



► PowerKon + ST

PowerKon + ST

"Safe Touch" low surface temperature convector

► **Technical Catalogue**

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PowerKon + ST
Casing and bracketry
coated with an
anti-bacterial and
scratch resistant
epoxy powder



The PowerKon + ST is ideal for the education, healthcare and care sectors.

01 ▶ Product Information



Powerkon + ST (Floor Standing and Wall Mounted)

The PowerKon + ST is ideal for the education, healthcare and the care sector. Casing and bracketry coated with an anti-bacterial and scratch resistant epoxy powder, coloured in RAL 9016, pure white. There are no joints in the casing to gather dirt, dust and potential bacteria.

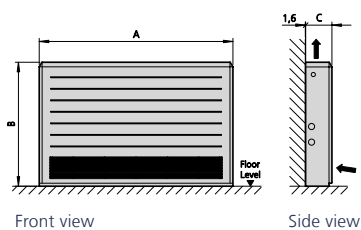
The new PowerKon + ST „Safe Touch“ low surface temperature convector delivers versatility, safety, highest thermal performance and a high-quality casing which can be installed extremely quickly. All performance data tested in accordance with BS EN 442.

Easy to install, strong single piece profiled casing, made of 1.6 mm steel with 3 mm rib details for extra strength and durability, complete with air inlet and air outlet grille at the front as floor standing casing. Air inlet/outlet grille as pencil proof linear bar grille with max. 7.1 mm bar spacing.

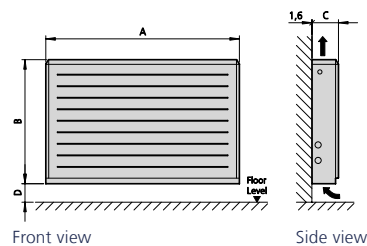
Complete with wall / floor brackets and wall spacer. Security screw locking system to fix casing onto bracketry to prevent unauthorized access.

Low water content PowerKon convector, made of aluminium fins on copper pipes, designed as single water way convector to maximize water turbulence and therefore thermal performance. Convactor with 1/2" fem. BSP bi-directional connections. Working pressure 10 bar, test pressure 16 bar. Convactor coated to RAL 7024, graphite grey.

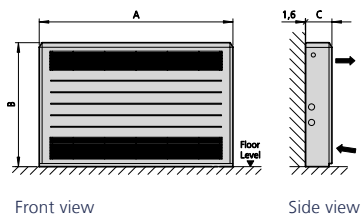
Floor mounted, top grille (FTG)



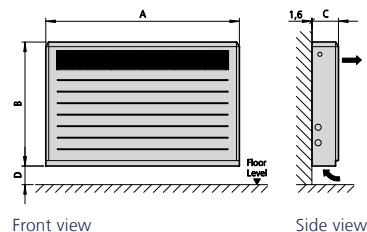
Wall mounted, top grille (WTG)



Floor mounted, front grille (FFG)



Wall mounted, front grille (WFG)



Casing Length A	Casing Heights B	Casing Depths C	Floor Distance D
[mm]	[mm]	[mm]	[mm]
650	500	120	100
850	650	170	120
1050	800	220	150
1250			
1450			
1650			
1850			
2050			

Product Data



Product Features

- ▶ Low water content PowerKon convector, made of aluminium fins on copper pipes
- ▶ Designed as single way water convector to maximize water turbulence and therefore thermal performance
- ▶ Convector with 1/2" fem. BSP bi-directional connections
- ▶ Working Pressure 10 bar, test pressure 16 bar
- ▶ Convector coated to RAL 7024, graphite grey
- ▶ All performance data tested in accordance with BS EN 442



Features

Casing

3 heights, 8 lengths, 3 depths;
4 models: WTG (Wall Top Grille), WFG (Wall Front Grille), FTG (Floor Top Grille), FFG (Floor Front Grille)

Convector

2 height, 8 lengths, 3 depths;
Convector type: single/twin

- Convection Heating System**
- ▶ Natural
 - ▶ LPHW
 - ▶ 2-pipe, heating only

Grille finishes

- ▶ Linear grilles

Uses

The Kampmann Powerkon + ST is ideal for the education, healthcare and care sector.



Healthcare and care sector



Education

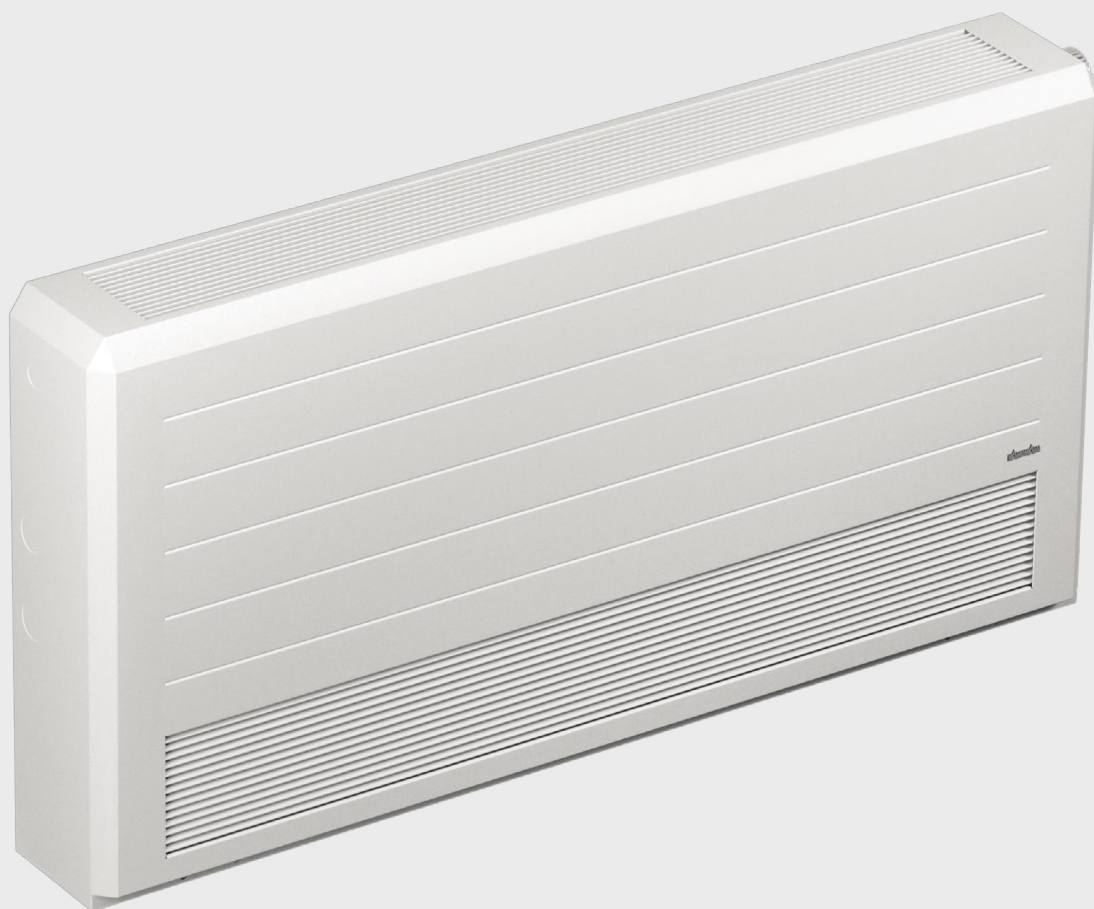
Selection guide: Overview of Models

Powerkon ST

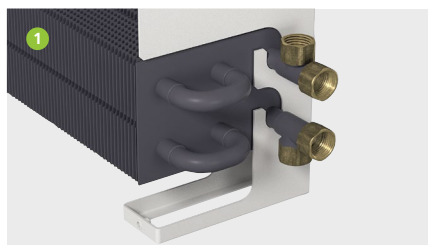
Convector specification

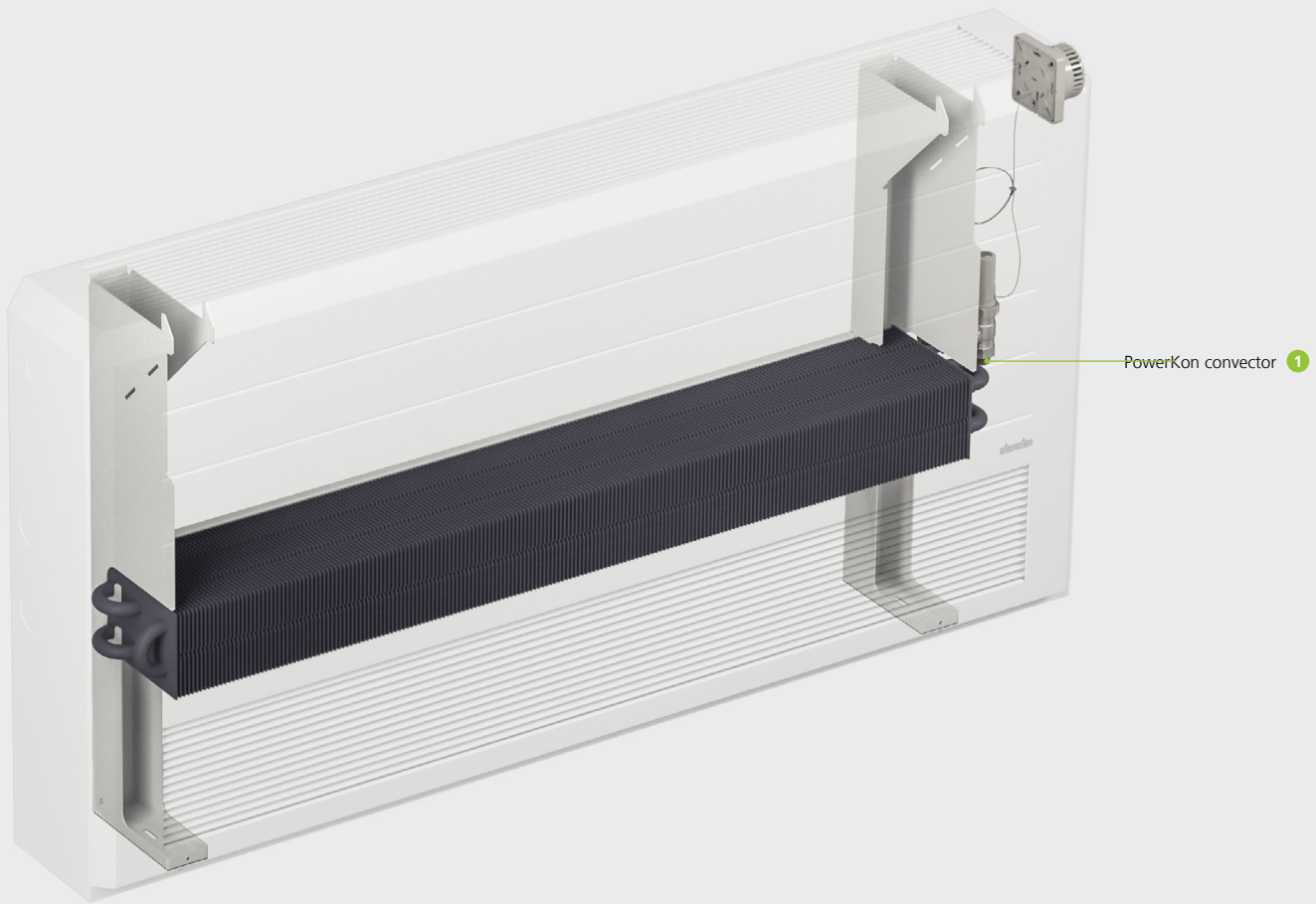
Model	Casing Heights	Casing Depths	Convector Type	Casing Lengths	Further information
	[mm]	[mm]		[mm]	
WTG (Wall Top Grille)	500 650 800	120 170 220	Single Convector 100S 150S 200S	650 850 1050 1250 1450 1650 1850 2050	► Page 14
WTG (Wall Top Grille)	500 650 800	120 170 220	Twin Convector 100T 150T 200T	650 850 1050 1250 1450 1650 1850 2050	► Page 14
WFG (Wall Front Grille)	500 650 800	120 170 220	Single Convector 100S 150S 200S	650 850 1050 1250 1450 1650 1850 2050	► Page 14
WFG (Wall Front Grille)	500 650 800	120 170 220	Twin Convector 100T 150T 200T	650 850 1050 1250 1450 1650 1850 2050	► Page 14
FTG (Floor Top Grille)	500 650 800	120 170 220	Single Convector 100S 150S 200S	650 850 1050 1250 1450 1650 1850 2050	► Page 15
FTG (Floor Top Grille)	500 650 800	120 170 220	Twin Convector 100T 150T 200T	650 850 1050 1250 1450 1650 1850 2050	► Page 15
FFG (Floor Front Grille)	500 650 800	120 170 220	Single Convector 100S 150S 200S	650 850 1050 1250 1450 1650 1850 2050	► Page 15
FFG (Floor Front Grille)	500 650 800	120 170 220	Twin Convector 100T 150T 200T	650 850 1050 1250 1450 1650 1850 2050	► Page 15

PowerKon + ST at a Glance



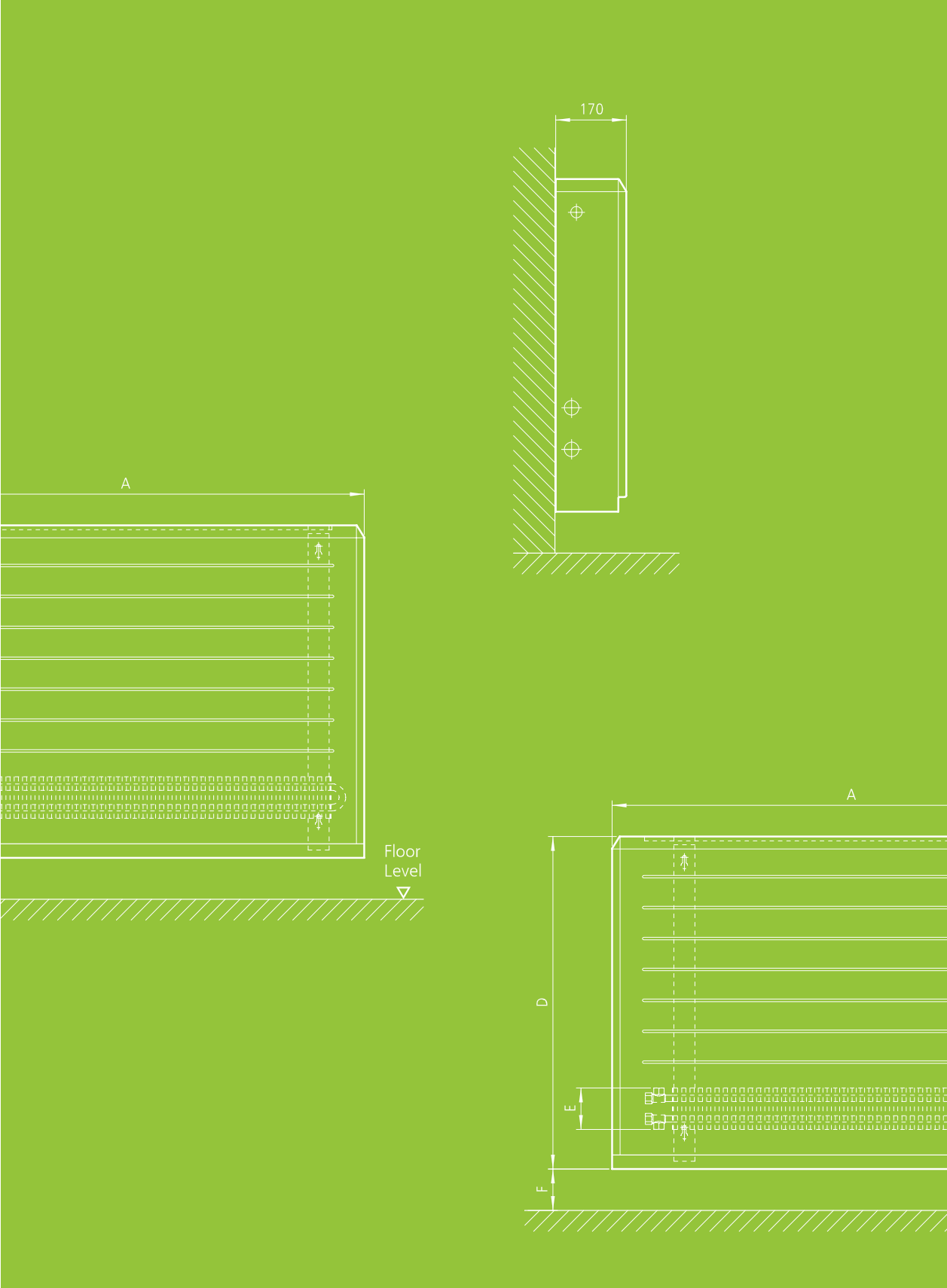
Features:





- 1 PowerKon convector**
 - › with bidirectional connections
- 2 Pipework cover**
 - › for all wall models, supplied by others
- 3 Air guidance**
 - › for all front grille models
- 4 Protection air inlet grille**
 - › for all wall models, comes as standard

02 ▶ Technical Data



Advice on Measuring Conditions

Heat outputs

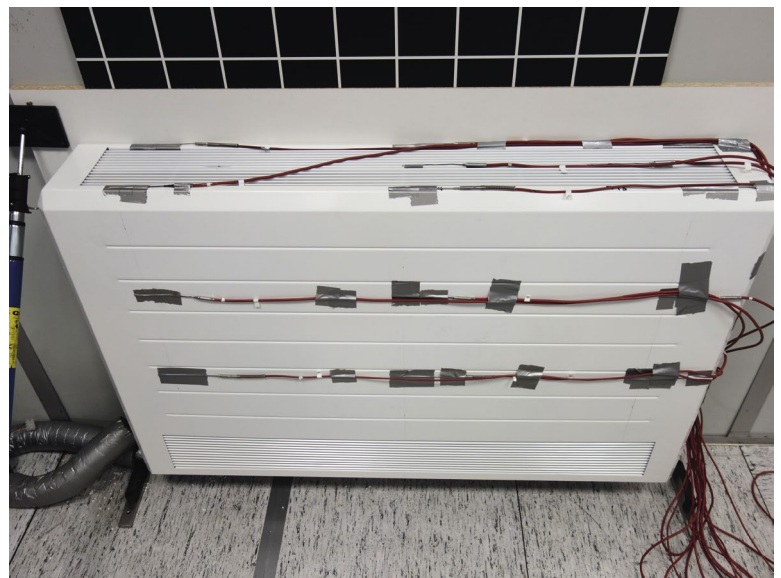
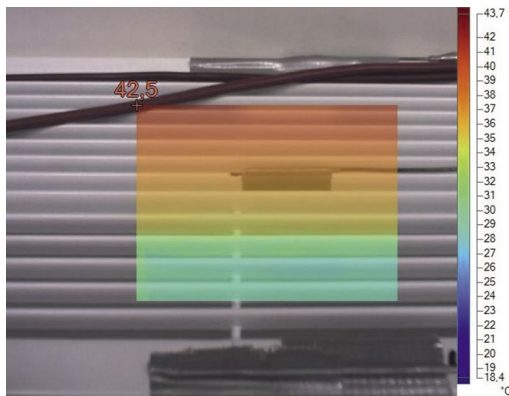
The heat outputs were measured in accordance with BS EN 442 „Radiators and Convectors“.

The standard regulates the performance measurements specifically of convectors.

Part 1 „Technical Specification and Requirements“

Part 2 „Test Procedure and Performance Data“

The reference/air temperature is measured in the centre of the test chamber (2 metres from the external wall) at a height of 0.75 metres). The surface temperature is measured in line with the NHS DN4 requirements to not exceed 43 °C.

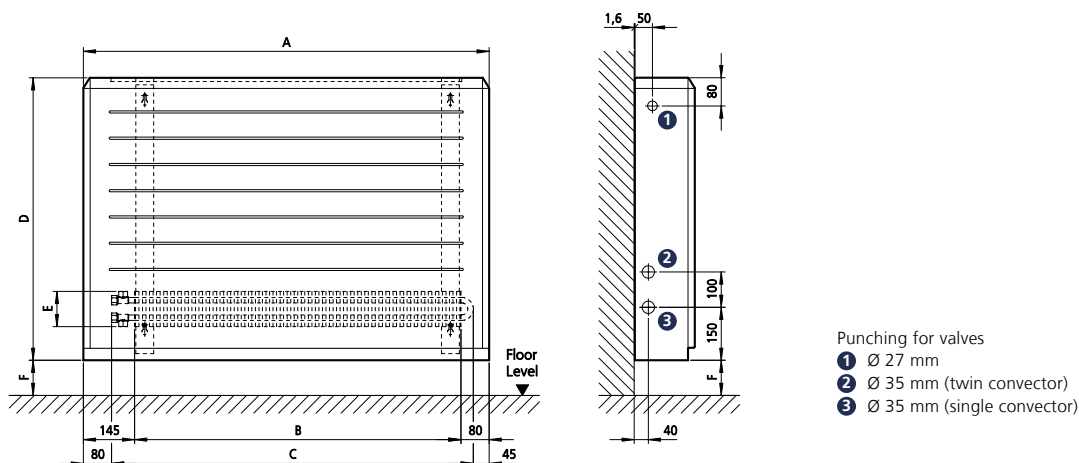


Test setup

PowerKon + ST

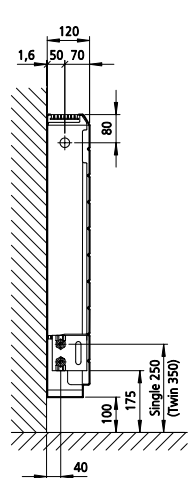
wall mounted (WTG & WFG)

Technical Drawings (Dimensions in mm)

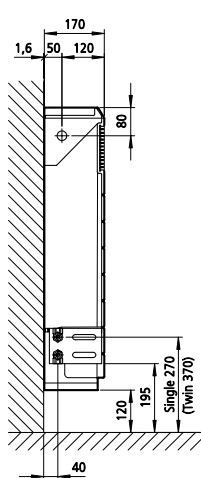


Front view
Example top grille and single convactor

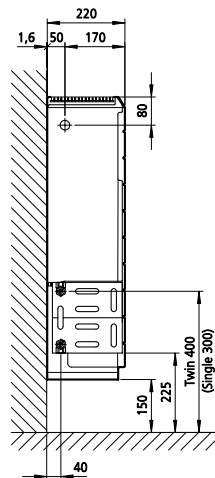
Side view



Sectional view, depth 120 mm
Example top grille and single convactor



Sectional view, depth 170 mm
Example front grille and single convactor



Sectional view, depth 220 mm
Example top grille and twin convector

Casing Length A	Finned Length B	Convactor Length C
[mm]	[mm]	[mm]
650	425	525
850	625	725
1050	825	925
1250	1025	1125
1450	1225	1325
1650	1425	1525
1850	1625	1725
2050	1825	1925

Casing Heights D
[mm]
500
650
800

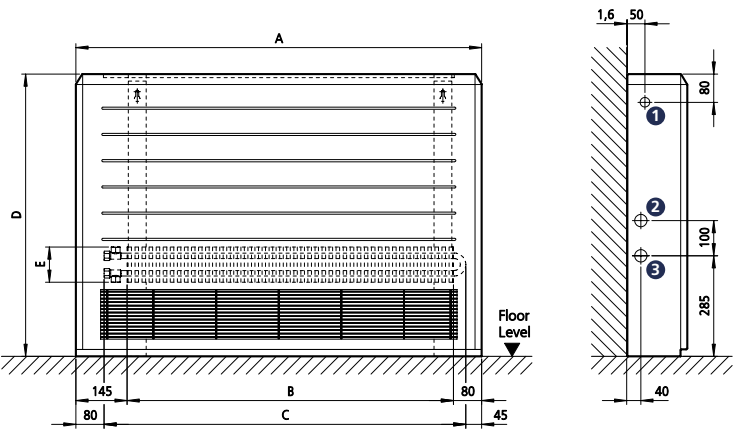
Convactor Heights E
[mm]
100 (single)
200 (twin)

Casing Depths F	Distance to Floor level
[mm]	[mm]
120	100
170	150
220	200

PowerKon + ST

floor mounted (FTG & FFG)

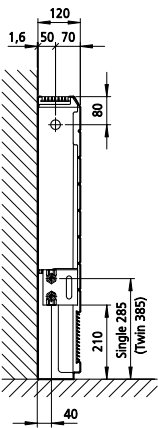
Technical Drawings (Dimensions in mm)



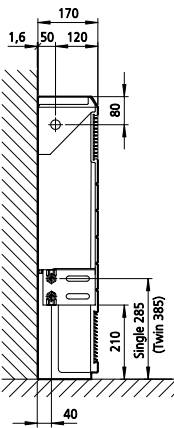
Front view
Example top grille and single convector

Side view

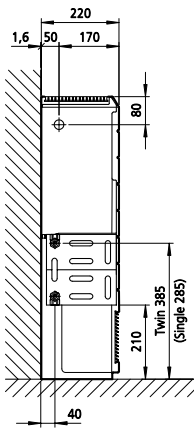
- Punching for valves
- 1 Ø 27 mm
 - 2 Ø 35 mm (twin convector)
 - 3 Ø 35 mm (single convector)



Sectional view, depth 120 mm
Example top grille and single convector



Sectional view, depth 170 mm
Example front grille and single convector



Sectional view, depth 220 mm
Example top grille and twin convector

Casing Length A	Finned Length B	Convector Length C
[mm]	[mm]	[mm]
650	425	525
850	625	725
1050	825	925
1250	1025	1125
1450	1225	1325
1650	1425	1525
1850	1625	1725
2050	1825	1925

Casing Heights D	Convector Heights E
[mm]	[mm]
500	100 (single)
650	200 (twin)
800	

Casing Depths	Convector Depths
[mm]	[mm]
120	100
170	150
220	200

Performance PowerKon + ST

Casing Height 500 mm



Casing Length	Convector Length	Single Convector					Twin Convector				
		Convector Type	WTG ¹⁾	WFG ²⁾	FTG ³⁾	FFG ⁴⁾	Convector Type	WTG ¹⁾	WFG ²⁾	FTG ³⁾	FFG ⁴⁾
[mm]	[mm]	Heat outputs ⁵⁾ at LPHW 75/65 °C, ΔT 50 K [W]									
650	525	100S	425	362	413	341	100T	524	425	509	n/a
		150S	673	539	653	508	150T	793	604	769	n/a
		200S	928	686	900	647	200T	1051	737	1020	n/a
850	725	100S	626	532	607	501	100T	771	624	748	n/a
		150S	990	793	960	748	150T	1166	888	1131	n/a
		200S	1364	1009	1323	951	200T	1546	1084	1499	n/a
1050	925	100S	826	702	801	662	100T	1018	824	988	n/a
		150S	1307	1047	1267	987	150T	1539	1172	1492	n/a
		200S	1801	1332	1747	1256	200T	2040	1431	1979	n/a
1250	1125	100S	1026	872	995	822	100T	1265	1024	1227	n/a
		150S	1624	1301	1574	1226	150T	1912	1456	1854	n/a
		200S	2238	1654	2170	1560	200T	2535	1778	2459	n/a
1450	1325	100S	1226	1042	1189	982	100T	1512	1224	1466	n/a
		150S	1940	1555	1882	1465	150T	2285	1740	2216	n/a
		200S	2674	1977	2593	1864	200T	3029	2125	2939	n/a
1650	1525	100S	1426	1213	1384	1143	100T	1758	1424	1706	n/a
		150S	2257	1808	2189	1704	150T	2658	2024	2578	n/a
		200S	3111	2301	3017	2169	200T	3524	2472	3419	n/a
1850	1725	100S	1627	1383	1578	1303	100T	2005	1623	1945	n/a
		150S	2574	2062	2496	1944	150T	3031	2308	2940	n/a
		200S	3547	2624	3440	2473	200T	4019	2819	3898	n/a
2050	1925	100S	1827	1553	1772	1464	100T	2252	1823	2185	n/a
		150S	2891	2316	2803	2183	150T	3404	2592	3301	n/a
		200S	3984	2947	3864	2778	200T	4513	3166	4378	n/a

n/a = not available

¹⁾ Model WTG = Wall Top Grille²⁾ Model WFG = Wall Front Grille³⁾ Model FTG = Floor Top Grille⁴⁾ Model FFG = Floor Front Grille⁵⁾ at room temperature $t_r = 20\text{ °C}$

Casing Height 650 mm



Casing Length	Convector Length	Single Convector					Twin Convector				
		Convector Type	WTG ¹⁾	WFG ²⁾	FTG ³⁾	FFG ⁴⁾	Convector Type	WTG ¹⁾	WFG ²⁾	FTG ³⁾	FFG ⁴⁾
[mm]	[mm]	Heat outputs ⁵⁾ at LPHW 75/65 °C, ΔT 50 K [W]									
650	525	100S	467	418	453	394	100T	576	491	558	463
		150S	739	624	716	588	150T	870	698	844	657
		200S	1018	794	987	748	200T	1154	853	1119	804
850	725	100S	687	615	666	580	100T	848	723	821	681
		150S	1087	918	1053	864	150T	1280	1027	1241	967
		200S	1498	1168	1452	1100	200T	1697	1254	1645	1182
1050	925	100S	907	812	879	766	100T	1119	954	1084	899
		150S	1435	1211	1390	1141	150T	1690	1355	1638	1276
		200S	1977	1541	1916	1452	200T	2240	1656	2171	1560
1250	1125	100S	1126	1009	1092	951	100T	1390	1185	1347	1117
		150S	1782	1505	1727	1418	150T	2099	1684	2035	1586
		200S	2456	1915	2381	1804	200T	2783	2057	2698	1938
1450	1325	100S	1346	1205	1305	1137	100T	1661	1416	1610	1335
		150S	2130	1798	2064	1694	150T	2509	2013	2432	1895
		200S	2935	2288	2846	2156	200T	3326	2459	3224	2316
1650	1525	100S	1566	1402	1518	1322	100T	1932	1647	1872	1553
		150S	2478	2092	2401	1971	150T	2918	2341	2829	2204
		200S	3414	2662	3310	2508	200T	3869	2860	3751	2695
1850	1725	100S	1786	1599	1731	1508	100T	2204	1879	2135	1771
		150S	2826	2386	2738	2247	150T	3328	2670	3226	2514
		200S	3894	3036	3775	2860	200T	4412	3261	4277	3073
2050	1925	100S	2006	1796	1944	1694	100T	2475	2110	2398	1989
		150S	3174	2679	3075	2524	150T	3738	2998	3623	2823
		200S	4373	3409	4239	3212	200T	4955	3663	4803	3451

¹⁾ Model WTG = Wall Top Grille
²⁾ Model WFG = Wall Front Grille
³⁾ Model FTG = Floor Top Grille
⁴⁾ Model FFG = Floor Front Grille
⁵⁾ at room temperature $t_L = 20\text{ °C}$

Casing Height 800 mm



Casing Length	Convector Length	Single Convector					Twin Convector				
		Convector Type	WTG ¹⁾	WFG ²⁾	FTG ³⁾	FFG ⁴⁾	Convector Type	WTG ¹⁾	WFG ²⁾	FTG ³⁾	FFG ⁴⁾
[mm]	[mm]	Heat outputs ⁵⁾ at LPHW 75/65 °C, ΔT 50 K [W]									
650	525	100S	496	452	482	426	100T	612	531	594	501
		150S	786	674	762	636	150T	926	755	896	712
		200S	1083	859	1050	809	200T	1227	922	1190	869
850	725	100S	730	665	708	627	100T	901	781	873	736
		150S	1156	992	1120	935	150T	1362	1110	1318	1047
		200S	1593	1263	1544	1189	200T	1804	1356	1749	1278
1050	925	100S	964	878	935	827	100T	1189	1031	1153	972
		150S	1525	1309	1478	1234	150T	1798	1465	1740	1382
		200S	2102	1667	2038	1570	200T	2382	1790	2309	1686
1250	1125	100S	1197	1091	1161	1028	100T	1477	1281	1432	1207
		150S	1895	1627	1837	1533	150T	2233	1820	2165	1717
		200S	2612	2071	2532	1951	200T	2959	2224	2869	2095
1450	1325	100S	1431	1303	1388	1229	100T	1765	1531	1711	1443
		150S	2265	1944	2195	1833	150T	2669	2176	2587	2052
		200S	3121	2475	3026	2331	200T	3537	2658	3429	2504
1650	1525	100S	1664	1516	1615	1429	100T	2053	1781	1991	1679
		150S	2635	2261	2554	2132	150T	3105	2531	3010	2387
		200S	3631	2879	3520	2712	200T	4114	3092	3989	2913
1850	1725	100S	1898	1729	1841	1630	100T	2342	2031	2270	1914
		150S	3005	2579	2912	2431	150T	3541	2886	3432	2722
		200S	4141	3283	4014	3092	200T	4691	3526	4548	3322
2050	1925	100S	2132	1942	2068	1830	100T	2630	2281	2550	2150
		150S	3374	2896	3270	2730	150T	3977	3241	3854	3057
		200S	4650	3687	4508	3473	200T	5269	3960	5108	3730

¹⁾ Model WTG = Wall Top Grille

²⁾ Model WFG = Wall Front Grille

³⁾ Model FTG = Floor Top Grille

⁴⁾ Model FFG = Floor Front Grille

⁵⁾ at room temperature $t_r = 20\text{ °C}$

Dry weights and Water contents per metre of casing

Convector Type	Model WTG ¹⁾			Model WFG ²⁾			Model FTG ³⁾			Model FFG ⁴⁾			Water Content
	Casing Height			Casing Height			Casing Height			Casing Height			
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[l/m]
	500	650	800	500	650	800	500	650	800	500	650	800	
100S	14.41	17.15	19.90	15.47	18.22	20.95	11.71	14.50	17.30	13.98	16.78	19.58	0.65
150S	17.79	20.89	23.99	19.81	22.90	26.01	14.41	17.59	20.77	17.64	20.82	24.00	0.97
200S	21.18	24.63	28.10	23.73	27.18	30.64	17.12	20.68	24.24	20.88	24.44	28.01	1.31
100T	16.45	19.19	21.94	17.51	20.26	22.99	13.75	16.54	19.34	16.02	18.82	21.62	1.31
150T	20.85	23.94	27.05	22.86	25.96	29.06	17.46	20.65	23.82	20.70	23.88	27.06	1.95
200T	25.24	28.70	32.16	27.79	31.25	34.70	21.18	24.74	28.30	24.94	28.50	32.07	2.60

Exponent values

Convactor Type	Model WTG ¹⁾			Model WFG ²⁾			Model FTG ³⁾			Model FFG ⁴⁾		
	Casing Height			Casing Height			Casing Height			Casing Height		
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
	500	650	800	500	650	800	500	650	800	500	650	800
100S	1.3656	1.3380	1.3247	1.4333	1.3559	1.3334	1.3669	1.3392	1.3260	1.4453	1.3673	1.3445
150S	1.3386	1.3115	1.2985	1.4012	1.3255	1.3035	1.3398	1.3127	1.2997	1.4129	1.3366	1.3144
200S	1.3461	1.3188	1.3057	1.4046	1.3287	1.3066	1.3473	1.3200	1.3069	1.4163	1.3398	1.3176
100T	1.5028	1.4725	1.4578	1.5716	1.4867	1.4621	1.5043	1.4738	1.4593	n/a	1.4992	1.4742
150T	1.4731	1.4433	1.4290	1.5364	1.4534	1.4293	1.4744	1.4446	1.4303	n/a	1.4656	1.4412
200T	1.4814	1.4513	1.4369	1.5401	1.4569	1.4327	1.4827	1.4527	1.4382	n/a	1.4691	1.4447

1) Model WTG = Wall Top Grille

2) Model WFG = Wall Front Grille

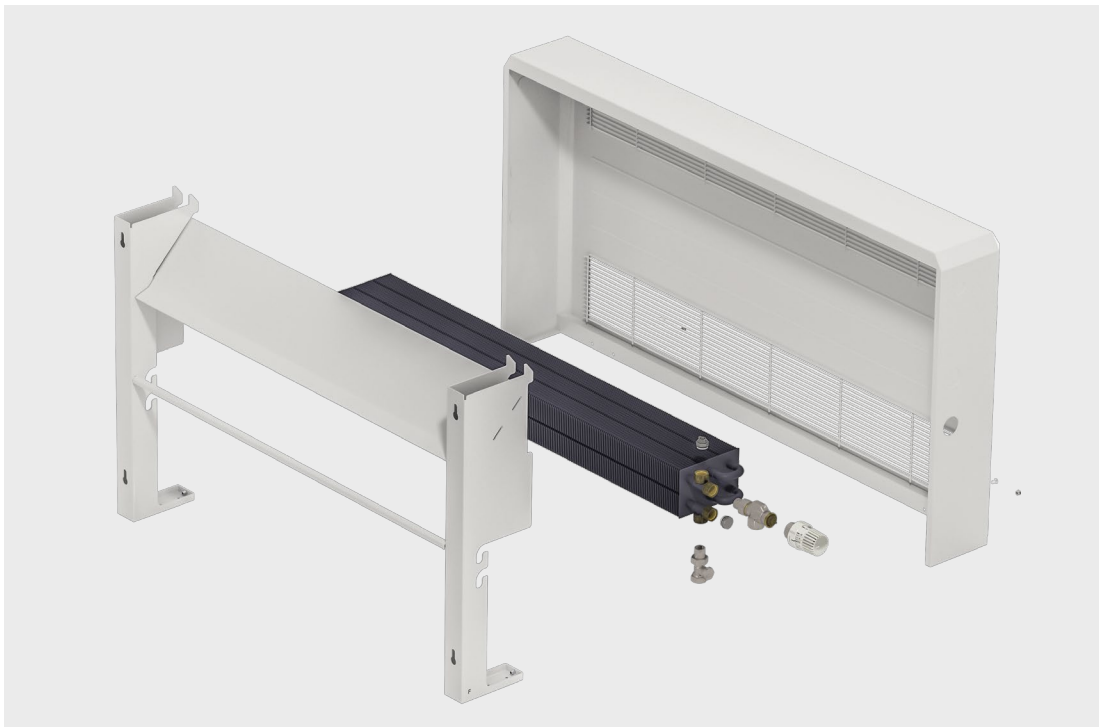
3) Model FTG = Floor Top Grille

4) Model FFG = Floor Front Grille

03 ▶ Design information



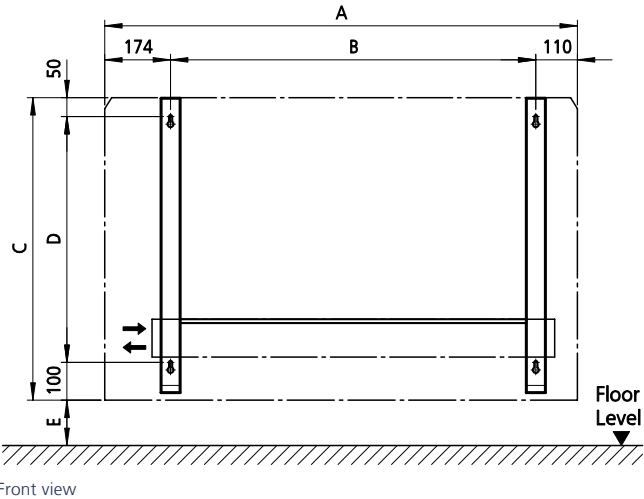
Information on Planning and Design



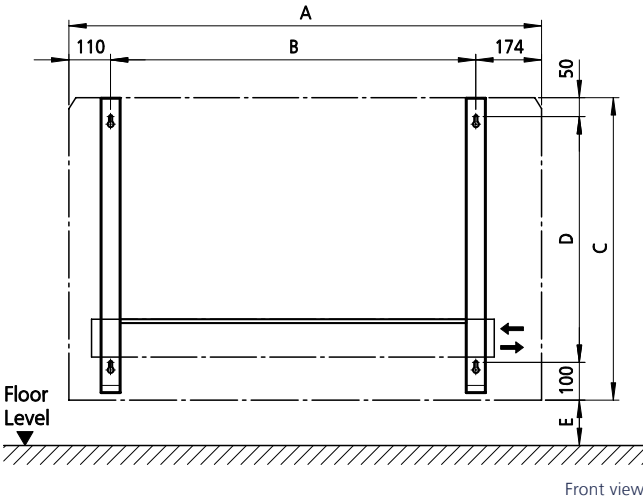
- ▶ Low surface temperature convector, compliant with NHS DN4 at ΔT 50K and a maximum flow temperature of 80°C
- ▶ Can be installed extremely quickly, thanks to its strong one-piece profiled casing. ½" BSP directional LPHW connections, wall/floor brackets and wall spacer are included.
- ▶ Strong single piece profiled casing, made of 1.6 mm steel with 3 mm rib details for extra strength and durability
- ▶ WFG complete with air outlet grille at the front and integral bottom grille to prevent convector access, compliant with NHS estates, as well as mounted casing.
- ▶ WTG complete with air outlet grille at the top and integral bottom grille to prevent convector access, compliant with NHS estates, as wall mounted casing.
- ▶ FFG complete with air inlet and air outlet grille at the front as floor standing casing.
- ▶ FTG complete with air inlet at the front plus air outlet grille at the top as floor standing casing.
- ▶ Air outlet grille is a pencil proof linear bar grille with max. 7.1 mm bar spacing.
- ▶ Complete with all brackets and wall spacers.
- ▶ Security screw locking system to fix casing onto bracketry to prevent unauthorized access.
- ▶ Casing and bracketry with scratch resistant and anti bacterial epoxy powder coating, colour finish, RAL 9016, pure white.
- ▶ No handed unit with knockouts for valve accessory to allow handing lhs and rhs.
- ▶ 10 years warranty on the casing, 30 years warranty on the convector.

Installation, bracket fixing detail

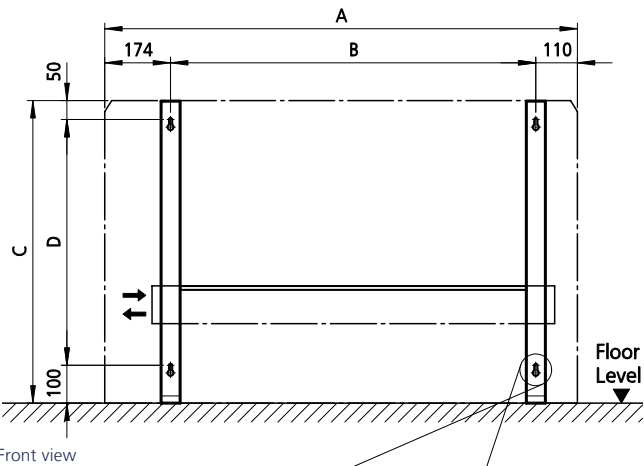
Wall mounted, LH valve position



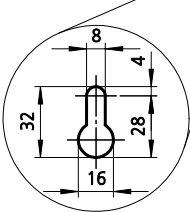
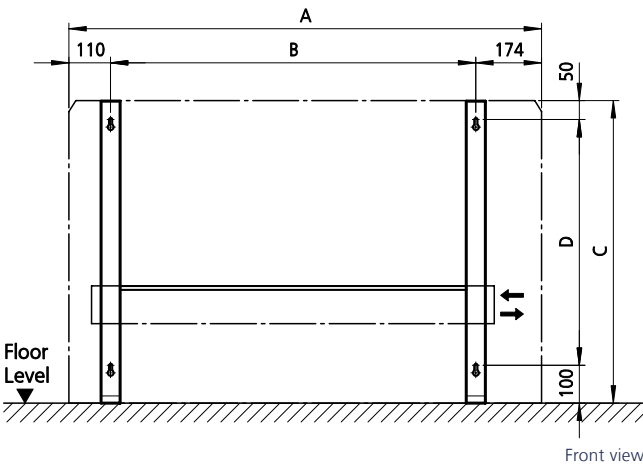
Wall mounted, RH valve position



Floor mounted, LH valve position



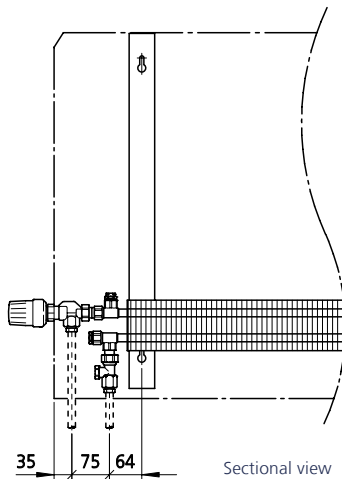
Floor mounted, RH valve position



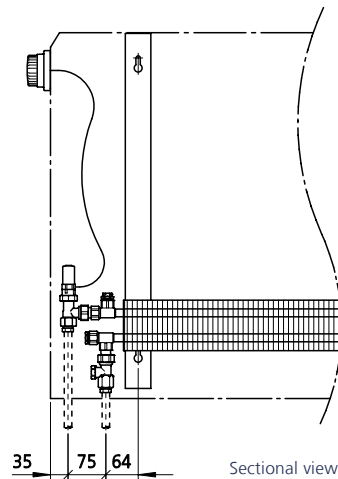
Casing Length A	Fixing Length B
[mm]	[mm]
650	366
850	566
1050	766
1250	966
1450	1166
1650	1366
1850	1566
2050	1766

Casing Heights C	Fixing Heights D	Floor Distance E
[mm]	[mm]	[mm]
500	350	100
650	450	120
800	650	150

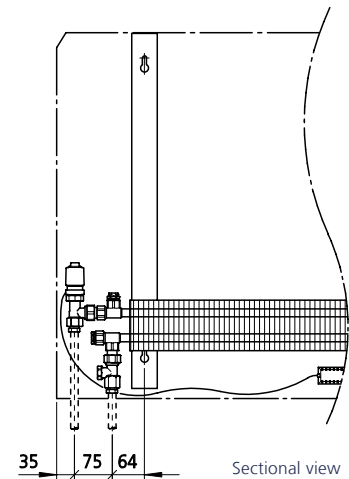
Valve Positions



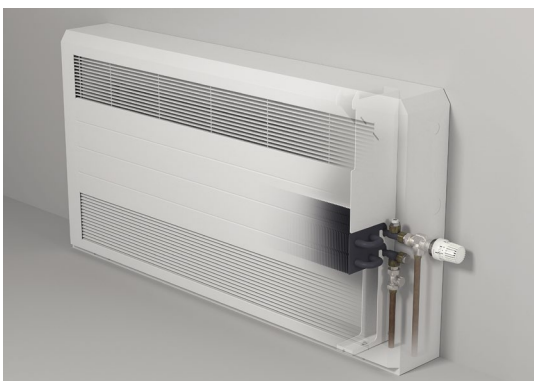
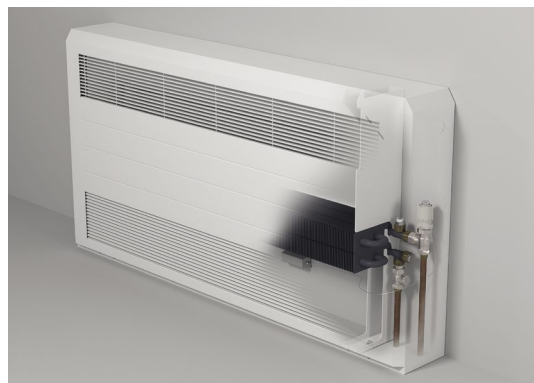
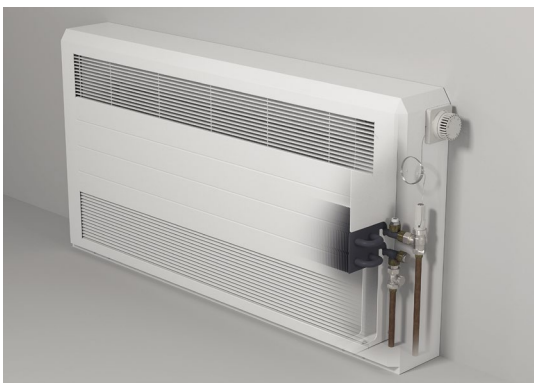
External TRV head



Inbuilt TRV head



Tamper proof TRV



Complete with installation kit, including 1/2" BSP air vent, 1/2" BSP blank and all fixing screws and washers.

Complete unit packed into single, strong cardboard packing.

04 ▶ Ordering Information

PowerKon + ST

Model	Casing Heights	Casing Depths	Casing Lengths	Convector Type	Art.no.
	[mm]	[mm]	[mm]		
WTG (Wall Top Grille)	500 = 500 mm 650 = 650 mm 800 = 800 mm	12 = 120 mm 17 = 170 mm 22 = 220 mm	065 = 650 mm 085 = 850 mm 105 = 1050 mm 125 = 1250 mm 145 = 1450 mm 165 = 1650 mm 185 = 1850 mm 205 = 2050 mm	1 = Single Convactor 2 = Twin Convactor	1261 -----
WFG (Wall Front Grille)	500 = 500 mm 650 = 650 mm 800 = 800 mm	12 = 120 mm 17 = 170 mm 22 = 220 mm	065 = 650 mm 085 = 850 mm 105 = 1050 mm 125 = 1250 mm 145 = 1450 mm 165 = 1650 mm 185 = 1850 mm 205 = 2050 mm	1 = Single Convactor 2 = Twin Convactor	1262 -----
FTG (Floor Top Grille)	500 = 500 mm 650 = 650 mm 800 = 800 mm	12 = 120 mm 17 = 170 mm 22 = 220 mm	065 = 650 mm 085 = 850 mm 105 = 1050 mm 125 = 1250 mm 145 = 1450 mm 165 = 1650 mm 185 = 1850 mm 205 = 2050 mm	1 = Single Convactor 2 = Twin Convactor	1263 -----
FFG (Floor Front Grille)	500 = 500 mm 650 = 650 mm 800 = 800 mm	12 = 120 mm 17 = 170 mm 22 = 220 mm	065 = 650 mm 085 = 850 mm 105 = 1050 mm 125 = 1250 mm 145 = 1450 mm 165 = 1650 mm 185 = 1850 mm 205 = 2050 mm	1 = Single Convactor 2 = Twin Convactor	1264 -----



Article key for wall mounted/floor mounted units (Example of art. no.)

126

1

2

3

4

065

12

50

1

2

3

4

Single Convactor

Twin Convactor

Length (example)

Depth (example)

Height (example)

WTG Wall Typ Grille

WFG Wall Front Grille

FTG Floor Typ Grille

FFG Floor Typ Grille

Keane Environmental.ie

Kampmann UK Ltd.

Dial House, Govett Avenue
Shepperton, Middlesex, TW17 8AG
Great Britain

T +44 (0)1932 228592
F +44 (0)1932 228949
E info@kampmann.co.uk
W Kampmann.co.uk

Keane Environmental Ltd.

Unit 15, Canal Walk, Parkwest
Industrial Estate, Dublin 12

T +353 (01) 620 5040
E sales@keaneenvironmental.ie
W Keaneenvironmental.ie

