	-10	-569	-805	-851	-10	100	-697	-726
	-20			-844	-756	-866	-20	-628	-874	-920	-20	110	-766	-795
				-933	-825	-935	-20	-687	-943	-989	-20	120	-835	-864
				-1022	-894	-1004	-20	-746	-1012	-1058	-20	130	-904	-933
		-30		-1111	-963	-1073	-30	-805	-1081	-1127	-30	140	-973	-1002
				-1200	-1032	-1142	-30	-864	-1150	-1196	-30	150	-1042	-1071
				-1289	-1101	-1211	-30	-923	-1219	-1265	-30	160	-1111	-1140
			-40	-1378	-1170	-1280	-40	-982	-1288	-1334	-40	170	-1180	-1209
				-1467	-1239	-1349	-40	-1041	-1357	-1403	-40	180	-1249	-1278
				-1556	-1308	-1418	-40	-1100	-1426	-1472	-40	190	-1318	-1347
-50				-1645	-1377	-1487	-50	-1159	-1495	-1541	-50	200	-1387	-1416
				-1734	-1446	-1556	-50	-1218	-1564	-1610	-50	210	-1456	-1485
				-1823	-1515	-1625	-50	-1277	-1633	-1679	-50	220	-1525	-1554
	-60			-1912	-1584	-1694	-60	-1336	-1702	-1748	-60	230	-1594	-1623
				-2001	-1653	-1763	-60	-1395	-1771	-1817	-60	240	-1663	-1692
				-2090	-1722	-1832	-60	-1454	-1840	-1886	-60	250	-1732	-1761
		-70		-2179	-1791	-1901	-70	-1513	-1909	-1955	-70	260	-1801	-1830
				-2268	-1860	-1970	-70	-1572	-1978	-2024	-70	270	-1870	-1900
				-2357	-1929	-2039	-70	-1631	-2047	-2093	-70	280	-1939	-1969
			-80	-2446	-1998	-2108	-80	-1690	-2116	-2162	-80	290	-2008	-2038
				-2535	-2067	-2177	-80	-1749	-2185	-2231	-80	300	-2077	-2107
				-2624	-2136	-2246	-80	-1808	-2254	-2300	-80	310	-2146	-2176
-90				-2713	-2205	-2315	-90	-1867	-2323	-2369	-90	320	-2215	-2245
				-2802	-2274	-2384	-90	-1926	-2392	-2438	-90	330	-2284	-2314
				-2891	-2343	-2453	-90	-1985	-2461	-2507	-90	340	-2353	-2383
	-100			-2980	-2412	-2522	-100	-2044	-2530	-2576	-100	350	-2422	-2452
				-3069	-2481	-2591	-100	-2103	-2600	-2645	-100	360	-2491	-2521
				-3158	-2550	-2660	-100	-2162	-2669	-2714	-100	370	-2560	-2590
		-110		-3247	-2619	-2729	-110	-2221	-2738	-2783	-110	380	-2629	-2659
				-3336	-2688	-2798	-110	-2280	-2807	-2852	-110	390	-2698	-2728
				-3425	-2757	-2867	-110	-2339	-2876	-2921	-110	400	-2767	-2797
			-120	-3514	-2826	-2936	-120	-2398	-2945	-2990	-120	410	-2836	-2866
				-3603	-2895	-3005	-120	-2457	-3014	-3059	-120	420	-2905	-2935
				-3692	-2964	-3074	-120	-2516	-3083	-3128	-120	430	-2974	-3004
-130				-3781	-3033	-3143	-130	-2575	-3152	-3197	-130	440	-3043	-3073
				-3870	-3102	-3212	-130	-2634	-3221	-3266	-130	450	-3112	-3142
				-3959	-3171	-3281	-130	-2693	-3290	-3335	-130	460	-3181	-3211
	-140			-4048	-3240	-3350	-140	-2752	-3359	-3404	-140	470	-3250	-3280
				-4137	-3309	-3419	-140	-2811	-3428	-3473	-140	480	-3319	-3349
				-4226	-3378	-3488	-140	-2870	-3497	-3542	-140	490	-3388	-3418
		-150		-4315	-3447	-3557	-150	-2929	-3566	-3611	-150	500	-3457	-3487
				-4404	-3516	-3626	-150	-2988	-3635	-3680	-150	510	-3526	-3556
				-4493	-3585	-3695	-150	-3047	-3704	-3749	-150	520	-3595	-3625
			-160	-4582	-3654	-3764	-160	-3106	-3773	-3818	-160	530	-3664	-3694
				-4671	-3723	-3833	-160	-3165	-3842	-3887	-160	540	-3733	-3763
				-4760	-3792	-3902	-160	-3224	-3911	-3956	-160	550	-3802	-3832
-170				-4849	-3861	-3971	-170	-3283	-3980	-4025	-170	560	-3871	-3901
				-4938	-3930	-4040	-170	-3342	-4049	-4094	-170	570	-3940	-3970
				-5027	-4000	-4109	-170	-3401	-4118	-4163	-170	580	-4009	-4039
	-180			-5116	-4069	-4178	-180	-3460	-4187	-4232	-180	590	-4078	-4108
				-5205	-4138	-4247	-180	-3519	-4256	-4301	-180	600	-4147	-4177
				-5294	-4207	-4316	-180	-3578	-4325	-4370	-180	610	-4216	-4246
		-190		-5383	-4276	-4385	-190	-3637	-4394	-4439	-190	620	-4285	-4315
				-5472	-4345	-4454	-190	-3696	-4463	-4508	-190	630	-4354	-4384
				-5561	-4414	-4523	-190	-3755	-4532	-4577	-190	640	-4423	-4453
			-200	-5650	-4483	-4592	-200	-3814	-4601	-4646	-200	650	-4492	-4522
				-5739	-4552	-4661	-200	-3873	-4670	-4715	-200	660	-4561	-4591
				-5828	-4621	-4730	-200	-3932	-4739	-4784	-200	670	-4630	-4660
-210				-5917	-4690	-4799	-210	-3991	-4808	-4853	-210	680	-4699	-4729
				-6006	-4759	-4868	-210	-4050	-4877	-4922	-210	690	-4768	-4798
				-6095	-4828	-4937	-210	-4109	-4946	-4991	-210	700	-4837	-4867
	-220			-6184	-4897	-5006	-220	-4168	-5015	-5060	-220	710	-4906	-4936
				-6273	-4966	-5075	-220	-4227	-5084	-5129	-220	720	-4975	-5005
				-6362	-5035	-5144	-220	-4286	-5153	-5198	-220	730	-5044	-5074
		-230		-6451	-5104	-5213	-230	-4345	-5222	-5267	-230	740	-5113	-5143
				-6540	-5173	-5282	-230	-4404	-5291	-5336	-230	750	-5182	-5212
				-6629	-5242	-5351	-230	-4463	-5360	-5405	-230	760	-5251	-5281
			-240	-6718	-5311	-5420	-240	-4522	-5429	-5474	-240	770	-5320	-5350
				-6807	-5380	-5489	-240	-4581	-5498	-5543	-240	780	-5389	-5419
				-6896	-5449	-5558	-240	-4640	-5567	-5612	-240	790	-5458	-5488



Regulation with thermostatic head.



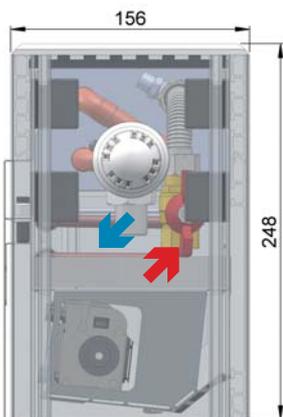
COIL-NK PTG



HEAT OUTPUT Q [W]

	air temperature t_A		
	15	20	22
	length L (mm) 1000		
80	1 610	1 503	1 460
70	1 395	1 288	1 245
60	1 108	1 007	967
45	554	475	443
	length L (mm) 1250		
80	2 098	1 958	1 902
70	1 818	1 678	1 622
60	1 447	1 315	1 262
45	734	629	587
	length L (mm) 1500		
80	2 659	2 482	2 411
70	2 304	2 127	2 056
60	1 836	1 669	1 602
45	933	800	747
	length L (mm) 1750		
80	3 132	2 923	2 839
70	2 714	2 505	2 422
60	2 158	1 962	1 884
45	1 083	928	866
	length L (mm) 2000		
80	3 572	3 334	3 239
70	3 096	2 858	2 763
60	2 465	2 241	2 151
45	1 239	1 062	991

cross section



Convector equipped with thermo-electric generator without need for power supply.

Suitable for interiors without power supply. This is the most efficient convector in terms of power supply.

CHARACTERISTICS

- high forced convection output
- short response time
- zero power supply
- silent operation

DIMENSIONS

width	156 mm
design height	248 mm
length	1000 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.



Recommended regulation
EB-A, EB-B, or EB-C

COIL-KZ



KZ 60 ELECTRIC POWER INPUT FOR FANS



length	power input
900	4 VA
1000	4 VA
1250	8 VA
1500	8 VA
1750	8 VA
2000	12 VA

HEAT OUTPUT Q [W] KZ 60

	1st degree minimum speed			2nd degree medium speed			3rd degree maximum speed				
	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	584	536	517	80	690	634	612	80	897	824	795
70	489	442	423	70	578	522	500	70	751	678	649
60	395	348	330	60	467	412	390	60	606	535	506
45	256	211	193	45	303	249	228	45	394	324	297
	length L (mm) 1000			length L (mm) 1000			length L (mm) 1000				
80	681	626	603	80	806	740	713	80	1 047	961	927
70	570	515	493	70	674	609	583	70	876	791	758
60	460	406	384	60	544	480	455	60	707	624	591
45	299	246	225	45	353	291	266	45	459	378	346
	length L (mm) 1250			length L (mm) 1250			length L (mm) 1250				
80	924	849	819	80	1 093	1 004	968	80	1 420	1 304	1 258
70	774	699	669	70	915	827	791	70	1 189	1 074	1 028
60	625	551	522	60	739	652	617	60	960	847	802
45	406	334	306	45	480	395	361	45	623	513	470
	length L (mm) 1500			length L (mm) 1500			length L (mm) 1500				
80	1 168	1 072	1 034	80	1 381	1 268	1 223	80	1 794	1 647	1 589
70	977	883	845	70	1 156	1 044	1 000	70	1 502	1 357	1 299
60	789	696	659	60	933	823	779	60	1 213	1 070	1 013
45	512	422	386	45	606	499	457	45	787	648	593
	length L (mm) 1750			length L (mm) 1750			length L (mm) 1750				
80	1 411	1 296	1 250	80	1 669	1 532	1 478	80	2 168	1 991	1 920
70	1 181	1 067	1 022	70	1 397	1 262	1 208	70	1 814	1 639	1 569
60	954	841	796	60	1 128	995	942	60	1 465	1 292	1 224
45	619	510	466	45	732	603	552	45	951	783	717
	length L (mm) 2000			length L (mm) 2000			length L (mm) 2000				
80	1 654	1 519	1 465	80	1 956	1 796	1 733	80	2 542	2 334	2 251
70	1 385	1 251	1 198	70	1 637	1 479	1 416	70	2 127	1 922	1 840
60	1 118	986	934	60	1 322	1 166	1 104	60	1 718	1 515	1 435
45	726	598	547	45	858	707	647	45	1 115	918	840

KZ 91 ELECTRIC POWER INPUT FOR FANS

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



Built-in convector for installation in walls with face panel.

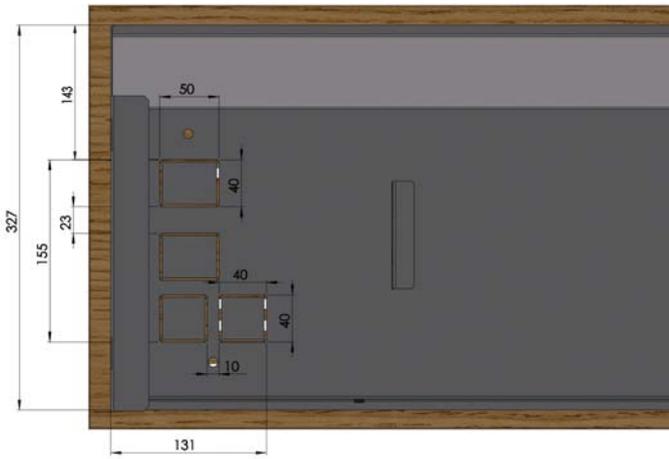
For use in spaces with low build-in depth. Suitable for interiors with increased esthetic demands. Provides increased user comfort.

CHARACTERISTICS

- high forced convection heating output
- quick response heating element
- low power consumption
- safe voltage 12 V DC
- easy control
- choice of stainless or wooden face panel

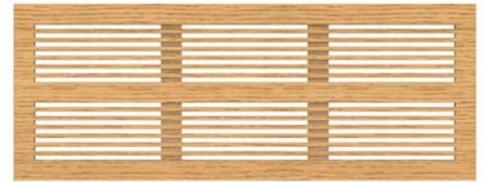
DIMENSIONS

width	60 a 91 mm
design height	328 mm (Panel 360 mm)
length	900 to 2000 mm
connection	G½"

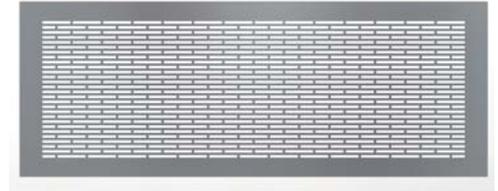


longitudinal section

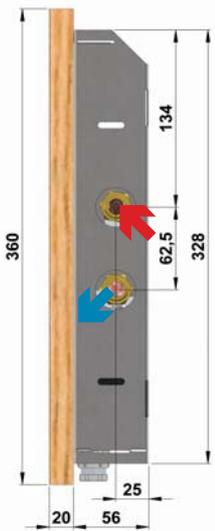
wood - oak without surface treatment



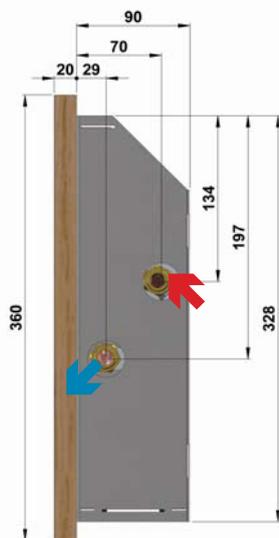
stainless matt



cross section COIL-KZ 60



cross section COIL-KZ 91



HEAT OUTPUT Q [W] KZ 91

	1st degree - minimum speed				2nd degree medium speed				3rd degree maximum speed			
	air temperature t_A				air temperature t_A				air temperature t_A			
	15	20	22		15	20	22		15	20	22	
mean water temperature t_w	length L (mm) 900			80	length L (mm) 900			80	length L (mm) 900			
	80	1 441	1 320		1 272	80	1 550		1 420	1 368	80	1 872
	70	1 201	1 082	1 035	70	1 291	1 164	1 113	70	1 560	1 406	1 344
	60	965	848	802	60	1 037	912	862	60	1 253	1 102	1 042
	45	619	508	463	45	666	546	498	45	805	659	602
	length L (mm) 1000			80	length L (mm) 1000			80	length L (mm) 1000			
	80	1 681	1 541		1 485	80	1 808		1 657	1 596	80	2 184
	70	1 401	1 262	1 207	70	1 506	1 358	1 298	70	1 820	1 640	1 568
	60	1 125	989	936	60	1 210	1 064	1 006	60	1 462	1 285	1 215
	45	723	592	541	45	777	637	581	45	939	769	702
	length L (mm) 1250			80	length L (mm) 1250			80	length L (mm) 1250			
	80	2 282	2 091		2 015	80	2 454		2 248	2 166	80	2 964
70	1 901	1 713	1 639	70	2 044	1 842	1 762	70	2 469	2 225	2 128	
60	1 527	1 343	1 270	60	1 642	1 444	1 365	60	1 984	1 744	1 649	
45	981	804	734	45	1 055	864	789	45	1 274	1 044	953	
length L (mm) 1500			80	length L (mm) 1500			80	length L (mm) 1500				
80	2 882	2 641		2 545	80	3 099		2 840	2 737	80	3 743	3 430
70	2 402	2 164	2 070	70	2 582	2 327	2 226	70	3 119	2 811	2 688	
60	1 929	1 696	1 604	60	2 074	1 824	1 725	60	2 506	2 203	2 083	
45	1 239	1 015	927	45	1 332	1 092	997	45	1 609	1 319	1 204	
length L (mm) 1750			80	length L (mm) 1750			80	length L (mm) 1750				
80	3 483	3 191		3 075	80	3 745		3 431	3 307	80	4 523	4 145
70	2 902	2 615	2 501	70	3 120	2 812	2 689	70	3 769	3 397	3 249	
60	2 331	2 050	1 938	60	2 506	2 204	2 084	60	3 028	2 662	2 517	
45	1 497	1 227	1 120	45	1 610	1 319	1 204	45	1 945	1 594	1 455	
length L (mm) 2000			80	length L (mm) 2000			80	length L (mm) 2000				
80	4 083	3 741		3 605	80	4 391		4 023	3 877	80	5 303	4 859
70	3 402	3 066	2 932	70	3 658	3 297	3 153	70	4 419	3 982	3 809	
60	2 733	2 403	2 272	60	2 939	2 584	2 443	60	3 549	3 121	2 951	
45	1 755	1 438	1 313	45	1 887	1 547	1 412	45	2 280	1 868	1 706	

FREE STANDING CONVECTORS

16



... more than heating



COIL-SU1

THERMAL EXPONENT $n = 1,3764$ 

Narrowest free standing convector with natural convection.

CHARACTERISTICS

- high output
- short response time

DIMENSIONS

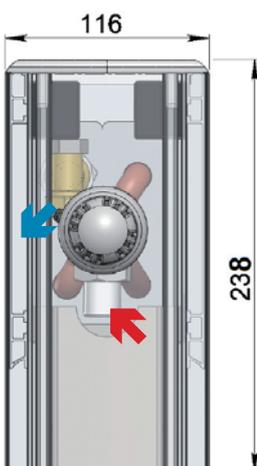
width	116 mm
design height	238 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

cross section



HEAT OUTPUT Q [W]

	air temperature t_A		
	15	20	22
	length L (mm) 900		
80	671	601	573
70	533	467	442
60	404	344	320
45	231	180	160
	length L (mm) 1000		
80	764	685	653
70	607	533	504
60	461	392	365
45	264	205	183
	length L (mm) 1250		
80	999	895	854
70	794	696	658
60	602	512	477
45	345	268	239
	length L (mm) 1500		
80	1 233	1 105	1 054
70	980	859	813
60	743	632	589
45	425	331	295
	length L (mm) 1750		
80	1 468	1 315	1 255
70	1 166	1 023	967
60	885	752	701
45	506	394	351
	length L (mm) 2000		
80	1 702	1 525	1 455
70	1 353	1 186	1 121
60	1 026	873	813
45	587	457	407

mean water temperature t_w

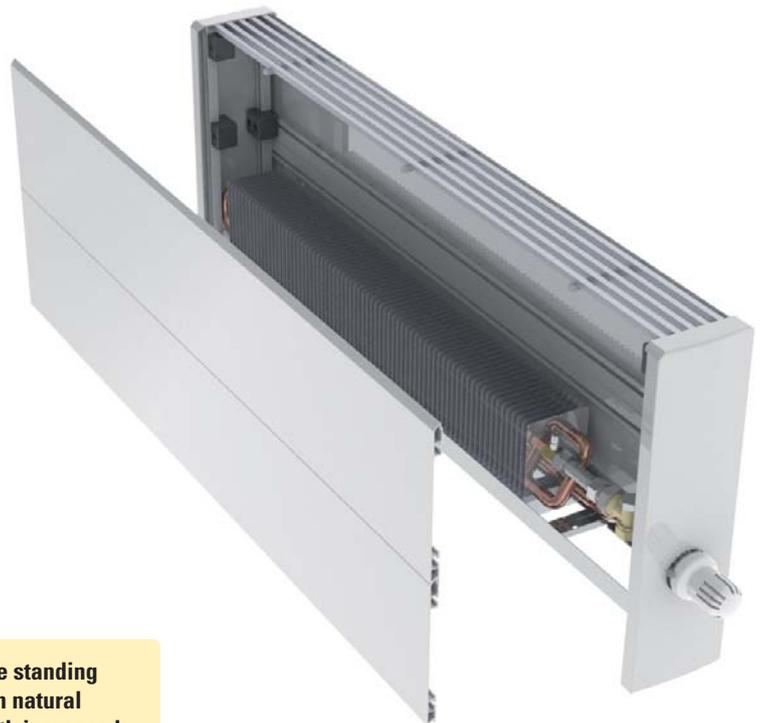


COIL-SU2

THERMAL EXPONENT $n = 1,3764$

HEAT OUTPUT Q [W]

	air temperature t_A		
	15	20	22
	length L (mm)		900
80	858	768	733
	681	598	565
	517	440	410
	296	230	205
70	977	876	836
	777	681	644
	589	501	467
	337	262	234
60	1 277	1 144	1 092
	1 015	890	842
	770	655	610
	441	343	306
45	1 577	1 413	1 348
	1 253	1 099	1 039
	951	808	753
	544	423	377
80	1 877	1 681	1 605
	1 491	1 308	1 237
	1 131	962	897
	648	504	449
70	2 177	1 950	1 861
	1 730	1 517	1 434
	1 312	1 116	1 040
	751	584	521



Narrowest free standing convector with natural convection with increased output.

CHARACTERISTICS

- very high output
- short response time

DIMENSIONS

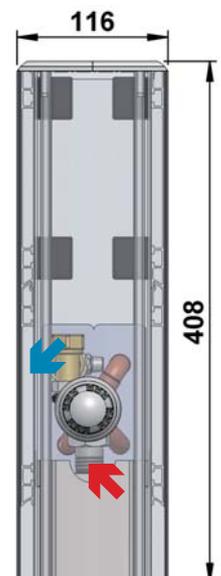
width	116 mm
design height	408 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

cross section





COIL-SPO

THERMAL EXPONENT $n = 1,2497$ 

Lowest free standing
convector without fan.

CHARACTERISTICS

- high output
- short response time

DIMENSIONS

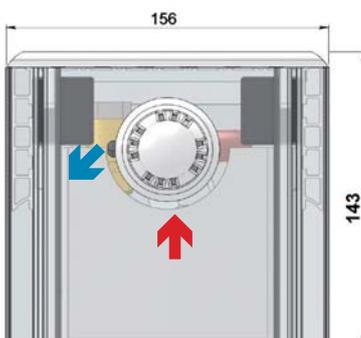
width	156 mm
design height	143 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille
must not be loaded or covered.

cross section



HEAT OUTPUT Q [W]

	air temperature t_A		
	15	20	22
	length L (mm) 900		
80	456	412	395
70	370	328	312
60	288	248	233
45	173	138	124
	15	20	22
	length L (mm) 1000		
80	520	470	451
70	422	374	356
60	328	283	266
45	198	157	142
	15	20	22
	length L (mm) 1250		
80	679	614	589
70	551	489	465
60	429	370	347
45	258	206	185
	15	20	22
	length L (mm) 1500		
80	838	759	727
70	680	604	574
60	529	457	429
45	319	254	229
	15	20	22
	length L (mm) 1750		
80	998	903	865
70	810	719	683
60	630	544	510
45	380	302	272
	15	20	22
	length L (mm) 2000		
80	1 157	1 047	1 004
70	939	834	792
60	731	631	592
45	440	351	316

mean water temperature t_w



COIL-SP1/4

THERMAL EXPONENT $n = 1,3816$

HEAT OUTPUT Q [W]

	air temperature t_A			
	15	20	22	
	length L (mm)		900	
mean water temperature t_w	80	839	751	717
	70	666	584	552
	60	505	429	400
	45	288	224	200
	length L (mm) <td>1000</td> <td></td>		1000	
	80	957	857	818
	70	760	666	630
	60	576	489	456
	45	329	256	228
	length L (mm) <td>1250</td> <td></td>		1250	
	80	1 253	1 122	1 070
	70	995	872	824
60	754	641	597	
45	430	335	298	
length L (mm) <td>1500</td> <td></td>		1500		
80	1 548	1 386	1 323	
70	1 229	1 077	1 018	
60	931	792	737	
45	532	414	369	
length L (mm) <td>1750</td> <td></td>		1750		
80	1 844	1 651	1 575	
70	1 464	1 283	1 213	
60	1 109	943	878	
45	633	492	439	
length L (mm) <td>2000</td> <td></td>		2000		
80	2 139	1 915	1 827	
70	1 698	1 489	1 407	
60	1 287	1 094	1 019	
45	735	571	509	



Standard free standing convector without fan with a width of 156 mm.

CHARACTERISTICS

- high output
- short response time

DIMENSIONS

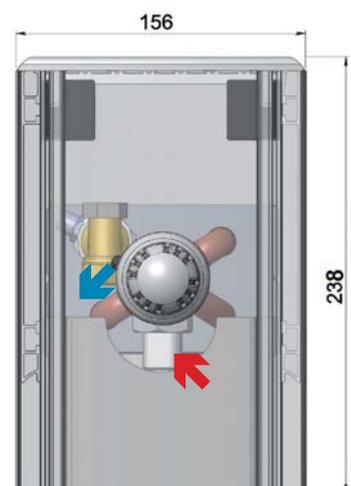
width	156 mm
design height	238 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

cross section





COIL-SP2/4

THERMAL EXPONENT $n = 1,3911$ 

Standard free standing convector without fan with increased output and a width of 156 mm.

CHARACTERISTICS

- high output
- short response time

DIMENSIONS

width	156 mm
design height	408 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

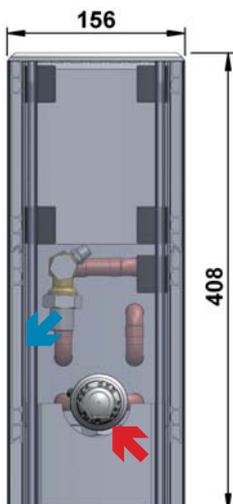
ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

HEAT OUTPUT Q [W]

	air temperature t_A			
	15	20	22	
	length L (mm)			
mean water temperature t_w	length L (mm) 900			
	80	1 307	1 169	1 116
	70	1 036	907	857
	60	784	665	619
	45	446	346	308
	length L (mm) 1000			
	80	1 490	1 333	1 272
	70	1 181	1 034	977
	60	893	758	706
	45	508	394	351
	length L (mm) 1250			
	80	1 947	1 742	1 662
70	1 543	1 352	1 277	
60	1 167	991	923	
45	664	515	459	
length L (mm) 1500				
80	2 404	2 151	2 052	
70	1 906	1 669	1 577	
60	1 441	1 224	1 139	
45	820	636	567	
length L (mm) 1750				
80	2 861	2 560	2 442	
70	2 268	1 986	1 877	
60	1 715	1 456	1 356	
45	976	757	674	
length L (mm) 2000				
80	3 318	2 968	2 832	
70	2 630	2 303	2 176	
60	1 989	1 689	1 572	
45	1 132	878	782	

cross section





COIL-SW250

THERMAL EXPONENT $n = 1,4173$



HEAT OUTPUT Q [W]

	air temperature t_A			
	15	20	22	
	length L (mm)		900	
mean water temperature t_w	80	1 533	1 369	1 305
	70	1 210	1 057	998
	60	910	770	716
	45	512	396	352
	length L (mm) <td>1000</td> <td></td>		1000	
	80	1 748	1 560	1 487
	70	1 379	1 205	1 137
	60	1 038	878	817
	45	584	451	401
	length L (mm) <td>1250</td> <td></td>		1250	
	80	2 284	2 039	1 943
	70	1 802	1 575	1 486
60	1 356	1 148	1 067	
45	763	590	524	
length L (mm) <td>1500</td> <td></td>		1500		
80	2 820	2 517	2 399	
70	2 225	1 944	1 835	
60	1 675	1 417	1 318	
45	943	728	647	
length L (mm) <td>1750</td> <td></td>		1750		
80	3 356	2 996	2 856	
70	2 648	2 314	2 184	
60	1 993	1 686	1 568	
45	1 122	866	770	
length L (mm) <td>2000</td> <td></td>		2000		
80	3 892	3 475	3 312	
70	3 072	2 683	2 533	
60	2 311	1 956	1 819	
45	1 301	1 005	893	

Most powerful free standing convector without fan with a height of 258 mm.

CHARACTERISTICS

- high output
- short response time

DIMENSIONS

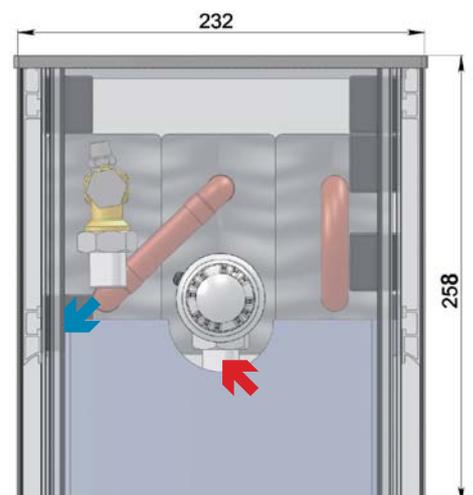
width	232 mm
design height	258 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

cross section



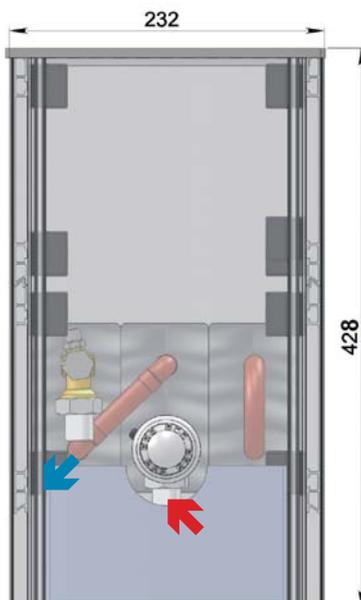


COIL-SW420

THERMAL EXPONENT $n = 1,3752$ 

Most powerful free standing convector without fan with a height of 428 mm.

cross section



CHARACTERISTICS

- very high output
- short response time

DIMENSIONS

width	232 mm
design height	428 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

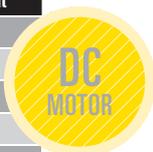
HEAT OUTPUT Q [W]

	air temperature t_A		
	15	20	22
	length L (mm) 900		
80	1 857	1 663	1 588
70	1 476	1 295	1 224
60	1 120	952	888
45	641	499	445
	length L (mm) 1000		
80	2 117	1 896	1 810
70	1 682	1 476	1 395
60	1 277	1 086	1 012
45	731	569	507
	length L (mm) 1250		
80	2 766	2 478	2 365
70	2 198	1 928	1 823
60	1 668	1 419	1 322
45	955	743	663
	length L (mm) 1500		
80	3 415	3 059	2 920
70	2 714	2 381	2 251
60	2 060	1 752	1 632
45	1 179	918	818
	length L (mm) 1750		
80	4 065	3 641	3 475
70	3 230	2 833	2 679
60	2 451	2 085	1 943
45	1 404	1 092	974
	length L (mm) 2000		
80	4 714	4 222	4 030
70	3 746	3 286	3 107
60	2 843	2 418	2 253
45	1 628	1 267	1 130

COIL-SK1

ELECTRIC POWER INPUT FOR FANS

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



Lowest free standing convector with fan.

CHARACTERISTICS

- high forced convection heating output
- quick response heating element
- heating even with fan switched off
- low power consumption
- safe voltage 12 V DC
- easy control

DIMENSIONS

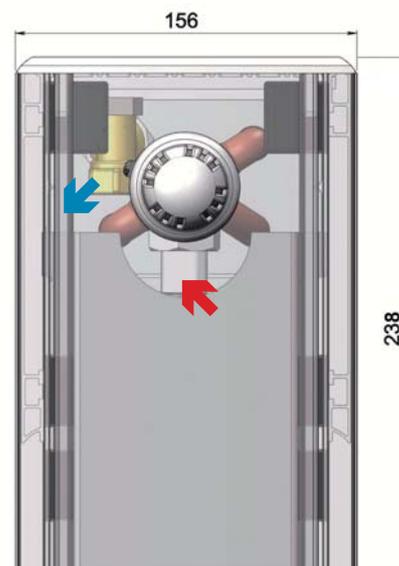
width	156 mm
design height	238 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

cross section





Recommended regulation
EB-A, EB-B, or EB-C

THERMAL EXPONENT $n = 1,09525$

HEAT OUTPUT Q [W]

	1st degree minimum speed			2nd degree medium speed			3rd degree maximum speed				
	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	1 159	1 061	1 023	80	1 239	1 135	1 094	80	1 614	1 478	1 425
70	965	869	831	70	1 032	930	889	70	1 344	1 211	1 158
60	774	681	644	60	829	728	689	60	1 079	948	896
45	497	407	371	45	531	435	397	45	692	567	517
	length L (mm) 1000			length L (mm) 1000			length L (mm) 1000				
80	1 352	1 238	1 193	80	1 446	1 325	1 276	80	1 883	1 725	1 662
70	1 126	1 014	970	70	1 204	1 085	1 037	70	1 568	1 413	1 351
60	904	794	751	60	967	850	803	60	1 259	1 106	1 046
45	580	475	433	45	620	508	463	45	807	661	603
	length L (mm) 1250			length L (mm) 1250			length L (mm) 1250				
80	1 834	1 680	1 619	80	1 963	1 798	1 732	80	2 555	2 341	2 255
70	1 528	1 376	1 316	70	1 634	1 472	1 408	70	2 128	1 917	1 833
60	1 226	1 078	1 019	60	1 312	1 153	1 090	60	1 708	1 501	1 419
45	787	644	588	45	841	689	629	45	1 096	897	819
	length L (mm) 1500			length L (mm) 1500			length L (mm) 1500				
80	2 317	2 123	2 045	80	2 479	2 271	2 188	80	3 228	2 957	2 849
70	1 930	1 738	1 662	70	2 064	1 860	1 779	70	2 688	2 422	2 316
60	1 549	1 362	1 287	60	1 657	1 457	1 377	60	2 158	1 897	1 793
45	994	814	743	45	1 063	871	795	45	1 384	1 133	1 035
	length L (mm) 1750			length L (mm) 1750			length L (mm) 1750				
80	2 800	2 565	2 471	80	2 995	2 744	2 644	80	3 900	3 573	3 443
70	2 332	2 101	2 009	70	2 495	2 247	2 149	70	3 248	2 926	2 798
60	1 872	1 645	1 555	60	2 002	1 760	1 664	60	2 607	2 292	2 166
45	1 201	983	897	45	1 284	1 052	960	45	1 672	1 370	1 250
	length L (mm) 2000			length L (mm) 2000			length L (mm) 2000				
80	3 283	3 007	2 898	80	3 512	3 217	3 100	80	4 573	4 189	4 036
70	2 734	2 463	2 355	70	2 925	2 635	2 520	70	3 808	3 431	3 281
60	2 194	1 929	1 823	60	2 348	2 063	1 951	60	3 057	2 687	2 540
45	1 408	1 153	1 052	45	1 506	1 233	1 126	45	1 961	1 606	1 466

COIL-SK2

ELECTRIC POWER INPUT FOR FANS

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



Most powerful free standing convector with fan.

CHARACTERISTICS

- high forced convection heating output
- quick response heating element
- heating even with fan switched off
- low power consumption
- safe voltage 12 V DC
- easy control

DIMENSIONS

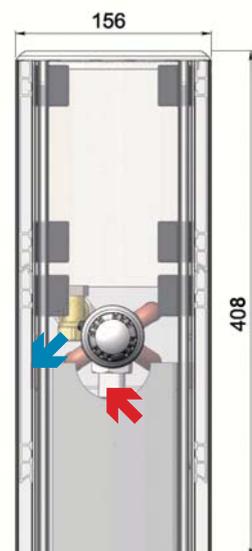
width	156 mm
design height	408 mm
length	900 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

cross section





Recommended regulation
EB-A, EB-B, or EB-C

THERMAL EXPONENT $n = 1,17097$

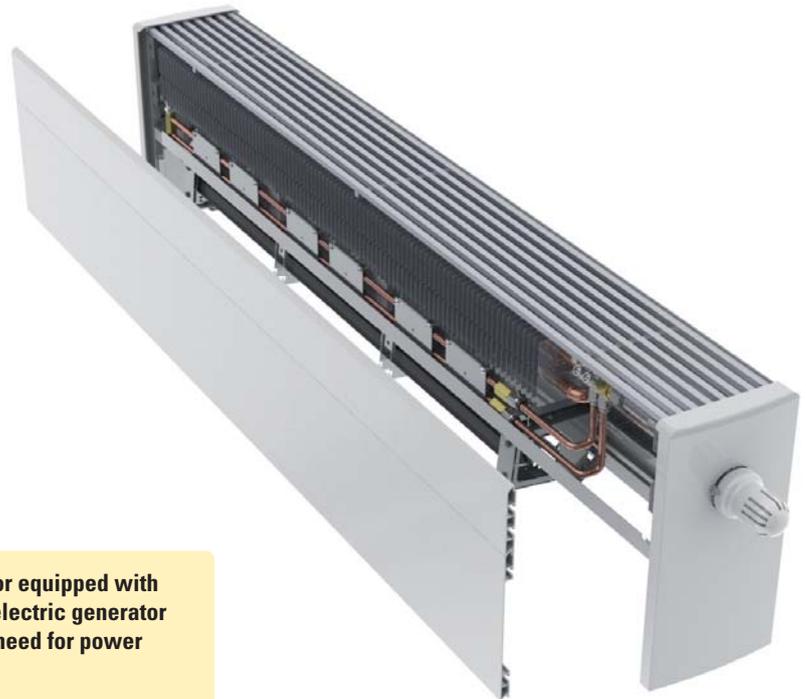
HEAT OUTPUT Q [W]

	1st degree minimum speed			2nd degree medium speed			3rd degree maximum speed				
	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	1 714	1 560	1 500	80	1 802	1 641	1 577	80	2 042	1 859	1 787
70	1 409	1 260	1 202	70	1 482	1 326	1 264	70	1 679	1 502	1 432
60	1 114	971	914	60	1 172	1 021	961	60	1 328	1 157	1 089
45	693	560	508	45	729	589	534	45	826	667	605
	length L (mm) 1000			length L (mm) 1000			length L (mm) 1000				
80	1 999	1 820	1 750	80	2 103	1 915	1 840	80	2 382	2 169	2 085
70	1 644	1 470	1 402	70	1 729	1 547	1 474	70	1 959	1 752	1 670
60	1 300	1 132	1 066	60	1 367	1 191	1 122	60	1 549	1 349	1 271
45	808	653	592	45	850	687	623	45	963	778	706
	length L (mm) 1250			length L (mm) 1250			length L (mm) 1250				
80	2 713	2 471	2 374	80	2 854	2 599	2 497	80	3 233	2 944	2 829
70	2 231	1 996	1 902	70	2 347	2 099	2 001	70	2 659	2 378	2 267
60	1 764	1 537	1 447	60	1 855	1 616	1 522	60	2 102	1 831	1 724
45	1 097	886	804	45	1 154	932	846	45	1 307	1 056	958
	length L (mm) 1500			length L (mm) 1500			length L (mm) 1500				
80	3 427	3 121	2 999	80	3 605	3 282	3 155	80	4 084	3 719	3 574
70	2 818	2 521	2 403	70	2 964	2 651	2 528	70	3 358	3 004	2 864
60	2 228	1 941	1 828	60	2 344	2 042	1 923	60	2 655	2 313	2 178
45	1 386	1 120	1 015	45	1 458	1 178	1 068	45	1 652	1 334	1 210
	length L (mm) 1750			length L (mm) 1750			length L (mm) 1750				
80	4 141	3 771	3 624	80	4 356	3 966	3 812	80	4 935	4 493	4 319
70	3 406	3 046	2 904	70	3 582	3 204	3 054	70	4 058	3 630	3 460
60	2 692	2 346	2 209	60	2 832	2 467	2 323	60	3 208	2 795	2 632
45	1 675	1 353	1 227	45	1 762	1 423	1 291	45	1 996	1 612	1 462
	length L (mm) 2000			length L (mm) 2000			length L (mm) 2000				
80	4 855	4 421	4 249	80	5 107	4 650	4 469	80	5 786	5 268	5 063
70	3 993	3 571	3 404	70	4 200	3 756	3 581	70	4 758	4 255	4 057
60	3 157	2 750	2 590	60	3 320	2 892	2 724	60	3 761	3 277	3 086
45	1 963	1 586	1 438	45	2 065	1 668	1 513	45	2 340	1 890	1 714

COIL-SK-PTG



Regulation with thermostatic head.



HEAT OUTPUT Q [W]

	air temperature t_A		
	15	20	22
	length L (mm) 1000		
80	1 610	1 503	1 460
70	1 395	1 288	1 245
60	1 108	1 007	967
50	554	475	443
	length L (mm) 1250		
80	2 098	1 958	1 902
70	1 818	1 678	1 622
60	1 447	1 315	1 262
50	734	629	587
	length L (mm) 1500		
80	2 659	2 482	2 411
70	2 304	2 127	2 056
60	1 836	1 669	1 602
50	933	800	747
	length L (mm) 1750		
80	3 132	2 923	2 839
70	2 714	2 505	2 422
60	2 158	1 962	1 884
50	1 083	928	866
	length L (mm) 2000		
80	3 572	3 334	3 239
70	3 096	2 858	2 763
60	2 465	2 241	2 151
50	1 239	1 062	991

Convector equipped with thermo-electric generator without need for power supply.

Suitable for interiors without power supply or where the most efficient solution is required in terms of power supply.

CHARACTERISTICS

- high forced convection output
- short response time
- zero power supply
- silent operation

DIMENSIONS

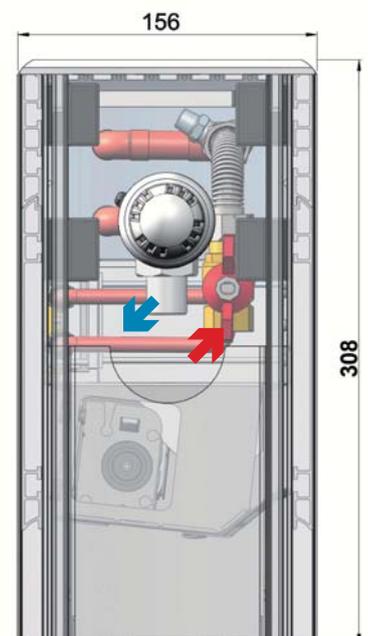
width	156 mm
design height	308 mm
length	1000 to 2000 mm
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

INFO: decorative convector grille must not be loaded or covered.

cross section





*31

COIL-LP

THERMAL EXPONENT $n = 1,4035$



Heating bench without fan with **GRANITE** or **WOODEN** top panel.

The bench is suitable as an esthetic component for interiors or swimming pools.

CHARACTERISTICS

- very high convection output
- high radiation output
- quick response heating element

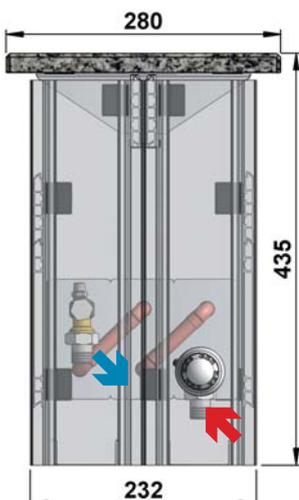
DIMENSIONS

width	280 mm
design height	435 mm
length	1000, 1250 and 1500 mm
granite panel	1000 and 1250 mm
wooden panel	1500 mm
loading capacity	do 150 kg
connection	G½"

COLOR DESIGN

ANODIZED	silver
	light bronze
	dark bronze
PAINTED	RAL 9016 semi-gloss (white)

cross section



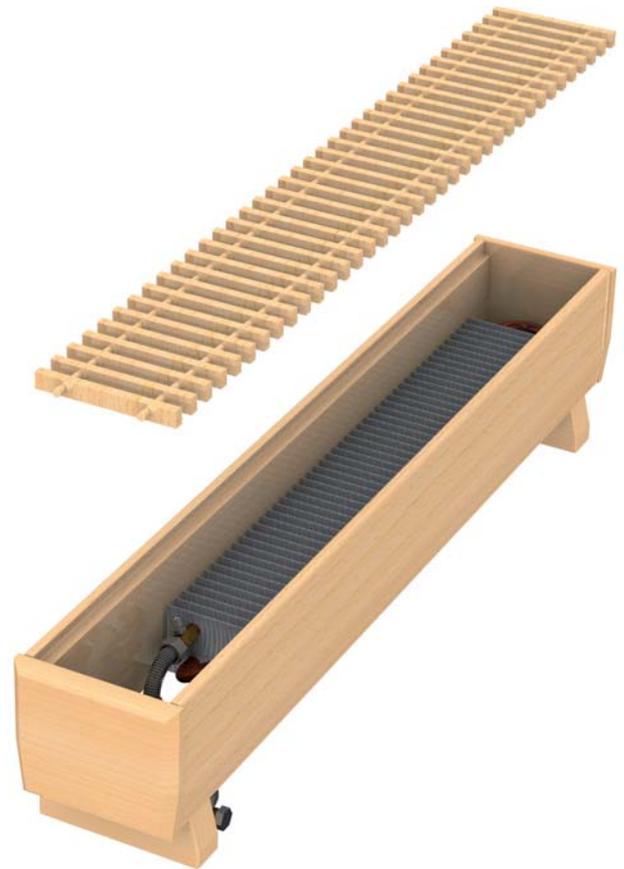
HEAT OUTPUT Q [W]

	air temperature t_a		
	15	20	22
	length L (mm) 1000		
80	1 923	1 719	1 639
70	1 521	1 331	1 257
60	1 148	973	905
45	650	503	448
	length L (mm) 1250		
80	2 513	2 246	2 142
70	1 988	1 739	1 642
60	1 500	1 271	1 183
45	849	657	585
	length L (mm) 1500		
80	3 103	2 774	2 645
70	2 455	2 147	2 028
60	1 852	1 570	1 461
45	1 048	812	722



COIL-DP

THERMAL EXPONENT $n = 1,3788$



HEAT OUTPUT Q [W]

		air temperature t_A			
		15	20	22	
		length L (mm)		900	
mean water temperature t_w	80	747	669	639	
	70	594	521	492	
	60	450	383	357	
	45	257	200	178	
			length L (mm)		1000
	80	872	781	745	
	70	693	607	574	
	60	525	446	416	
	45	300	234	208	
			length L (mm)		1500
	80	1 495	1 339	1 277	
	70	1 187	1 041	984	
60	900	765	713		
45	515	400	357		
		length L (mm)		2000	
80	2 118	1 896	1 810		
70	1 682	1 475	1 394		
60	1 275	1 084	1 010		
45	729	567	506		

All-wood free standing convector without fan.

Specially designed esthetic interior component manufactured from solid timber (beech).

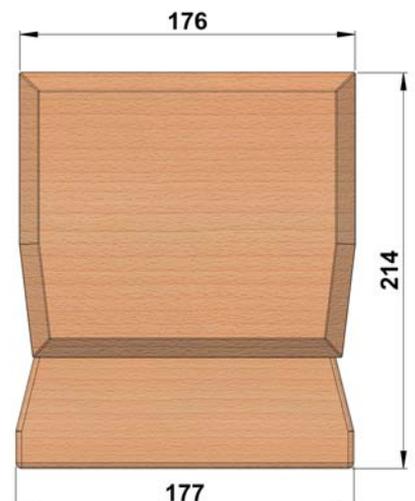
CHARACTERISTICS

- high natural convection output
- short response time

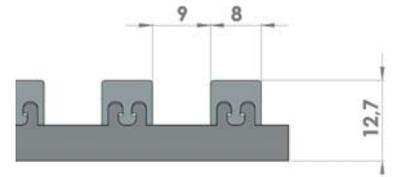
DIMENSIONS

width	176 mm
design height	214 mm
length	900 to 2000 mm
connection	G½"

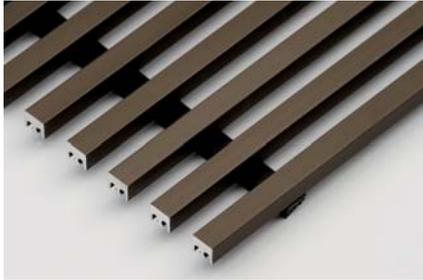
cross section



GRILLES



LONGITUDINAL – AL pro NK1, NK2, NK PTG, NU1, NU2, NP1/4, NP2/4, NW170, NW340, SK1, SK2, SK PTG, SU1, SU2, SP1/4, SP2/4, SW250, SW420, SP0



dark bronze



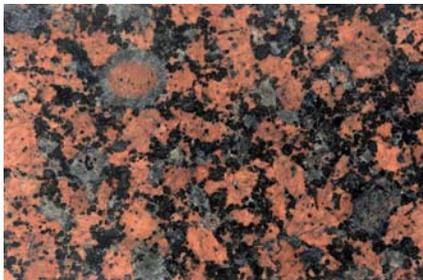
light bronze



silver

PANELS

GRANITE PANEL for LP



red-black



brown-green



white-black

COLOR DESIGN



dark bronze



light bronze



silver



white

Physical characteristics

APPROXIMATE AIR THROUGHPUT OF MINIB CONVECTORS, m³/h

fan wheel diameter	convector length	low speed	medium speed	maximum speed
30 mm	1000 mm	100	120	250
50 mm	1000 mm	200	220	300

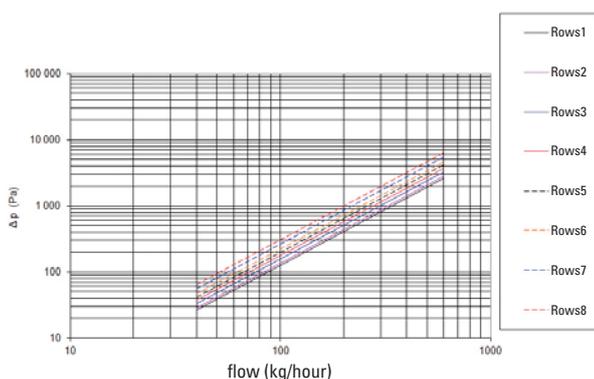
Info: air throughput values in the table apply to 1000 mm convectors. For other lengths, multiply the unit throughputs by the relevant convector length in meters (for example, COIL NK1 with a length of 2000 mm has air throughput for medium speed $220 \times 2 = 440$ m³/h).

WATER VOLUME OF MINIB CONVECTORS, dm³

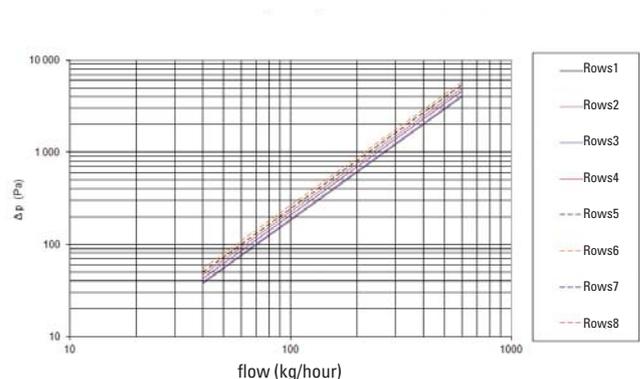
Average water volume of MINIB convectors (two-pipe exchangers):									
convector length, m	0,9	1,0	1,25	1,5	1,75	2,0	2,5	3,0	
water volume of exchanger, dm ³ (for pipe diameter 15mm)	0,2	0,25	0,3	0,4	0,5	0,6	0,7	0,9	
water volume of exchanger, dm ³ (for pipe diameter 12mm)	0,13	0,15	0,2	0,25	0,3	0,35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

Pressure losses

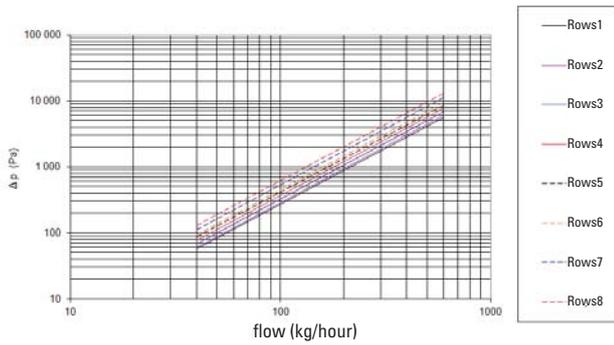
Pressure losses of 2 tube exchanger MINIB KZ 60, Cu pipe Ø 15mm



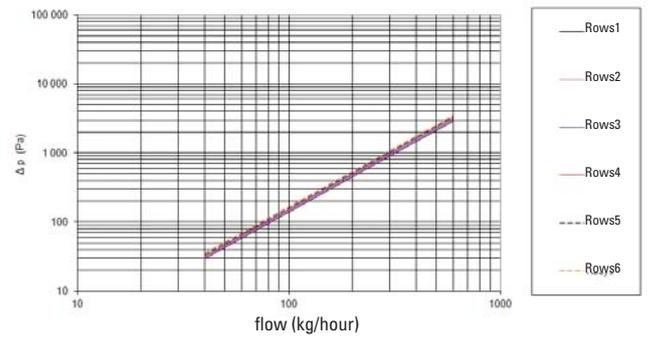
Pressure losses of 2 tube exchanger MINIB SP0, Cu pipe Ø 15mm



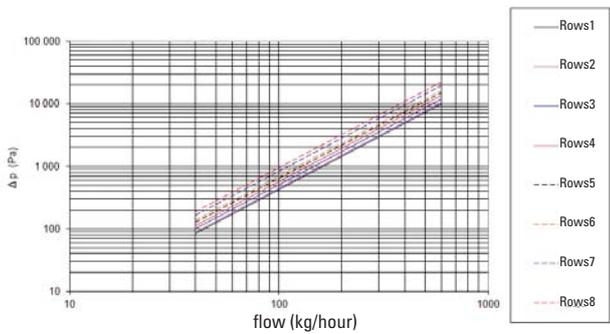
Pressure losses of 4 tube exchanger MINIB KZ90, NK1, NK2, SK1, SK2, NU1, NU2, SU1, SU2, DP
Cu pipe Ø 15 mm



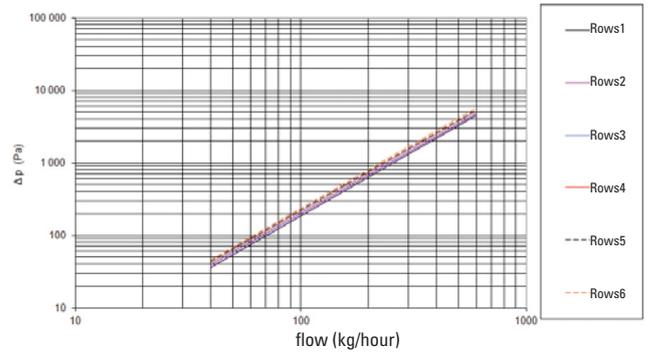
Pressure losses of 4 tube exchanger MINIB NP1/SP1
4 Cu pipes Ø 15 mm



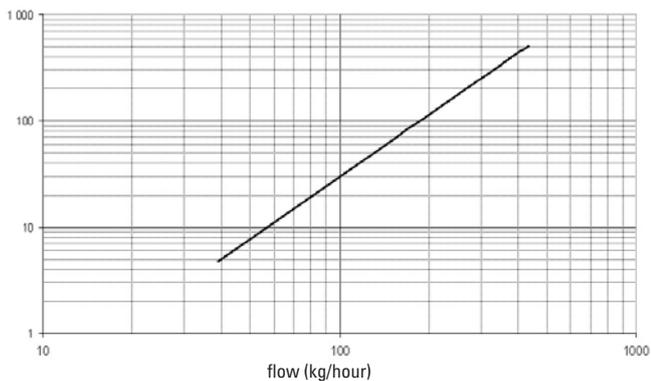
Pressure losses of 6 tube exchanger MINIB NW170, NW340, SW250, SW420, LP Cu pipe Ø 15 mm



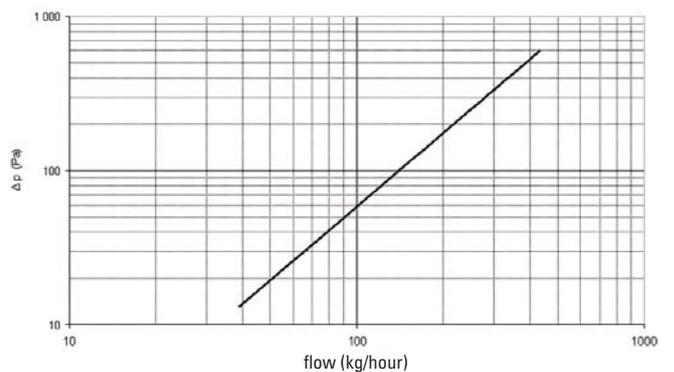
Pressure losses of 8 tube exchanger MINIB NP2/SP2
8 Cu pipes Ø 15 mm



Pressure losses of direct ball valve 1/2"

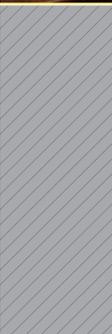
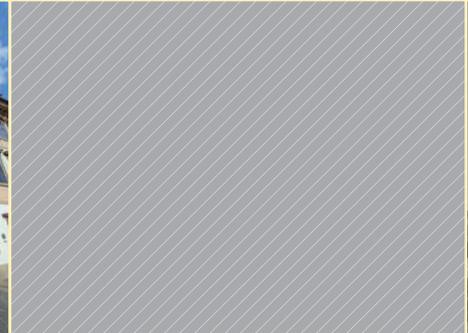
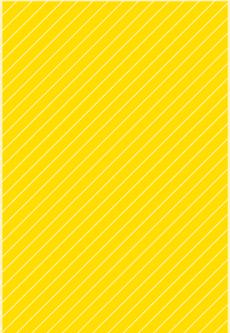


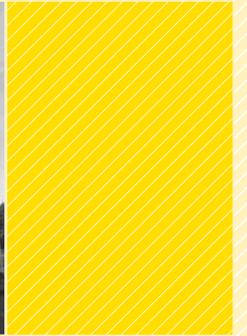
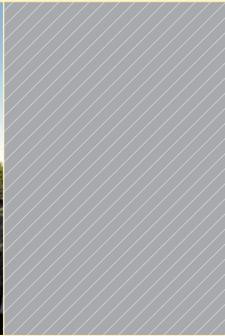
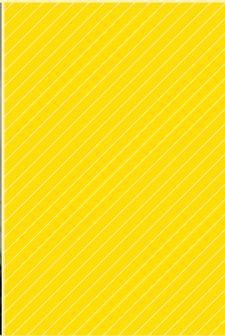
Pressure losses in flexible stainless hose AZ 1/2"
L = 65mm



REFERENCES

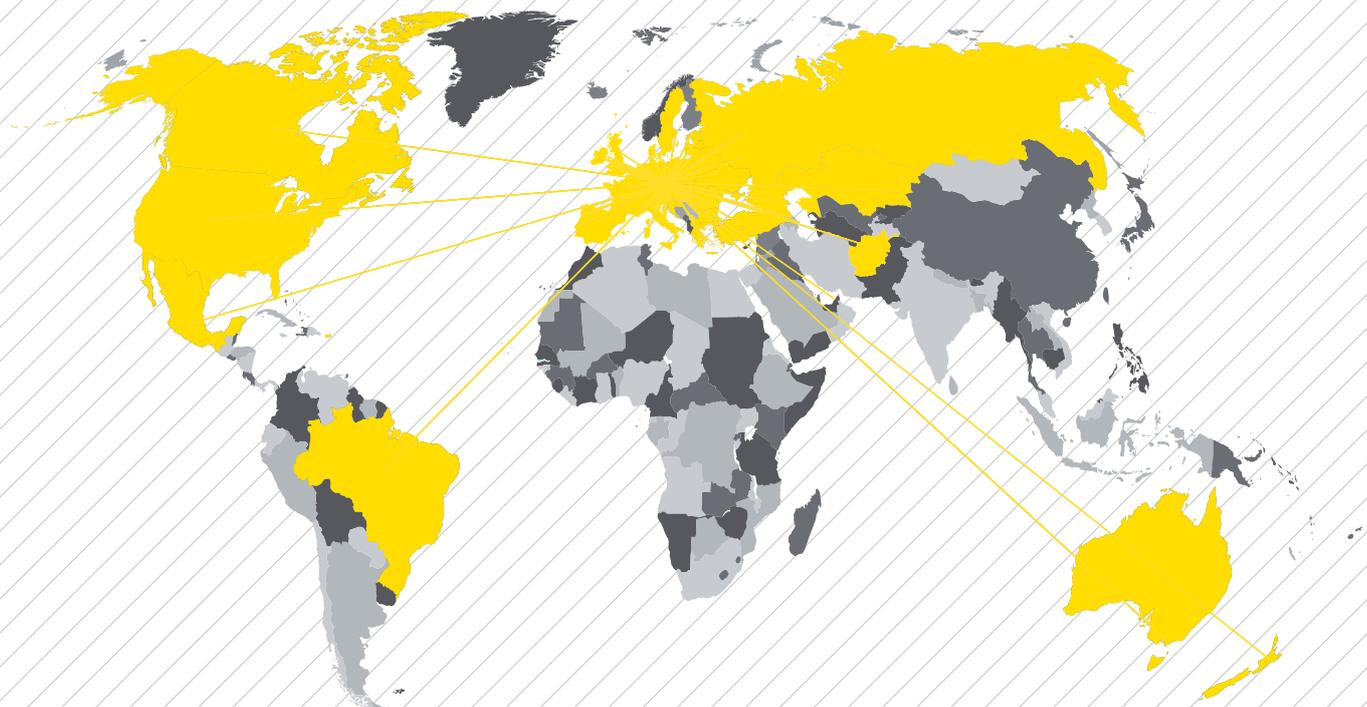
Convectors are suitable for all building types.







●●● more than just heat



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