



Specification Guide | Edition 4

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About MHS Radiators

Founded as a family business in 1980, MHS Radiators has been a respected and trusted company for three generations. Today, it is still owned and operated by the same families, who have the knowledge, passion and enthusiasm for practical yet exciting radiator designs suitable for a multitude of commercial applications.



From education to healthcare, we provide commercial radiators built to the highest manufacturing standards that are purposefully designed for specification led projects. For the residential sector, we offer a comprehensive collection of design-oriented yet practical radiators, plus a range of high-efficiency aluminium radiators compatible with low-temperature renewable heating systems.

Flexibility

With our own state-of-the-art assembly and finishing plant in Rochford, Essex, we can deliver high-quality painted finishes in as little as 10 days. For the ultimate design flexibility, we also offer a bespoke colour-matching service.



Look out for the colour matching symbol on each product page for availability.



The MHS promise

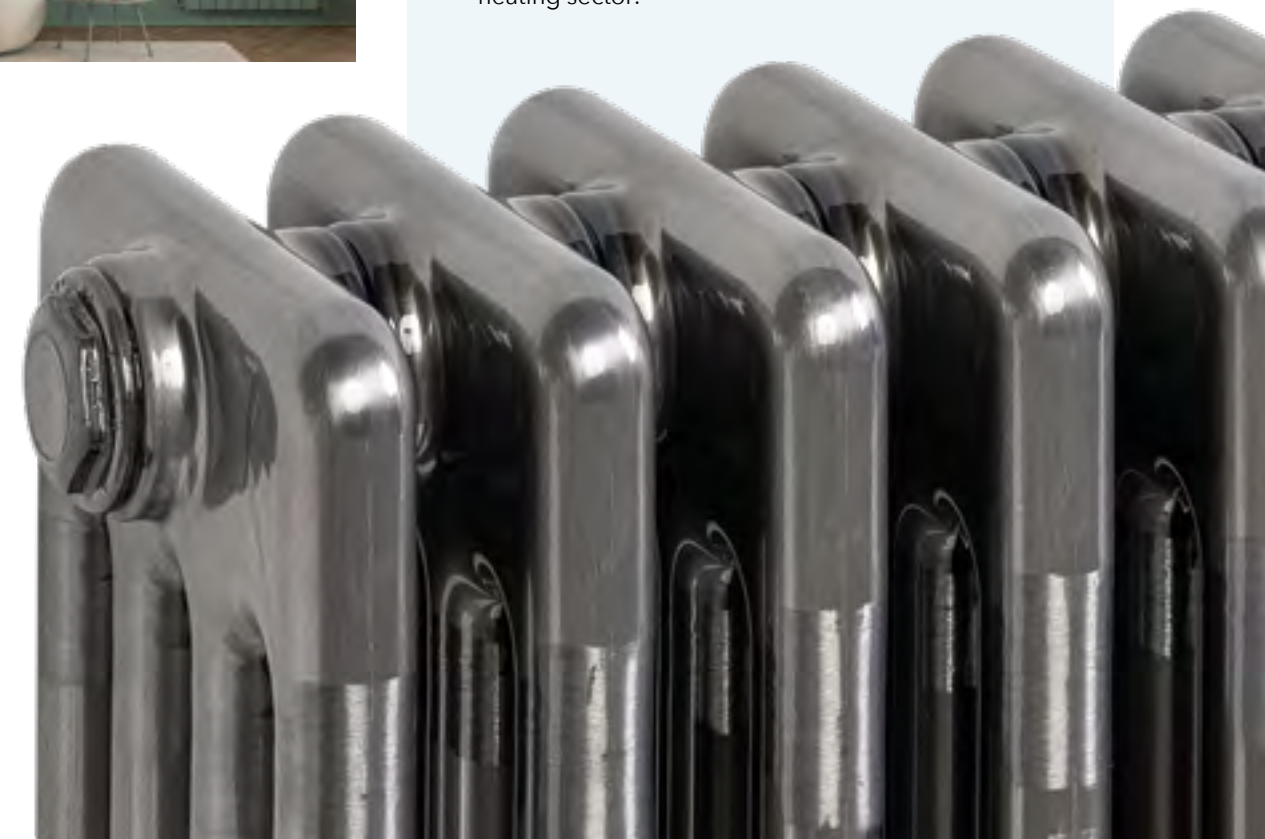
- **Huge selection of stock**
Our warehouse holds a vast stock of our key product lines, so when customers need our radiators, delivery is always swift and prompt.
- **Commitment to quality**
Our products are manufactured adhering to stringent guidelines, including ISO 9001, ISO 14001 and EN 442.
- **Reliability**
Our radiators combine exceptional design with value for money and are guaranteed to last, as reflected by our renowned product warranties.
- **Suitable for a range of applications**
MHS Radiators can be used in residential, commercial, retail, healthcare, education and other public sector properties.
- **Service**
From an initial enquiry at our sales office, to fast delivery on our own fleet of vehicles, MHS Radiators offers an unparalleled service in the commercial heating sector.

Scheduler tool

Register today and utilise this powerful resource for your next project.

This premium tool from MHS Radiators will allow you to quickly create custom schedules, identifying products that match your requirements and adding them at a click of a button. Registered users will also be able to upload their own logo and export schedules for emailing.

www.mhsradiators.co.uk/scheduler-tool/



Radiators for low temperature heating systems

Drive to Net Zero

As the UK drives towards Net Zero by 2050, there is a requirement for new and existing buildings to decarbonise their heating systems by replacing their gas-fired boilers with low temperature renewable systems, such as air or ground-source heat pumps.

Particularly with existing buildings, there is a trade-off between running the heat pumps at high temperatures (consequently lowering the efficiency) or significantly increasing the size of the radiators.

MHS offer a range of aluminium and fan-assisted radiators that allow the heat pumps to run at low temperatures, maximising efficiency of the system, whilst keeping the size of the radiators to a minimum.



Aluminium radiators

Traditionally, the vast majority of radiators installed in the UK are steel panel radiators. In recent years, there has been a significant growth in the use of high performance aluminium radiators, which feature very low water volumes and far higher heat conducting capabilities compared to their steel panel counterparts. The difference relates to the chemical properties of the two metals, with aluminium's lower thermal inertia reducing the time taken for a radiator to meet the desired temperature (Figure 1). Since aluminium models are quicker to heat up and cool down, there is less chance of 'overshooting' the desired temperature and wasting energy, making them far more suitable for use with the lower flow temperatures associated with heat pumps.



Fan-assisted radiators

Fan-assisted radiators, such as the Galant Boost, use forced convection to increase the rate of transfer of heat from the emitter to the air, thereby increasing the output of the radiator.

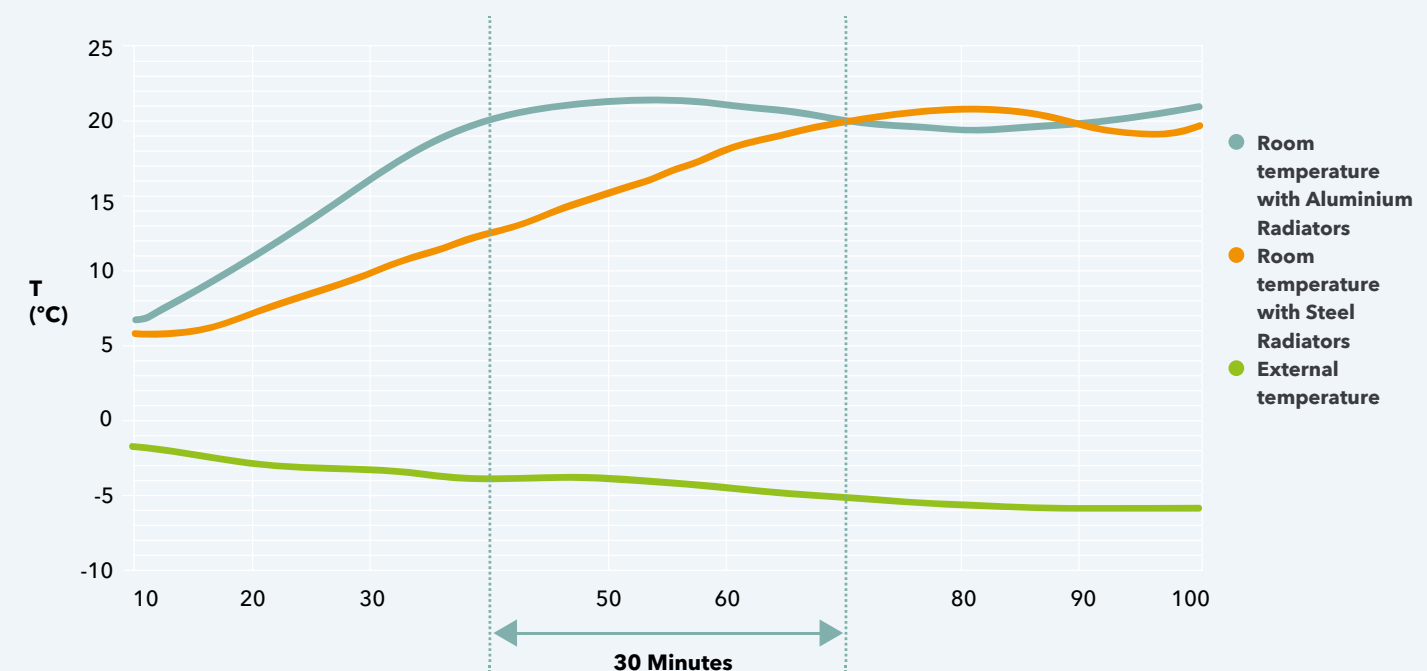
Depending on the operating temperatures, the discreet fans increase the output of the radiator by 60% in Comfort mode and 124% in Boost mode.

As a result, radiator sizes can be maintained while reducing operating temperatures.

Despite the forced convection, radiators such as the Galant Boost operate at almost silent noise levels (25dBa in Comfort mode).



Fig 1. Relative heat up times for aluminium vs. steel radiators



The graph shows the time taken to bring a medium sized apartment from 5°C (41°F) to an optimal temperature of 20°C (68°F) using a 24kW boiler

Galant & Galant Plan Boost Overview



The Galant & Galant Plan Boost radiators are manufactured from 1.2mm steel. Fitted with robust, discreet fans, they are ideal for low temperature heating systems within commercial applications.

Control and Comfort

A built-in sensor detects room heat requirements, activating fans to 'boost' mode upon receiving warm water from the TRV head. After a brief period, the fans transition to the almost silent 'Comfort' mode.

Heat regulation is maintained utilising a conventional TRV head, regardless of brand or mode of operation. Users retain control flexibility, toggling between 'Boost', 'Comfort' or 'Off' manually via an intuitive interface displaying selected modes through LED indicators.

In 'Comfort' mode, the Galant Boost excels, offering prolonged, energy-efficient heating with minimal power consumption and virtually noiseless operation. With fans and controls consuming less than 20 watts per hour, and noise levels below 25 dB(A), optimal comfort is ensured.

Effortless Transition

Transitioning from existing metric radiators to Galant Boost radiators is effortless, requiring no complex alterations to existing pipe systems.

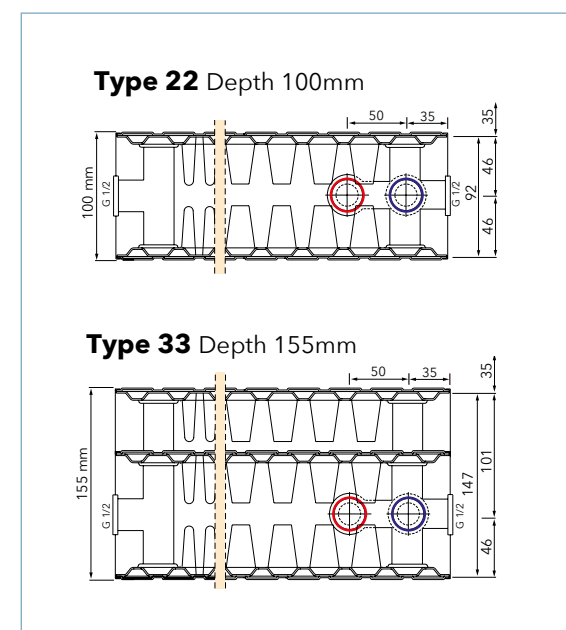
Property owners can future-proof their radiator upgrade, with the fans being utilised when low temperature heating plant is introduced.

Intelligently Engineered Ventilation

Equipped with a discreetly placed fan at the bottom, the radiators feature tamper protection, making them safe for households with children and pets. Additionally, they're splash-proof, operate on low voltage, and provide peace of mind regarding safety.

Simplicity in Maintenance

The radiators are intelligently designed to prevent the accumulation of dust or dirt in hard-to-reach areas, ensuring easy cleaning.



Galant & Galant Plan Boost Overview

Conventional aesthetic, modern technology

Optimal Efficiency

Thanks to artificially induced convection, Galant Boost radiators operate effectively with lower flow temperatures, leading to significant energy savings and reduced heating costs. Even at a length of 2 meters, they consume merely 4.9 watts in comfort mode and no more than 23.4 watts in boost mode.

Eco-Friendly Comfort

Reduced energy consumption translates to lower CO2 emissions, making a positive impact on the environment.

Supplied with: wall brackets, plugs, air vent, top grille, welded side panel, 3m cable with plug.

Connections: 6x G1/2"

Maximum operating pressure: 6 bar

Maximum operating temperature: 55°C (with fans operating)

Protection class: IP20

Supply voltage: 100-240V

Output voltage: 12V

***Warranty:** 10 years (2 years on electrical components)



Galant Boost

Technical - Type 22



Model		500mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GB22-5006	600	425	589	818	332	476	662	245	365	509	164	257	359	134	215	301
GB22-5008	800	566	786	1090	443	634	882	327	486	678	219	342	479	178	286	401
GB22-5010	1000	708	982	1363	554	793	1103	409	608	848	274	428	599	223	358	501
GB22-5012	1200	850	1178	1636	665	952	1324	491	730	1018	329	514	719	268	430	601
GB22-5014	1400	991	1375	1908	776	1110	1544	573	851	1187	384	599	839	312	501	701
GB22-5016	1600	1133	1571	2181	886	1269	1765	654	973	1357	438	685	958	357	573	802
GB22-5018	1800	1274	1768	2453	997	1427	1985	736	1094	1526	493	770	1078	401	644	902
GB22-5020	2000	1416	1964	2726	1108	1586	2206	818	1216	1696	548	856	1198	446	716	1002

Model		600mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GB22-6006	600	494	668	913	384	538	739	282	412	569	187	290	403	152	242	338
GB22-6008	800	658	890	1217	512	718	986	376	550	759	250	386	538	202	322	450
GB22-6010	1000	823	1113	1521	640	897	1232	470	687	949	312	483	672	253	403	563
GB22-6012	1200	988	1336	1825	768	1076	1478	564	824	1139	374	580	806	304	484	676
GB22-6014	1400	1152	1558	2129	896	1256	1725	658	962	1329	437	676	941	354	564	788
GB22-6016	1600	1317	1781	2434	1024	1435	1971	752	1099	1518	499	773	1075	405	645	901
GB22-6018	1800	1481	2003	2738	1152	1615	2218	846	1237	1708	562	869	1210	455	725	1013
GB22-6020	2000	1646	2226	3042	1280	1794	2464	940	1374	1898	624	966	1344	506	806	1126

Model		900mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GB22-9006	600	685	844	1147	533	679	932	391	518	720	259	363	512	210	302	430
GB22-9008	800	914	1125	1530	711	905	1242	521	691	960	346	484	683	280	403	573
GB22-9010	1000	1142	1406	1912	889	1131	1553	651	864	1200	432	605	854	350	504	716
GB22-9012	1200	1370	1687	2294	1067	1357	1864	781	1037	1440	518	726	1025	420	605	859
GB22-9014	1400	1599	1968	2677	1245	1583	2174	911	1210	1680	605	847	1196	490	706	1002
GB22-9016	1600	1827	2250	3059	1422	1810	2485	1042	1382	1920	691	968	1366	560	806	1146

Galant Boost

Technical - Type 33



Model		500mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GB33-5006	600	619	784	999	484	623	796	356	468	600	237	321	413	193	265	341
GB33-5008	800	826	1046	1332	645	830	1061	474	624	800	316	428	551	257	353	455
GB33-5010	1000	1032	1307	1665	806	1038	1326	593	780	1000	395	535	689	321	441	569
GB33-5012	1200	1238	1568	1998	967	1246	1591	712	936	1200	474	642	827	385	529	683
GB33-5014	1400	1445	1830	2331	1128	1453	1856	830	1092	1400	553	749	965	449	617	797
GB33-5016	1600	1651	2091	2664	1290	1661	2122	949	1248	1600	632	856	1102	514	706	910
GB33-5018	1800	1858	2353	2997	1451	1868	2387	1067	1404	1800	711	963	1240	578	794	1024
GB33-5020	2000	2064	2614	3330	1612	2076	2652	1186	1560	2000	790	1070	1378	642	882	1138

Model		600mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GB33-6006	600	703	883	1100	548	705	881	403	533	670	268	369	466	217	305	386
GB33-6008	800	938	1177	1467	730	940	1175	537	711	893	357	492	621	289	407	515
GB33-6010	1000	1172	1471	1834	913	1175	1469	671	889	1116	446	615	776	361	509	644
GB33-6012	1200	1406	1765	2201	1096	1410	1763	805	1067	1339	535	738	931	433	611	773
GB33-6014	1400	1641	2059	2568	1278	1645	2057	939	1245	1562	624	861	1086	505	713	902
GB33-6016	1600	1875	2354	2934	1461	1880	2350	1074	1422	1786	714	984	1242	578	814	1030
GB33-6018	1800	2110	2648	3301	1643	2115	2644	1208	1600	2009	803	1107	1397	650	916	1159
GB33-6020	2000	2344	2942	3668	1826	2350	2938	1342	1778	2232	892	1230	1552	722	1018	1288

Model		900mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GB33-9006	600	963	1135	1441	750	906	1157	550	685	881	365	474	614	296	392	511
GB33-9008	800	1284	1514	1922	1000	1208	1542	733	914	1174	486	632	819	394	522	681
GB33-9010	1000	1605	1892	2402	1250	1510	1928	916	1142	1468	608	790	1024	493	653	851
GB33-9012	1200	1926	2270	2882	1500	1812	2314	1099	1370	1762	730	948	1229	592	784	1021
GB33-9014	1400	2247	2649	3363	1750	2114	2699	1282	1599	2055	851	1106	1434	690	914	1191

Galant Plan Boost
Technical - Type 22



Galant Plan Boost
Technical - Type 33



Model		500mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GPB22-5006	600	423	574	802	332	461	646	246	352	494	165	246	347	135	205	289
GPB22-5008	800	564	765	1070	442	614	862	328	469	659	220	328	462	180	273	386
GPB22-5010	1000	705	956	1337	553	768	1077	410	586	824	275	410	578	225	341	482
GPB22-5012	1200	846	1147	1604	664	922	1292	492	703	989	330	492	694	270	409	578
GPB22-5014	1400	987	1338	1872	774	1075	1508	574	820	1154	385	574	809	315	477	675
GPB22-5016	1600	1128	1530	2139	885	1229	1723	656	938	1318	440	656	925	360	546	771
GPB22-5018	1800	1269	1721	2407	995	1382	1939	738	1055	1483	495	738	1040	405	614	868
GPB22-5020	2000	1410	1912	2674	1106	1536	2154	820	1172	1648	550	820	1156	450	682	964

Model		500mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GPB33-5006	600	601	772	989	470	615	787	347	464	593	232	320	409	189	264	337
GPB33-5008	800	802	1029	1318	626	820	1050	462	618	791	310	426	545	252	352	450
GPB33-5010	1000	1002	1286	1648	783	1025	1312	578	773	989	387	533	681	315	440	562
GPB33-5012	1200	1202	1543	1978	940	1230	1574	694	928	1187	464	640	817	378	528	674
GPB33-5014	1400	1403	1800	2307	1096	1435	1837	809	1082	1385	542	746	953	441	616	787
GPB33-5016	1600	1603	2058	2637	1253	1640	2099	925	1237	1582	619	853	1090	504	704	899
GPB33-5018	1800	1804	2315	2966	1409	1845	2362	1040	1391	1780	697	959	1226	567	792	1012
GPB33-5020	2000	2004	2572	3296	1566	2050	2624	1156	1546	1978	774	1066	1362	630	880	1124

Model		600mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GPB22-6006	600	495	644	895	387	520	725	286	399	559	191	281	397	155	235	332
GPB22-6008	800	660	858	1193	516	693	967	381	532	746	255	375	529	207	313	443
GPB22-6010	1000	825	1073	1491	645	866	1209	476	665	932	319	469	661	259	391	554
GPB22-6012	1200	990	1288	1789	774	1039	1451	571	798	1118	383	563	793	311	469	665
GPB22-6014	1400	1155	1502	2087	903	1212	1693	666	931	1305	447	657	925	363	547	776
GPB22-6016	1600	1320	1717	2386	1032	1386	1934	762	1064	1491	510	750	1058	414	626	886
GPB22-6018	1800	1485	1931	2684	1161	1559	2176	857	1197	1678	574	844	1190	466	704	997
GPB22-6020	2000	1650	2146	2982	1290	1732	2418	952	1330	1864	638	938	1322	518	782	1108

Model		600mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GPB33-6006	600	678	867	1094	530	692	878	391	523	669	262	362	467	212	299	388
GPB33-6008	800	904	1156	1458	706	922	1170	521	698	892	349	482	622	283	398	518
GPB33-6010	1000	1130	1445	1823	883	1153	1463	651	872	1115	436	603	778	354	498	647
GPB33-6012	1200	1356	1734	2188	1060	1384	1756	781	1046	1338	523	724	934	425	598	776
GPB33-6014	1400	1582	2023	2552	1236	1614	2048	911	1221	1561	610	844	1089	496	697	906
GPB33-6016	1600	1808	2312	2917	1413	1845	2341	1042	1395	1784	698	965	1245	566	797	1035
GPB33-6018	1800	2034	2601	3281	1589	2075	2633	1172	1570	2007	785	1085	1400	637	896	1165
GPB33-6020	2000	2260	2890	3646	1766	2306	2926	1302	1744	2230	872	1206	1556	708	996	1294

Model		900mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GPB22-9006	600	640	820	1123	500	659	911	369	503	704	247	352	500	201	293	419
GPB22-9008	800	854	1093	1498	667	878	1215	492	671	938	329	470	667	268	391	559
GPB22-9010	1000	1067	1366	1872	834	1098	1519	615	839	1173	411	587	834	335	489	699
GPB22-9012	1200	1280	1639	2246	1001	1318	1823	738	1007	1408	493	704	1001	402	587	839
GPB22-9014	1400	1494	1912	2621	1168	1537	2127	861	1175	1642	575	822	1168	469	685	979
GPB22-9016	1600	1707	2186	2995	1334	1757	2430	984	1342	1877	658	939	1334	536	782	1118

Model		900mm High														
Code	Width (mm)	Output (watts 55°/45°/20°C)			Output (watts 50°/40°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 40°/30°/20°C)			Output (watts 35°/30°/20°C)		
		Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost	Static	Comfort	Boost
GPB33-9006	600	890	1082	1355	696	863	1085	513	652	824	343	449	575	279	371	476
GPB33-9008	800	1186	1443	1807	928	1150	1447	684	869	1099	458	599	765	372	495	634
GPB33-9010	1000	1483	1804	2259	1160	1438	1809	855	1086	1374	572	749	956	465	619	793
GPB33-9012	1200	1780	2165	2711	1392	1726	2171	1026	1303	1649	686	899	1147	558	743	952
GPB33-9014	1400	2076	2526	3163	1624	2013	2533	1197	1520	1924	801	1049	1338	651	867	1110

Planair Overview



Planair Technical

The Planair is engineered with composite copper pipes and aluminium fins for optimal heat transfer and improved efficiency in low-temperature systems, such as air and ground source heat pumps. The lightweight EPP chassis ensures durable and quiet operation.

Key features include factory-fitted valve kits with thermostatic valves and stainless steel pipes for easy connection, an efficient EC tangential fan with variable speed control, and an integrated condensate tray for cooling applications. The unit is protected by an ISO Coarse Class Air Filter, ensuring easy maintenance.

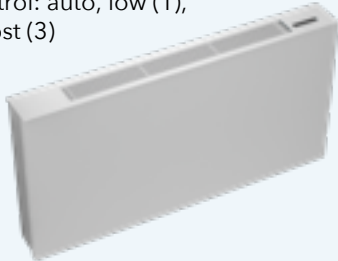
Features

- Heating and cooling for low temperature systems
- High outputs at conventional radiator sizes
- Height - 621mm
- Depth - 141mm
- Various control options (Digital, Thermostat, BMS)
- Factory fitted TRV or PICV valves
- Left or right handed connections
- 230V supply



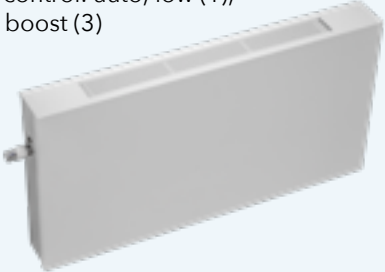
Display

- Intuitive touch screen display
- Heating & cooling
- 3-speed fan control: auto, low (1), medium (2), boost (3)



Thermostat

- Operation with conventional or smart thermostatic head (M30 × 1.5)
- Heating only
- 3-speed fan control: auto, low (1), medium (2), boost (3)



Electromechanical/BMS

- Control via room thermostat or BMS (0-10V signal)
- Heating & cooling



Heating Performance Data - Display and Thermostat Models												
Width (mm)	Output (watts 75°/65°/20°C)			Output (watts 55°/45°/20°C)			Output (watts 45°/35°/20°C)			Output (watts 35°/30°/20°C)		
	Fan Speed			Fan Speed			Fan Speed			Fan Speed		
	3	2	1	3	2	1	3	2	1	3	2	1
780	3260	2495	1760	1689	1346	992	960	764	588	659	545	397
1030	5040	3941	2622	2641	2140	1495	1515	1268	891	1034	850	606
1220	6485	4918	3244	3402	2685	1858	1954	1598	1159	1333	1068	755

For Electromechanical heating data and Cooling data, refer to the Planair product brochure.

High output heat exchanger

Optimised for low temperature systems, improving efficiencies of air & ground source heat pumps. Manufactured from composite copper pipes and aluminium fins for the best possible heat transfer.



Lightweight EPP chassis

Enables quiet operation with maximum performance. EPP is a recyclable closed-cell moulded foam.

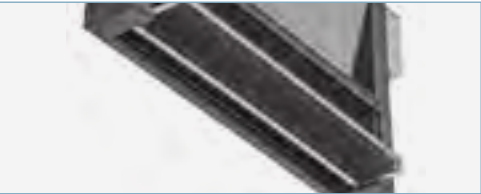
Durable EC tangential fan

Ensures quiet operation for noise-sensitive applications. Powered by an efficient EC motor with low energy consumption, the durable tangential fan provides continuously variable fan speed control for on-demand heat supply. 28°C LTC (adjustable on request).



ISO Coarse Class Air Filter

Guards against accidental intrusion and ingress of dirt and dust. Simple to vacuum when installed for easy cleaning.



Integrated condensate tray

For applications requiring cooling. The integrated condensate tray with free drainage for heat exchangers and valves is made of EPP with a specially treated surface for safe drainage of any condensate produced.



Aluminium radiator benefits

Lightweight construction

As shown in Figure 2, aluminium radiators are much lighter than steel panel radiators, allowing for an easier installation. Combined with a low water content, concerns over a wall's loadbearing capacity are reduced, as well as structural considerations on large projects such as apartment buildings.

Fig 2. Weight comparison of aluminium and steel radiators

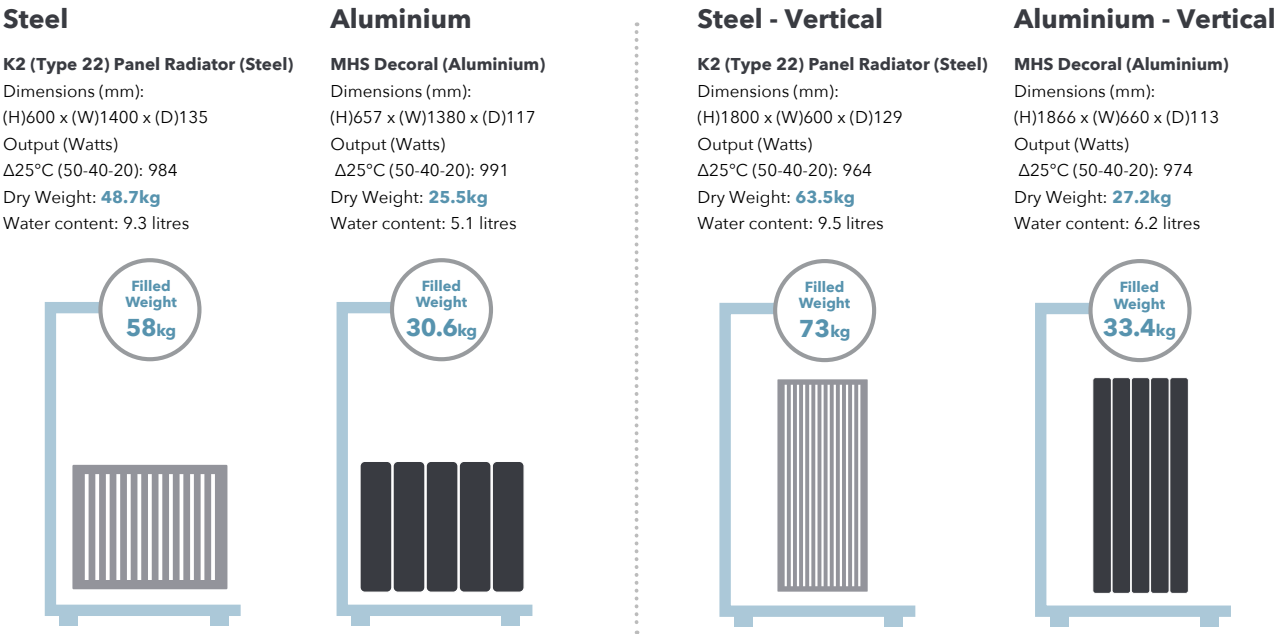
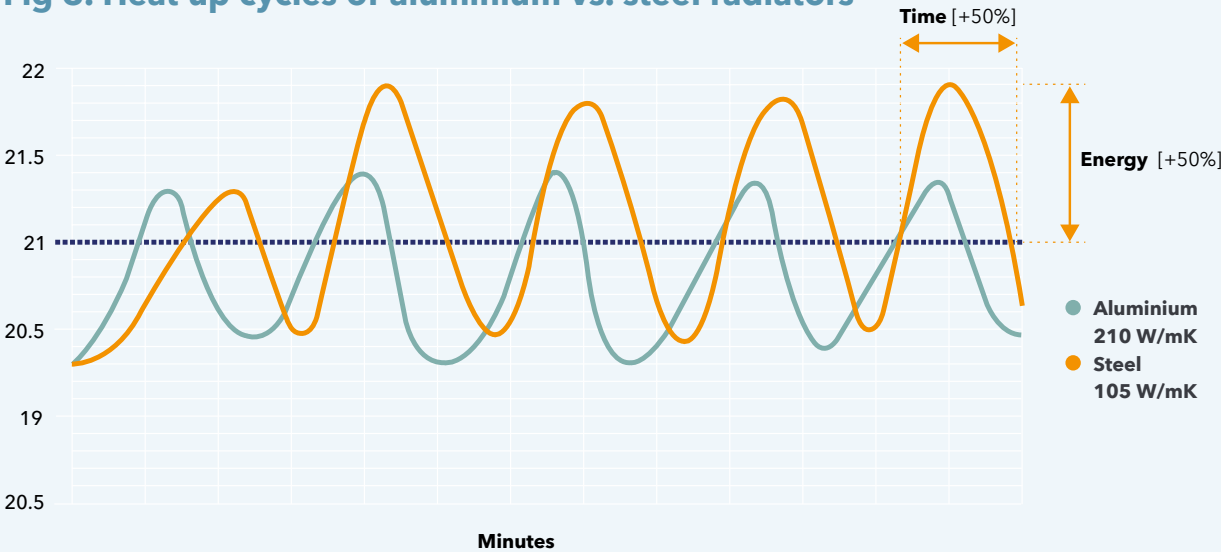


Fig 3. Heat up cycles of aluminium vs. steel radiators



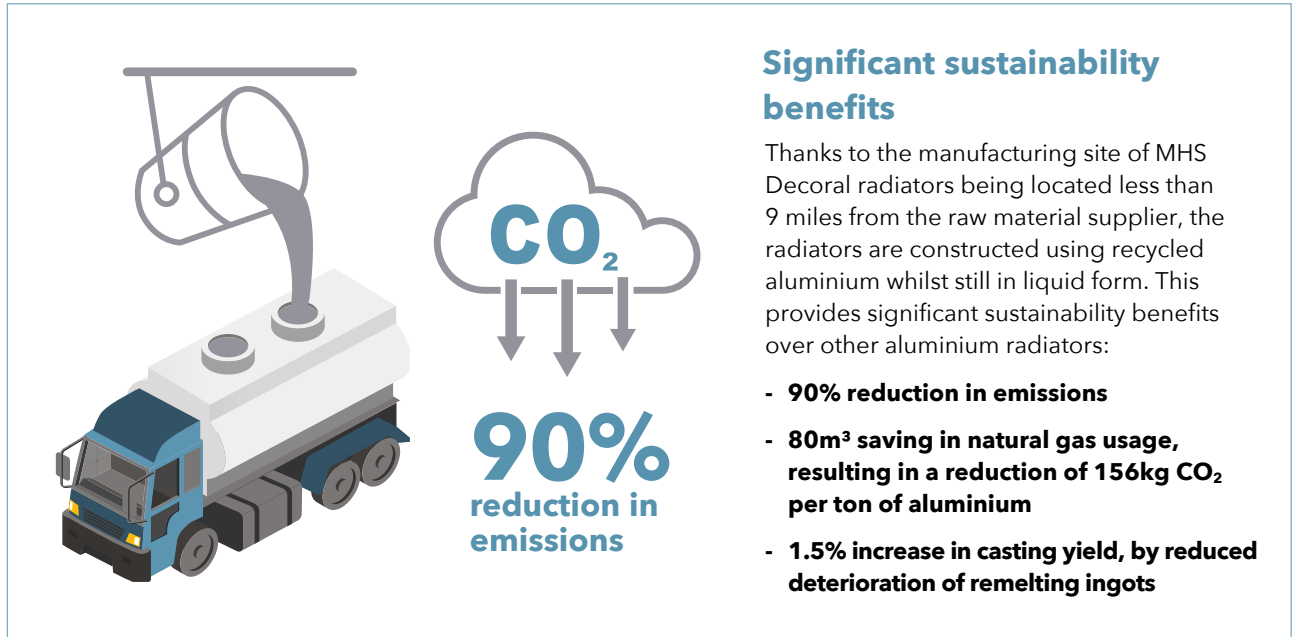
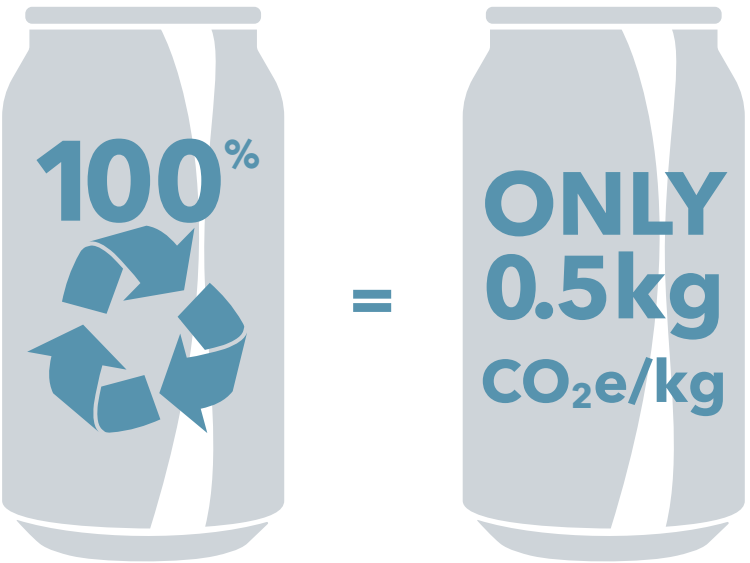
A further benefit of aluminium radiators is the higher modulation rates (Figure 3). Aluminium radiators deliver lower peaks and troughs compared to steel, reducing energy wastage.

Embodied carbon

As well as renewable energy production becoming a key part in the design of buildings, embodied carbon is becoming an increasingly important consideration, if we are to achieve the targets necessary to slow the increase in global temperatures.

Building materials and construction CO₂ emissions account for 11% of total global emissions, meaning that even the choice of which radiators are used in a new building should be carefully considered.

MHS Decoral radiators are manufactured from **100% recycled aluminium**. The aluminium recycling process requires only 5% of the energy used in the production of the primary metal, equating to a carbon footprint of 0.5kg CO₂e per kg of aluminium produced, compared to 6.7kg CO₂e/kg from primary extraction.



By carefully controlling the production chain, from scrap metal found throughout Europe, to the finished product, MHS aluminium radiators are guaranteed to be of high quality - both technically and environmentally.

Finally, the MHS Decoral is 100% recyclable. Aluminium can be recycled indefinitely without ever losing its properties, guaranteeing a low carbon footprint throughout its lifecycle. This also helps to reduce the uptake of the primary metal, and promote the use of materials that would otherwise be sent to landfill.

Decoral® 97

Overview



Decoral® 97

Technical

The aluminium Decoral 97 is finished in RAL 9010 Warm White and can operate up to 16 bar maximum working pressure (tested to 24 bar) as standard. Radiators are supplied complete with wall brackets and ½" BSP-f connections, with end panels available as an optional extra. The Decoral 97 carries a 10-year guarantee against manufacturing defects.

Features

- Material - 100% recycled/recyclable aluminium
- Finish - RAL 9010 Warm White
Other colours available on request
- Heights - 407-757mm
- Widths - 260-2020mm
- Outputs - 277-4063 watts
- Maximum Working Pressure - 16 bar (24 bar test)
- Warranty - 10 years



Technical data per section & linear metre

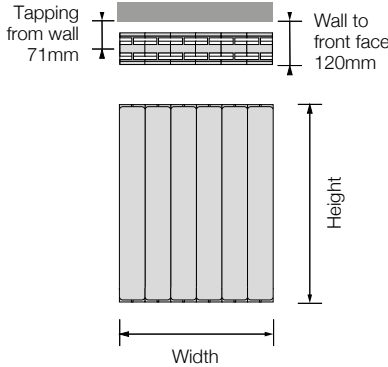
	Height (mm)							
	407		557		657		757	
	Per Sec	Per Metre	Per Sec	Per Metre	Per Sec	Per Metre	Per Sec	Per Metre
Weight (kg)	1.12	14.0	1.34	16.7	1.51	18.9	1.92	24.0
Water content (litres)	0.24	3.00	0.26	3.25	0.29	3.63	0.35	4.38

Performance data

Width (including bushes) (mm)	Sections	Height (mm)				Height (mm)			
		407	557	657	757	407	557	657	757
		Output (watts Δt 50°C)				Output (watts Δt 30°C)			
260	3	277	359	431	488	143	184	222	251
340	4	370	478	574	650	191	246	296	335
420	5	462	598	718	813	238	308	370	418
500	6	554	717	861	975	285	369	443	502
580	7	647	837	1005	1138	333	431	518	586
660	8	739	956	1148	1300	381	492	591	670
740	9	832	1076	1292	1463	428	554	665	753
820	10	924	1195	1435	1625	476	615	739	837
900	11	1016	1315	1579	1788	523	677	813	921
980	12	1109	1434	1722	1950	571	739	887	1004
1060	13	1201	1554	1866	2113	619	800	961	1088
1140	14	1294	1673	2009	2275	666	862	1035	1172
1220	15	1386	1793	2153	2438	714	923	1109	1256
1300	16	1478	1912	2296	2600	761	985	1182	1339
1380	17	1571	2032	2440	2763	809	1046	1257	1422
1460	18	1663	2151	2583	2925	856	1108	1330	1506
1540	19	1756	2271	2727	3088	904	1169	1404	1590
1620	20	1848	2390	2870	3250	952	1231	1478	1674
1700	21	1940	2510	3014	3413	999	1293	1552	1757
1780	22	2033	2629	3157	3575	1047	1354	1626	1841
1860	23	2125	2749	3301	3738	1094	1415	1700	1925
1940	24	2218	2868	3444	3900	1142	1477	1774	2009
2020	25	2310	2988	3588	4063	1190	1539	1848	2092

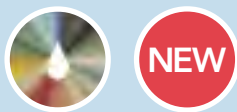
For other operating temperatures, refer to page 131.

Optional end panels



Decoral® 77

Overview



Available in a variety of heights, the Decoral 77 is a slim version of our popular Decoral 97 aluminium radiator. Ideal for hallways and tight spaces, the attractive and lightweight model boasts high outputs and is ideal for use with heat pumps and other renewable heating technologies.

Features

- Material - 100% recycled/recyclable aluminium
- Finish - RAL 9010 Warm White
Other colours available on request
- Heights - 557-757mm
- Widths - 260-2020mm
- Outputs - 296-3260 watts
- Maximum Working Pressure - 16 bar (24 bar test)
- Warranty - 10 years



Decoral® 77

Technical

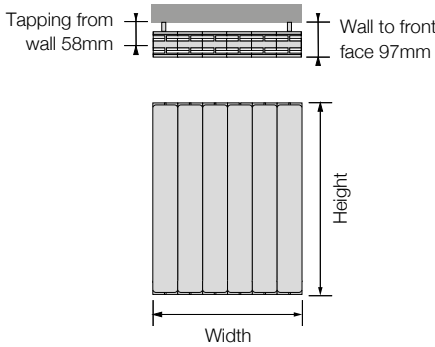
Technical data per section & linear metre

	Height (mm)					
	557		657		757	
	Per Sec	Per Metre	Per Sec	Per Metre	Per Sec	Per Metre
Weight (kg)	1.03	12.9	1.11	13.9	1.35	16.9
Water content (litres)	0.25	3.1	0.28	3.5	0.39	4.9

Performance data

Width (including bushes) (mm)	Sections	Height (mm)			Height (mm)		
		557	657	757	557	657	757
		Output (watts Δt 50°C)			Output (watts Δt 30°C)		
260	3	296	341	391	152	176	201
340	4	395	454	522	203	234	269
420	5	494	568	652	254	293	336
500	6	593	681	782	305	351	403
580	7	692	795	913	356	409	470
660	8	790	908	1043	407	468	537
740	9	889	1022	1174	458	526	605
820	10	988	1135	1304	509	585	672
900	11	1087	1249	1434	560	643	739
980	12	1186	1362	1565	611	701	806
1060	13	1284	1476	1695	661	760	873
1140	14	1383	1589	1826	712	818	940
1220	15	1482	1703	1956	763	877	1007
1300	16	1581	1816	2086	814	935	1074
1380	17	1680	1930	2217	865	994	1142
1460	18	1778	2043	2347	916	1052	1209
1540	19	1877	2157	2478	967	1111	1276
1620	20	1976	2270	2608	1018	1169	1343
1700	21	2075	2384	2738	1069	1228	1410
1780	22	2174	2497	2869	1120	1286	1478
1860	23	2272	2611	2999	1170	1345	1544
1940	24	2371	2724	3130	1221	1403	1612
2020	25	2470	2838	3260	1272	1462	1679

For other operating temperatures, refer to page 131.



Extratherm 97

Overview



A fusion of cutting-edge design and recycled aluminium, the Extratherm 97 features a rounded top and open-fronted curves for a touch of continental charm. Lightweight and versatile, it is ideal for use with heat pumps and other renewable heating technologies. The Extratherm 97 also has excellent outputs and thermal efficiency in a small footprint.

Features

- Material - 100% recycled/recyclable aluminium
- Finish - RAL 9010 Warm White
Other colours available on request
- Heights - 407-757mm
- Widths - 260-2020mm
- Outputs - 275-4043 watts
- Maximum Working Pressure - 16 bar (24 bar test)
- Warranty - 10 years



Extratherm 97

Technical

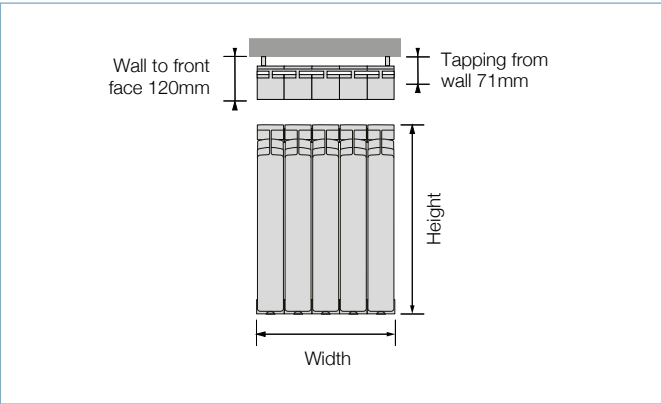
Technical data per section & linear metre

	Height (mm)							
	407		557		657		757	
	Per Sec	Per Metre	Per Sec	Per Metre	Per Sec	Per Metre	Per Sec	Per Metre
Weight (kg)	1.03	12.9	1.32	16.5	1.51	18.9	1.73	21.6
Water content (litres)	0.21	2.6	0.26	3.3	0.30	3.8	0.36	4.5

Performance data

Width (including bushes) (mm)	Sections	Height (mm)				Height (mm)			
		407	557	657	757	407	557	657	757
		Output (watts Δt 50°C)				Output (watts Δt 30°C)			
260	3	275	374	431	485	142	193	222	250
340	4	366	498	574	647	188	256	296	333
420	5	458	623	718	809	236	321	370	417
500	6	549	748	862	970	283	385	444	500
580	7	641	872	1005	1132	330	449	518	583
660	8	732	997	1149	1294	377	513	592	666
740	9	824	1121	1292	1455	424	577	665	749
820	10	915	1246	1436	1617	471	642	740	833
900	11	1007	1371	1580	1779	519	706	814	916
980	12	1098	1495	1723	1940	565	770	887	999
1060	13	1190	1620	1867	2102	613	834	962	1083
1140	14	1281	1744	2010	2264	660	898	1035	1166
1220	15	1373	1869	2154	2426	707	963	1109	1249
1300	16	1464	1994	2298	2587	754	1027	1183	1332
1380	17	1556	2118	2441	2749	801	1091	1257	1416
1460	18	1647	2243	2585	2911	848	1155	1331	1499
1540	19	1739	2367	2728	3072	896	1219	1405	1582
1620	20	1830	2492	2872	3234	942	1283	1479	1666
1700	21	1922	2617	3016	3396	990	1348	1553	1749
1780	22	2013	2741	3159	3557	1037	1412	1627	1832
1860	23	2105	2866	3303	3719	1084	1476	1701	1915
1940	24	2196	2990	3446	3881	1131	1540	1775	1999
2020	25	2288	3115	3590	4043	1178	1604	1849	2082

For other operating temperatures, refer to page 131.



Dubal 30

Overview



The Dubal 30 is a unique 147mm depth die-cast aluminium radiator, providing versatility when a low level radiator is required. The radiator is reversible, providing a choice of flat-fronted or open-fronted style. The Dubal 30 can be paired with free-standing feet, ideal for when the radiator is positioned in front of glazing.

Features

- Material - 100% recycled/recyclable aluminium
- Finish - RAL 9010 Warm White
Other colours available on request
- Heights - 288mm
- Widths - 260-2020mm
- Outputs - 249-2075 watts
- Maximum Working Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years



Dubal 30

Technical

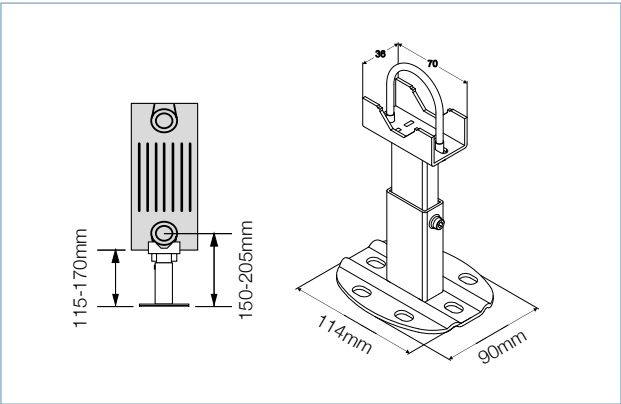
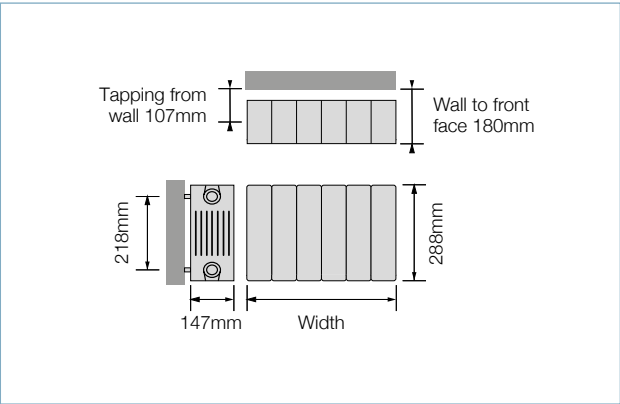
Technical data per section & linear metre

	Height (mm)	
	288	
	Per Sec	Per Metre
Weight (kg)	1.45	18.1
Water content (litres)	0.27	3.4

Performance data

Width (including bushes) (mm)	Sections	Height (mm)		Height (mm)	
		288 (Open Front)	288 (Flat Front)	288 (Open Front)	288 (Flat Front)
		Output (watts Δt 50°C)		Output (watts Δt 30°C)	
260	3	249	246	128	127
340	4	332	328	171	169
420	5	415	410	214	211
500	6	498	492	256	253
580	7	581	574	299	296
660	8	664	656	342	338
740	9	747	738	385	380
820	10	830	820	427	422
900	11	913	902	470	465
980	12	996	984	513	507
1060	13	1079	1066	556	549
1140	14	1162	1148	598	591
1220	15	1245	1230	641	633
1300	16	1328	1312	684	676
1380	17	1411	1394	727	718
1460	18	1494	1476	769	760
1540	19	1577	1558	812	802
1620	20	1660	1640	855	845
1700	21	1743	1722	898	887
1780	22	1826	1804	940	929
1860	23	1909	1886	983	971
1940	24	1992	1968	1026	1014
2020	25	2075	2050	1069	1056

For other operating temperatures, refer to page 131.



Decoral® Vertical Overview



Decoral® Vertical Technical

The aluminium Decoral Vertical radiator is finished in RAL 9010 Warm White. The Decoral Vertical radiators have a 16 bar maximum working pressure (24 bar test) and are supplied with wall brackets and 1/2" BSP-f connections. The Decoral Vertical carries a 10-year guarantee against manufacturing defects.

Features

- Material - 100% recycled/recyclable aluminium
- Finish - RAL 9010 Warm White
Other colours available on request.
- Heights - 966-2066mm
- Widths - 260-660mm
- Outputs - 546-2400 watts
- Maximum Working Pressure - 16 bar (24 bar test)
- Warranty - 10 years



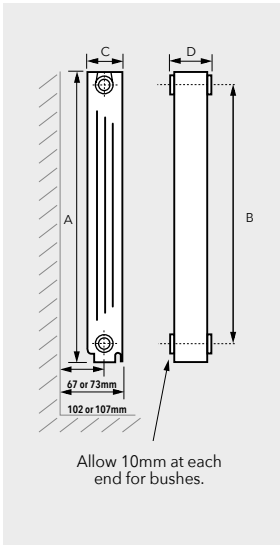
Technical data per section

	Height (mm)						
	966	1066	1266	1466	1666	1866	2066
Weight (kg)	1.96	2.20	2.50	2.80	3.00	3.40	3.80
Water content (litres)	0.43	0.47	0.55	0.62	0.70	0.78	0.86

Performance data

Width (mm)	260	340	420	500	580	660	260	340	420	500	580	660
Sections	3	4	5	6	7	8	3	4	5	6	7	8
Height (mm)	Output (watts Δt 50°C)						Output (watts Δt 30°C)					
966	546	728	910	1092	-	-	281	375	469	562	-	-
1066	585	780	975	1170	-	-	301	402	502	603	-	-
1266	669	892	1115	1338	-	-	345	459	574	689	-	-
1466	750	1000	1250	1500	-	-	386	515	644	773	-	-
1666	825	1100	1375	1650	-	-	425	567	708	850	-	-
1866	900	1200	1500	1800	2100	2400	464	618	773	927	1082	1236
2066	972	1296	1620	1944	-	-	501	667	834	1001	-	-

For other operating temperatures, refer to page 131.



Technical data per section

	Height (mm)						
	966	1066	1266	1466	1666	1866	2066
Height A	966	1066	1266	1466	1666	1866	2066
Centres B	900	1000	1200	1400	1600	1800	2000
Depth C	90	90	90	90	90	90	90
Width D	80	80	80	80	80	80	80
Max No. Sections	6	6	6	6	6	8	6
Max Working Pressure	16	16	16	16	16	16	16
Max Test Pressure	24	24	24	24	24	24	24

Radiators over the stated maximum number of sections must be assembled on site. Please contact our sales office for more information

Play Overview



Play Technical

A lightweight, sleek radiator made from recycled aluminium with contemporary curved edges. The slim design is perfect for a range of room and wall sizes, including hallways and kitchens. It also has low water content, high outputs and impressive thermal efficiency.

Features

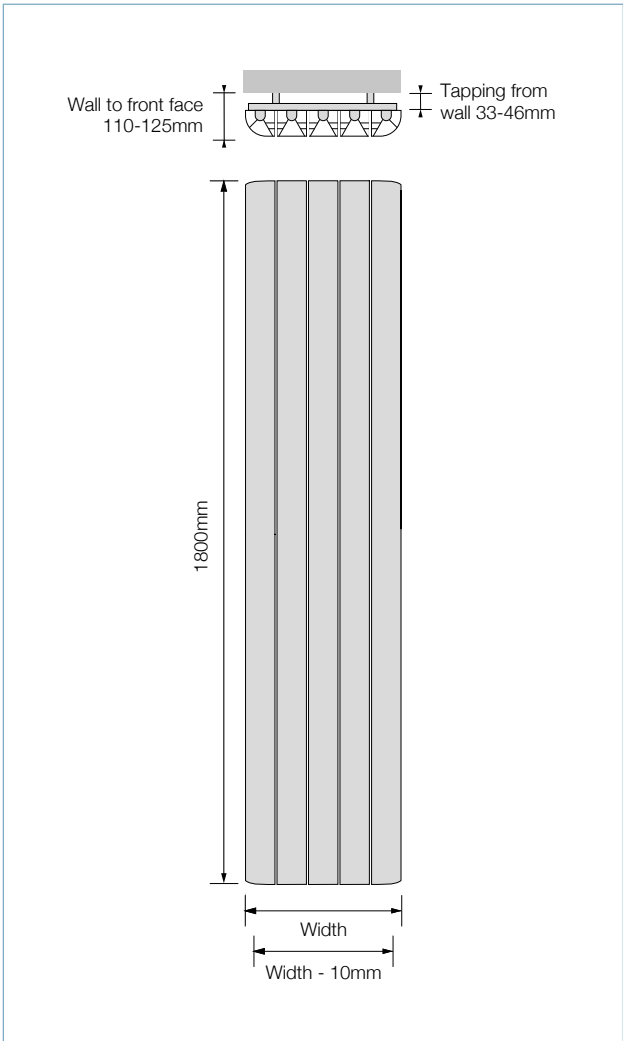
- Material - 100% recycled/recyclable aluminium
- Finish - RAL 9010 Warm White
Other colours available on request.
- Height - 1800mm
- Widths - 250-590mm
- Outputs - 734-1714 watts
- Maximum Working Pressure - 10 bar (13 bar test)
- Warranty - 5 years



Performance data

Sections	Width (mm)	Output (watts Δt 50°C)	Output (watts Δt 30°C)	Weight (kg)	Water content (litres)
3	250	734	378	7.98	1.56
4	335	979	504	10.64	2.08
5	420	1224	630	13.30	2.60
6	560	1469	757	15.96	3.12
7	590	1714	883	18.62	3.64

For other operating temperatures, refer to page page 131.



The advantages of radiators with an integrated flow tube

Achieving Lifetime Homes Standard

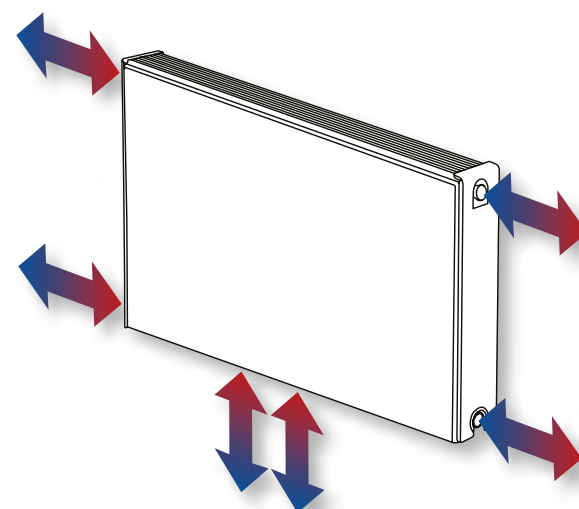
This requirement, in accordance with Document M 2004 (Part M), stipulates that switches, socket outlets and other equipment in habitable rooms are installed at appropriate heights between 450mm and 1200mm from finished floor level.

Any 'service controls', such as TRVs, need to be at least 300mm from any internal room corner. This eliminates any need for reaching or bending down to adjust the settings, and ensures controls remain easily within the reach of wheelchair users and the elderly.

To comply with these standards, MHS Radiators has a wide range of products that have integrated flow tubes and underside connections, allowing the TRV head to be positioned at the top of the radiator.

Compliant products include:

- Galant and Galant Plan (pages 32-35)
- Centara and Centara Plan (pages 40-43)



Fast and flexible fit

Radiators with underside connection points provides easy installation and flexibility in terms of TRV location, which is particularly beneficial in new builds or retrofit projects. These connections allow for pipework installation and finishing at first fix, long before radiator size actually needs to be determined, saving on time and labour. Furthermore, the Centara range also has centrally located underside connections, which allow for even greater flexibility during installation. Installers are able to position pipework centrally, without having to preplan the size or style of a radiator. They can then return during the second fix, safe in the knowledge all radiators will be positioned correctly, regardless of their size.

Quality tested

All radiators with an integrated flow tube are manufactured and tested to EN 442. Every radiator carries the CE mark which certifies independent approval of heat output and verifies production under a quality system to EN ISO 9001.



Designed and manufactured to the latest standards



Connect with Variocon

All radiators in the Galant, Galant Plan, Centara and Centara Plan range can utilise the MHS Variocon valve set. This can swivel for angled, through the wall connections or can simply come up from the floor for straight connections - making specification/installation considerably easier.



Variocon valve



TRV insert

Every Variocon valve set is supplied with a pre-set valve insert, which enhances the efficiency of the system and reduces energy consumption.



Galant Overview



Galant Technical



The Galant horizontal is supplied with welded side panels, which, combined with optional top grille security clips, make it the perfect radiator for high-traffic environments such as schools and hospitals.

The Galant offers multiple connection options, with 4 side 1/2" BSP-f connections and 2 underside 1/2" BSP-f connections. As a reversible radiator, the underside connections can be on the left or right side.

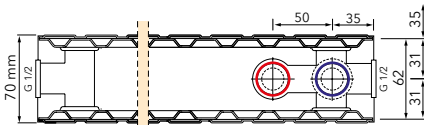
Manufactured from 1.2mm steel, the Galant horizontal radiator has a 6 bar maximum working pressure (8 bar test). The MHS Galant carries a 10-year guarantee against manufacturing defects.



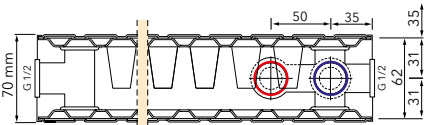
Features

- Types - 20, 21, 22 & 33
- Material - Steel (1.2mm)
- Finish - RAL 9016 Traffic White
Other colours available on request
- Heights - 200-900mm
- Lengths - 400-3000mm
- Models - 239
- Outputs - 337-7017 watts
- Maximum Working Pressure - 6 bar (8 bar test)
- Warranty - 10 years

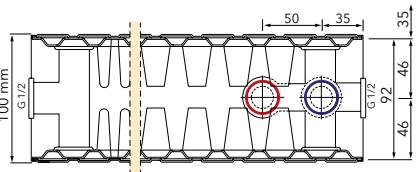
Type 20 Depth 70mm



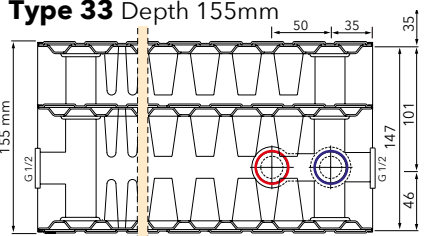
Type 21 Depth 70mm



Type 22 Depth 100mm



Type 33 Depth 155mm



Galant - Type 20	Height (mm)		
	500	600	900
Weight (kg/metre)	21.90	26.10	40.80
Water content (litres/metre)	3.60	4.40	6.40

Galant - Type 21	Height (mm)			
	350	500	600	900
Weight (kg/metre)	20.50	25.20	30.40	43.10
Water content (litres/metre)	2.80	3.60	4.40	6.40

Galant - Type 22	Height (mm)				
	200	350	500	600	900
Weight (kg/metre)	14.10	24.40	29.30	34.70	49.40
Water content (litres/metre)	1.80	2.80	3.60	4.40	6.40

Galant - Type 33	Height (mm)				
	200	350	500	600	900
Weight (kg/metre)	21.30	35.60	43.40	51.50	73.00
Water content (litres/metre)	2.60	4.10	5.80	6.70	9.60

Type	Height (mm)																	
	200		350			500				600				900				
	22	33	21	22	33	20	21	22	33	20	21	22	33	20	21	22	33	
Width (mm)	400	-	-	-	-	-	337	434	559	820	392	499	659	936	555	704	916	1285
	500	-	-	-	-	-	421	543	699	1025	490	624	824	1170	694	881	1146	1607
	600	446	667	540	710	1054	505	651	838	1230	588	749	988	1403	833	1057	1375	1928
	700	521	778	630	829	1230	589	760	978	1435	686	874	1153	1637	972	1233	1604	2249
	800	595	890	720	947	1406	674	868	1118	1640	784	998	1318	1871	1110	1409	1833	2570
	900	670	1001	810	1066	1581	758	977	1257	1845	882	1123	1482	2105	1249	1585	2062	2892
	1000	744	1112	900	1184	1757	842	1085	1397	2050	980	1248	1647	2339	1388	1761	2291	3213
	1100	818	1223	990	1302	1933	926	1194	1537	2255	1078	1373	1812	2573	1527	1937	2520	3534
	1200	893	1334	1080	1421	2108	1010	1302	1676	2460	1176	1498	1976	2807	1666	2113	2749	3856
	1400	1042	1557	1260	1658	2460	1179	1519	1956	2870	1372	1747	2306	3275	1943	2465	3207	4498
	1600	1190	1779	1440	1894	2811	1347	1736	2235	3280	1568	1997	2635	3742	-	2818	3666	5141
	1800	1339	2002	1620	2131	3163	1516	1953	2515	3690	1764	2246	2965	4210	-	3170	4124	5783
	2000	1488	2224	1800	2368	3514	1684	2170	2794	4100	1960	2496	3294	4678	-	3522	4582	6426
2200	1637	2446	-	2605	3865	-	2387	3073	4510	2156	2746	3623	5146	-	-	-	-	
2600	1934	2891	-	3078	4568	-	2821	3632	5330	-	3245	4282	6081	-	-	-	-	
3000	2232	3336	-	3552	5271	-	3255	4191	6150	-	3744	4941	7017	-	-	-	-	

New Available from January 2025

Outputs shown in watts at Δt 50°C
For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Visit www.mhsradiators.co.uk for full details

Galant Plan Overview



Galant Plan Technical



The Galant Plan horizontal radiator is manufactured from 1.2mm steel with a 0.5mm aluminium front plate, ensuring a rapid and efficient heat transfer.

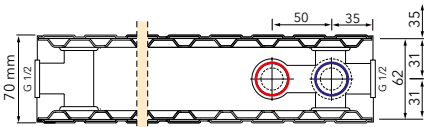
The Galant Plan offers multiple connection options, with 4 side 1/2" BSP-f connections and 2 underside 1/2" BSP-f connections. The underside connections can be on the left or right side, to be specified when ordering. All horizontal models are supplied with welded side panels, which, combined with optional top grille security clips, make it the perfect radiator for high-traffic environments such as schools and hospitals. The MHS Galant Plan carries a 10-year guarantee against manufacturing defects.

Features

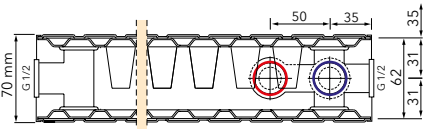
- Types - 20, 21, 22 & 33
- Material - Steel (1.2mm) & 0.5mm aluminium front plate
- Finish - RAL 9016 Traffic White
Other colours available on request
- Heights - 200-900mm
- Lengths - 400-2000mm
- Models - 200
- Outputs - 336-4466 watts
- Maximum Working Pressure - 6 bar (8 bar test)
- Warranty - 10 years



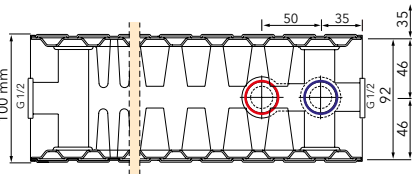
Type 20 Depth 70mm



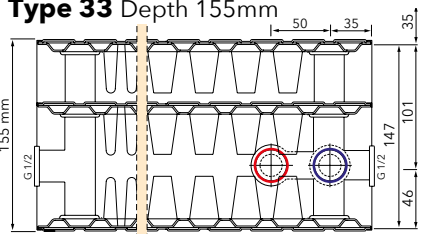
Type 21 Depth 70mm



Type 22 Depth 100mm



Type 33 Depth 155mm



Galant Plan - Type 20	Height (mm)		
	500	600	900
Weight (kg/metre)	23.00	27.50	42.80
Water content (litres/metre)	3.60	4.40	6.40

Galant Plan - Type 21	Height (mm)			
	350	500	600	900
Weight (kg/metre)	21.30	26.30	31.80	45.10
Water content (litres/metre)	2.80	3.60	4.40	6.40

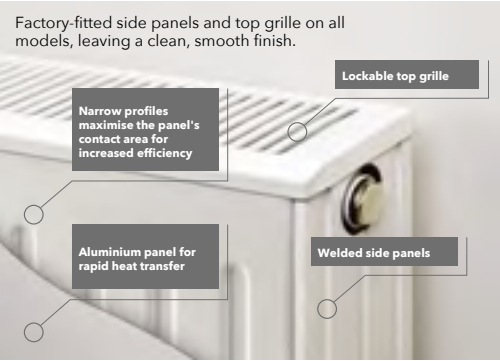
Galant Plan - Type 22	Height (mm)				
	200	350	500	600	900
Weight (kg/metre)	14.60	25.20	30.40	36.10	51.40
Water content (litres/metre)	1.80	2.80	3.60	4.40	6.40

Galant Plan - Type 33	Height (mm)				
	200	350	500	600	900
Weight (kg/metre)	21.80	36.40	44.40	52.90	75.00
Water content (litres/metre)	2.60	4.10	5.80	6.70	9.60

Type	Height (mm)																	
	200		350			500				600				900				
	22	33	21	22	33	20	21	22	33	20	21	22	33	20	21	22	33	
Width (mm)	400	-	-	-	-	-	336	433	552	791	390	500	652	893	546	665	844	1172
	500	-	-	-	-	-	420	541	690	989	488	625	815	1117	682	831	1055	1465
	600	444	632	528	690	1007	503	649	828	1187	586	749	977	1340	818	997	1265	1758
	700	518	737	616	805	1175	587	757	966	1385	683	874	1140	1563	955	1163	1476	2051
	800	592	842	704	920	1343	671	866	1104	1582	781	999	1303	1786	1091	1330	1687	2344
	900	666	948	792	1035	1511	755	974	1242	1780	878	1124	1466	2010	1228	1496	1898	2637
	1000	740	1053	880	1150	1679	839	1082	1380	1978	976	1249	1629	2233	1364	1662	2109	2930
	1100	814	1158	968	1265	1847	923	1190	1518	2176	1074	1374	1792	2456	1500	1828	2320	3223
	1200	888	1264	1056	1380	2015	1007	1298	1656	2374	1171	1499	1955	2680	1637	1994	2531	3516
	1400	1036	1474	1232	1610	2351	1175	1515	1932	2769	1366	1749	2281	3126	1910	2327	2953	4102
	1600	1184	1685	1408	1840	2686	1342	1731	2208	3165	1562	1998	2606	3573	-	-	3374	-
	1800	1332	1895	1584	2070	3022	1510	1948	2484	3560	1757	2248	2932	4019	-	-	-	-
2000	1480	2106	1760	2300	3358	1678	2164	2760	3956	1952	2498	3258	4466	-	-	-	-	

New

Outputs shown in watts at Δt 50°C
For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.



Visit www.mhsradiators.co.uk for full details

Galant & Galant Plan Vertical Overview



The Galant Vertical is manufactured from 1.2mm steel, while the Galant Plan Vertical is also fitted with a 0.5mm aluminium front plate, ensuring a rapid and efficient heat transfer. Supplied with securable side panels and top grille as standard, the Galant Vertical has a 6 bar maximum working pressure (8 bar test). The Galant Vertical is supplied with 4 1/2" BSP-f connections and carries a 10-year warranty against manufacturing defects.

Features

- Types - 20
- Material - Steel (1.2mm), 0.5mm aluminium front plate on Galant Plan Vertical.
- Finish - RAL 9016 Traffic White
Other colours available on request
- Heights - 1500-2200mm
- Widths - 500, 600 & 900mm
- Models - 18
- Outputs - 999-2597 watts
- Maximum Working Pressure - 6 bar (8 bar test)
- Warranty - 10 years



Galant Plan Vertical
Type 20



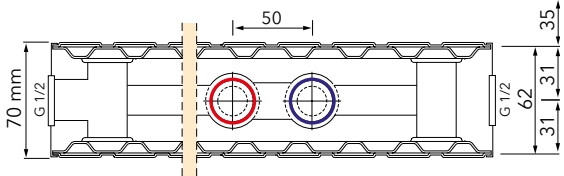
Galant Plan
Type 20



Galant
Type 20

Plan View

Type 20 Depth 70mm



Galant & Galant Plan Vertical Technical

Galant Vertical

Width (mm)	Type 20	Height (mm)		
		1500	1800	2200
500	Output (watts)	1054	1241	1443
	Weight (kg/metre)	32.90	39.40	48.20
	Water content (litres/metre)	5.40	6.48	7.92
600	Output (watts)	1264	1489	1732
	Weight (kg/metre)	39.20	47.00	57.40
	Water content (litres/metre)	6.60	7.92	9.68
900	Output (watts)	1896	2233	2597
	Weight (kg/metre)	61.20	73.40	89.80
	Water content (litres/metre)	9.60	11.52	14.08



Galant Plan Vertical

Width (mm)	Type 20	Height (mm)		
		1500	1800	2200
500	Output (watts)	999	1146	1356
	Weight (kg/metre)	34.50	41.40	50.60
	Water content (litres/metre)	5.40	6.48	7.92
600	Output (watts)	1137	1304	1543
	Weight (kg/metre)	41.30	49.50	60.50
	Water content (litres/metre)	6.60	7.92	9.68
900	Output (watts)	1515	1738	2056
	Weight (kg/metre)	64.20	77.00	94.20
	Water content (litres/metre)	9.60	11.52	14.08

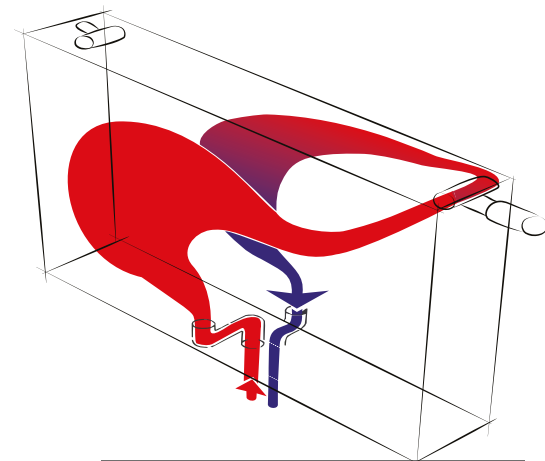


Outputs shown in watts at Δt 50°C
For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

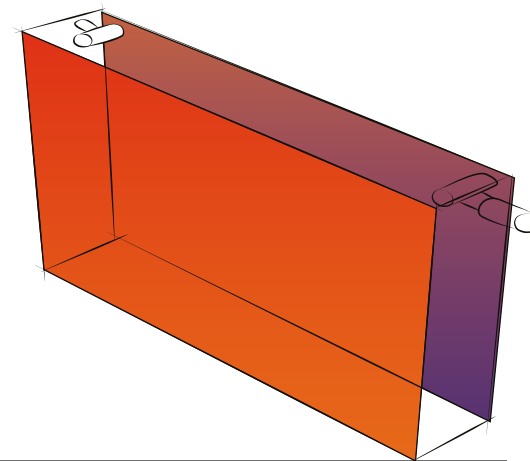
When ordering the Galant Plan Vertical it must be specified if the flow and TRV head (if fitted) will be on the left or right side.

Centara & Centara Plan Introduction

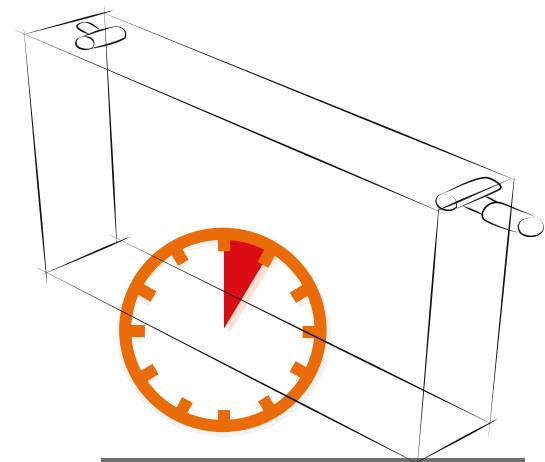
The Centara radiator is cleverly designed to reduce heat loss through the wall, allowing it to deliver more radiant heat than traditional radiators. As a result, the Centara provides end users with the same levels of comfort whilst lowering the thermostat by 1 degree, returning a 5% energy saving.



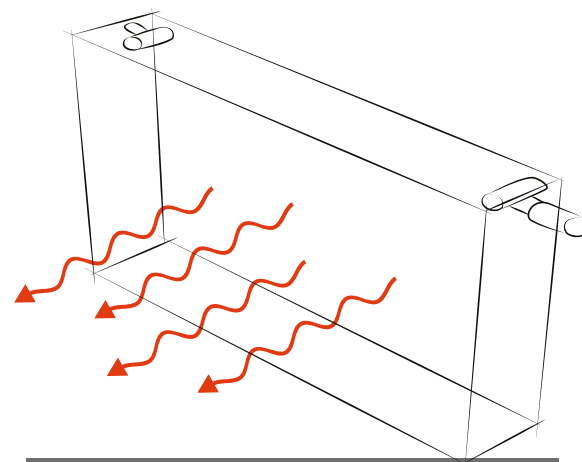
The front panel of the radiator is prioritised



Energy consumption and heat loss through the wall are reduced

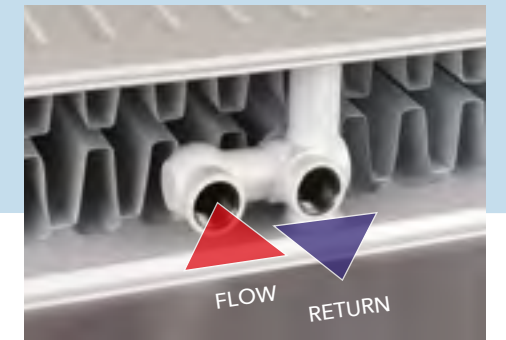


Rapid heat up times



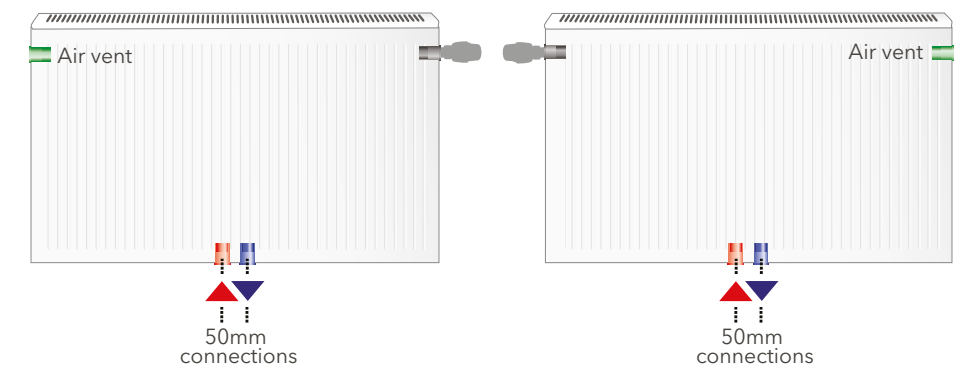
More radiation, less convection

Centara Connections



Important note: The Centara must only be installed with the flow on the left (see diagram below). The special Centara air vent supplied by MHS must be installed, while the TRV head can be fitted on either side.

Underside connection



Connect with Variocon

All radiators in the Centara range can utilise the MHS Variocon valve set. This can swivel for angled, through the wall connections or can simply come up from the floor for straight connections - making specification / installation considerably easier.



The Variocon valve can be supplied with connections suitable for either 15mm copper pipe or 1/2" steel pipe. An optional hose drain union can be supplied to allow the radiator to be drained without disconnecting from the system. The Variocon valve set can be ordered with either a chrome or a white TRV head.



TRV insert

Every Variocon kit is equipped with a pre-set valve insert, which enhances the efficiency of the system and reduces energy consumption.



Centara Overview



Centara Technical



The Centara radiator range is manufactured from 1.2mm steel and is available in RAL 9016 Traffic White as standard, with other colours available on request. Supplied complete with wall brackets, plug and air vent, welded side panels and top grille as standard, the Centara radiator has a 6 bar maximum working pressure (8 bar test). The Centara is supplied with underside 50mm connections.

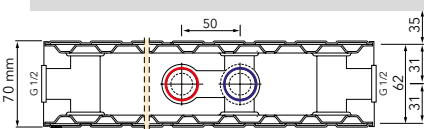
All models are supplied with welded side panels, which, combined with optional top grille security clips, make it the perfect radiator for high-traffic environments such as schools and hospitals. The MHS Centara carries a 10-year guarantee against manufacturing defects.

Features

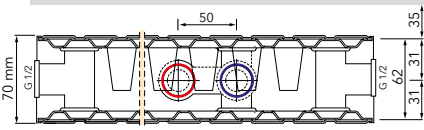
- Types - 20, 21, 22 & 33
- Material - Steel (1.2mm)
- Finish - RAL 9016 Traffic White
Other colours available on request
- Heights - 350-900mm
- Lengths - 400-2000mm
- Models - 104
- Outputs - 322-3334 watts
- Maximum Working Pressure - 6 bar (8 bar test)
- Warranty - 10 years



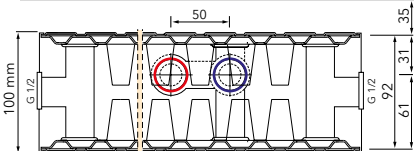
Type 20 Depth 70mm



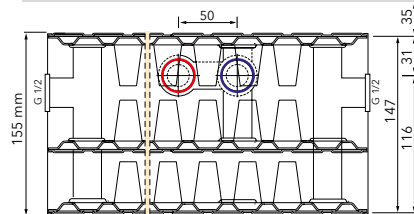
Type 21 Depth 70mm



Type 22 Depth 100mm



Type 33 Depth 155mm



Centara - Type 20	Height (mm)		
	500	600	900
Weight (kg/metre)	21.90	26.10	40.80
Water content (litres/metre)	3.60	4.40	6.40

Centara - Type 21	Height (mm)		
	500	600	900
Weight (kg/metre)	25.20	30.40	43.10
Water content (litres/metre)	3.60	4.40	6.40

Centara - Type 22	Height (mm)			
	350	500	600	900
Weight (kg/metre)	24.40	29.30	37.40	49.40
Water content (litres/metre)	2.80	3.60	4.40	6.40

Centara - Type 33	Height (mm)			
	350	500	600	900
Weight (kg/metre)	35.60	43.40	51.50	73.00
Water content (litres/metre)	4.10	5.80	6.70	9.60

	Type	Height (mm)													
		350		500				600				900			
		22	33	20	21	22	33	20	21	22	33	20	21	22	33
Width (mm)	400	-	-	322	413	515	-	367	477	614	-	515	588	771	-
	500	-	-	403	517	644	-	459	596	768	-	-	736	964	1384
	600	-	-	483	620	772	1116	550	715	922	1289	773	883	1157	1661
	700	-	-	-	723	901	-	-	834	1075	-	-	1030	1350	1938
	800	910	1334	644	826	1030	1554	734	954	1229	1718	-	1177	1542	2214
	900	-	-	-	930	1158	1749	-	1073	1382	1933	-	-	1735	2491
	1000	1137	1667	805	1033	1287	1943	917	1192	1536	2148	-	1471	1928	2768
	1200	1364	2000	966	1240	1544	2332	1100	1430	1843	2578	-	-	2314	-
	1400	1592	2334	-	1446	1802	2720	-	1669	2150	3007	-	-	-	-
	1600	1819	2667	-	1653	2059	-	-	1907	2458	-	-	-	-	-
	1800	2047	3001	-	-	2317	-	-	-	2765	-	-	-	-	-
	2000	2274	3334	-	-	2574	-	-	-	3072	-	-	-	-	-

Outputs shown in watts at Δt 50°C
For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Visit www.mhsradiators.co.uk for full details

Centara Plan Overview



Centara Plan Technical



The Centara Plan is manufactured from 1.2mm steel with a 0.5mm aluminium front plate and is available in RAL 9016 Traffic White as standard, with other colours available on request. Supplied complete with wall brackets, plug and air vent, welded side panels and top grille as standard, the Centara Plan radiator has a 6 bar maximum working pressure (8 bar test). The Centara Plan is supplied with underside 50mm connections.

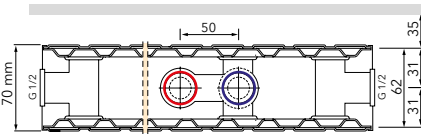
All models are supplied with welded side panels, which, combined with optional top grille security clips, make it the perfect radiator for high-traffic environments such as schools and hospitals. The MHS Centara Plan carries a 10-year guarantee against manufacturing defects.

Features

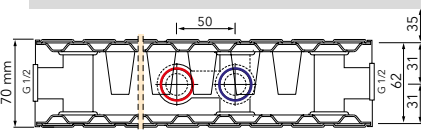
- Types - 20, 21, 22 & 33
- Material - Steel (1.2mm) & 0.5mm aluminium front plate
- Finish - RAL 9016 Traffic White
Other colours available on request
- Heights - 350-900mm
- Lengths - 400-2000mm
- Models - 104
- Outputs - 308-2886 watts
- Maximum Working Pressure - 6 bar (8 bar test)
- Warranty - 10 years



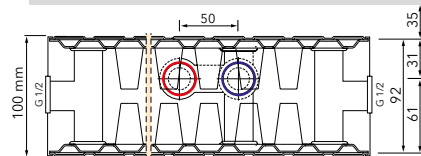
Type 20 Depth 70mm



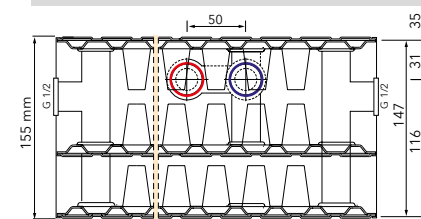
Type 21 Depth 70mm



Type 22 Depth 100mm



Type 33 Depth 155mm



Centara Plan - Type 20	Height (mm)		
	500	600	900
Weight (kg/metre)	23.00	27.50	42.80
Water content (litres/metre)	3.60	4.40	6.40

Centara Plan - Type 21	Height (mm)		
	500	600	900
Weight (kg/metre)	26.30	31.80	45.10
Water content (litres/metre)	3.60	4.40	6.40

Centara Plan - Type 22	Height (mm)			
	350	500	600	900
Weight (kg/metre)	25.20	30.40	36.10	51.40
Water content (litres/metre)	2.80	3.60	4.40	6.40

Centara Plan - Type 33	Height (mm)			
	350	500	600	900
Weight (kg/metre)	36.40	44.40	52.90	75.00
Water content (litres/metre)	4.10	5.80	6.70	9.60

	Type	Height (mm)													
		350		500				600				900			
		22	33	20	21	22	33	20	21	22	33	20	21	22	33
Width (mm)	400	-	-	308	375	514	-	361	441	577	-	487	582	768	-
	500	-	-	385	469	643	-	452	552	722	-	-	727	960	1242
	600	-	-	461	562	771	1045	542	662	866	1159	730	872	1151	1490
	700	-	-	-	656	900	-	-	772	1010	-	-	1018	1343	1738
	800	833	1153	615	750	1028	1394	722	882	11545	1546	-	1163	1535	1986
	900	-	-	-	843	1157	1568	-	993	1299	1739	-	1454	1727	2235
	1000	1041	1441	769	937	1285	1742	903	1103	1443	1932	-	-	1919	2483
	1200	1249	1729	923	1124	1542	2090	1084	1324	1732	2318	-	-	2303	-
	1400	1457	2017	-	1312	1799	2439	-	1544	2020	2705	-	-	-	-
	1600	1666	2306	-	1499	2056	-	-	1765	2309	-	-	-	-	-
	1800	1874	2594	-	-	2313	-	-	-	2597	-	-	-	-	-
	2000	2082	2882	-	-	2570	-	-	-	2886	-	-	-	-	-

Outputs shown in watts at Δt 50°C
For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

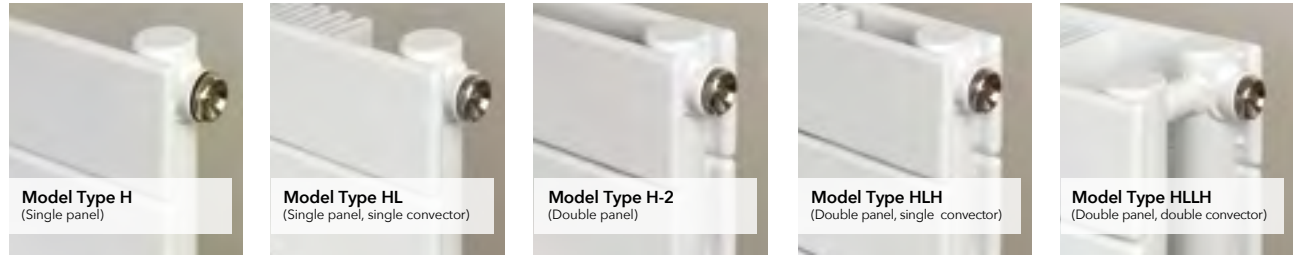
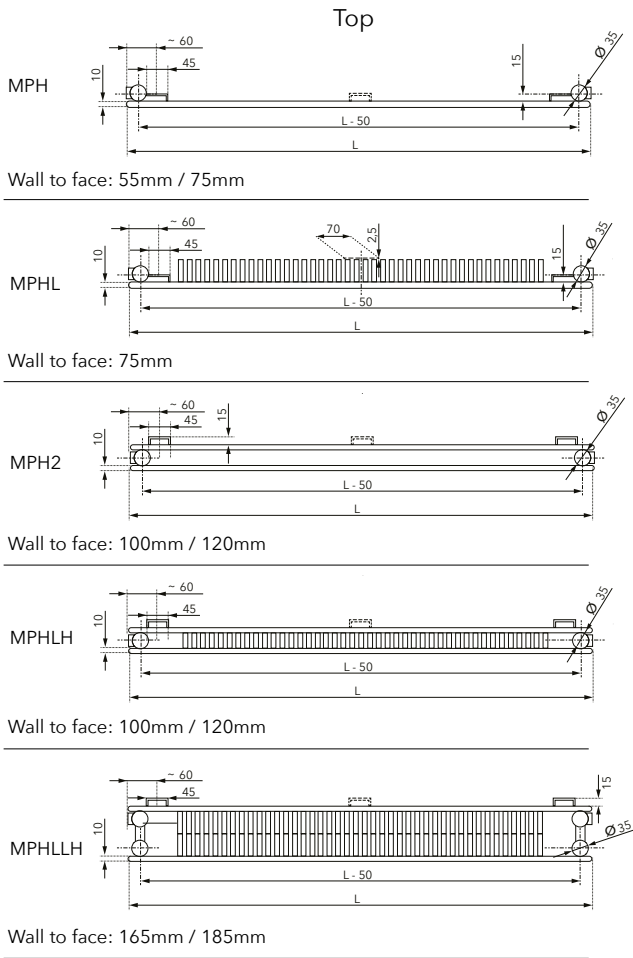
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Matrix Plus Horizontal Overview

The Matrix Plus Horizontal is a contemporary twist on the well renowned Matrix range of radiators, suitable for both commercial and domestic applications. All models are manufactured from 70mm x 10mm steel tubes welded to ø35mm round headers, with 1.5mm material thickness. The Matrix Plus has a maximum working pressure of 4.6 bar and is tested to 6 bar. Connections are ½" with multiple connection patterns available. As standard, the radiators are powder coated in RAL 9016, with other RAL colours available on request. The Matrix Plus horizontal is available in five depths; single panel, single panel - single convector, double panel, double panel - single convector, double panel - double convector. The depths vary from 45mm to 120mm. There are 10 heights (from 217mm to 860.5mm) and 18 lengths (from 500mm to 2400mm), offering a total of 814 models.

Features

- A well-engineered, robust radiator for commercial and domestic applications
- Manufactured from 70mm x 10mm steel tubes
- 1.5mm air gap between tubes
- 1.5mm material thickness
- Multiple connection options
- Standard RAL 9016 finish. Other RAL colours also available
- Outputs - 130-4966 watts
- Maximum Working Pressure - 4.6 bar (6 bar test)
- Heights - 217-860.5mm
- Lengths - 500-2400mm
- Warranty - 5 years



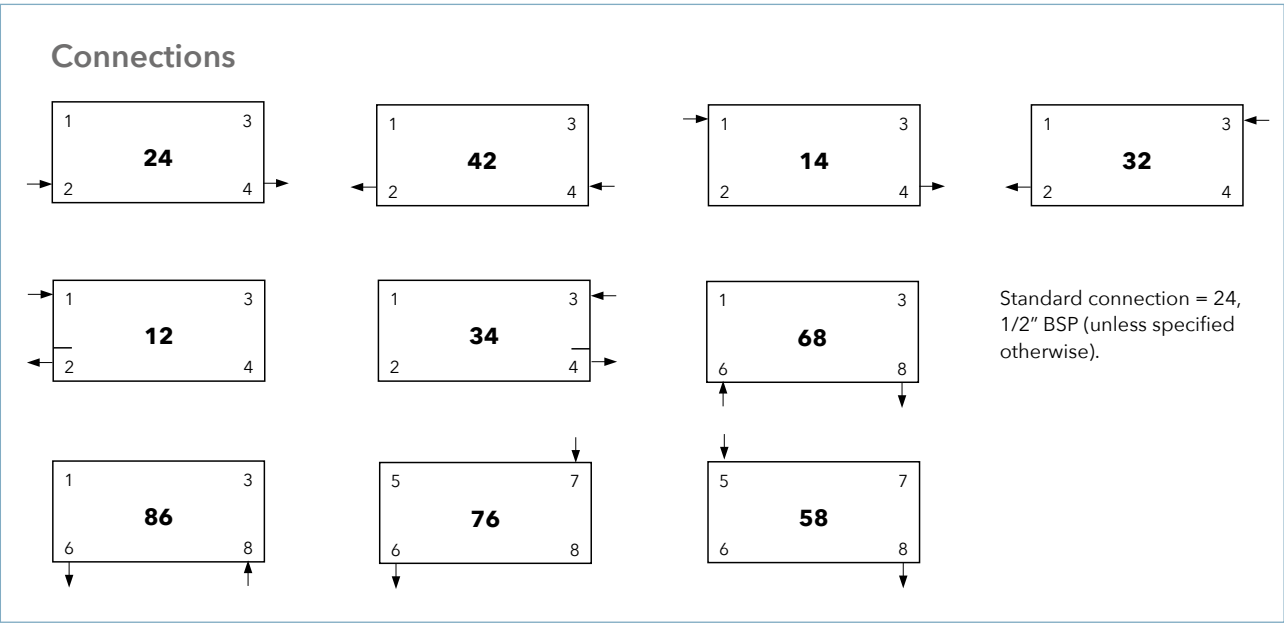
Matrix Plus Horizontal Technical

Height (mm)	Maximum length (mm)	Type H per linear metre data			Type HL per linear metre data			Type H-2 per linear metre data		
		Output (watts Δt 50°C)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
217	2400	260	6.18	1.40	555	10.98	1.40	420	11.40	2.80
288.5	2400	333	8.19	1.87	690	14.54	1.87	530	15.20	3.70
360	2400	406	10.38	2.30	806	18.44	2.30	630	18.80	4.80
431.5	2400	472	12.55	2.80	917	22.18	2.80	730	22.40	5.60
503	2400	543	14.58	3.30	1024	25.91	3.30	840	26.10	6.50
574.5	2400	614	16.68	3.80	1124	29.72	3.80	940	29.80	7.50
646	2400	686	18.79	4.20	1224	33.37	4.20	1050	33.50	8.30
717.5	2400	758	20.89	4.70	1316	36.92	4.70	1150	37.00	9.30
789	2400	833	22.99	5.20	1373	38.84	5.20	1260	41.60	11.80
860.5	2400	908	25.00	5.60	1433	40.60	5.60	1360	45.20	12.50

Height (mm)	Maximum length (mm)	Type HLH per linear metre data			Maximum length (mm)	Type HLLH per linear metre data		
		Output (watts Δt 50°C)	Weight (kg)	Water content (litres)		Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
360	2400	860	25.00	4.80	2400	1498	36.43	4.80
431.5	2400	962	30.00	5.60	2400	1688	43.54	5.60
503	2400	1085	34.00	6.50	2400	1901	50.65	6.50
574.5	2400	1190	38.00	7.50	2400	2069	57.66	7.50
646	2400	1290	43.00	8.30	2200	2227	64.87	8.30
717.5	2400	1390	48.00	9.30	2000	2365	72.04	9.30
789	2400	1500	51.00	11.80	1900	2472	76.52	11.80
860.5	2200	1580	55.00	12.50	1800	2583	81.14	12.50

For Δt 30°C, apply a correction factor of 0.515. For other operating temperatures, refer to page 131.

Depending on model, lengths are available from 500mm to 2000mm in 100mm increments, plus 2200mm and 2400mm.



Matrix Plus Vertical Overview

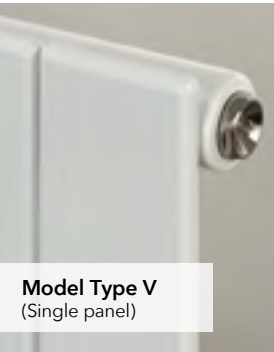


Matrix Plus Vertical Technical

All models are manufactured from 70mm x 10mm steel tubes welded to ø35mm round headers, with 1.5mm material thickness. The Matrix Plus has a maximum working pressure of 4.6 bar and is tested to 6 bar. Connections are 1/2" with multiple connection patterns available. As standard, the radiators are powder coated in RAL 9016, with other RAL colours available on request. The Matrix Plus vertical is available in four depths; single panel, single panel - single convector, double panel, double panel - single convector. The depths vary from 45mm to 68mm. There are 11 heights (from 600mm to 2600mm) and 17 lengths (217mm to 1361mm), offering a total of 566 models.

Features

- A well-engineered, robust radiator for commercial and domestic applications
- Manufactured from 70mm x 10mm steel tubes
- 1.5mm air gap between tubes
- 1.5mm material thickness
- Multiple connection options
- Standard RAL 9016 finish. Other RAL colours also available
- Outputs - 143-3400 watts
- Maximum Working Pressure - 4.6 bar (6 bar test)
- Heights - 600-2600mm
- Lengths - 217-1361mm
- Warranty - 5 years



Model Type V
(Single panel)

Wall to face: 55mm / 75mm



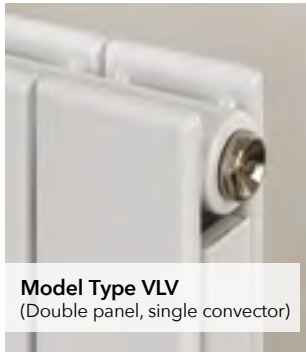
Model Type VL
(Single panel, single convector)

Wall to face: 90mm / 110mm



Model Type V-2
(Double panel)

Wall to face: 100mm / 120mm



Model Type VLV
(Double panel, single convector)

Wall to face: 100mm / 120mm

Height (mm)	Maximum length (mm)	Type V per linear metre data		
		Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
600	1361	659	19.36	4.10
800	1361	839	24.78	5.60
1000	1361	1051	30.19	6.10
1200	1361	1244	34.74	7.10
1400	1361	1429	41.03	8.10
1600	1361	1622	46.44	9.00
1800	1361	1793	51.86	9.90
2000	1361	2014	57.27	10.92
2200	1361	2240	62.69	11.80
2400	1361	2438	68.11	12.74
2600	1361	2673	73.52	13.60

Maximum length (mm)	Type VL per linear metre data		
	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
1003.5	1065	27.62	4.10
1003.5	1359	37.05	5.60
1003.5	1636	47.91	6.10
1003.5	1903	56.48	7.10
1003.5	2184	69.64	8.10
1003.5	2424	80.51	9.00
1003.5	2659	91.37	9.90
1003.5	2857	103.43	10.92
1003.5	3092	114.23	11.80

Maximum length (mm)	Type V-2 per linear metre data		
	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
1361	940	38.42	8.10
1361	1230	49.60	9.60
1361	1512	60.73	11.10
1361	1820	71.95	12.60
1361	2074	82.98	14.60
1361	2323	94.10	16.50
1361	2590	105.23	18.30
1146	2857	116.35	20.20
1075	3120	127.48	22.10
1004	3387	138.57	24.00
860	3641	147.04	26.00

Height (mm)	Maximum length (mm)	Type VLV per linear metre data		
		Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
600	1004	1387	47.00	8.10
800	1004	1724	61.83	9.60
1000	1004	2088	78.10	11.10
1200	1004	2465	91.22	12.60
1400	1004	2802	110.67	14.60
1600	1004	3023	126.95	16.50
1800	1004	3318	143.23	18.30
2000	860	3710	160.70	20.20
2200	789	3935	178.15	22.10

Depending on model, lengths are available from 217mm to 1361mm in 71.5mm increments.
For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Connections

Standard connection = 24, 1/2" BSP (unless specified otherwise).
*Extra Cost

Matrix Horizontal Overview



The Matrix Horizontal is made from 1.5mm steel and is finished in RAL 9016 Traffic White as standard, with other RAL colours available at an additional cost. Supplied with wall brackets, this radiator has a 5.4 bar maximum working pressure (mwp) (tested to 7 bar) as standard. A high pressure, 2mm steel version is also available with 10 bar mwp (13 bar test) at an additional cost.

There are 2 x 1/2" BSP-f (BBOE 2 and 4 detail) connections as standard unless otherwise specified; alternative configurations are also available (some at extra cost), which must be specified with each order. The Matrix radiator carries a 5-year guarantee against manufacturing defects.



Features

- Types - H (10), HL (11), H-2 (20), HLH (21) & HL-2 (22)
- Material - Steel (1.5mm flat tubes as standard. 2mm for high pressure version)
- Finish - RAL 9016 Traffic White as standard. Other RAL colours available at an additional cost.
- Heights - 70-840mm
- Lengths - 500-6000mm
- Models - 2912
- Outputs - 49-13842 watts
- Maximum Working Pressure - 5.4 bar (7 bar test) 10 bar (13 bar test) available on request.
- Warranty - 5 years

Matrix Horizontal Technical

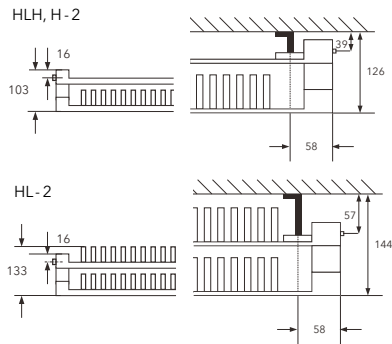
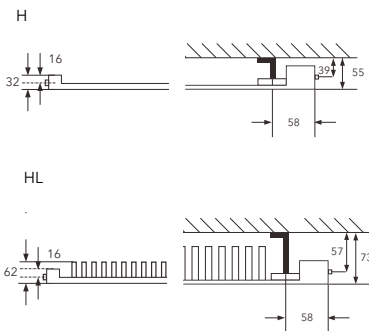
Height (mm)	Type H (10) per linear metre data			Type HL (11) per linear metre data			Type H2 (20) per linear metre data		
	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
70	98	2.06	0.56	207	3.54	0.56	180	4.24	1.14
140	166	4.06	1.10	368	7.35	1.10	283	8.45	2.25
210	225	6.18	1.80	505	10.98	1.80	393	12.61	3.61
280	288	8.19	2.35	628	14.52	2.35	511	16.37	4.92
350	355	10.38	3.05	733	18.44	3.05	616	20.85	6.25
420	434	12.55	3.78	834	22.18	3.78	723	24.68	7.91
490	492	14.58	4.30	931	25.91	4.30	830	29.09	8.89
560	551	16.68	4.92	1022	29.72	4.92	938	33.20	10.21
630	610	18.79	5.55	1113	33.37	5.55	1044	37.32	11.53
700	651	20.89	6.18	1196	37.09	6.18	1148	41.44	12.85
770	729	22.99	6.80	1248	38.84	6.80	1252	45.56	14.17
840	787	25.00	7.47	1303	40.60	7.47	1355	49.70	15.24

Height (mm)	Type HLH (21) per linear metre data			Type HL-2 (22) per linear metre data		
	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
350	1002	28.58	6.25	1362	36.43	6.25
420	1139	34.21	7.91	1535	43.53	7.91
490	1271	39.83	8.89	1698	50.65	8.89
560	1394	45.37	10.21	1848	57.66	10.21
630	1513	51.08	11.53	1989	64.87	11.53
700	1623	56.77	12.85	2112	72.04	12.85
770	1730	61.02	14.17	2208	76.53	14.17
840	1839	65.27	15.24	2307	81.14	15.24

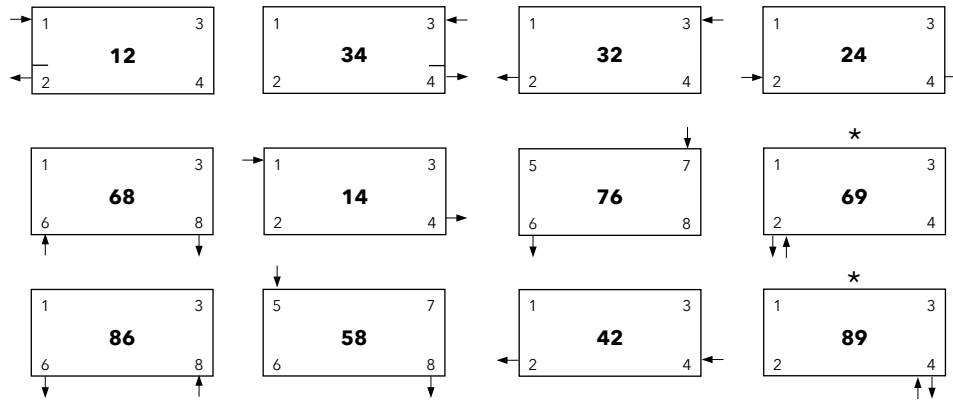
For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

All heights and types indicated above are available in lengths from 500mm to 6000mm in 100mm increments.

Horizontal models



Connections



Connection sizes are available in 1/2", 3/4" and 1" on most models. When ordering, the connection size must be given together with the relevant connection number.

Standard connection = 24, 1/2" BSP (unless specified otherwise)

*Extra cost

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Matrix Vertical Overview



Matrix Vertical Technical

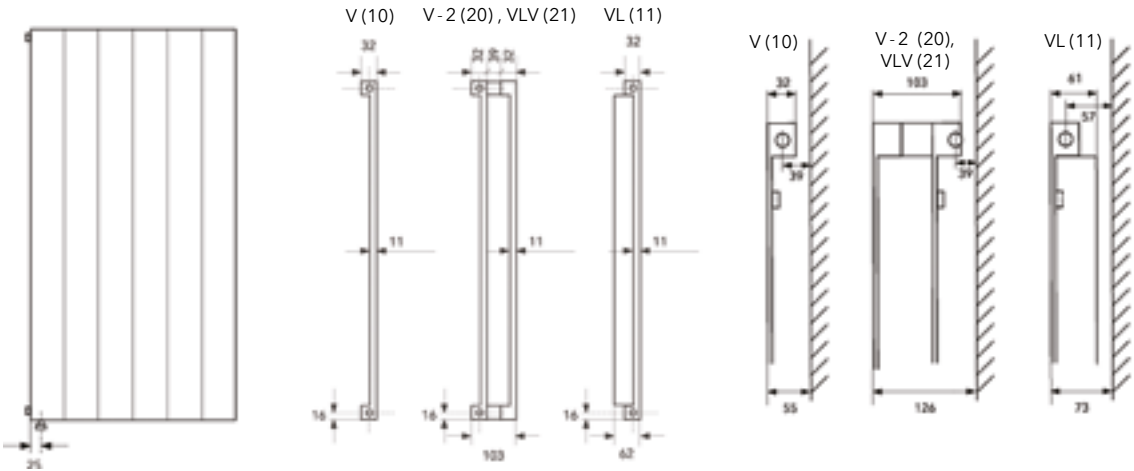
The Matrix Vertical is made from 1.5mm steel and is finished in RAL 9016 Traffic White as standard, with other RAL colours available at an additional cost. Supplied with wall brackets, this radiator has a 5.4 bar maximum working pressure (mwp) (tested to 7 bar) as standard. A high pressure, 2mm steel version with 10 bar mwp (13 bar test) is also available at extra cost. There are 2 x ½" BSP (BBOE 2 and 4 detail) connections as standard unless otherwise specified; alternative configurations are also available (some at extra cost), which must be specified with each order. The Matrix radiator carries a 5-year guarantee against manufacturing defects.

Features

- Types - V (10), VL (11), V-2 (20) & VLV (21)
- Material - Steel (1.5mm flat tubes as standard. 2mm for high pressure version)
- Finish - RAL 9016 Traffic White as standard. Other RAL colours available at an additional cost.
- Heights - 1000-3600mm
- Lengths - 70-1400mm
- Models - 840
- Outputs - 68-6360 watts
- Maximum Working Pressure - 5.4 bar (7 bar test) 10 bar (13 bar test) available on request.
- Warranty - 5 years



Vertical models



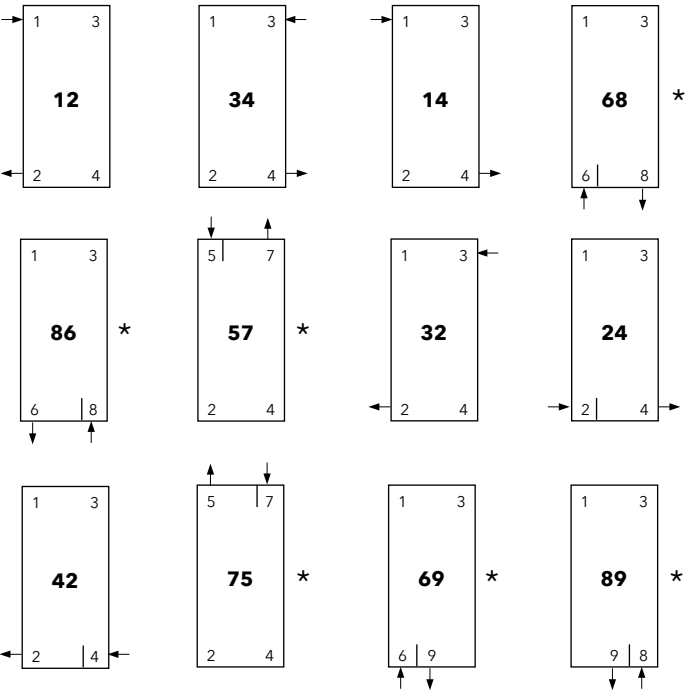
Height (mm)	Type V (10) per 70mm width data		
	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
1000	68	2.11	0.59
1200	81	2.43	0.69
1400	93	2.87	0.80
1600	105	3.25	0.90
1800	117	3.63	1.00
2000	128	4.01	1.11
2200	139	4.39	1.21
2400	150	4.77	1.31
2600	161	5.15	1.45
2800	172	5.53	1.56
3000	182	5.90	1.67
3200	193	6.28	1.78
3400	204	6.66	1.88
3600	214	7.04	1.99

Type VL (11) per 70mm width data		
Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
107	3.35	0.59
123	3.95	0.69
141	4.87	0.80
157	5.64	0.90
172	6.40	1.00
186	7.24	1.11
201	8.00	1.21

Type V-2 (20) per 70mm width data		
Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
108	4.25	1.20
127	5.04	1.41
145	5.81	1.60
163	6.59	1.80
180	7.37	2.00
197	8.14	2.20
213	8.92	2.40
228	9.70	2.60
243	10.29	2.91
258	11.05	3.12
273	11.81	3.34
288	12.57	3.55
303	13.33	3.77
318	14.08	3.98

Height (mm)	Type VLV (21) per 70mm width data		
	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
1000	149	5.47	1.20
1200	176	6.39	1.41
1400	200	7.75	1.60
1600	215	8.89	1.80
1800	237	10.03	2.00
2000	257	11.25	2.20
2200	277	12.47	2.40

Connections



*Extra cost

All heights and types indicated above are available in widths from 70mm to 1400mm in 70mm increments.

For Δt 30°C, apply a correction factor of 0.515. For other operating temperatures, refer to page 131.

Connection sizes are available in 1/2", 3/4" and 1" on most models. When ordering, the connection size must be given together with the relevant connection number.

Standard connection = 24, 1/2" BSP (unless specified otherwise)

Matrix Convector Overview



Matrix Convector Technical

The Matrix Convector is made from 1.5mm steel and is finished in RAL 9016 Traffic White as standard, with other RAL colours available at an additional cost. Supplied with floor brackets as standard (wall brackets are available on request), this radiator has a 5.4 bar maximum working pressure (mwp) (tested to 7 bar) as standard. A high pressure, 2mm steel

version with 10 bar mwp (13 bar test) is also available at extra cost. There are 2 x 1/2" BSP connections (BBOE 2 and 4 detail) as standard unless otherwise specified; alternative configurations are also available (some at extra cost), which must be specified with each order. The Matrix radiator carries a 5-year guarantee against manufacturing defects.

Features

- Types - Standard (C), High Output (CP)
- Material - Steel (1.5mm flat tubes as standard. 2mm for high pressure version)
- Finish - RAL 9016 Traffic White as standard. Other RAL colours available at an additional cost.
- Heights - 70-280mm
- Lengths - 500-6000mm
- Depths - 73-351mm
- Sizes - 1792
- Outputs - 172-18876 watts
- Maximum Working Pressure - 5.4 bar (7 bar test) 10 bar (13 bar test) available on request.
- Warranty - 5 years



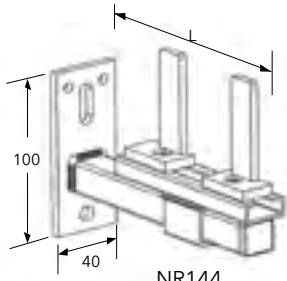
C Range - standard model

Depth (mm) C7 & C14 / C21 & C28	Type C7 - 70mm (H) per linear metre data			Type C14 - 140mm (H) per linear metre data			Type C21 - 210mm (H) per linear metre data			Type C28 - 280mm (H) per linear metre data		
	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
2 Panel - 73/83mm	344	5.67	1.15	503	11.28	2.40	717	17.72	3.75	877	23.63	5.02
3 Panel - 134/154mm	599	9.34	1.82	925	19.10	4.05	1188	29.68	5.78	1447	39.39	7.72
4 Panel - 196/226mm	821	13.03	2.42	1277	27.03	5.01	1643	41.49	8.05	2002	55.28	10.83
5 Panel - 256/296mm	986	16.63	3.02	1519	34.55	6.09	2060	53.51	10.29	2509	71.36	13.89

CP Range - high output model

Depth (mm)	Type CP7 - 70mm (H) per linear metre data			Type CP14 - 140mm (H) per linear metre data			Type CP21 - 210mm (H) per linear metre data			Type CP28 - 280mm (H) per linear metre data		
	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Weight (kg)	Water content (litres)
2 Panel - 96mm	382	6.17	1.15	632	12.85	2.40	851	19.76	3.75	1030	26.67	5.02
3 Panel - 181mm	639	10.23	1.82	1073	21.95	4.05	1447	33.85	5.78	1747	45.75	7.72
4 Panel - 266mm	860	14.90	2.42	1504	31.45	5.01	2046	48.26	8.05	2473	65.08	10.83
5 Panel - 351mm	1120	19.15	3.02	1920	41.17	6.09	2605	62.50	10.29	3146	83.83	13.89

All heights and types indicated above are available in lengths from 500mm to 6000mm in 100mm increments. For Δt 30°C, apply a correction factor of 0.515. For other operating temperatures, refer to page 131.

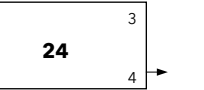
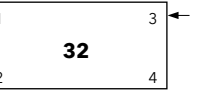
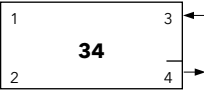


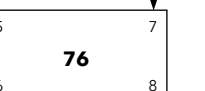
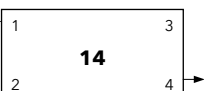
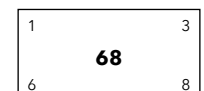
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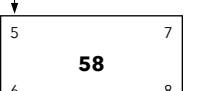
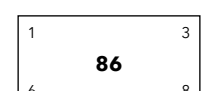
Wall bracket - convector models

	L	From wall to back of radiator minimum
C - 2	100mm	30mm
C - 3	150mm	30mm
C - 4	200mm	30mm
C - 5	250mm	30mm

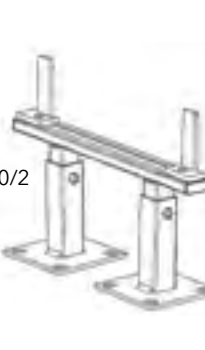
Connections







Connection sizes are available in 1/2", 3/4" and 1" on most models. When ordering, the connection size must be given together with the relevant connection number. Standard connection = 24, 1/2" BSP (unless specified otherwise).



NR150 NR150/2

Floor bracket - convector models

When ordering please specify the height required. NR150/ _ * _ _ _

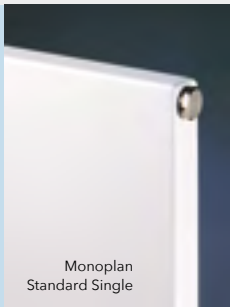
Heavy duty floor bracket - convector models

Recommended for 4 & 5 panel models. When ordering please specify the height required. NR150/2/ _ * _ _ _

Heights	1*	3*	4*	5*	6*
Minimum	65	90	120	180	270
Maximum	90	120	180	270	370

Visit www.mhsradiators.co.uk for full details

Monoplan Horizontal Overview



The flat-fronted Monoplan Horizontal range is made from steel (2mm front panel and 1.25mm internal panel) and finished in RAL 9016 Traffic White as standard, with other RAL colours available on request. The Monoplan has a 6 bar maximum working pressure (mwp) tested to 7.8 bar, while a high pressure version (10 bar mwp, 13 bar test) is also available at additional cost.

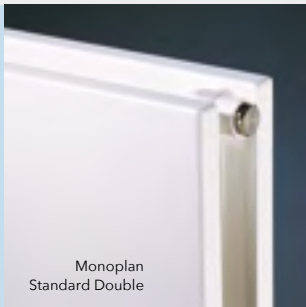
The radiator has ½” BSP-f connections, with horizontal (BBOE B1D1 detail) as standard, unless otherwise specified. There are two Monoplan Horizontal specifications. Standard has open profile single, double or triple panels, while Comfort features a top grille and welded on side panels, available for DR to TK3 models, making the radiator flat to all surfaces. All models carry a 5-year guarantee against manufacturing defects.

Features

- Types - ER (10), EK (11), DR (20), C (21), DK (22) T (30), TK3 (33),
- Material - Steel (2mm front panel as standard. 2.5mm for high pressure version)
- Finish - RAL 9016 Traffic White
Other colours available on request
- Heights - 220-950mm
- Lengths - 400-4000mm
- Models - 1813
- Outputs - 111-14756 watts
- Pressure - 6 bar (7.8 bar test)
10 bar (13 bar test) available on request
- Warranty - 5 years



Monoplan Horizontal Technical



	Type ER (10) - Depth 32mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	278	375	466	560	651	749	974
Weight (kg/metre)	7.5	10.0	14.0	17.4	20.4	22.9	26.8
Water content (litres/metre)	1.7	1.8	2.1	2.3	2.5	2.8	3.2

	Type EK (11) - Depth 43mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	371	508	665	824	971	1108	1387
Weight (kg/metre)	8.6	11.9	15.6	19.2	23.0	26.7	35.6
Water content (litres/metre)	1.7	1.8	2.1	2.3	2.5	2.8	3.2

	Type DR (20) - Depth 95mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	468	624	784	941	1095	1248	1592
Weight (kg/metre)	14.3	19.6	24.9	30.3	35.6	40.9	53.2
Water content (litres/metre)	2.4	2.8	3.5	4.0	4.5	4.9	5.7

	Type C (21) - Depth 95mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	561	785	1016	1245	1459	1657	2055
Weight (kg/metre)	15.4	21.7	28.1	34.4	40.8	47.2	61.9
Water content (litres/metre)	2.4	2.8	3.5	4.0	4.5	4.9	5.7

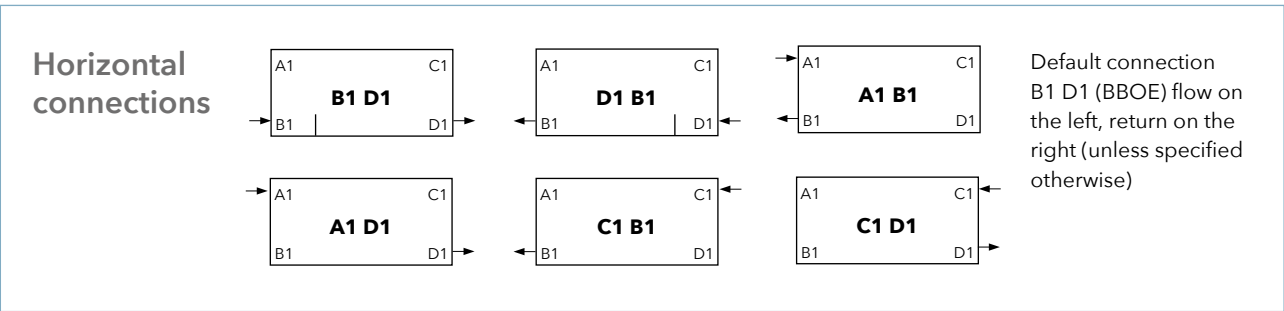
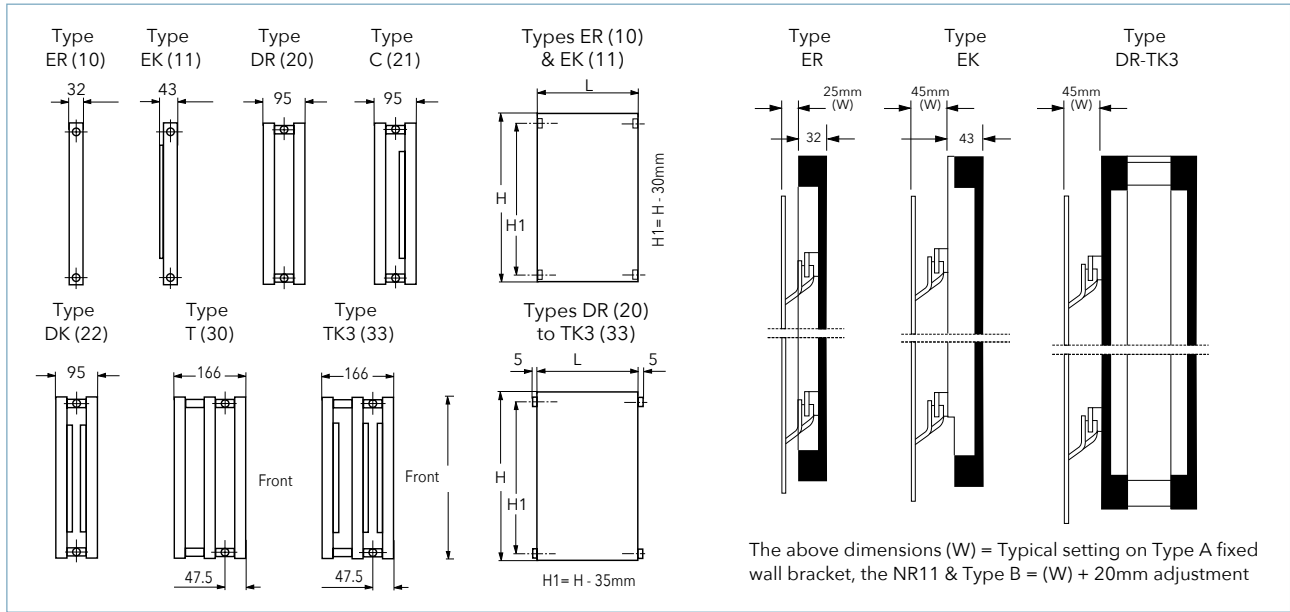
	Type DK (22) - Depth 95mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	674	985	1269	1546	1806	2047	2533
Weight (kg/metre)	16.5	23.8	31.4	38.8	46.1	53.3	69.2
Water content (litres/metre)	2.4	2.8	3.5	4.0	4.5	4.9	5.7

	Type T (30) - Depth 166mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	668	899	1124	1346	1564	1778	2251
Weight (kg/metre)	21.7	30.1	38.1	46.0	54.0	61.9	80.0
Water content (litres/metre)	3.8	4.5	5.2	5.9	6.6	7.3	8.9

	Type TK3 (33) - Depth 166mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	987	1439	1849	2252	2629	2980	3689
Weight (kg/metre)	25.5	36.3	46.6	57.1	67.8	78.8	104.7
Water content (litres/metre)	3.8	4.5	5.2	5.9	6.6	7.3	8.9

All types and all heights are available in the following lengths (mm):
400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800, 3900 & 4000

For Δt 30°C, apply a correction factor of 0.515. For other operating temperatures, refer to page 131.



Visit www.mhsradiators.co.uk for full details

Monoplan Vertical Overview



The Monoplan Vertical range is made from steel (2mm front panel and 1.25mm internal panel) and finished in RAL 9016 Traffic White as standard, with other RAL colours available on request. DR, DK & TK3 models have welded in fill side panels. It has a 6 bar maximum working pressure (mwp) tested to 7.8 bar. A high pressure version (10 bar mwp, 13 bar test) is also available at an additional cost. The Monoplan radiator has ½" BSP-f connections (B5D5 detail) as standard, unless otherwise specified. The Monoplan carries a 5-year guarantee against manufacturing defects.

Features

- Types - ER (10), EK (11), DR (20), DK (22), TK3 (33)
- Material - Steel (2mm front panel as standard, 2.5mm for high pressure version)
- Finish - Standard RAL 9016 Traffic White
Other colours available on request
- Heights - 1200-3800mm
- Widths - 320-950mm
- Models - 810
- Outputs - 406-13034 watts
- Maximum Working Pressure - 6 bar (7.8 bar test).
10 bar (13 bar test) available on request
- Warranty - 5 years



Monoplan Vertical Technical

Type ER (10) - Depth 32mm	Width (mm)					
	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	338	419	504	586	674	877
Weight (kg/metre)	10.0	14.0	17.4	20.4	22.9	26.8
Water content (litres/metre)	1.8	2.1	2.3	2.5	2.8	3.2

Type EK (11) - Depth 43mm	Width (mm)					
	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	457	599	742	874	997	1248
Weight (kg/metre)	11.9	15.6	19.2	23.0	26.7	35.6
Water content (litres/metre)	1.8	2.1	2.3	2.5	2.8	3.2

Type DR (20) - Depth 95mm	Width (mm)					
	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	562	706	847	986	1123	1433
Weight (kg/metre)	19.6	24.9	30.3	35.6	40.9	53.2
Water content (litres/metre)	2.8	3.5	4.0	4.5	4.9	5.7

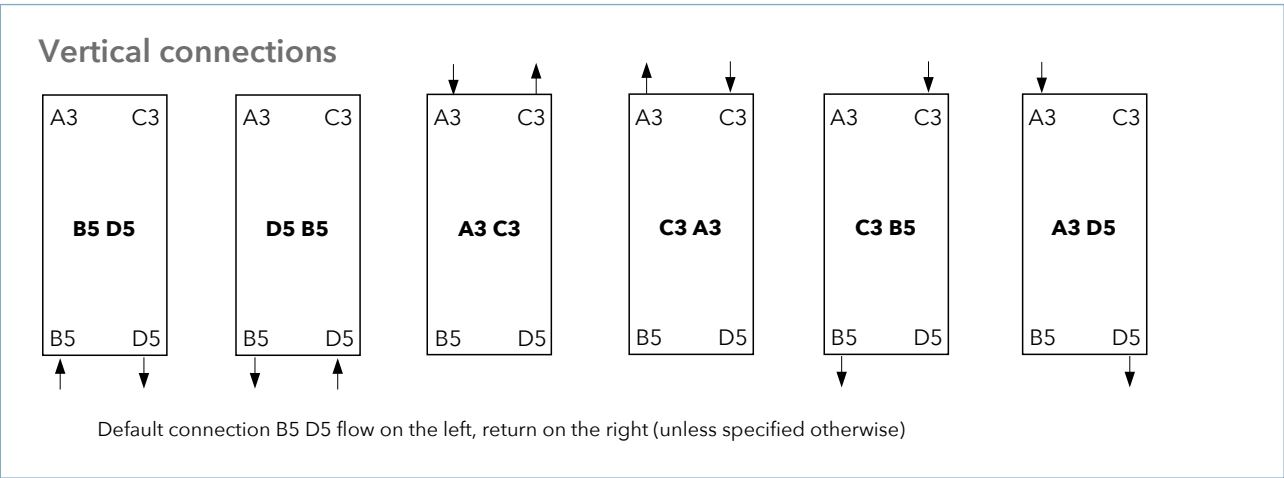
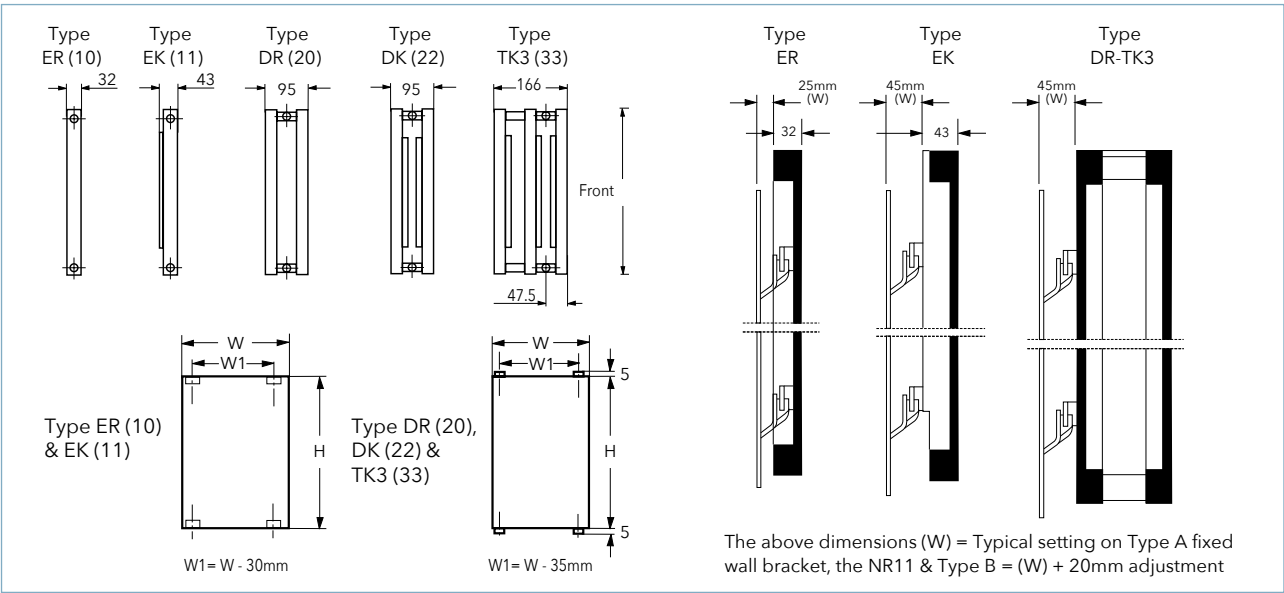
Type DK (22) - Depth 95mm	Width (mm)					
	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	887	1142	1391	1625	1842	2280
Weight (kg/metre)	23.8	31.4	38.8	46.1	53.3	69.2
Water content (litres/metre)	2.8	3.5	4.0	4.5	4.9	5.7

NEW

Type TK3 (33) - Depth 166mm	Width (mm)					
	320	420	520	620	720	950
Output (watts/metre Δt 50°C)	1338	1719	2094	2445	2771	3430
Weight (kg/metre)	36.3	46.6	57.1	67.8	78.8	104.7
Water content (litres/metre)	4.5	5.2	5.9	6.6	7.3	8.9

All types and all widths are available in the following heights (mm):

1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700 & 3800



For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Visit www.mhsradiators.co.uk for full details

PowerKon + ST FTG Plus

Low Surface Temperature (LST) radiator

Overview

NEW

The PowerKon + ST 'Safe Touch' low surface temperature convector delivers versatility, safety, high thermal performance and a high-quality casing, which can be installed extremely quickly. The new FTG Plus model is supplied with a perforated air inlet and outlet with a pencil proof oval form grille, wall/floor brackets, wall spacer and a security screw locking system to fix casing onto bracketry to prevent unauthorised access. Bidirectional pipework knock-outs are supplied as standard.

All performance data is tested in accordance with BS EN 442. The casing is an easy to install, strong single piece profile casing manufactured from 1.6mm steel with 3mm rib details for extra strength and durability.



PowerKon Convector
with bidirectional connections



Pipework knock-outs
for utilisation by the installer if required



Features

- Low water content PowerKon convector, made of aluminium fins on copper pipes
- Designed as single waterway convectors to maximise water turbulence and therefore thermal performance
- FTG Plus - Floor standing casing complete with air inlet at the front and air outlet at the top
- Pipework knock-outs for utilisation by the installer if required
- Maximum Working Pressure - 10 bar (16 bar test)
- Casing powder coated in anti-bacterial RAL 9016 Traffic White (Convector coated to RAL 7024 Graphite Grey)
- Warranty - 10 years (casing), 30 years (convector)
- All performance data tested in accordance with BS EN442
- NHS 43°C compliant

For valve options, refer to page 130.

PowerKon + ST FTG Plus

Low Surface Temperature (LST) radiator

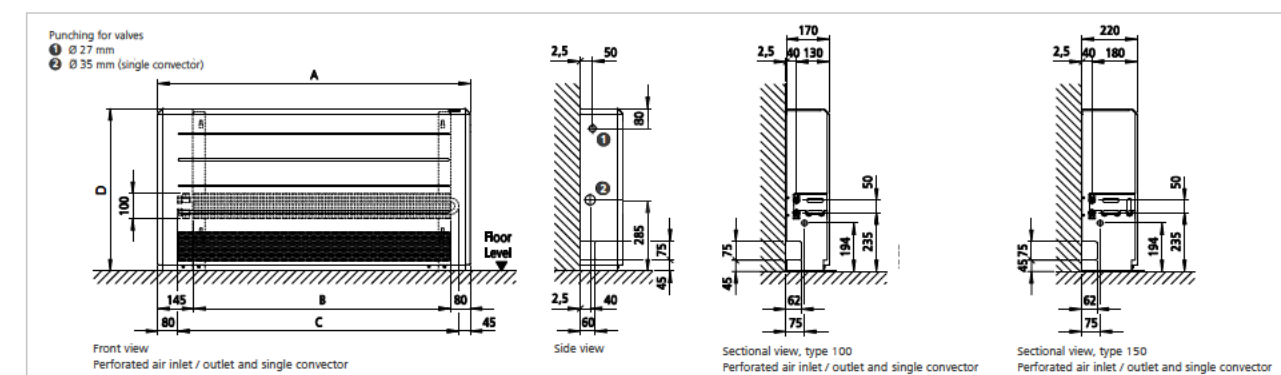
Technical

Casing Length	Convector Length	Depth	Single Convector		
			Height		
			500mm	650mm	800mm
(mm)			Output (watts Δt 50°C)		
650	525	170	653	716	762
		220	900	987	1050
850	725	170	960	1053	1120
		220	1323	1452	1544
1050	925	170	1267	1390	1478
		220	1747	1916	2038
1250	1125	170	1574	1727	1837
		220	2170	2381	2532
1450	1325	170	1882	2064	2195
		220	2593	2846	3026
1650	1525	170	2189	2401	2554
		220	3017	3310	3520
1850	1725	170	2496	2738	2912
		220	3440	3775	4014
2050	1925	170	2803	3075	3270
		220	3864	4239	4508

Stocked sizes High output Twin Convector available on request.
120mm depth casing available on request.

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 123.

Dimensions in mm



Casing Length A	Finned Length B	Convector Length C	Casing Heights D	Convector Heights E	Casing Depths	Convector Depths
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
650	425	525	500	100 (single)	170	150
850	625	725	650		220	200
1050	825	925	800			
1250	1025	1125				
1450	1225	1325				
1650	1425	1525				
1850	1625	1725				
2050	1825	1925				

PowerKon + ST

Low Surface Temperature (LST) radiator
Overview

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

The PowerKon + ST 'Safe Touch' low surface temperature convector delivers versatility, safety, high thermal performance and a high-quality casing which can be installed extremely quickly.

All performance data is tested in accordance with BS EN 442. The casing is an easy to install, strong single piece profile casing manufactured from 1.6mm steel with 3mm rib details for extra strength and durability.

Features

- Low water content PowerKon convector, made of aluminium fins on copper pipes
- Designed as single waterway convector to maximise water turbulence and therefore thermal performance
- Maximum Working Pressure - 10 bar (16 bar test)
- Casing powder coated in anti-bacterial RAL 9016 Traffic White (Convector coated to RAL 7024 Graphite Grey)
- Warranty - 10 years (casing), 30 years (convector)
- All performance data tested in accordance with BS EN442
- NHS 43°C compliant

For valve options, refer to page 130.

Floor mounted, top grille (FTG)



Floor mounted, front grille (FFG)



Wall mounted, top grille (WTG)

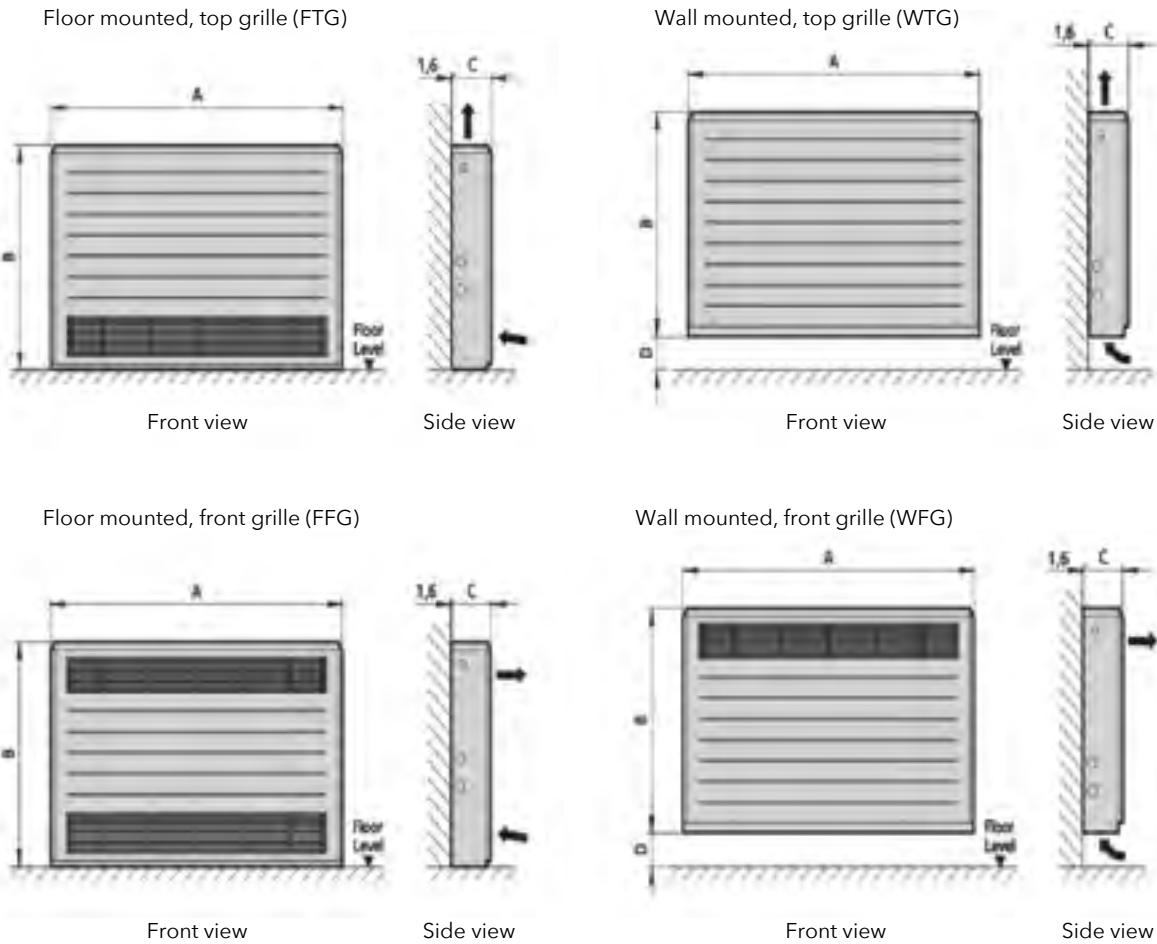


Wall mounted, front grille (WFG)



PowerKon + ST

Low Surface Temperature (LST) radiator
Overview



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			

PowerKon + ST (500)

Low Surface Temperature (LST) radiator

Technical

Casing Height (500mm)

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)	Output (watts Δt 50°C)									
650	525	100S	425	362	413	341	100T	524	425	509	-
		150S	673	539	653	508	150T	793	604	769	-
		200S	928	686	900	647	200T	1051	737	1020	-
850	725	100S	626	532	607	501	100T	771	624	748	-
		150S	990	793	960	748	150T	1166	888	1 131	-
		200S	1364	1009	1323	951	200T	1546	1084	1499	-
1050	925	100S	826	702	801	662	100T	1018	824	988	-
		150S	1307	1047	1267	987	150T	1539	1172	1492	-
		200S	1801	1332	1747	1256	200T	2040	1431	1979	-
1250	1125	100S	1026	872	995	822	100T	1265	1024	1227	-
		150S	1624	1301	1574	1226	150T	1912	1456	1854	-
		200S	2238	1654	2170	1560	200T	2535	1778	2459	-
1450	1325	100S	1226	1042	1189	982	100T	1512	1224	1466	-
		150S	1940	1555	1882	1465	150T	2285	1740	2216	-
		200S	2674	1977	2593	1864	200T	3029	2125	2939	-
1650	1525	100S	1426	1213	1384	1143	100T	1758	1424	1706	-
		150S	2257	1808	2189	1704	150T	2658	2024	2578	-
		200S	3111	2301	3017	2169	200T	3524	2472	3419	-
1850	1725	100S	1627	1383	1578	1303	100T	2005	1623	1945	-
		150S	2574	2062	2496	1944	150T	3031	2308	2940	-
		200S	3547	2624	3440	2473	200T	4019	2819	3898	-
2050	1925	100S	1827	1553	1772	1464	100T	2252	1823	2185	-
		150S	2891	2316	2803	2183	150T	3404	2592	3301	-
		200S	3984	2947	3864	2778	200T	4513	3166	4378	-

¹⁾ Model WTG = Wall Top Grille

²⁾ Model WFG = Wall Front Grille

³⁾ Model FTG = Floor Top Grille

⁴⁾ Model FFG = Floor Front Grille

For Δt 30°C, apply a correction factor of 0.515.

For other operating temperatures, refer to page 131.

PowerKon + ST (650)

Low Surface Temperature (LST) radiator

Technical

Casing Height (650mm)

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)	Output (watts Δt 50°C)									
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	2381	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

For Δt 30°C, apply a correction factor of 0.515.

For other operating temperatures, refer to page 131.

PowerKon + ST (800)

Low Surface Temperature (LST) radiator

Technical

PowerKon + ST

Low Surface Temperature (LST) radiator

Technical

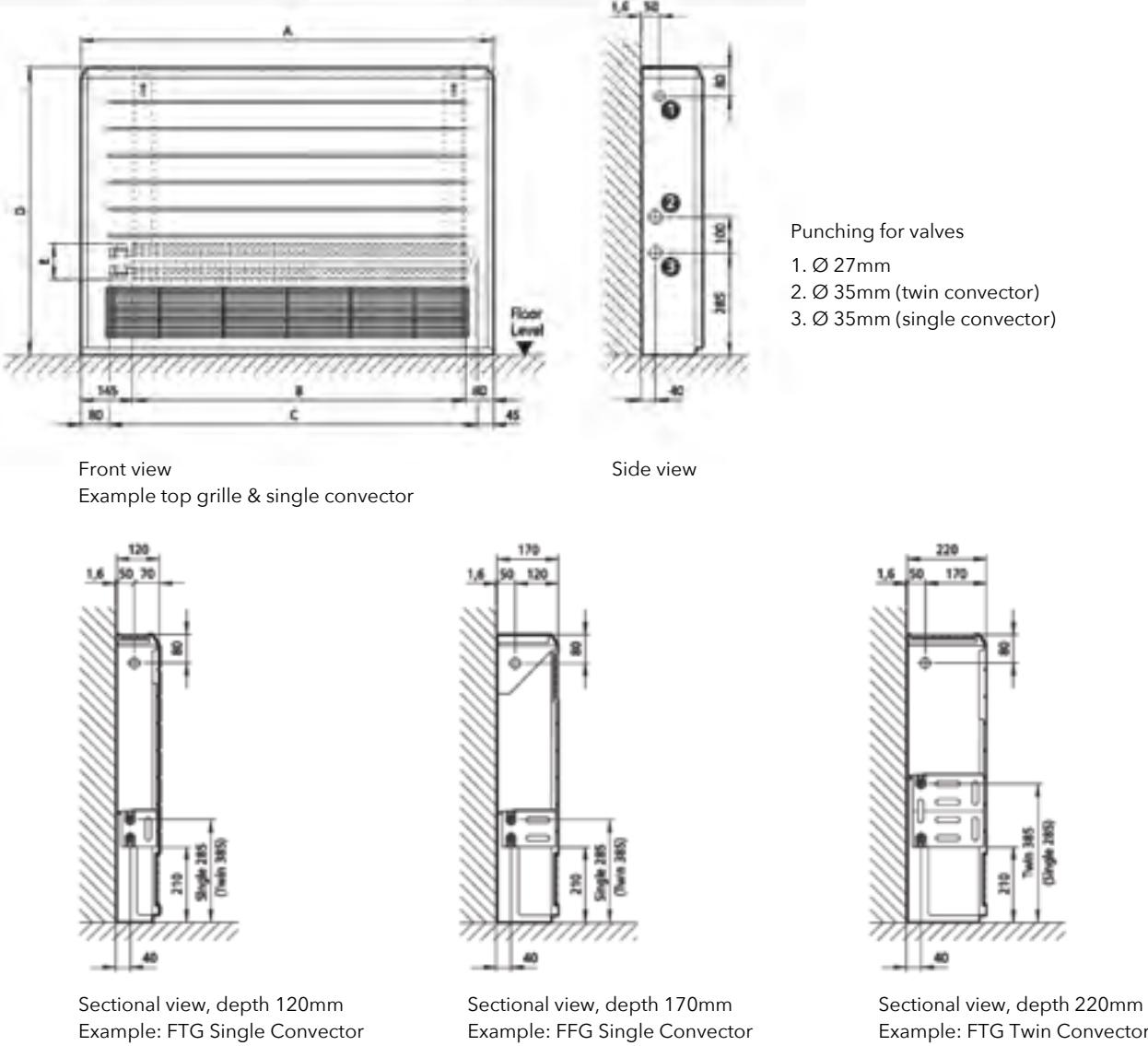
Casing Height (800mm)

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)	Output (watts Δt 50°C)									
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	2584	2052
		200S	3121	2475	3026	2331	200T	3537	2658	3429	2504
1650	1525	100S	1664	1 516	1615	1429	100T	2053	1781	1991	1679
		150S	2635	2261	2554	2132	150T	3105	2531	3005	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	3427	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	3849	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

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Technical Drawings (Dimensions in mm)



Casing Length A	Finned Length B	Convector Length C	Casing Heights D	Convector Heights E	Casing Depths	Convector Depths
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
650	425	525	500	100 (single)	120	100
850	625	725	650	200 (twin)	170	150
1050	825	925	800		220	200
1250	1025	1125				
1450	1225	1325				
1650	1425	1525				
1850	1625	1725				
2050	1825	1925				

Visit www.mhsradiators.co.uk for full details

Secureguard

Low Surface Temperature (LST) Anti-Ligature radiator

Overview

All Secureguard LST radiators are supplied complete with a panel radiator, with a choice of a Type 21 (120mm depth casing), a Type 22 (180mm depth) or a Type 33 (240mm depth). All the radiators have a maximum working pressure of 6 bar (8 bar test).

Features

- Anti-ligature.
- Low surface temperature (LST).
- Warranty - 5 years
- Robust and tamper resistant 2mm thick fully welded Zintec steel casing.
- Finished in RAL 9016 (Traffic White) antimicrobial paint (other colours available on request at additional cost).
- Easy-fit 2 piece supply (frame and front cover).
- Flat rear edge for sealing the frame to the wall with an anti-pick mastic (supply by others).
- Kick bar at the bottom of the frame, securable to the floor along the length for rigidity.
- Removable front cover for cleaning access. Front cover is interlocking with frame to prevent upwards removal.
- Bull-nose corners on top front edges and 27mm radius edges provide robustness and minimise impact trauma.
- All casing joins visible on the front or top to minimise opportunity for concealment.
- 2.5mm outlet holes on a 4.6mm triangular pitch for ligature resistance with optimum performance to maintain LST criteria.
- 2mm outlet holes on a 4mm triangular pitch to comply with Home Office Police Buildings Design Guide – Custody section PD3.02.14 Grilles (July 2009) are available. N.B. While the majority of the cover is below 43°C, restricted size apertures elevate the grille temperature above the LST criteria.
- Front facing key locks (tamper resistant security screws available on request).
- Choice of internal or external valve options including a unique, slim-fitting anti-ligature external TRV control.
- Bespoke options such as square edges, corner units and continuous casings available upon request.

For valve options, refer to page 130.



Casings

All casings are constructed from 2mm thick fully welded Zintec steel, painted in RAL9016 (Traffic White) with an antimicrobial finish. Other colours are available at additional cost. As standard, the grilles are perforated with 2.5mm diameter holes at 4.6mm centres, in a triangular pitch formation. Each case is also supplied with a removable front cover and 2 front facing key locks, allowing easy access for venting, cleaning and maintenance.

Style B cases have a top outlet grille and front facing inlet grille.

Style T cases have a solid top with front facing outlet and inlet grilles.

Style S cases have a sloped top with a top outlet grille, front facing outlet grille and front facing inlet grille.

Secureguard Style B

Low Surface Temperature (LST) Anti-Ligature radiator

Technical

Style B Type 21 (Case depth 120mm)

Case Height (mm)	Case Width (mm)												
	700	800	900	1000	1100	1200	1300	1500	1700	1900	2100	2300	2500
	Output (watts Δt 50°C)												
625	-	-	432	-	576	-	720	864	1008	1152	1296	1440	-
775	347	433	520	608	694	780	868	1041	1215	1388	1562	1736	-
875	399	499	599	699	798	898	998	1198	1397	1597	1796	1996	-
1175	563	704	845	986	1127	1268	1408	-	-	-	-	-	-

Style B Type 22 (Case depth 180mm)

Case Height (mm)	Case Width (mm)												
	700	800	900	1000	1100	1200	1300	1500	1700	1900	2100	2300	2500
	Output (watts Δt 50°C)												
625	-	-	568	-	757	-	947	1136	1326	1515	1704	1894	2084
775	447	558	670	782	894	1005	1117	1340	1564	1788	2012	2235	2458
875	527	659	790	922	1054	1185	1317	1580	1844	2108	2372	2635	2898
1175	732	916	1100	1283	1466	1649	1832	2199	2565	-	-	-	-

Style B Type 33 (Case depth 240mm)

Case Height (mm)	Case Width (mm)												
	700	800	900	1000	1100	1200	1300	1500	1700	1900	2100	2300	2500
	Output (watts Δt 50°C)												
625	-	-	843	-	1124	-	1405	1686	1968	2248	2530	2811	3092
775	-	820	984	1148	1312	1476	1640	1968	2296	2624	2952	-	-
875	-	936	1122	1309	1496	1684	1871	2245	2620	2993	3368	3742	-
1175	1028	1284	1542	1799	2056	2313	2570	-	-	-	-	-	-

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Secureguard Style T

Low Surface Temperature (LST) Anti-Ligature radiator

Technical

Style T Type 21 (Case depth 120mm)

Case Height (mm)	Case Width (mm)												
	700	800	900	1000	1100	1200	1300	1500	1700	1900	2100	2300	2500
	Output (watts Δt 50°C)												
725	-	-	432	-	576	-	720	864	1008	1152	1296	1440	-
875	347	433	520	608	694	780	868	1041	1215	1388	1562	1736	-
975	399	499	599	699	798	898	998	1198	1397	1597	1796	1996	-
1275	563	704	845	986	1127	1268	1408	-	-	-	-	-	-

Style T Type 22 (Case depth 180mm)

Case Height (mm)	Case Width (mm)												
	700	800	900	1000	1100	1200	1300	1500	1700	1900	2100	2300	2500
	Output (watts Δt 50°C)												
725	-	-	568	-	757	-	947	1136	1326	1515	1704	1894	2084
875	447	558	670	782	894	1005	1117	1340	1564	1788	2012	2235	2458
975	527	659	790	922	1054	1185	1317	1580	1844	2108	2372	2635	2898
1275	732	916	1100	1283	1466	1649	1832	2199	2565	-	-	-	-

Style T Type 33 (Case depth 240mm)

Case Height (mm)	Case Width (mm)												
	700	800	900	1000	1100	1200	1300	1500	1700	1900	2100	2300	2500
	Output (watts Δt 50°C)												
725	-	-	843	-	1124	-	1405	1686	1968	2248	2530	2811	3092
875	-	820	984	1148	1312	1476	1640	1968	2296	2624	2952	-	-
975	-	936	1122	1309	1496	1684	1871	2245	2620	2993	3368	3742	-
1275	1028	1284	1542	1799	2056	2313	2570	-	-	-	-	-	-

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Secureguard Style S

Low Surface Temperature (LST) Anti-Ligature radiator

Technical

Style S Type 21 (Case depth 120mm)

Case Height (mm)	Case Width (mm)												
	700	800	900	1000	1100	1200	1300	1500	1700	1900	2100	2300	2500
	Output (watts Δt 50°C)												
675	-	-	432	-	576	-	720	864	1008	1152	1296	1440	-
825	347	433	520	608	694	780	868	1041	1215	1388	1562	1736	-
925	399	499	599	699	798	898	998	1198	1397	1597	1796	1996	-
1225	563	704	845	986	1127	1268	1408	-	-	-	-	-	-

Style S Type 22 (Case depth 180mm)

Case Height (mm)	Case Width (mm)												
	700	800	900	1000	1100	1200	1300	1500	1700	1900	2100	2300	2500
	Output (watts Δt 50°C)												
675	-	-	568	-	757	-	947	1136	1326	1515	1704	1894	2084
825	447	558	670	782	894	1005	1117	1340	1564	1788	2012	2235	2458
925	527	659	790	922	1054	1185	1317	1580	1844	2108	2372	2635	2898
1225	732	916	1100	1283	1466	1649	1832	2199	2565	-	-	-	-

Style S Type 33 (Case depth 240mm)

Case Height (mm)	Case Width (mm)												
	700	800	900	1000	1100	1200	1300	1500	1700	1900	2100	2300	2500
	Output (watts Δt 50°C)												
725	-	-	843	-	1124	-	1405	1686	1968	2248	2530	2811	3092
875	-	820	984	1148	1312	1476	1640	1968	2296	2624	2952	-	-
975	-	936	1122	1309	1496	1684	1871	2245	2620	2993	3368	3742	-
1275	1028	1284	1542	1799	2056	2313	2570	-	-	-	-	-	-

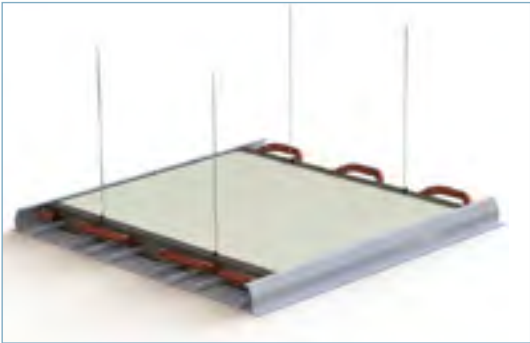
For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.



Moduline Plus Radiant Panel - Overview

Moduline Plus radiant panels provide a comfortable work and living environment through convection and radiation. It is easy to regulate zones or rooms individually and due to the exclusion of radiators, extra wall and floor space is made available. Moduline panels are compatible with grid type ceilings and can replace the standard tile without any additional work. The Moduline panel is constructed from RAL 9016 powder coated 2mm aluminium extrusion fused to 12x0.4mm high quality precision copper tubing. This allows a quick and efficient heat transfer and can withstand pressure up to 10 bar. Panels are insulated with a rigid, non-fibrous, foil faced insulation.

To support the weight of a fluid filled panel we strongly advise to add suspension wires from the panels to a structural part of the building or ceiling. The panels are manufactured with several holes to fix the cables. If the panels are to be free-hanging rather than within a T-bar grid, end cover plates are required at a small additional cost. If free-hanging panels are to be connected in series, a central joining piece is available to give the appearance of a single panel installation.

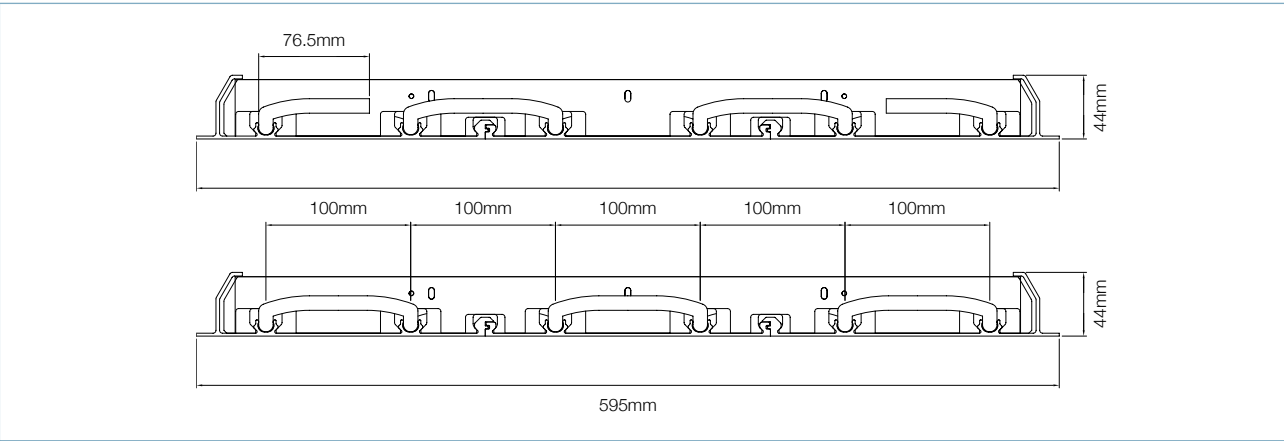


Features

- 2mm Aluminium extrusions with profiled high ridge return edges
- Turblent flow achieved using 12mm, one piece copper meander waterways
- Non-fibrous foil backed insulation to A2 class fire rating
- 10 bar working pressure (16 bar test)
- Connect in series up to 3 panels (9 metres)
- Outputs tested to EN14037
- Linear pattern facia
- Warranty - 10 years

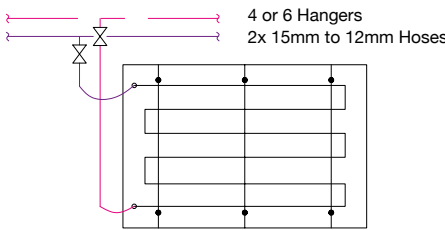
Moduline Plus Radiant Panel - Technical

Model	Length (mm)	Output (watts)							Weight (kg)		Hanging Wires
		Δt 30°C	Δt 35°C	Δt 40°C	Δt 45°C	Δt 50°C	Δt 55°C	Δt 60°C	Dry	Filled	
600	595	110	132	155	177	199	224	253	3.5	4.1	4
1200	1195	220	264	309	354	398	448	505	7.0	8.1	4
1800	1795	329	396	463	531	598	671	758	10.5	12.2	4
2400	2395	439	528	618	708	797	895	1010	14.1	16.3	4
3000	2995	548	660	772	885	996	1119	1263	17.5	20.3	6

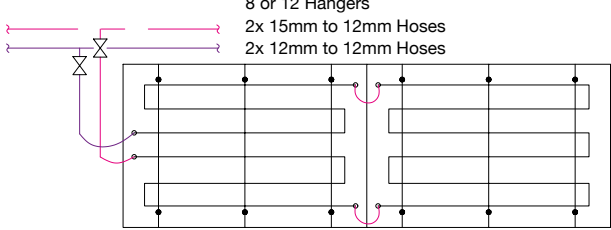


Installation

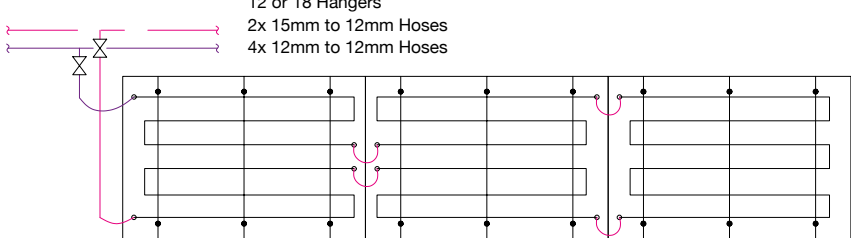
One Panel



Two Panels



Three Panels



Aqua Line Radiant Panel - Overview

Aqua Line radiant heating panels are manufactured from 0.75mm cold rolled steel plate with profiled panels. All panels are powder coated in RAL 9010 matt, with other colours available on request. The Aqua Line is a modular system, with 4 panel widths and single lengths of 4m and 6m that can be connected to form lengths up to 80m. The Aqua Line radiant panels are pressure tested for a system pressure of up to 8 bar.

Features

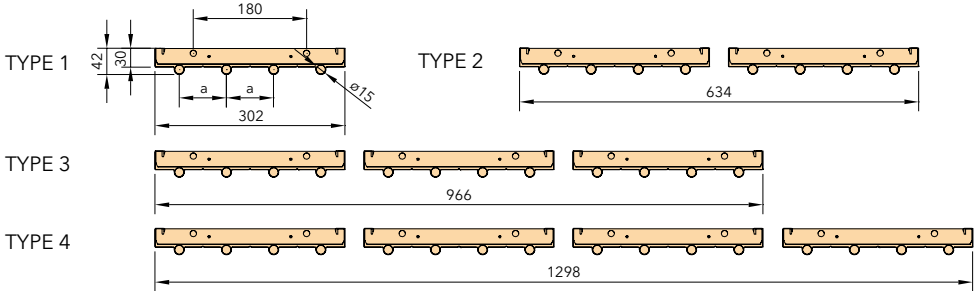
- Material - Steel (0.75mm)
- Finish - RAL 9010 (matt)
Other colours available on request
- Panel widths - Up to 1300mm
- Panel lengths - 4000mm and 6000mm
- Fire class Insulation - A2-S1
- Maximum Working Pressure - 8 bar
- Warranty - 5 years



Aqua Line Radiant Panel - Technical



Dimensions



Aqua Line		Type 1	Type 2	Type 3	Type 4
Operating weight with water content and insulation (4m)	kg	12.4	24.8	37.2	50
Operating weight with water content and insulation (6m)	kg	18.5	37	55.5	74

Heat output table for panels in watts/m in accordance with EN 14037 1-3

Delta T (Δt) [K]	Type 1	Type 2	Type 3	Type 4
70	264	209	793	1058
69	260	207	786	1047
68	256	205	779	1036
67	251	203	772	1025
66	247	201	765	1014
65	242	199	758	1003
64	238	197	751	992
63	233	195	744	981
62	229	193	737	970
61	225	191	730	959
60	220	189	723	948
59	216	187	716	937
58	212	185	709	926
57	207	183	702	915
56	203	181	695	904
55	199	179	688	893
54	195	177	681	882
53	190	175	674	871
52	186	173	667	860
51	182	171	660	849
50	178	169	653	838
49	173	167	646	827
48	169	165	639	816
47	165	163	632	805
46	161	161	625	794
45	157	159	618	783
44	153	157	611	772
43	149	155	604	761
42	144	153	597	750
41	140	151	590	739
40	136	149	583	728
39	132	147	576	717
38	128	145	569	706
37	124	143	562	695
36	120	141	555	684
35	116	139	548	673
30	97	116	466	627
25	78	94	383	529

Heat output table per two collectors in watts/unit in accordance with EN 14037 1-3

Delta T (Δt) [K]	Type 1	Type 2	Type 3	Type 4
70	90	180	270	360
69	88	176	264	353
68	87	174	260	347
67	85	170	256	341
66	84	167	251	335
65	82	164	246	329
64	81	161	242	322
63	79	158	237	316
62	78	155	233	310
61	76	152	228	304
60	74	149	223	298
59	73	146	219	292
58	71	143	214	286
57	70	140	210	280
56	68	137	205	274
55	67	134	201	268
54	66	131	197	262
53	64	128	192	256
52	63	125	188	250
51	61	122	183	244
50	60	119	179	239
49	58	116	175	233
48	57	113	170	227
47	55	111	166	221
46	54	108	162	215
45	52	105	157	210
44	51	102	153	204
43	50	99	149	198
42	48	96	145	193
41	47	94	140	187
40	45	91	136	182
39	44	88	132	176
38	43	85	128	171
37	41	83	124	165
36	40	80	120	160
35	39	77	116	154
30	32	64	96	128
25	26	51	77	102

Values at a mass flow of 0.04 litres per second / pipe.

Multisec Overview



Multisec Overview

The Multisec radiator is made from 25mm diameter, 1.2mm steel tubes with 1.5mm headers. It is finished in RAL 9016 Traffic White as standard, with other colours available on request. The Multisec can be supplied as a wall mounted radiator, or a floor standing radiator with the option of slip-on, welded or cast feet. Capable of operating up to 10 bar (tested to 13 bar), each

Multisec radiator has ½" BSP-f connections, with BBOE as the standard configuration. Alternative configurations and connections are also available (some at extra cost), although these must be specified with each order (see main Multisec sales brochure for more information). The Multisec radiator carries a 5-year guarantee against manufacturing defects.

Features

- Types - 2, 3, 4, 5 & 6 Column
- Material - Steel
- Finish - RAL 9016 Traffic White as standard
- Colour, Bare Metal and Tinted Lacquer options
- Heights - 207-2500mm
- Lengths - Modular (46mm per section)
- Curved and angled models also available
- Bespoke connection options
- Maximum Working Pressure - 10 bar (13 bar test)
- Warranty - 5 years



Multisec
Technical



Multisec
Technical

Technical data per section (46mm width)

	Height (mm)	Weight (kg)	Water content (litres)	Max no of sections		Output (watts Δt 50°C)
				White & Colours	Bare Metal	
2 Column - 66mm depth (per section data)	207	0.35	0.29	40	28	17.5
	300	0.49	0.37	40	28	25.6
	400	0.63	0.45	40	40	33.0
	500	0.77	0.53	40	40	40.1
	556	0.85	0.58	40	40	44.0
	586	0.89	0.60	40	40	46.1
	600	0.91	0.61	40	40	47.1
	626	0.95	0.63	40	40	48.9
	656	0.99	0.66	40	40	51.0
	676	1.02	0.67	40	40	52.4
	750	1.12	0.73	40	40	57.6
	756	1.13	0.74	40	40	58.0
	786	1.18	0.76	40	40	60.1
	856	1.27	0.82	40	40	65.1
	876	1.30	0.83	40	40	66.5
	900	1.33	0.85	40	40	68.1
	1000	1.48	0.93	40	40	75.2
	1200	1.76	1.09	35	35	89.5
	1500	2.18	1.33	35	35	111.4
	1656	2.40	1.46	35	35	123.1
	1800	2.60	1.58	35	35	134.1
3 Column - 107mm depth (per section data)	1856	2.69	1.62	35	35	138.4
	2000	2.89	1.74	30	30	149.8
	2056	2.98	1.78	30	30	154.2
	2200	3.17	1.90	30	30	165.9
	2500	3.59	2.40	25	25	190.9

	Height (mm)	Weight (kg)	Water content (litres)	Max no of sections		Output (watts Δt 50°C)
				White & Colours	Bare Metal	
3 Column - 107mm depth (per section data)	207	0.53	0.42	40	28	24.8
	300	0.74	0.54	40	28	34.7
	400	0.95	0.66	40	40	45.1
	500	1.16	0.79	40	40	55.2
	556	1.28	0.85	40	40	60.9
	586	1.34	0.89	40	40	63.8
	600	1.37	0.91	40	40	65.2
	626	1.43	0.94	40	40	67.8
	656	1.49	0.97	40	40	70.8
	676	1.53	1.00	40	40	72.8
	750	1.69	1.09	40	40	80.0
	756	1.70	1.09	40	40	80.6
	786	1.77	1.13	40	40	83.6
	856	1.91	1.21	40	40	90.4
	876	1.96	1.24	40	40	92.3
	900	2.01	1.27	35	35	94.6
	1000	2.22	1.39	35	35	104.3
	1200	2.64	1.63	35	35	123.5
	1500	3.28	1.99	25	25	151.9
	1656	3.61	2.18	25	25	166.7
	1800	3.91	2.35	22	22	180.2
4 Column - 148mm depth (per section data)	1856	4.04	2.42	22	22	185.5
	2000	4.33	2.59	22	22	199.0
	2056	4.47	2.66	22	22	204.3
	2200	4.76	2.83	18	18	217.8
	2500	5.39	3.19	18	18	245.9

Technical data per section (46mm width)

	Height (mm)	Weight (kg)	Water content (litres)	Max no of sections		Output (watts Δt 50°C)
				White & Colours	Bare Metal	
5 Column - 189mm depth (per section data)	207	0.89	0.70	40	28	39.7
	300	1.24	0.90	40	28	56.5
	400	1.59	1.10	40	40	72.4
	500	1.95	1.30	40	40	87.7
	556	2.14	1.41	40	40	96.2
	586	2.24	1.47	40	40	100.7
	600	2.30	1.50	40	40	102.7
	626	2.39	1.55	36	36	106.6
	656	2.50	1.61	36	36	111.0
	676	2.57	1.65	36	36	114.0
	750	2.83	1.80	33	33	124.8
	756	2.80	1.81	33	33	125.7
	786	2.97	1.87	33	33	130.0
	856	3.20	2.01	28	28	140.1
	876	3.27	2.05	28	28	143.0
	900	3.36	2.10	28	28	146.4
	1000	3.71	2.30	20	20	160.6
	1200	4.41	2.70	15	15	188.8
	1500	5.47	3.30	15	15	230.4
	1656	6.02	3.62	15	15	251.9
	1800	6.53	3.91	12	12	271.6
6 Column - 230mm depth (per section data)	1856	6.75	4.02	12	12	279.3
	2000	7.23	4.31	12	12	299.0
	2056	7.45	4.42	12	12	306.7
	2200	7.94	4.71	12	12	326.4
	2500	9.00	5.31	12	12	367.4

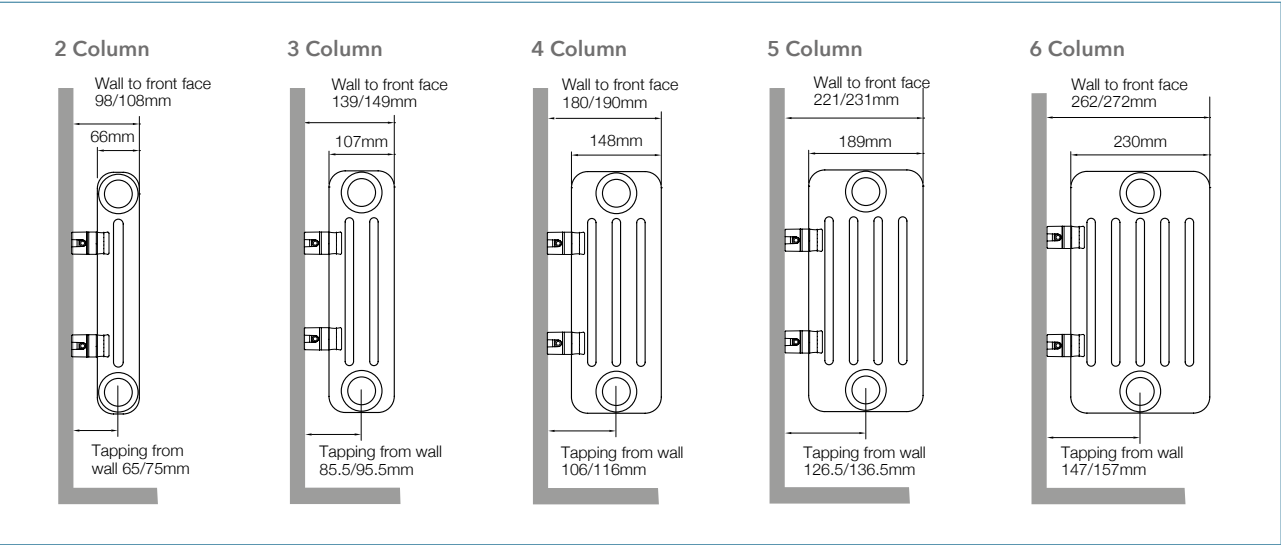
	Height (mm)	Weight (kg)	Water content (litres)	Max no of sections		Output (watts Δt 50°C)
				White & Colours	Bare Metal	
6 Column - 230mm depth (per section data)	207	1.07	0.80	40	28	48.7
	300	1.49	1.10	40	28	67.7
	400	1.92	1.30	40	40	87.3
	500	2.34	1.60	40	40	106.2
	556	2.58	1.70	35	35	116.5
	586	2.70	1.77	35	35	121.9
	600	2.76	1.80	35	35	124.5
	626	2.87	1.85	30	30	129.1
	656	3.00	1.90	30	30	134.5
	676	3.09	2.00	30	30	138.0
	750	3.40	2.20	27	27	150.9
	756	3.42	2.20	27	27	152.0
	786	3.56	2.25	27	27	157.1
	856	3.85	2.40	23	23	169.0
	876	3.93	2.50	23	23	172.4
	900	4.03	2.50	23	23	176.4
	1000	4.46	2.80	20	20	192.9
	1200	5.30	3.20	15	15	224.7
	1500	6.57	4.00	15	15	270.0
	1656	7.23	4.36	14	14	292.5
	1800	7.84	4.70	10	10	312.7
7 Column - 262mm depth (per section data)	1856	8.11	4.84	10	10	320.4
	2000	8.69	5.20	10	10	339.8
	2056	8.95	5.29	10	10	347.2
	2200	9.53	5.60	10	10	366.0
	2500	10.80	6.40	10	10	403.4

	Height (mm)	Weight (kg)	Water content (litres)	Max no of sections		Output (watts Δt 50°C)
				White & Colours	Bare Metal	
4 Column - 148mm depth (per section data)	207	0.71	0.56	40	28	32.0
	300	0.99	0.72	40	28	46.8
	400	1.27	0.88	40	40	59.8
	500	1.55	1.04	40	40	72.4
	556	1.71	1.13	40	40	79.3
	586	1.79	1.18	40	40	83.0
	600	1.84	1.20	40	40	84.7
	626	1.91	1.24	40	40	87.9
	656	1.99	1.29	40	40	91.6
	676	2.05	1.32	40	40	94.0
	750	2.26	1.44	40	40	102.9
	756	2.28	1.45	40	40	103.6
	786	2.37	1.50	40	40	107.2
	856	2.56	1.61	35	35	115.6
	876	2.61	1.65	35	35	118.0
	900	2.68	1.68	35	35	120.8
	1000	2.96	1.84	35	35	132.7
	1200	3.53	2.17	25	25	156.2
	1500	4.37	2.65	20	20	191.4
	1656	4.81	2.90	20	20	209.7
	1800	5.22	3.13	20	20	226.6
5 Column - 189mm depth (per section data)	1856	5.40	3.22	20	20	233.3
	2000	5.78	3.45	15	15	250.3
	2056	5.96	3.54	15	15	256.9
	2200	6.35	3.77	15	15	274.1
	2500	7.19	4.25	15	15	310.2



Note - Add 100mm to height for models with feet.
Manufacturing Tolerance of +/-0.2mm per section.
Radiators over the stated maximum sections must be assembled on site.
Please contact our sales office for more information.
For other operating temperatures, refer to page 131.

Note - Add 100mm to height for models with feet.
Manufacturing Tolerance of +/-0.2mm per section.
Radiators over the stated maximum sections must be assembled on site.
Please contact our sales office for more information.
For other operating temperatures, refer to page 131.



Arc

Overview & Technical



This radiator features elegant 50x25mm oval tubes that provide a contemporary and elegant finish - perfect for a wide range of interiors.

Features

- Material - Steel
- Finish - White (RAL 9016)
Other colours available on request
- Heights - 600-2000mm
- Widths - 300-1800mm
- Outputs - 226-2902 watts
- Maximum Working Pressure - 5 bar (6.5 bar test)
- Warranty - 5 years



Single shown here

Technical data

Technical data			Height (mm)								
	Width (mm)	Tubes	600	800	1000	1200	1400	1600	1800	2000	
			Output (watts Δt 50°C)								
Single	300	5	226	292	358	423	489	555	621	688	
	360	6	271	350	429	508	586	665	745	826	
	420	7	316	409	501	592	684	776	869	963	
	480	8	361	467	572	677	782	886	994	1101	
	540	9	406	526	644	761	879	997	1118	1238	
	600	10	451	584	715	846	977	1108	1242	1376	
	660	11	496	642	787	931	1075	1219	1366	1514	
	720	12	541	701	858	1015	1172	1330	1490	1651	
	780	13	586	759	930	1100	1270	1440	1615	1789	
	840	14	631	818	1001	1184	1368	1551	1739	1926	
	900	15	677	876	1073	1269	-	-	-	-	
	960	16	722	934	1144	1354	-	-	-	-	
	1020	17	767	993	1216	1438	-	-	-	-	
	1080	18	812	1051	1287	-	-	-	-	-	
	1140	19	857	1110	1359	-	-	-	-	-	
	1200	20	902	1168	1430	-	-	-	-	-	
	1260	21	947	1226	-	-	-	-	-	-	
	1320	22	992	1285	-	-	-	-	-	-	
	1380	23	1037	1343	-	-	-	-	-	-	
	1440	24	1082	1402	-	-	-	-	-	-	
	1500	25	1128	1460	-	-	-	-	-	-	
	1560	26	1173	1518	-	-	-	-	-	-	
	1620	27	1218	1577	-	-	-	-	-	-	
	1680	28	1263	1635	-	-	-	-	-	-	
	1740	29	1308	1694	-	-	-	-	-	-	
	1800	30	1353	1752	-	-	-	-	-	-	
	Dry weight per tube (kg)			0.83	1.05	1.27	1.49	1.71	1.94	2.16	2.38
	Water content per tube (litres)			0.61	0.81	1.00	1.20	1.39	1.59	1.79	1.98

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Arc

Overview & Technical



Single



Double



Double shown here

Technical data

Technical data			Height (mm)								
	Width (mm)	Tubes	600	800	1000	1200	1400	1600	1800	2000	
			Output (watts Δt 50°C)								
Double	300	5	349	451	551	649	747	844	940	1037	
	360	6	418	541	661	779	896	1012	1128	1244	
	420	7	488	631	771	909	1045	1181	1316	1451	
	480	8	558	721	881	1038	1194	1350	1504	1658	
	540	9	627	811	991	1168	1344	1518	1692	1866	
	600	10	697	901	1101	1298	1493	1687	1880	2073	
	660	11	767	991	1211	1428	1642	1856	2068	2280	
	720	12	836	1081	1321	1558	1792	2024	2256	2488	
	780	13	906	1171	1431	1687	1941	2193	2444	2695	
	840	14	976	1261	1541	1817	2090	2362	2632	2902	
	900	15	1046	1352	1652	1947	-	-	-	-	
	960	16	1115	1442	1762	2077	-	-	-	-	
	1020	17	1185	1532	1872	2207	-	-	-	-	
	1080	18	1255	1622	1982	-	-	-	-	-	
	1140	19	1324	1712	2092	-	-	-	-	-	
	1200	20	1394	1802	2202	-	-	-	-	-	
	1260	21	1464	1892	-	-	-	-	-	-	
	1320	22	1533	1982	-	-	-	-	-	-	
	1380	23	1603	2072	-	-	-	-	-	-	
	1440	24	1673	2162	-	-	-	-	-	-	
	1500	25	1743	2253	-	-	-	-	-	-	
	1560	26	1812	2343	-	-	-	-	-	-	
	1620	27	1882	2433	-	-	-	-	-	-	
	1680	28	1952	2523	-	-	-	-	-	-	
	1740	29	2021	2613	-	-	-	-	-	-	
	1800	30	2091	2703	-	-	-	-	-	-	
	Dry weight per tube (kg)			1.53	1.97	2.42	2.86	3.30	3.75	4.19	4.42
	Water content per tube (litres)			1.20	1.59	1.98	2.37	2.77	3.16	3.55	3.94

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Visit www.mhsradiators.co.uk for full details

Energia® Overview

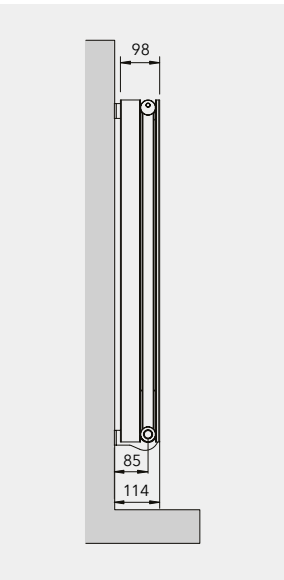


Energia® Technical

With a unique patented design consisting of 50mm tubes, this robust and versatile radiator delivers extremely high outputs.

Features

- Material - Steel
- Finish - RAL 9016 Traffic White
Other colours available on request
- Heights - 390-2000mm
- Lengths - 274-1786mm
- Sizes - 144
- Outputs - 347-3858 watts
- Maximum Working Pressure - 5 bar (6.5 bar test)
- Warranty - 5 years



Technical data per tube

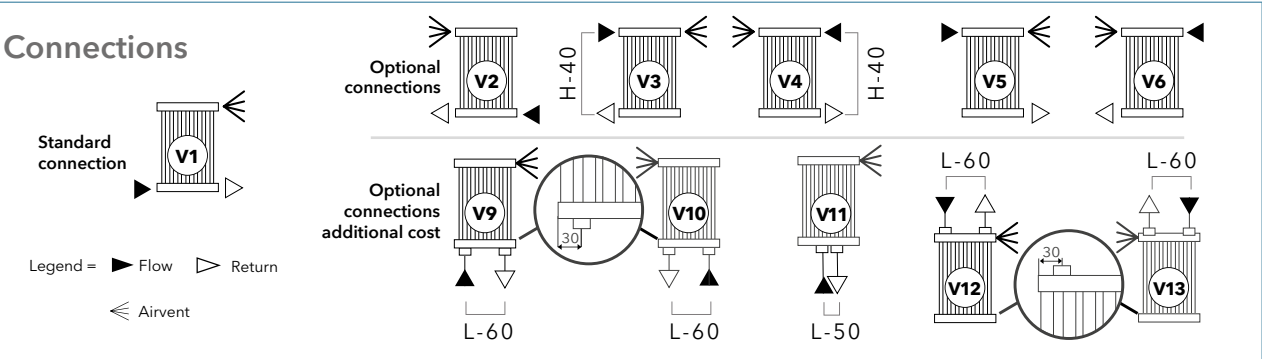
	Height (mm)						
	390	540	640	840	940	1800	2000
Dry weight per tube (kg)	1.39	1.88	2.20	2.85	3.18	5.98	6.63
Water content per tube (litres)	0.53	0.69	0.80	1.02	1.13	2.06	2.28

Performance data

Performance data		Height (mm)						
		390	540	640	840	940	1800	2000
Width (mm)	Tubes	Output (watts Δt 50°C)						
274	5	347	443	507	653	699	1250	1378
330	6	417	532	609	784	839	1500	1653
386	7	486	621	710	914	979	1750	1929
442	8	556	709	812	1045	1119	2000	2205
498	9	625	798	913	1175	1259	2250	2480
554	10	695	887	1015	1306	1399	2500	2756
610	11	764	975	1116	1437	1539	2750	3031
666	12	833	1064	1218	1567	1678	3000	3307
722	13	903	1153	1319	1698	1818	3250	3582
778	14	972	1241	1420	1828	1958	3500	3858
834	15	1042	1330	1522	1959	2098	-	-
890	16	1111	1419	1623	2090	2238	-	-
946	17	1181	1507	1725	2220	2378	-	-
1002	18	1250	1596	1826	2351	2518	-	-
1058	19	1320	1684	1928	2481	2657	-	-
1114	20	1389	1773	2029	2612	2797	-	-
1170	21	1459	1862	2131	2743	2937	-	-
1226	22	1528	1950	2232	2873	3077	-	-
1282	23	1597	2039	2334	3004	3217	-	-
1338	24	1667	2128	2435	3134	3357	-	-
1394	25	1736	2216	2536	-	-	-	-
1450	26	1806	2305	2638	-	-	-	-
1506	27	1875	2394	2739	-	-	-	-
1562	28	1945	2482	2841	-	-	-	-
1618	29	2014	2571	2942	-	-	-	-
1674	30	2084	2660	3044	-	-	-	-
1730	31	2153	2748	3145	-	-	-	-
1786	32	2222	2837	3247	-	-	-	-

For Δt 30°C, apply a correction factor of 0.515. For other operating temperatures, refer to page 131.

Connections



Tubi®

Overview



Tubi®

Technical

Sophisticated simplicity, the Tubi will complement any interior. Its elegant Italian designed 38mm vertical tubes are exquisitely arranged either side of a horizontal bar to provide a subtle symmetry that belies a good heat output.

Features

- Material - Steel
- Finish - RAL 9016 Traffic White
Other colours available on request
- Heights - 330-2030mm
- Widths - 318-1662mm
- Sizes - 365
- Outputs - 267-3498 watts
- Maximum Working Pressure - 8 bar (10 bar test)
- Warranty - 5 years



Technical data per tube

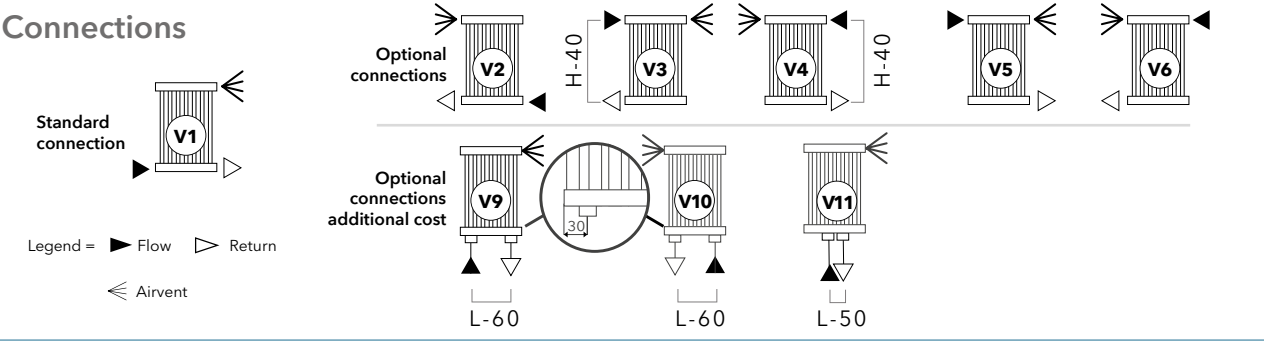
	Height (mm)																
	330	380	430	474	530	574	630	724	780	830	874	930	1030	1774	1830	1974	2030
Dry weight per tube (kg)	0.84	0.95	1.06	1.13	1.27	1.35	1.49	1.67	1.82	1.93	2.00	2.15	2.36	3.96	4.11	4.40	4.54
Water content per tube (litres)	0.72	0.82	0.92	1.01	1.12	1.21	1.32	1.51	1.62	1.72	1.81	1.92	2.12	3.60	3.71	4.00	4.11

Performance data

Performance data		Height (mm)																
		330	380	430	474	530	574	630	724	780	830	874	930	1030	1774	1830	1974	2030
Width (mm)	Tubes	Output (watts Δt 50°C)																
318	6	267	301	333	361	397	424	458	516	550	580	607	640	700	1140	1173	1259	1293
374	7	312	351	389	421	463	495	535	602	642	677	708	747	816	1330	1369	1469	1509
430	8	356	401	444	482	529	566	611	688	734	774	809	854	933	1520	1564	1679	1724
486	9	401	451	500	542	595	636	688	774	825	870	910	960	1049	1710	1760	1889	1940
542	10	445	501	555	602	661	707	764	860	917	967	1011	1067	1166	1900	1955	2099	2155
598	11	490	551	611	662	727	778	840	946	1009	1064	1112	1174	1283	2090	2151	2309	2371
654	12	534	601	666	722	793	848	917	1032	1100	1160	1213	1280	1399	2280	2346	2519	2586
710	13	579	651	722	783	859	919	993	1118	1192	1257	1314	1387	1516	2470	2542	2729	2802
766	14	623	701	777	843	925	990	1070	1204	1284	1354	1415	1494	1632	2660	2737	2939	3017
822	15	668	752	833	903	992	1061	1146	1290	1376	1451	1517	1601	1749	2850	2933	3149	3233
878	16	712	802	888	963	1058	1131	1222	1376	1467	1547	1618	1707	1866	-	-	-	-
934	17	757	852	944	1023	1124	1202	1299	1462	1559	1644	1719	1814	1982	-	-	-	-
990	18	801	902	999	1084	1190	1273	1375	1548	1651	1741	1820	1921	2099	-	-	-	-
1046	19	846	952	1055	1144	1256	1343	1452	1634	1742	1837	1921	2027	2215	-	-	-	-
1102	20	890	1002	1110	1204	1322	1414	1528	1720	1834	1934	2022	2134	2332	-	-	-	-
1158	21	935	1052	1166	1264	1388	1485	1604	1806	1926	2031	2123	2241	2449	-	-	-	-
1214	22	979	1102	1221	1324	1454	1555	1681	1892	2017	2127	2224	2347	2565	-	-	-	-
1270	23	1024	1152	1277	1385	1520	1626	1757	1978	2109	2224	2325	2454	2682	-	-	-	-
1326	24	1068	1202	1332	1445	1586	1697	1834	2064	2201	2321	2426	2561	2798	-	-	-	-
1382	25	1113	1253	1388	1505	1653	1768	1910	2150	2293	2418	2528	2668	2915	-	-	-	-
1438	26	1157	1303	1443	1565	1719	1838	1986	2236	2384	2514	2629	2774	3032	-	-	-	-
1494	27	1202	1353	1499	1625	1785	1909	2063	2322	2476	2611	2730	2881	3148	-	-	-	-
1550	28	1246	1403	1554	1686	1851	1980	2139	2408	2568	2708	2831	2988	3265	-	-	-	-
1606	29	1291	1453	1610	1746	1917	2050	2216	2494	2659	2804	2932	3094	3381	-	-	-	-
1662	30	1335	1503	1665	1806	1983	2121	2292	2580	2751	2901	3033	3201	3498	-	-	-	-

For Δt 30°C, apply a correction factor of 0.515. For other operating temperatures, refer to page 131.

Connections



Cast Iron Overview



Cast Iron Overview



Ionic in Anthracite finish



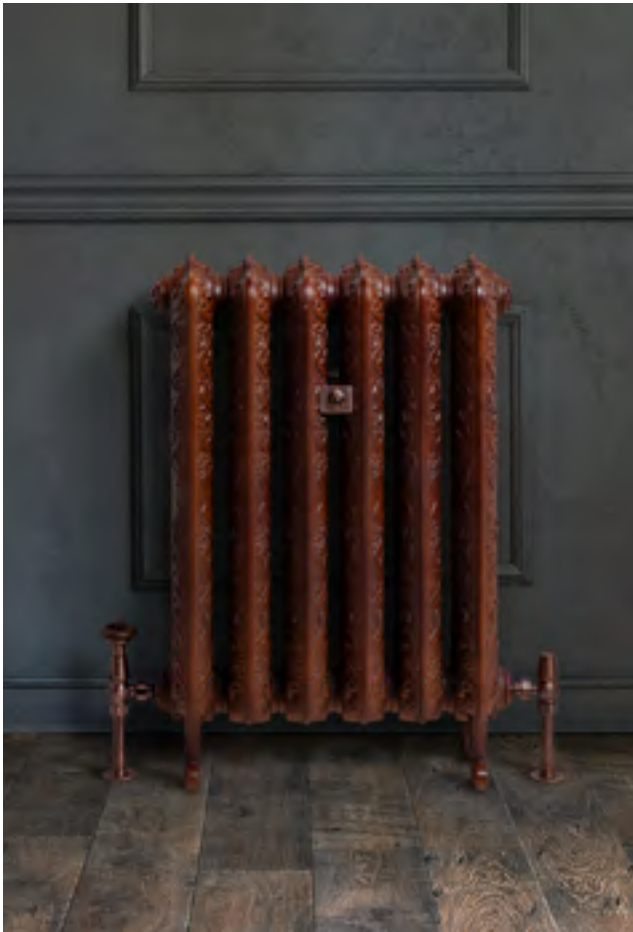
Ionic in Bronze finish



Clasico



Burlington in Dark Old Penny finish



Flora in Corten finish



Clasico in Gun Metal finish



Liberty in Pewter finish



Liberty in Pewter finish



Burlington in Dark Old Penny finish



Blenheim in Light Old Penny finish

Ionic Overview



Ionic Overview

The Ionic is a diverse cast iron radiator available in 13 different models. It can be supplied in a factory primer, a white or black primer ready for on-site painting, or a range of colours and special effects finished by the MHS assembly and finishing plant. The Ionic radiator has a maximum working pressure of 6 bar (7.8 bar test).

Integral feet and wall ties are supplied as standard, while a wall mounted version can also be specified at no additional cost. All radiators are supplied with 1/2" BSP-f (BBOE) connections, 3/4" or 1" connections, while TBOE or TBSE connections are also available (to be specified at time of order). The Ionic radiator carries a 10-year guarantee against manufacturing defects.

Features

- Types - 2, 4 & 6 Column
- Material - Cast iron
- Heights - 357-960mm
- Depths - 2 Column: 70mm
4 Column: 144mm
6 Column: 221mm
- Maximum Working Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years
- Electric option by special request



6 column shown here in Bronze finish with Nostalgia brass thermostatic valves and traditional brass pipe sleeves



2 column



4 column



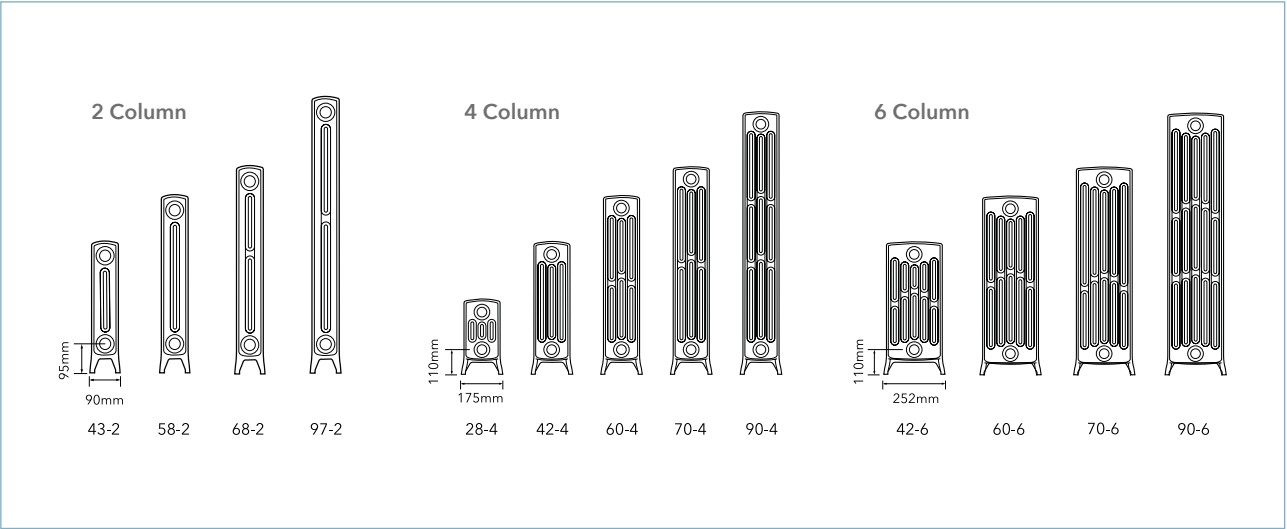
6 column



2 column wall mounted shown here in Matt Black with Chartwell TRV black nickel valves and pipe sleeves



2 column shown here in Light Old Penny with Kentwell TRV Satin valves, pipe sleeves and wall stay.



4 column shown here in Anthracite finish with Chartwell anthracite thermostatic valves and traditional anthracite pipe sleeves.

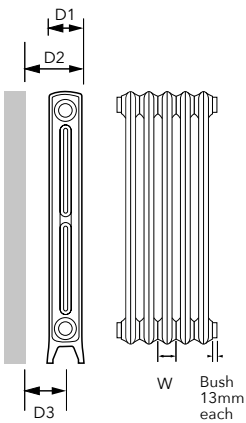


2 column shown here in Matt Black

Ionic
Technical

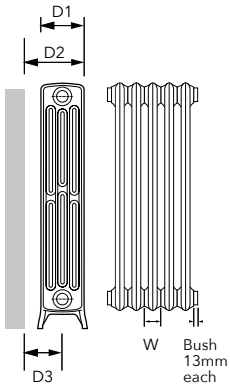
Ionic
Technical

Ionic 2 Column



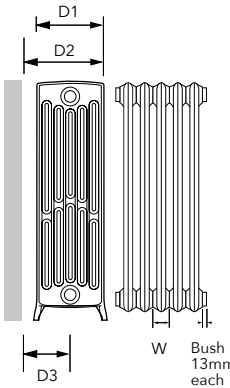
All information is per section		43/2	58/2	68/2	97/2
Height (mm)		490	640	740	1040
Output (watts @ Δt 50°C)		41.0	46.0	62.0	74.0
Columns		2	2	2	2
Depth	(mm) - D1	70	70	70	70
Depth (wall to face)	(mm) - D2	102 or 112	102 or 112	102 or 112	102 or 112
Pipe centres from wall	(mm) - D3	67 or 77	67 or 77	67 or 77	67 or 77
Width (mm)		60	60	60	60
Dry weight (kg)*		2.60	3.41	3.82	5.15
Water content (L)		0.36	0.48	0.56	0.8
Max no. factory built sections #		20	20	20	17

Ionic 4 Column



All information is per section		28/4	42/4	60/4	70/4	90/4
Height (mm)		357	475	660	760	960
Output (watts @ Δt 50°C)		43.6	65.1	93.0	107.8	138.7
Columns		4	4	4	4	4
Depth	(mm) - D1	144	144	144	144	144
Depth (wall to face)	(mm) - D2	176 or 186	176 or 186	176 or 186	176 or 186	176 or 186
Pipe centres from wall	(mm) - D3	104 or 114	104 or 114	104 or 114	104 or 114	104 or 114
Width (mm)		60	60	60	60	60
Dry weight (kg)*		3.35	4.10	5.44	6.11	7.77
Water content (L)		0.35	0.51	0.85	0.97	1.10
Max no. factory built sections #		20	20	17	17	17

Ionic 6 Column



All information is per section		42/6	60/6	70/6	90/6
Height (mm)		485	660	760	960
Output (watts @ Δt 50°C)		95.3	133.0	151.0	197.0
Columns		6	6	6	6
Depth	(mm) - D1	221	221	221	221
Depth (wall to face)	(mm) - D2	253 or 263	253 or 263	253 or 263	253 or 263
Pipe centres from wall	(mm) - D3	142.5 or 152.5	142.5 or 152.5	142.5 or 152.5	142.5 or 152.5
Width (mm)		60	60	60	60
Dry weight (kg)*		6.29	8.26	9.50	12.11
Water content (L)		0.85	1.20	1.40	1.50
Max no. factory built sections #		17	17	15	10

A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.

*Footed sections add 0.5kg

Performance data

Width (excluding bushes) (mm)	Sections	Model 43/2	Model 58/2	Model 68/2	Model 97/2	Model 28/4	Model 42/4	Model 60/4	Model 70/4	Model 90/4	Model 42/6	Model 60/6	Model 70/6	Model 90/6
		Output (watts Δt 50°C)												
180	3	123	138	186	222	131	195	279	323	416	287	399	453	591
240	4	164	184	248	296	174	260	372	431	555	382	532	604	788
300	5	205	230	310	370	218	326	465	539	694	478	665	755	985
360	6	246	276	372	444	262	391	558	647	832	573	798	906	1182
420	7	287	322	434	518	305	456	651	755	971	669	931	1057	1379
480	8	328	368	496	592	349	521	744	862	1110	764	1064	1208	1576
540	9	369	414	558	666	392	586	837	970	1248	860	1197	1359	1773
600	10	410	460	620	740	436	651	930	1078	1387	955	1330	1510	1970
660	11	451	506	682	814	480	716	1023	1186	1526	1051	1463	1661	2167
720	12	492	552	744	888	523	781	1116	1294	1664	1146	1596	1812	2364
780	13	533	598	806	962	567	846	1209	1401	1803	1242	1729	1963	2561
840	14	574	644	868	1036	610	911	1302	1509	1942	1337	1862	2114	2758
900	15	615	690	930	1110	654	977	1395	1617	2081	1433	1995	2265	2955
960	16	656	736	992	1184	698	1042	1488	1725	2219	1528	2128	2416	3152
1020	17	697	782	1054	1258	741	1107	1581	1833	2358	1624	2261	2567	3349
1080	18	738	828	1116	1332	785	1172	1674	1940	2497	1719	2394	2718	3546
1140	19	779	874	1178	1406	828	1237	1767	2048	2635	1815	2527	2869	3743
1200	20	820	920	1240	1480	872	1302	1860	2156	2774	1910	2660	3020	3940
1260	21	861	966	1302	1554	916	1367	1953	2264	2913	2006	2793	3171	4137
1320	22	902	1012	1364	1628	959	1432	2046	2372	3051	2101	2926	3322	4334
1380	23	943	1058	1426	1702	1003	1497	2139	2479	3190	2197	3059	3473	4531
1440	24	984	1104	1488	1776	1046	1562	2232	2587	3329	2292	3192	3624	4728
1500	25	1025	1150	1550	1850	1090	1628	2325	2695	3468	2388	3325	3775	4925
1560	26	1066	1196	1612	1924	1134	1693	2418	2803	3606	2483	3458	3926	5122
1620	27	1107	1242	1674	1998	1177	1758	2511	2911	3745	2579	3591	4077	5319
1680	28	1148	1288	1736	2072	1221	1823	2604	3018	3884	2674	3724	4228	5516
1740	29	1189	1334	1798	2146	1264	1888	2697	3126	4022	2770	3857	4379	5713
1800	30	1230	1380	1860	2220	1308	1953	2790	3234	4161	2865	3990	4530	5910
1860	31	1271	1426	1922	2294	1352	2018	2883	3342	4300	2961	4123	4681	6107
1920	32	1312	1472	1984	2368	1395	2083	2976	3450	4438	3056	4256	4832	6304
1980	33	1353	1518	2046	2442	1439	2148	3069	3557	4577	3152	4389	4983	6501
2040	34	1394	1564	2108	2516	1482	2213	3162	3665	4716	3247	4522	5134	6698
2100	35	1435	1610	2170	2590	1526	2279	3255	3773	4855	3343	4655	5285	6895
2160	36	1476	1656	2232	2664	1570	2344	3348	3881	4993	3438	4788	5436	7092
2220	37	1517	1702	2294	2738	1613	2409	3441	3989	5132	3534	4921	5587	7289
2280	38	1558	1748	2356	2812	1657	2474	3534	4096	5271	3629	5054	5738	7486
2340	39	1599	1794	2418	2886	1700	2539	3627	4204	5409	3725	5187	5889	7683
2400	40	1640	1840	2480	2960	1744	2604	3720	4312	5548	3820	5320	6040	7880

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Clasico

Overview



Clasico

Technical

The Clasico is a contemporary cast iron radiator with a flat top, available in 5 different heights. It can be supplied in a factory primer, a white or black primer ready for on-site painting, or a range of colours and special effects finished by the MHS assembly and finishing plant. The Clasico radiator has a maximum working pressure of 6 bar (7.8 bar test). Feet and wall ties are supplied as standard, while a wall mounted version can also be specified at no additional cost. All radiators are supplied with 1/2" BSP-f (BBOE) connections - 3/4" connections and TBOE or TBSE configurations are also available (to be specified at the time of order). The Clasico radiator carries a 10-year guarantee against manufacturing defects.

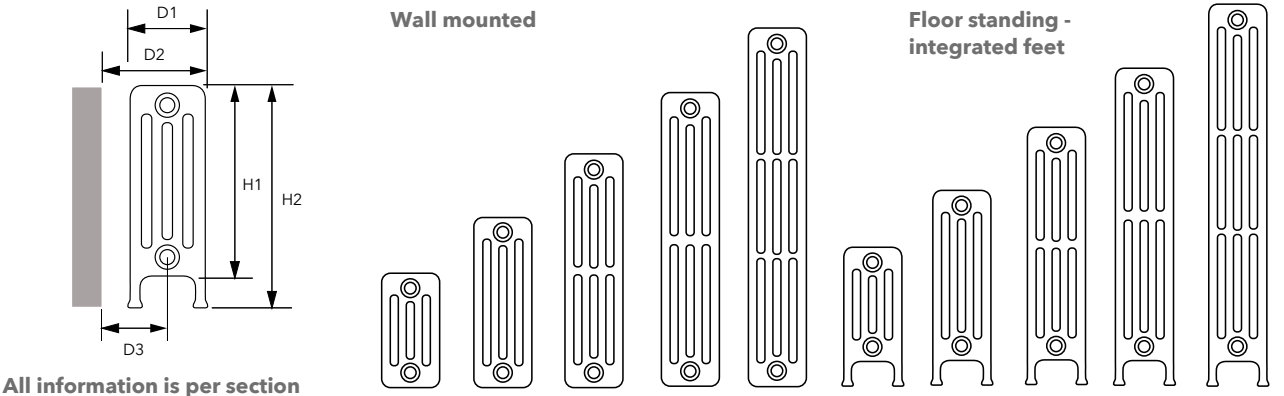
The Clasico is supplied as standard with integrated feet and all fixing/ties included in the price. Should the wall mounted version be required, this must be stated when ordering.



Shown here finished in Gun Metal finish with Anthracite Chartwell TRV valves.

Features

- Types - 4 Column
- Material - Cast iron
- Heights - 353-935mm
- Depth - 140mm
- Maximum Working Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years



All information is per section

Model / Code		C33/4-B	C46/4-B	C61/4-B	C80/4-B	C95/4-B	C33/4-F	C46/4-F	C61/4-F	C80/4-F	C95/4-F
Height	(mm) - H1	288	420	570	720	870	353	485	635	785	935
Depth	(mm) - D1	140	140	140	140	140	140	140	140	140	140
Depth (Wall To Face)	(mm) - D2	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182
Pipe Centres From Wall	(mm) - D3	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112

Technical data per section

	Model C33/4	Model C46/4	Model C61/4	Model C80/4	Model C95/4
Height with foot (mm)	353	485	636	785	935
Height without foot (mm)	288	420	570	720	870
Columns	4	4	4	4	4
Section width(mm)	50	50	50	55	55
Output (watts Δt 50°C)	40.8	58.2	75.4	98.3	116.4
Weight (kg)	2.58	3.19	4.19	5.17	6.54
Water content (litres)	0.40	0.49	0.60	0.85	0.97
Maximum factory built sections #	20	20	20	20	17
Maximum number of sections	28	40	40	40	40



A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.

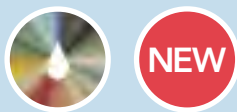
Performance data

Width (excluding bushes) (mm)	Sections	Model C33/4	Model C46/4	Model C61/4	Width (excluding bushes) (mm)	Model C80/4	Model C95/4
		Output (watts Δt 50°C)				Output (watts Δt 50°C)	
150	3	122	175	226	165	295	349
200	4	163	233	302	220	393	466
250	5	204	291	377	275	492	582
300	6	245	349	452	330	590	698
350	7	286	407	528	385	688	815
400	8	326	466	603	440	786	931
450	9	367	524	679	495	885	1048
500	10	408	582	754	550	983	1164
550	11	449	640	829	605	1081	1280
600	12	490	698	905	660	1180	1397
650	13	530	757	980	715	1278	1513
700	14	571	815	1056	770	1376	1630
750	15	612	873	1131	825	1475	1746
800	16	653	931	1206	880	1573	1862
850	17	694	989	1282	935	1671	1979
900	18	734	1048	1357	990	1769	2095
950	19	775	1106	1433	1045	1868	2212
1000	20	816	1164	1508	1100	1966	2328
1050	21	857	1222	1583	1155	2064	2444
1100	22	898	1280	1659	1210	2163	2561
1150	23	938	1339	1734	1265	2261	2677
1200	24	979	1397	1810	1320	2359	2794
1250	25	1020	1455	1885	1375	2458	2910
1300	26	1061	1513	1960	1430	2556	3026
1350	27	1102	1571	2036	1485	2654	3143
1400	28	1142	1630	2111	1540	2752	3259
1450	29	-	1688	2187	1595	2851	3376
1500	30	-	1746	2262	1650	2949	3492
1550	31	-	1804	2337	1705	3047	3608
1600	32	-	1862	2413	1760	3146	3725
1650	33	-	1921	2488	1815	3244	3841
1700	34	-	1979	2564	1870	3342	3958
1750	35	-	2037	2639	1925	3441	4074
1800	36	-	2095	2714	1980	3539	4190
1850	37	-	2153	2790	2035	3637	4307
1900	38	-	2212	2865	2090	3735	4423
1950	39	-	2270	2941	2145	3834	4540
2000	40	-	2328	3016	2200	3932	4656

For Δt 30°C, apply a correction factor of 0.515.

For other operating temperatures, refer to page 131.

Astro Overview



Astro Technical

Astro is well suited to modern and traditional spaces with its rounded contours, crisp line detail and distinctive pinched top. This cast iron radiator effortlessly merges timeless charm with contemporary allure, reinventing the classic design for a modern era.

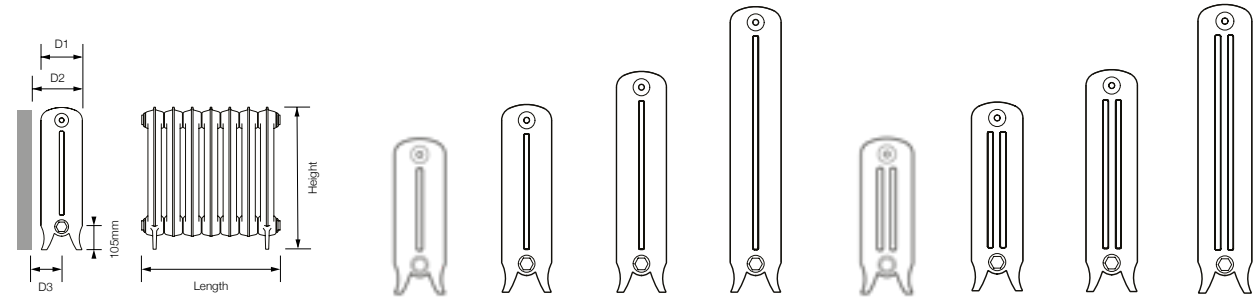
It can be supplied in a white or black primer ready for on-site painting, or a range of colours and special effects finished by the MHS assembly and finishing plant.



Features

- Types - 2 & 3 Column
- Material - Cast iron
- Heights - 520-920mm
- Depths - 180 & 200mm
- Maximum Working Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years
- Electric option by special request

Note - When connecting bottom opposite ends 24mm must be added to 'L' dimension to allow for the reducing bushes. If connecting top/bottom same end then 12mm must be added to 'L' dimension plus valves.



All information is per section					2 Column				3 Column			
Model / Code		AST52/2	AST62/2	AST72/2	AST92/2	AST52/3	AST62/3	AST72/3	AST92/3			
Height	(mm) - H1	520	620	720	920	520	620	720	920			
Depth	(mm) - D1	180	180	180	180	200	200	200	200			
Depth (Wall To Face)	(mm) - D2	210 or 220	210 or 220	210 or 220	210 or 220	230 or 240	230 or 240	230 or 240	230 or 240			
Pipe Centres From Wall	(mm) - D3	120 or 130	120 or 130	120 or 130	120 or 130	130 or 140	130 or 140	130 or 140	130 or 140			

Technical data per section

	2 Column				3 Column			
	Model AST52/2	Model AST62/2	Model AST72/2	Model AST92/2	Model AST52/3	Model AST62/3	Model AST72/3	Model AST92/3
Height with foot (mm)	520	620	720	920	520	620	720	920
Output (watts Δt 50°C)	86	103	124	149	97	119	138	176
Weight (kg)	7.30	9.30	10.10	12.50	9.00	10.52	12.64	16.18
Water content (litres)	2.13	2.61	3.05	4.14	2.10	2.60	2.90	3.80
Maximum factory built sections #	15	15	15	10	15	15	10	10

A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.

Performance data

Performance data		2 Column					3 Column			
Width (excluding bushes) (mm)	Sections	Model AST52/2	Model AST62/2	Model AST72/2	Model AST92/2	Width (excluding bushes) (mm)	Model AST52/3	Model AST62/3	Model AST72/3	Model AST92/3
		Output (watts Δt 50°C)					Output (watts Δt 50°C)			
240	3	258	309	372	447	240	291	357	414	528
320	4	344	412	496	596	320	388	476	552	704
400	5	430	515	620	745	400	485	595	690	880
480	6	516	618	744	894	480	582	714	828	1056
560	7	602	721	868	1043	560	679	833	966	1232
640	8	688	824	992	1192	640	776	952	1104	1408
720	9	774	927	1116	1341	720	873	1071	1242	1584
800	10	860	1030	1240	1490	800	970	1190	1380	1760
880	11	946	1133	1364	1639	880	1067	1309	1518	1936
960	12	1032	1236	1488	1788	960	1164	1428	1656	2112
1040	13	1118	1339	1612	1937	1040	1261	1547	1794	2288
1120	14	1204	1442	1736	2086	1120	1358	1666	1932	2464
1200	15	1290	1545	1860	2235	1200	1455	1785	2070	2640
1280	16	1376	1648	1984	2384	1280	1552	1904	2208	2816
1360	17	1462	1751	2108	2533	1360	1649	2023	2346	2992
1440	18	1548	1854	2232	2682	1440	1746	2142	2484	3168
1520	19	1634	1957	2356	2831	1520	1843	2261	2622	3344
1600	20	1720	2060	2480	2980	1600	1940	2380	2760	3520
1680	21	1806	2163	2604	3129	1680	2037	2499	2898	3696
1760	22	1892	2266	2728	3278	1760	2134	2618	3036	3872
1840	23	1978	2369	2852	3427	1840	2231	2737	3174	4048
1920	24	2064	2472	2976	3576	1920	2328	2856	3312	4224
2000	25	2150	2575	3100	3725	2000	2425	2975	3450	4400
2080	26	2236	2678	3224	3874	2080	2522	3094	3588	4576
2160	27	2322	2781	3348	4023	2160	2619	3213	3726	4752
2240	28	2408	2884	3472	4172	2240	2716	3332	3864	4928
2320	29	2494	2987	3596	4321	2320	2813	3451	4002	5104
2400	30	2580	3090	3720	4470	2400	2910	3570	4140	5280
2480	31	2666	3193	3844	4619	2480	3007	3689	4278	5456
2560	32	2752	3296	3968	4768	2560	3104	3808	4416	5632
2640	33	2838	3399	4092	4917	2640	3201	3927	4554	5808
2720	34	2924	3502	4216	5066	2720	3298	4046	4692	5984
2800	35	3010	3605	4340	5215	2800	3395	4165	4830	6160
2880	36	3096	3708	4464	5364	2880	3492	4284	4968	6336
2960	37	3182	3811	4588	5513	2960	3589	4403	5106	6512
3040	38	3268	3914	4712	5662	3040	3686	4522	5244	6688
3120	39	3354	4017	4836	5811	3120	3783	4641	5382	6864
3200	40	3440	4120	4960	5960	3200	3880	4760	5520	7040

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Liberty Overview



Liberty Technical

The Liberty, a traditional 2 column cast iron radiator, can be supplied in a factory primer, a white or black primer ready for on-site painting, or a range of colours and special effects finished by the MHS assembly and finishing plant. The Liberty radiator has a maximum working pressure of 6 bar (7.8 bar test). Feet and wall ties are supplied as standard.

All radiators are supplied with ½" BSP-f (BBOE) connections, ¾" or 1" connections, while TBOE or TBSE connections are also available (to be specified at time of order). The Liberty radiator carries a 10-year guarantee against manufacturing defects.



Features

- Types - 2 Column
- Material - Cast iron
- Heights - 540-954mm
- Depth - 203mm
- Maximum Working Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years
- Electric option by special request



Shown here in Pewter finish with Kentwell chrome thermostatic valves and chrome pipe sleeves.

Technical data per section

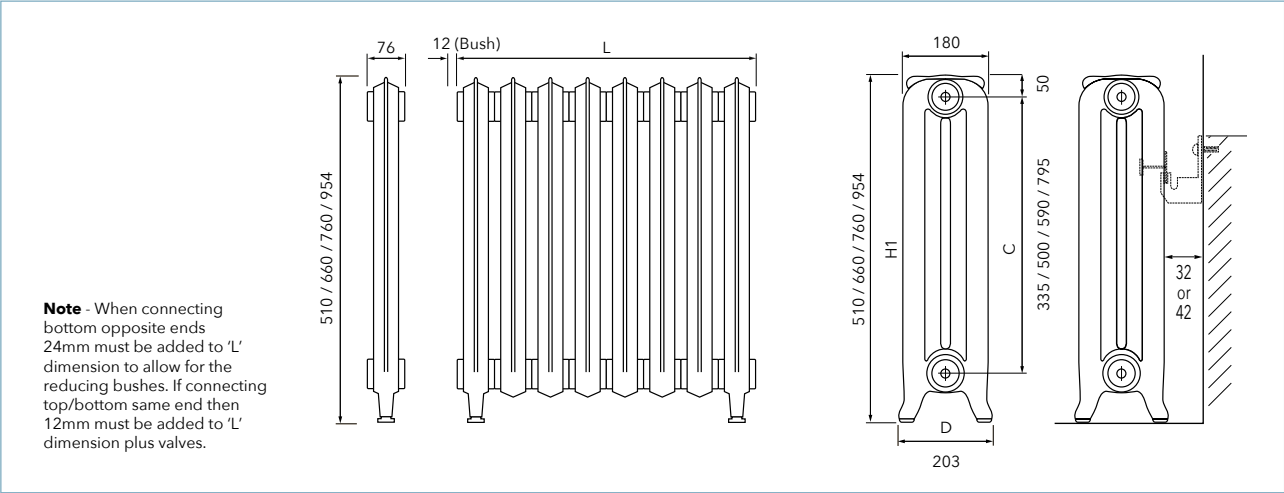
	Model LIB 510	Model LIB 660	Model LIB 760	Model LIB 954
Height with foot (mm)	510	660	760	954
Output (watts Δt 50°C)	74	111	121	151
Weight (kg)	6.60	10.20	11.00	13.70
Water content (litres)	1.83	2.30	2.60	3.30
Maximum factory built sections #	15	15	15	15

A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.

Performance data

Width (excluding bushes) (mm)	Sections	Model LIB 510	Model LIB 660	Model LIB 760	Model LIB 954
		Output (watts Δt 50°C)			
228	3	222	333	363	453
304	4	296	444	484	604
380	5	370	555	605	755
456	6	444	666	726	906
532	7	518	777	847	1057
608	8	592	888	968	1208
684	9	666	999	1089	1359
760	10	740	1110	1210	1510
836	11	814	1221	1331	1661
912	12	888	1332	1452	1812
988	13	962	1443	1573	1963
1064	14	1036	1554	1694	2114
1140	15	1110	1665	1815	2265
1216	16	1184	1776	1936	2416
1292	17	1258	1887	2057	2567
1368	18	1332	1998	2178	2718
1444	19	1406	2109	2299	2869
1520	20	1480	2220	2420	3020
1596	21	1554	2331	2541	3171
1672	22	1628	2442	2662	3322
1748	23	1702	2553	2783	3473
1824	24	1776	2664	2904	3624
1900	25	1850	2775	3025	3775
1976	26	1924	2886	3146	3926
2052	27	1998	2997	3267	4077
2128	28	2072	3108	3388	4228
2204	29	2146	3219	3509	4379
2280	30	2220	3330	3630	4530
2356	31	2294	3441	3751	4681
2432	32	2368	3552	3872	4832
2508	33	2442	3663	3993	4983
2584	34	2516	3774	4114	5134
2660	35	2590	3885	4235	5285
2736	36	2664	3996	4356	5436
2812	37	2738	4107	4477	5587
2888	38	2812	4218	4598	5738
2964	39	2886	4329	4719	5889
3040	40	2960	4440	4840	6040

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.



Blenheim

Overview



Blenheim

Technical

The Blenheim, a traditional 3 column cast iron radiator, can be supplied in a factory primer, a white or black primer ready for on-site painting, or a range of colours and special effects finished by the MHS assembly and finishing plant. The Blenheim radiator has a maximum working pressure of 6 bar (7.8 bar test).

Feet and wall ties are supplied as standard. All radiators are supplied with ½” BSP-f (BBOE) connections, ¾” or 1” connections, while TBOE or TBSE connections are also available (to be specified at time of order). The Blenheim radiator carries a 10-year guarantee against manufacturing defects.

Features

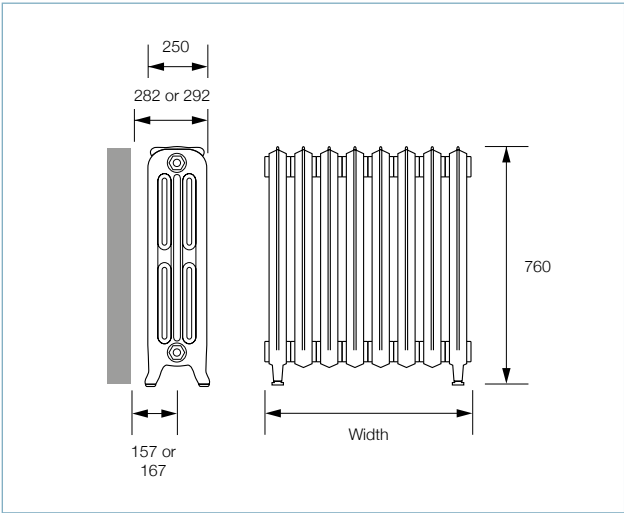
- Types - 3 Column
- Material - Cast iron
- Height - 760mm
- Depth - 250mm
- Maximum Working Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years
- Electric option by special request



760mm high model shown here in Light Old Penny finish with Nostalgia brass thermostatic valves and traditional brass pipe sleeves.



Note - When connecting bottom opposite ends 24mm must be added to 'Length' dimension to allow for the reducing bushes. If connecting top/bottom same end then 12mm must be added to 'Length' dimension plus valves.



Technical data per section

	Scrolled Model BLS 760
Height with foot (mm)	760
Output (watts Δt 50°C)	180
Weight (kg)	12.50
Water content (litres)	3.00
Maximum factory built sections #	15

A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.

Performance data

Width (excluding bushes) (mm)	Sections	Scrolled Model BLS 760
		Output (watts Δt 50°C)
234	3	540
312	4	720
390	5	900
468	6	1080
546	7	1260
624	8	1440
702	9	1620
780	10	1800
858	11	1980
936	12	2160
1014	13	2340
1092	14	2520
1170	15	2700
1248	16	2880
1326	17	3060
1404	18	3240
1482	19	3420
1560	20	3600
1638	21	3780
1716	22	3960
1794	23	4140
1872	24	4320
1950	25	4500
2028	26	4680
2106	27	4860
2184	28	5040
2262	29	5220
2340	30	5400
2418	31	5580
2496	32	5760
2574	33	5940
2652	34	6120
2730	35	6300
2808	36	6480
2886	37	6660
2964	38	6840
3042	39	7020
3120	40	7200

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Burlington Overview



Burlington Technical

The Burlington is a round top scrolled relief cast iron radiator. It can be supplied in a factory primer, a white or black primer ready for on-site painting, or a range of colours and special effects finished by the MHS assembly and finishing plant. The Burlington radiator has a maximum working pressure of 6 bar (7.8 bar test).

Integral feet and wall ties are supplied as standard. All radiators are supplied with ½” BSP-f (BBOE) connections, ¾” or 1” connections, while TBOE or TBSE connections are also available (to be specified at time of order). The Burlington carries a 10-year guarantee against manufacturing defects.

Technical data per section

	Model BUR 838
Height with foot (mm)	838
Output (watts Δt 50°C)	136.1
Weight (kg)	12.20
Water content (litres)	2.90
Maximum factory built sections #	15

A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.

Performance data

Width (excluding bushes) (mm)	Sections	Model BUR 838
		Output (watts Δt 50°C)
228	3	408
304	4	544
380	5	681
456	6	817
532	7	953
608	8	1089
684	9	1225
760	10	1361
836	11	1497
912	12	1633
988	13	1769
1064	14	1905
1140	15	2042
1216	16	2178
1292	17	2314
1368	18	2450
1444	19	2586
1520	20	2722
1596	21	2858
1672	22	2994
1748	23	3130
1824	24	3266
1900	25	3403
1976	26	3539
2052	27	3675
2128	28	3811
2204	29	3947
2280	30	4083
2356	31	4219
2432	32	4355
2508	33	4491
2584	34	4627
2660	35	4764
2736	36	4900
2812	37	5036
2888	38	5172
2964	39	5308
3040	40	5444

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Features

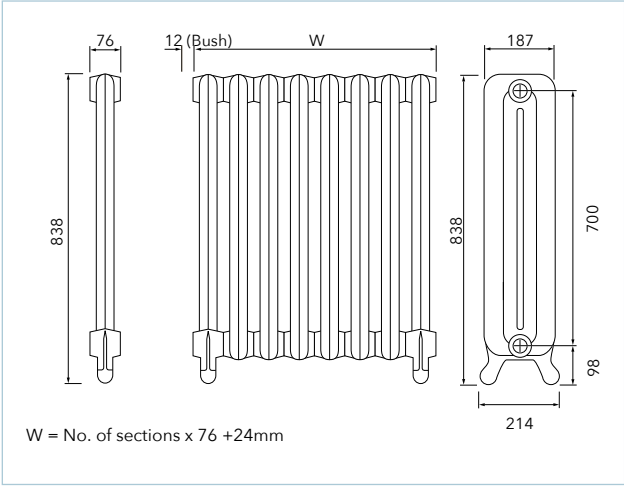
- Types - 2 Column
- Material - Cast iron
- Height - 838mm
- Depth - 214mm
- Maximum Working Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years
- Electric option by special request



Note - When connecting bottom opposite ends 24mm must be added to 'Length' dimension to allow for the reducing bushes. If connecting top/bottom same end then 12mm must be added to 'Length' dimension plus valves.

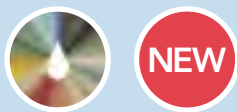


Shown here in Dark Old Penny finish with Chartwell brass thermostatic valves and traditional brass pipe sleeves.



Flora

Overview



The Flora seamlessly blends the enduring qualities of cast iron with intricate organic motifs, delicately entwined in a scroll-like pattern. Its graceful lines and ornate feet exude elegance, making Flora the perfect centrepiece for traditional interiors, refurbished properties and even new builds.

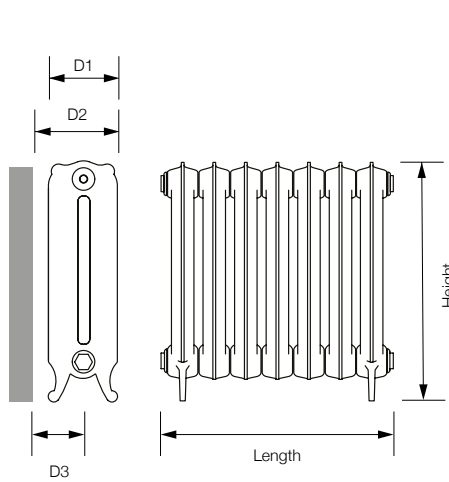
It can be supplied in a white or black primer ready for on-site painting, or a range of colours and special effects finished by the MHS assembly and finishing plant.

Features

- Types - 2 Column
- Material - Cast iron
- Heights - 520-920mm
- Depth - 180mm
- Maximum Working Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years
- Electric option by special request



520mm high model shown here in Antique Gold finish with Chartwell angled TRV brass valves and traditional brass pipe sleeves.



Note - When connecting bottom opposite ends 24mm must be added to 'Length' dimension to allow for the reducing bushes. If connecting top/bottom same end then 12mm must be added to 'Length' dimension plus valves.



All information is per section

Model / Code		FLO520	FLO720	FLO920
Height	(mm) - H1	520	720	920
Depth	(mm) - D1	180	180	180
Depth (Wall To Face)	(mm) - D2	210 or 220	210 or 220	210 or 220
Pipe Centres From Wall	(mm) - D3	120 or 130	120 or 130	120 or 130

Flora

Technical

Technical data per section	Model FLO520	Model FLO720	Model FLO920
Height with foot (mm)	520	720	920
Output (watts Δt 50°C)	86	120	149
Weight (kg)	9.30	11.30	15.00
Water content (litres)	2.57	3.06	4.14
Maximum factory built sections #	15	15	10

A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.

Performance data

Width (excluding bushes) (mm)	Sections	Model FLO520	Model FLO720	Model FLO920
		Output (watts Δt 50°C)		
240	3	258	360	447
320	4	344	480	596
400	5	430	600	745
480	6	516	720	894
560	7	602	840	1043
640	8	688	960	1192
720	9	774	1080	1341
800	10	860	1200	1490
880	11	946	1320	1639
960	12	1032	1440	1788
1040	13	1118	1560	1937
1120	14	1204	1680	2086
1200	15	1290	1800	2235
1280	16	1376	1920	2384
1360	17	1462	2040	2533
1440	18	1548	2160	2682
1520	19	1634	2280	2831
1600	20	1720	2400	2980
1680	21	1806	2520	3129
1760	22	1892	2640	3278
1840	23	1978	2760	3427
1920	24	2064	2880	3576
2000	25	2150	3000	3725
2080	26	2236	3120	3874
2160	27	2322	3240	4023
2240	28	2408	3360	4172
2320	29	2494	3480	4321
2400	30	2580	3600	4470
2480	31	2666	3720	4619
2560	32	2752	3840	4768
2640	33	2838	3960	4917
2720	34	2924	4080	5066
2800	35	3010	4200	5215
2880	36	3096	4320	5364
2960	37	3182	4440	5513
3040	38	3268	4560	5662
3120	39	3354	4680	5811
3200	40	3440	4800	5960

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Space Overview

Space Technical



Features

- Types - Central Heating, Dual Fuel & Electric
- Material - 22mm mild steel tubing
- Finishes - RAL 9016 Traffic White or Chrome
- Heights - 800, 1000, 1200, 1600 & 1800mm
- Widths - 300, 400, 500 & 600mm
- Depths - 85-105mm wall to face
- Outputs - 222-1094 watts
- Maximum Working Pressure - 6 bar (10 bar test)
- Warranty - 5 years

The Space towel rail is made from steel. It is available in either chrome plated or RAL 9016 Traffic White finish and comes complete with wall brackets, plug and air vent. The Space has a 6 bar maximum working pressure (tested to 10 bar), is supplied with 1/2" BSP-f connections and carries a 5 year warranty against manufacturing defects.

Space Dual Fuel models are supplied with an electric element (loose) with two chrome tee pieces to provide symmetrical connections.

Space Electric models are supplied factory filled and tested, with the element fitted to the right hand side, unless otherwise specified.

Electric elements require a 240V single phase connection and carry a 2-year guarantee against manufacturing defects. Electric element options include a standard IP64 element, a Smart IP44 element, an LST IPx5 element or a WiFi IPx5 element.

Space White



Height (mm)	Width (mm)	C1 Centres (mm)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Electric elements			
						Standard (watts)	Smart (watts)	WiFi (watts)	LST (watts)
800	500	455	4.30	3.39	430	350	400	400	300
1200	500	455	6.21	4.95	621	450	600	600	300
1600	500	455	8.13	6.51	821	600	600	600	-
1200	600	555	7.08	5.60	721	600	600	600	400

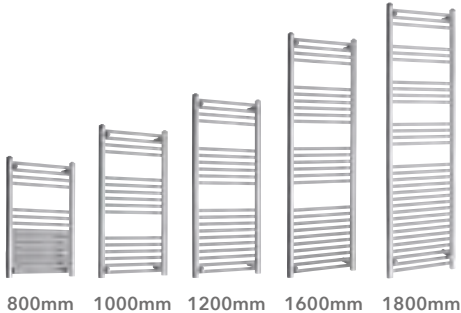
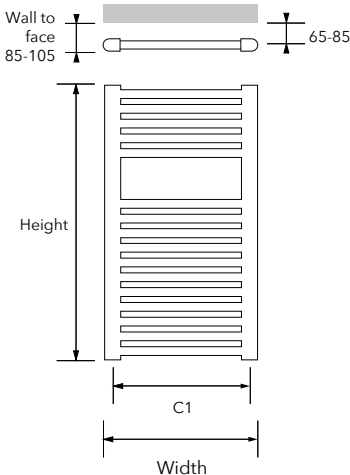
Space Chrome



Height (mm)	Width (mm)	C1 Centres (mm)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Electric elements			
						Standard (watts)	Smart (watts)	WiFi (watts)	LST (watts)
800	300	255	3.09	2.48	222	150	200	200	100
1000	300	255	3.69	2.99	264	250	200	200	200
1200	300	255	4.48	3.64	322	250	300	300	200
1600	300	255	5.88	4.81	425	350	400	400	-
800	400	355	3.69	2.93	255	250	200	200	300
1000	400	355	4.38	3.51	304	250	300	300	300
1200	400	355	5.35	4.30	370	250	300	300	300
1600	400	355	7.00	5.66	489	350	400	400	-
800	500	455	4.30	3.39	302	250	300	300	300
1000	500	455	5.07	4.03	357	250	300	300	300
1200	500	455	6.21	4.95	436	350	400	400	300
1600	500	455	8.13	6.51	576	450	600	600	-
1800	500	455	9.45	7.56	662	600	600	600	-
800	600	555	4.91	3.85	350	250	300	300	300
1000	600	555	5.76	4.56	413	350	400	400	300
1200	600	555	7.08	5.60	506	450	600	600	400
1600	600	555	9.25	7.36	668	600	600	600	-
1800	600	555	10.80	8.57	768	600	600	600	-

For Δt 30°C, apply a correction factor of 0.515.
For other operating temperatures, refer to page 131.

Visit www.mhsradiators.co.uk for full details

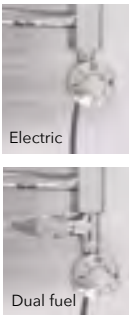


Standard element

The Standard IP64 rated element.
These elements are also available/sold separately if required.

MHS Smart timer thermostatic element

The MHS thermostatically adjustable control is available in chrome. Modes of comfort: Boost, Standby/ Antifreeze, Timer 12, Timer 24. MHS Smart Control is compliant with the Eco-Design directive for energy using products 2005/32/EC.



LST element

The LST IPx5 element is available in Chrome as standard and White on request. It uses an electronic sensor to maintain a constant temperature of 43°C. The LST element features a 2 hour timer function and an antifreeze function.

WiFi element

The remotely controlled WiFi element offers 5 room temperature settings from 15 to 28°C, a convenient dryer function and a 7-day schedule. The device can be controlled through a free Android/iOS app.

Nina

Overview

Nina

Technical



A simple design, complemented by discreet brackets, ensure this towel rail is a great addition to any bathroom. Available in 80 finishes, there is a Nina towel rail for any bathroom style, with the most popular finishes available from stock.



Sparkling Grey finish.



Matt Black finish.



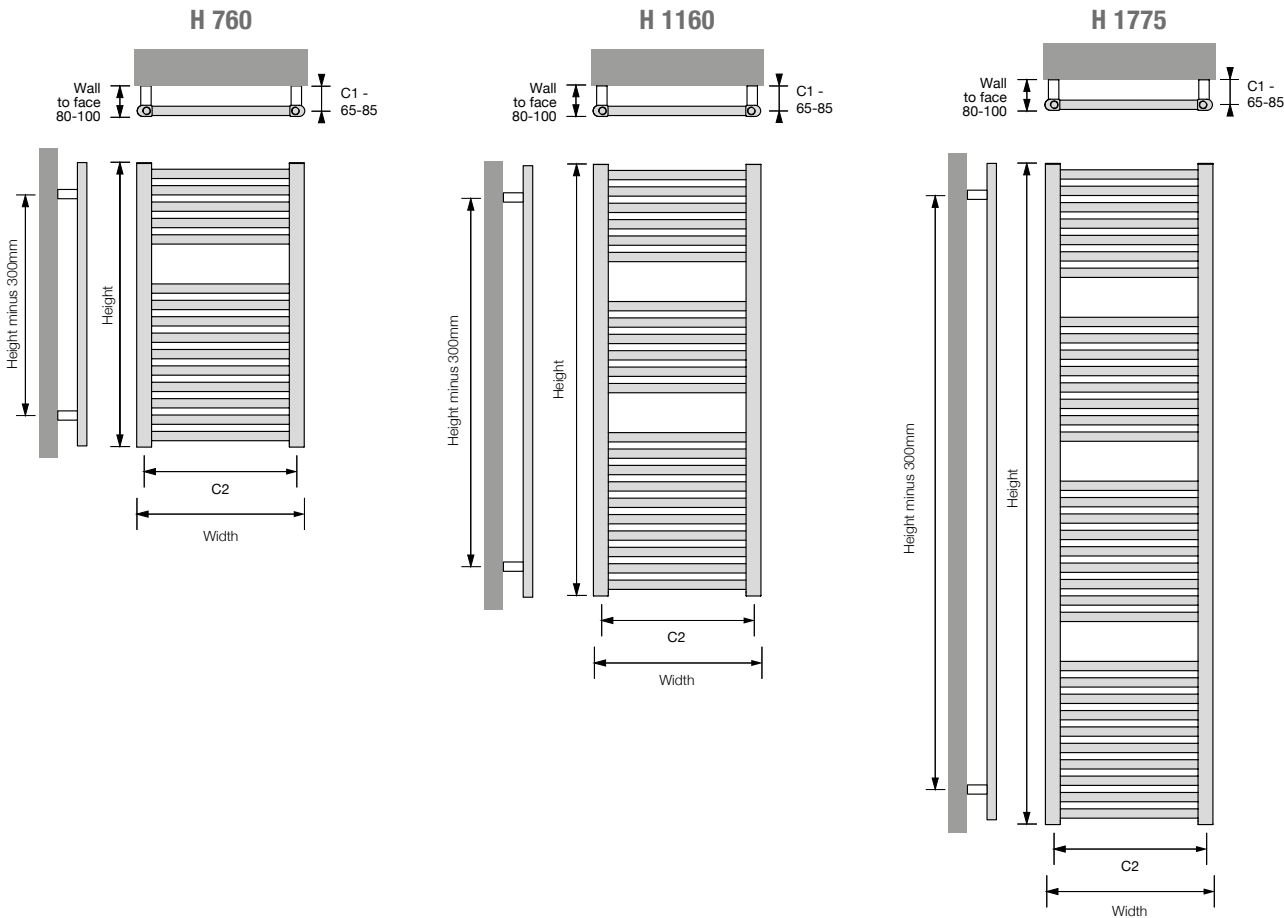
Shown here in Denim Blue with Radius corner manual antique copper valves and pipe sleeves



Shown here in Quartz Dust finish with Radius chrome manual corner valves.

Height (mm)	Width (mm)	C2 Centres (mm)	Weight (kg)	Water content (litres)	White & Colours	Chrome	White & Colours	Chrome
					Output (watts Δt 50°C)		Smart Electric Element (watts)	
760	400	350	5.10	3.40	317	181	300	100
760	500	450	6.00	4.00	379	254	300	200
760	600	550	6.90	4.60	441	296	400	200
1160	400	350	7.60	5.10	449	289	400	200
1160	500	450	8.90	6.00	539	362	400	300
1160	600	550	10.20	6.90	630	426	600	400
1775	500	450	13.60	9.20	832	553	800	400
1775	600	550	15.60	10.60	974	649	800	600

For Δt 30°C, apply a correction factor of 0.515. For other operating temperatures, refer to page 131.



Features

- Types - Central Heating, Dual Fuel & Electric
- Material - 22mm mild steel tubing
- Finishes - White, Colours & Chrome
- Heights - 760, 1160 & 1175mm
- Widths - 400, 500 & 600mm
- Outputs - 317-974 watts
- Maximum Working Pressure - 6 bar (10 bar test)
- Warranty - 5 years

Lara

Overview

Manufactured in Italy, Lara is available in a variety of finishes, including Polished and Satin, as well as exclusive Antique Brass and Antique Copper, which are achieved by using a specialised electro-chemical process. To complete the minimalistic look, a range of complementary accessories are also available for all installation types.

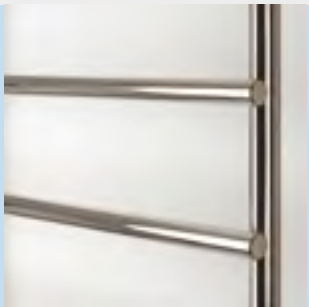
Features

- Types - Central Heating, Dual Fuel & Electric
- Stainless steel ø25mm horizontal tubes, fixed to ø30mm headers
- Variety of finishes
- Heights - 420, 600, 740, 1020, 1300 & 1580mm
- Width - 530mm
- Outputs - 112-383 watts
- Warranty - 10 years (2 years on electrical components)



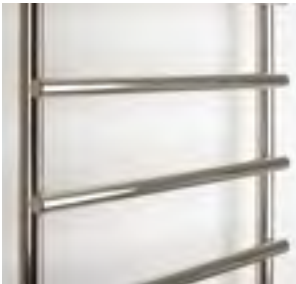
Lara

Technical



Height (mm)	Width (mm)	C1 Centres (mm)	C2 Centres (mm)	Weight (kg)	Water content (litres)	Polished	Satin	Antique Brass	Antique Copper	Standard Electric Element (watts)
						Output (watts Δt 50°C)				
420	530	64 - 76	500	2.57	1.32	112	121	-	-	150
600				3.36	1.74	146	158	-	-	150
740				4.03	2.11	173	187	173	173	150
1020				5.41	2.86	228	247	228	228	250
1300				6.80	3.60	288	312	288	288	250
1580				8.18	4.34	354	383	-	-	350

For Δt 30°C, apply a correction factor of 0.515. For other operating temperatures, refer to page 131.



Polished



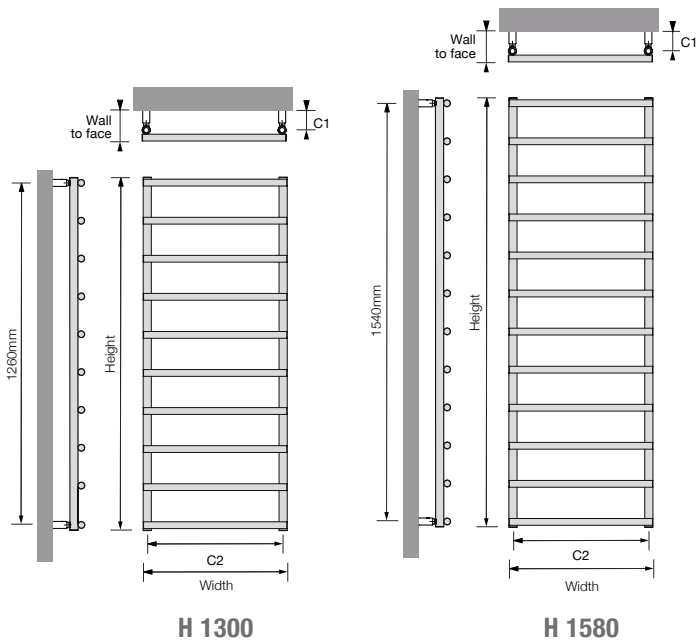
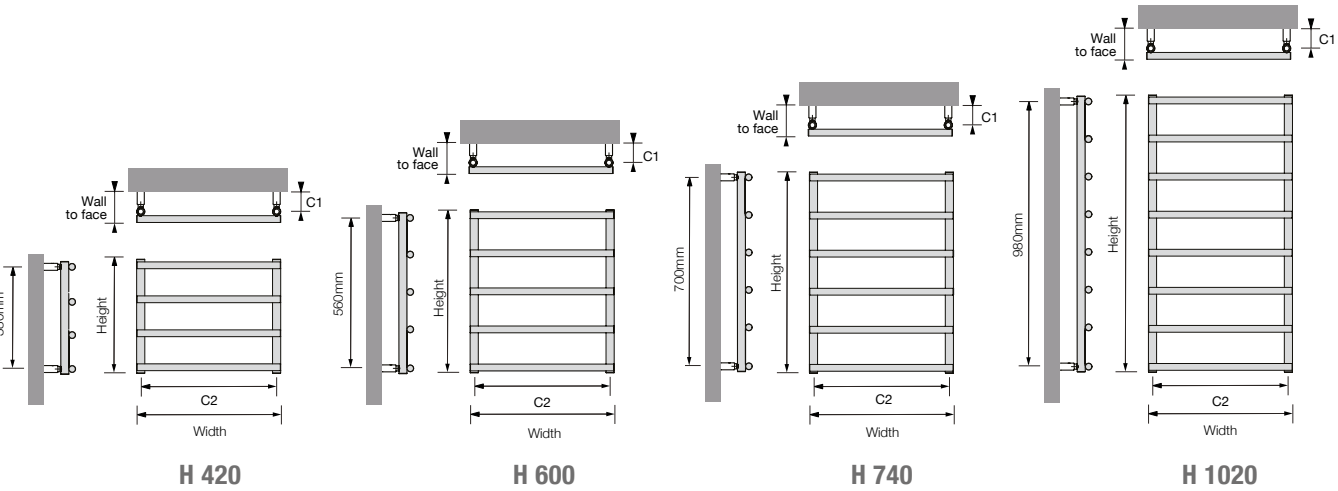
Satin



Antique Brass



Antique Copper



Visit www.mhsradiators.co.uk for full details

Louisa®

Overview



Louisa®

Technical

An elegant steel towel warmer with horizontal tubes, the Louisa is the perfect fusion of form and fashion. Boasting a distinct personality while providing exceptional levels of warmth, this emitter has a large surface area suitable for an array of applications and heating systems.

Features

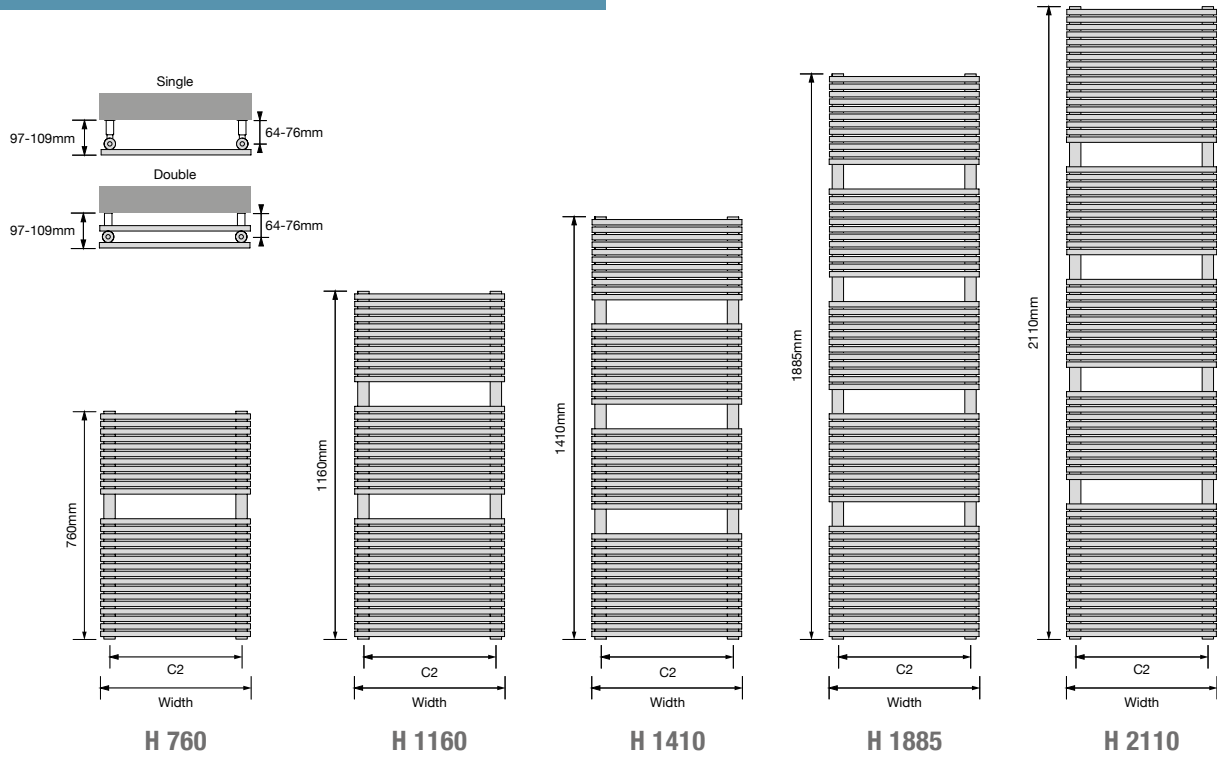
- Types - Central Heating, Dual Fuel & Electric
- Steel ø18mm horizontal tubes, fixed to ø30mm headers
- A choice of 80 finishes
- Single or Double models
- Heights - 760, 1160, 1410, 1885 & 2110mm
- Widths - 430, 480, 530 & 580mm
- Outputs - 436-2042 watts
- Warranty - 5 years (2 years on electrical components)



Single



Double

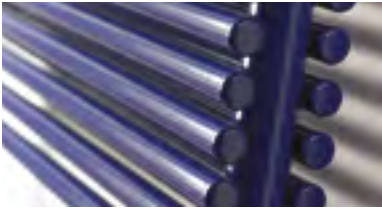


	Height (mm)	Width (mm)	C2 Centres (mm)	Weight (kg)	Water content (litres)	Output (watts Δt 50°C)	Smart Electric Element (watts)
Single	760	430	400	6.7	2.9	436	400
	760	480	450	8.0	3.3	489	400
	1160	430	400	11.0	4.6	631	600
	1160	480	450	12.0	4.9	705	600
	1160	530	500	13.0	5.3	779	600
	1160	580	550	13.9	5.7	852	800
	1410	430	400	13.0	5.4	753	600
	1410	480	450	14.2	5.9	838	800
	1410	530	500	15.3	6.2	923	800
	1410	580	550	16.5	6.4	1008	800
	1885	430	400	17.5	7.3	986	800
	1885	480	450	19.1	7.9	1090	800
	1885	530	500	20.5	8.5	1194	800
	1885	580	550	22.2	9.1	1298	800
	2110	530	500	23.4	9.7	1322	800
Double	2110	580	550	25.2	10.3	1438	800
	2110	730	700	30.7	12.5	1768	800
	760	430	400	12.7	5.1	565	600
	760	480	450	14.0	5.6	711	600
	1160	430	400	19.5	7.9	821	800
	1160	480	450	21.5	8.7	1018	800
	1160	530	500	23.5	9.4	1215	800
	1160	580	550	25.3	10.2	1609	800
	1410	430	400	23.0	9.4	957	800
	1410	480	450	25.4	10.2	1183	800
	1410	530	500	27.2	11.3	1421	800
	1410	580	550	30.2	12.0	1897	800
	1885	430	400	31.0	12.5	1268	800
	1885	480	450	34.0	13.7	1565	800
	1885	530	500	37.2	14.9	1861	800
	1885	580	550	40.3	16.1	2042	800

For Δt 30°C, apply a correction factor of 0.515. For other operating temperatures, refer to page 131.



Single



Double

Decoral® Electric WiFi Overview



The lightweight Decoral Electric Wifi radiator is ideal for a range of properties, especially modern apartments. This exceptional radiator can be managed remotely via a smartphone app or with the onboard controls for daily/ weekly programming and start-up adaptive control. Other features include an open window detection function, consumption display, and built-in back-lit LCD interface.

Features

- Manageable remotely via Android & Apple smartphones
- Aluminium alloy body - quickly reaches the desired temperature
- Daily and weekly programming with start-up adaptive control
- Open window detection function
- Consumption display
- Built-in back-lit LCD interface
- NTC temperature probe and electronic temperature regulation
- Outputs - 750-1800 watts
- Colour: RAL 9010 Warm White
- Warranty - 10 years (2 years on electrical components)



Domus One App

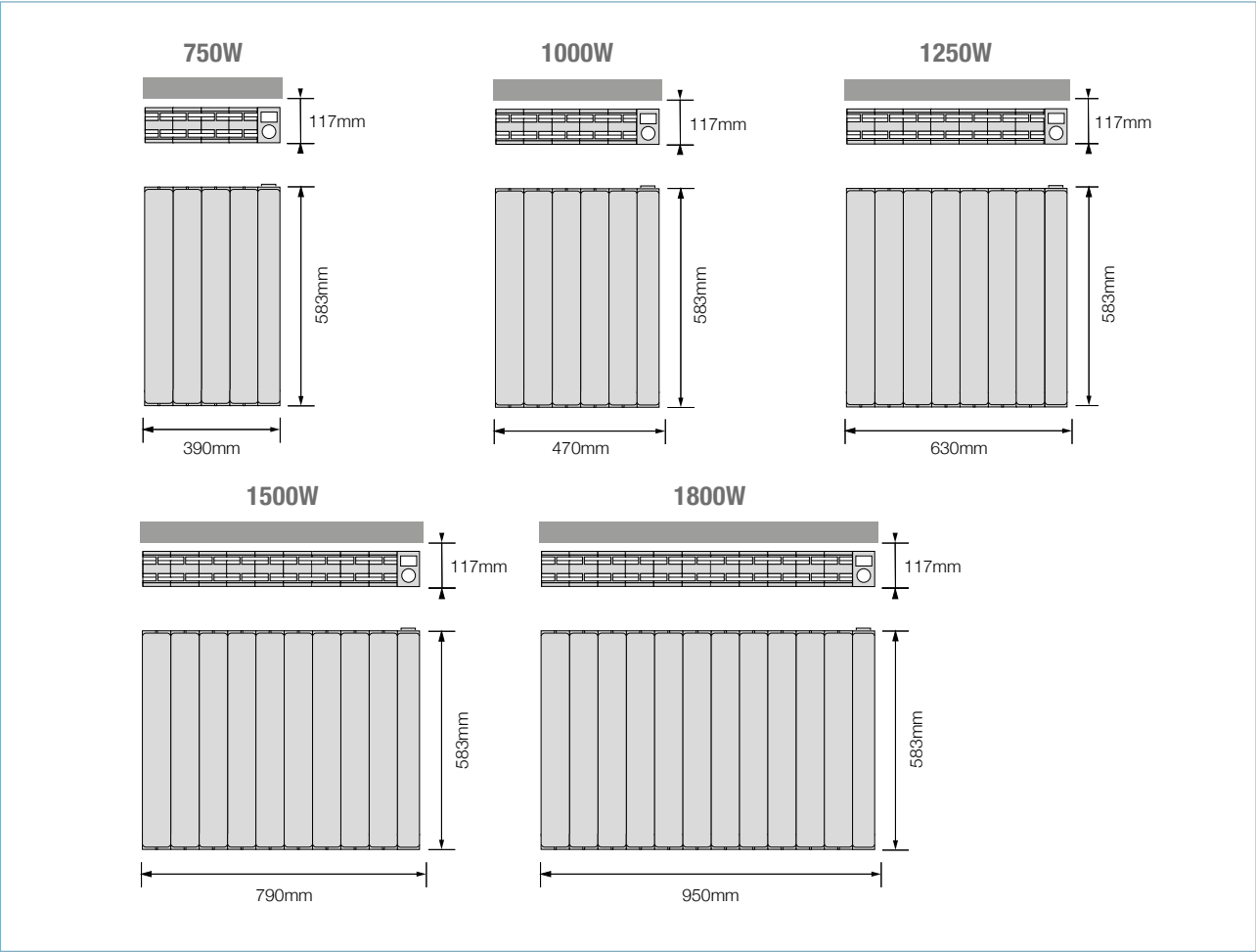
- Set the temperatures of each operating mode
- Set a weekly schedule for each thermostat
- Turn on and off all functions of each thermostat
- Conveniently organise your thermostats into groups
- Monitor the performance of your heating system





Decoral® Electric WiFi Technical

Width (mm)	Sections	Height (mm)	Depth (mm)	Wall to face (mm)	Weight (kg)	Output (watts)
390	4 + control unit	583	80	117	8.0	750
470	5 + control unit				9.9	1000
630	7 + control unit				13.7	1250
790	9 + control unit				17.1	1500
950	11 + control unit				19.7	1800



Multisec Electric Overview



The Multisec Electric is a steel multi-column electric radiator available in eight sizes with outputs from 400 to 2000 watts. As standard, the radiator is supplied in RAL9016 and can be complemented by optional slip-on feet. All models are supplied with a five-year radiator warranty and a two-year warranty on the electrical components.

Features

- Steel multi-column electric radiator
- 600mm height
- 3 column depth
- Outputs - 400-2000 watts
- Supplied in RAL 9016 as standard
- Optional slip-on feet
- Optional remote control
- Warranty - 5 years
(2 years on electrical components)



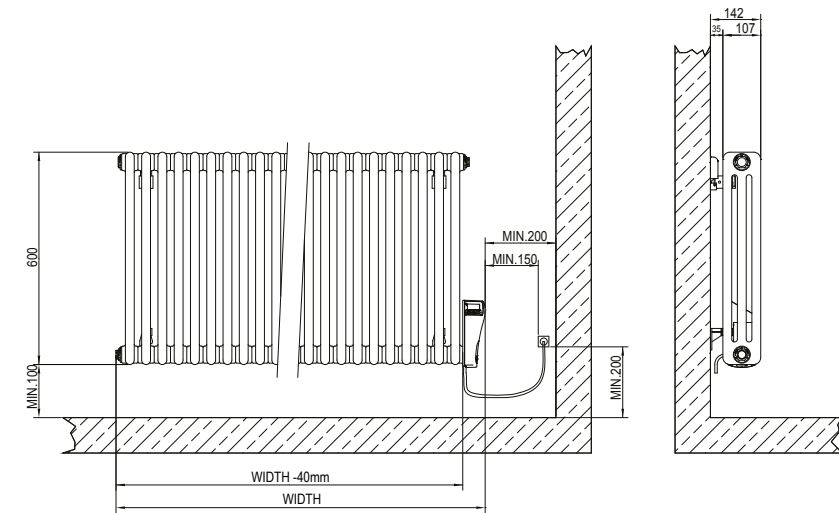
Infrared remote control



Multisec Electric Technical

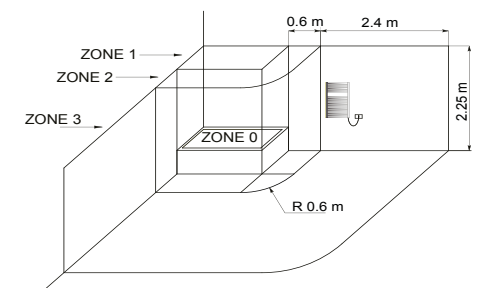


Width (mm)	Sections	Height (mm)	Columns	Weight (kg)	Output (watts)
378	7	600	3	16	400
424	8			18	500
608	12			27	750
654	13			30	900
746	15			34	1000
838	17			39	1200
1022	21			48	1500
1160	24			55	2000



How to place electric radiators

The national rules on installing electrical equipment in the bathroom must be respected. The electric radiators must be always installed outside zone 1 and 2. In particular the electric switch and control elements must be mandatorily located in zone 3, in order that no electrical control center is accessible to anyone using the shower or bath.



Dynamic Valves

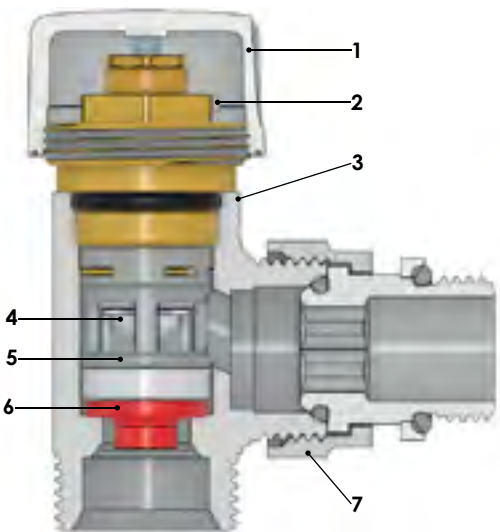


Dynamic Valves

Pressure Independent Thermostatic radiator valves

Traditionally, radiator flow rates are set manually when balancing a heating system. MHS Dynamic valves allow the installer to set the correct peak design flow rate directly on the radiator valve with a special regulation key.

The volume flow is kept constant even if the differential pressure in the system fluctuates. If, for example, the flow rate were to increase due to other thermostatic valves closing, the cartridge membrane will reduce the opening surface so that the flow rate is automatically limited to a preset value. Likewise, if the flow rate were to decrease below the preset value, the cartridge membrane will increase the opening surface and the flow rate will return to the preset value.



Advantages of MHS Dynamic Valves

- Easy to use, pre-settable flow rates allowing faster commissioning
- Automatic, hydronic balancing during all load conditions
- Control of return temperatures
- Aesthetically pleasing

1	Protection cap
2	Indicator ring
3	Valve body
4	EPDM stopper
5	Setting sleeves
6	EPDM controlled-deformation balancing membrane
7	Brass tail piece with EPDM self-seal

Calculating radiator flow rates

Radiator flow rate = $\frac{\text{Required heat output (watts)}}{\Delta t \text{ across radiator} \times 1.16}$ = flow rate (l/h)

Example
Required output: 600 watts
Operating temperatures: 55-35-20

Radiator flow rate = $\frac{600}{20 \times 1.16}$ = 25.86 l/h

Therefore, use pre-setting position 3.

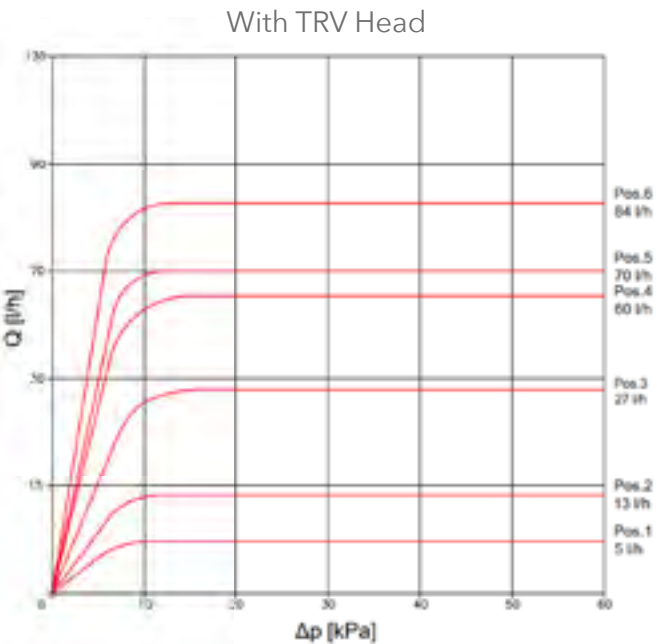
Adjusting pre-setting



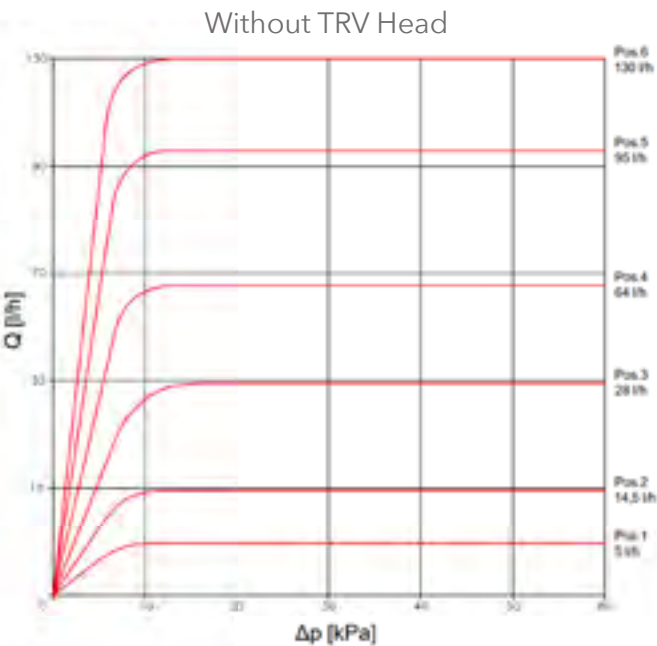
Dynamic - Pressure Drop

The diagrams show the pressure drop values of the valve in the different pre-settings. The corresponding Kv values are reported for each of them.

Pre-setting (N)	Kv (m³/h)
1	0.02
2	0.04
3	0.10
4	0.19
5	0.21
6	0.25



Pre-setting (N)	Kv (m³/h)
1	0.02
2	0.05
3	0.09
4	0.20
5	0.30
6	0.41





Dynamic Valves

Dynamic Valves

Dynamic Angled
Nickel Plated

Dynamic Angled TRV 15mm



Dynamic Angled TRV 1/2" BSP



Dynamic Straight
Nickel Plated

Dynamic Straight TRV 15mm



Dynamic Straight TRV 1/2" BSP



Dynamic Reverse Angled
Nickel Plated

Dynamic Reverse Angled TRV 15mm



Dynamic Reverse Angled TRV 1/2" BSP



TRV Heads

Anti-tamper plastic TRV head A421



Lockable plastic TRV head (White) A49500A



Lockable plastic TRV head (Chrome) A49500B



To be ordered separately to valve body & lockshield

Non-thermostatic hand wheel

Plastic hand wheel (White) A57915A



Plastic hand wheel (Chrome) A57915B



To be ordered separately to valve body & lockshield

Dynamic Angled
Chrome

Dynamic Angled Chrome TRV 15mm



Also available with 1/2" BSP connections

Dynamic Straight
Chrome

Dynamic Straight Chrome TRV 15mm



Also available with 1/2" BSP connections

Dynamic Reverse Angled
Chrome

Dynamic Reverse Angled Chrome TRV 15mm



Also available with 1/2" BSP connections

TRV Heads

Lockable plastic TRV head A49500



Brass TRV head A409



To be ordered separately to valve body & lockshield

Non-thermostatic hand wheel

Plastic hand wheel A574



To be ordered separately to valve body & lockshield

Finishes

All products on this page are available in these finishes.

Satin (B)	Chrome (P)	Antique Copper (AAC)	Antique Brass (AAB)	Black (BL)	White (W)
					

Valves

Combining high quality engineering with a sleek and elegant style, these beautifully smooth valves provide the perfect finishing touch to any radiator. Available in an array of stunning finishes, with a choice of angled, corner or straight versions, Radius valves offer superior heating control while complementing and enhancing a radiator's design.

Radius angled manual



Also available with 1/2" BSP connections

Radius angled TRV



Also available with 1/2" BSP connections

Valves

Radius corner manual



Also available with 1/2" BSP connections

Radius corner TRV



Also available with 1/2" BSP connections

Valves

Valves

Radius straight manual



Radius chrome straight manual 15mm

Radius satin straight manual 15mm

Radius black straight manual 15mm

Also available with 1/2" BSP connections

Radius straight TRV



Radius chrome straight TRV 15mm

Radius black straight TRV 15mm

Radius satin straight TRV 15mm

Also available with 1/2" & 3/4" BSP connections

Chartwell manual angled



Chartwell black nickel angled manual 15mm

Chartwell brass angled manual 15mm

Chartwell anthracite angled manual 15mm

Also available with 1/2" & 3/4" BSP connections

Chartwell angled TRV



Chartwell black nickel TRV angled 15mm

Chartwell brass TRV angled 15mm

Chartwell anthracite TRV angled 15mm

Also available with 1/2" & 3/4" BSP connections

Valves

Valves

Nostalgia Manual



Manual angled brass valves



Manual angled anthracite valves

Also available with 1/2" & 3/4" BSP connections

Kentwell angled manual

Kentwell black nickel angled manual 15mm



Kentwell satin angled manual 15mm



Kentwell antique copper angled manual 15mm



Kentwell antique brass angled manual 15mm



Kentwell chrome angled manual 15mm



Kentwell polished brass angled manual 15mm



Also available with 1/2" & 3/4" BSP connections

Nostalgia TRV



TRV angled brass valves



TRV angled anthracite valves

Also available with 1/2" & 3/4" BSP connections

Kentwell corner manual

Kentwell polished brass corner manual 15mm



Kentwell chrome corner manual 15mm



Kentwell corner TRV

Kentwell polished brass corner TRV 15mm



Kentwell chrome corner TRV 15mm



Valves

Valves

Kentwell angled TRV



Also available with 1/2" & 3/4" BSP connections

Stratford Corner, Double Angle Valves

This dynamic corner/double angle valve set is the perfect solution to tidy pipework for your towel rails.

Stratford Corner, Double Angle TRV (chrome head)



Studio Valves

The dynamic Studio Valve represents unrivalled aesthetics and value, combining gleaming futuristic sophistication and engineered precision.



Also available as a straight valve



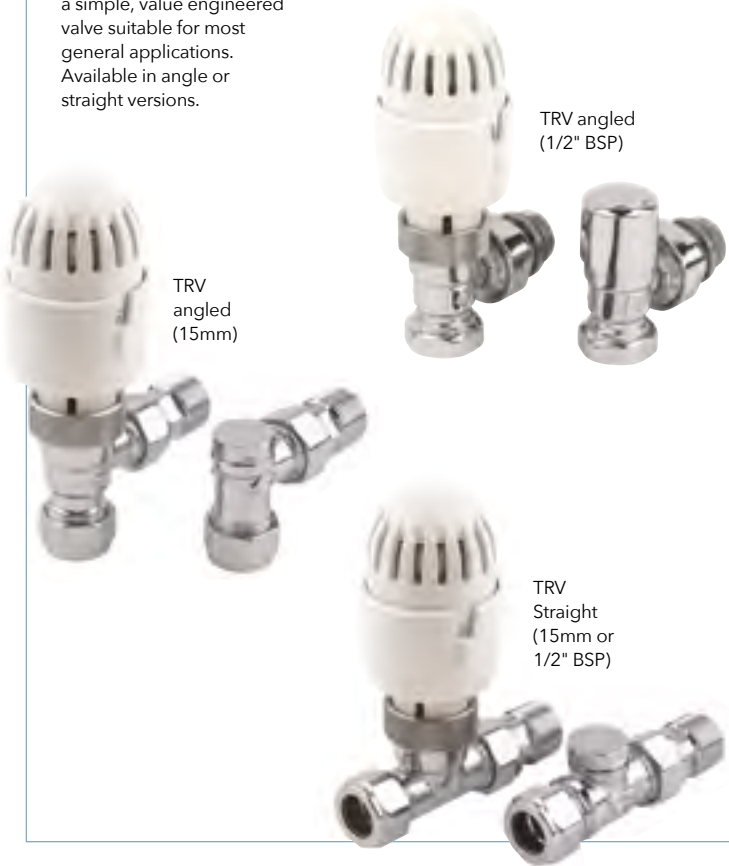
Studio angled TRV (15mm)



Studio angled TRV (1/2" BSP)

Sterling Valve

The Sterling contract TRV is a simple, value engineered valve suitable for most general applications. Available in angle or straight versions.



TRV angled (15mm)

TRV angled (1/2" BSP)

TRV Straight (15mm or 1/2" BSP)

Valves

Valves

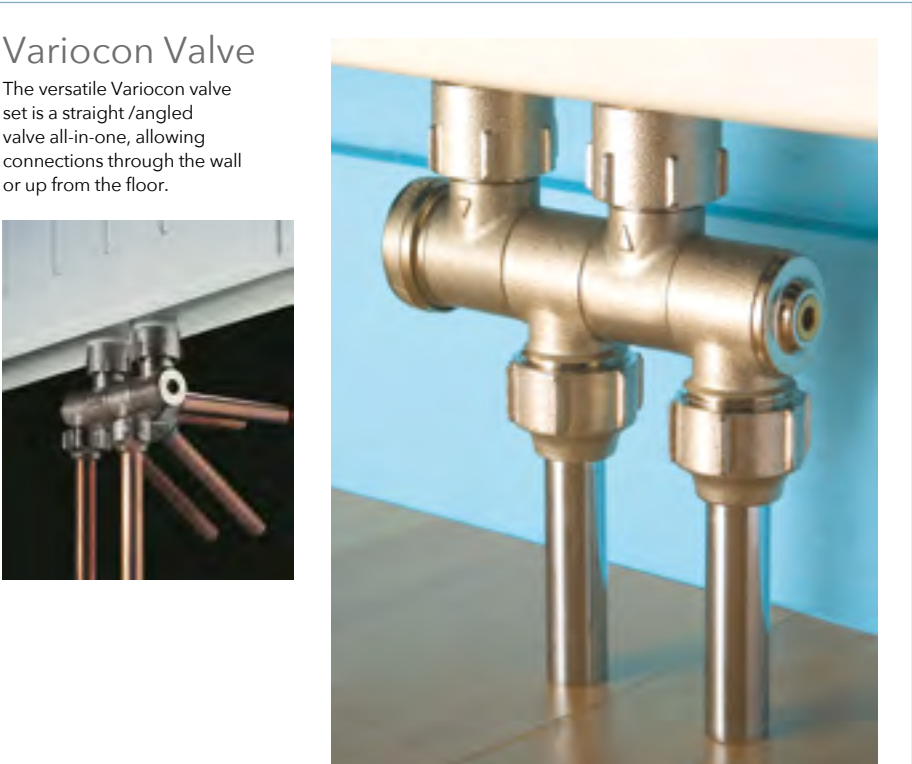
Twin Valve

The Twin Valve represents unrivalled aesthetics with gleaming futuristic sophistication and engineered precision. Connection centres = 50mm.



Variocon Valve

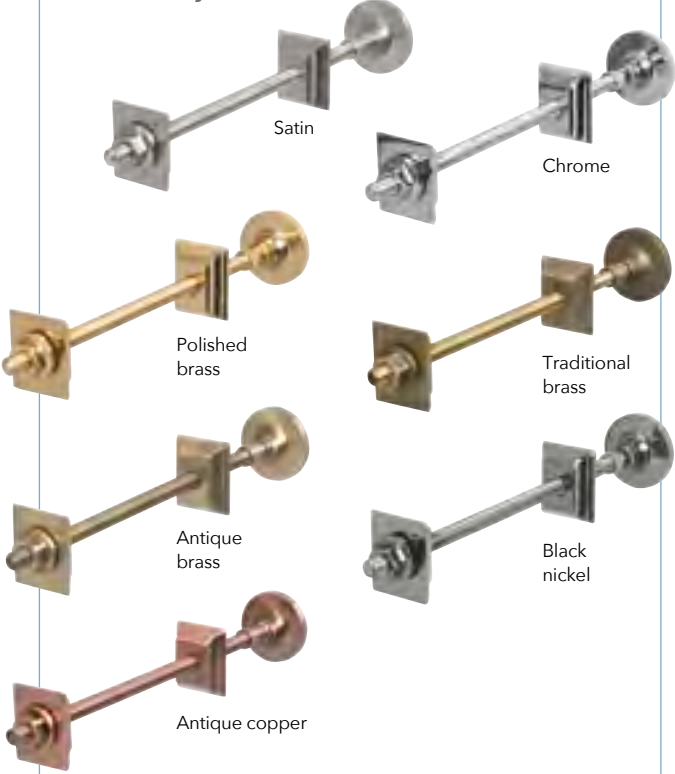
The versatile Variocon valve set is a straight /angled valve all-in-one, allowing connections through the wall or up from the floor.



Sleeving kits



Wall stays



Air vents



Valves

Valves & Correction factor tables

PowerKon External Valves

PowerKon External TRV Valve Set
(Code: PKVLV-EXT)
PowerKon Pressure Independent External TRV Valve Set
(Code: PKVLV-EXTPI)



PowerKon Inbuilt Valves

PowerKon Inbuilt TRV Valve Set
(Code: PKVLV-IB)
PowerKon Pressure Independent Inbuilt TRV Valve Set
(Code: PKVLV-IBPI)



PowerKon Internal Valves

PowerKon Internal TRV Valve Set
(Code: PKVLV-INT)
PowerKon Pressure Independent Internal TRV Valve Set
(Code: PKVLV-INTPI)



Secureguard Internal Valve Kit

(Code: SG-VALVE KIT-INT)
The Secureguard Internal valve kit is an internal control and comprises of 1/2" angle pattern presettable valve body, remote sensing phial and TRV head, plus a 1/2" angle lockshield on the return connection.



Secureguard External Valve Kit

(Code: SG-VALVE KIT-EXT)
The Secureguard External valve kit is an external control and comprises of 1/2" angle pattern presettable valve body, remote sensing phial and TRV head, plus a 1/2" lockshield valve on the return connection. The kit also includes a unique, slim-fitting anti-ligature shroud, dial and fixings.



Note: The external valve kit must be ordered at the same time as the casings, with handing of the TRV specified.

Correction factor table

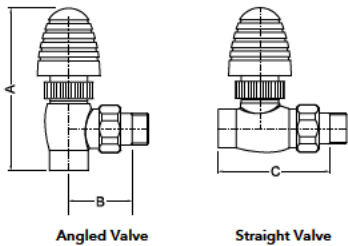
The outputs shown within this brochure are based on BS EN442. BS EN442 specifies that all outputs must be stated at ΔT 50°C, which is based on 75-65-20°C operating conditions. The ΔT is calculated by taking the mean water temperature and deducting the ambient air temperature. For example, a typical air-source heat pump system will have flow temperatures of 45°C and return temperatures of 40°C. With an ambient air temperature of 20°C, this means the system is operating at ΔT 22.5°C. To calculate the output of a radiator at operating conditions other than ΔT 50°C, multiply the listed output by the correction factors shown in the table on the right.

ΔT	CORRECTION FACTOR	ΔT	CORRECTION FACTOR
60	1.267	41	0.773
59	1.240	40	0.748
58	1.213	39	0.724
57	1.186	38	0.700
56	1.159	37	0.676
55.5	1.145	36	0.652
55	1.132	35	0.629
54	1.105	34	0.606
53	1.079	33	0.583
52	1.052	32	0.560
51	1.026	31	0.537
50	1.000	30	0.515
49	0.974	29	0.493
48	0.948	28	0.471
47	0.923	27	0.449
46	0.897	26	0.427
45	0.872	25	0.406
44	0.847	24	0.385
43	0.822	23	0.364
42	0.797	22.5	0.354

Typical valve dimensions The following notation has been used for dimensions:

Valves	A	B	C
Chartwell	Chartwell Angle Manual	107	44
	Chartwell Angle TRV	139	44
	Chartwell 1/2" BSP Angle	93	53
	Chartwell 3/4" BSP Angle	95	53
Kentwell	Angled/Corner Manual	100	46
	Angled/Corner TRV	110	46
	Angled Manual	107	53
	Angled TRV	139	53
Nostalgia	1/2" BSP Angled Manual	93	53
	3/4" BSP Angled Manual	95	53
	1/2" BSP Angled TRV	125	53
	3/4" BSP Angled TRV	127	53
Radius	Angled Manual	77	41
	Straight Manual/TRV	-	67
	Angled TRV	126	41
	Corner Manual	54	41
Sterling	Corner TRV	110	41
	Angled TRV	120	48

Valves	A	B	C
Sterling	Straight TRV	-	77
	1/2" BSP Angled TRV	120	48
	1/2" BSP Straight TRV	-	77
Stratford Corner	Corner TRV	110	41
	Angled Manual	60	40
	Straight Manual	-	77
Studio	Angled TRV	130	40
	1/2" BSP Angled TRV	130	40
	Angled TRV	68	42
	1/2" BSP Angled TRV	68	40
Dynamic (excluding TRV Head)	Straight TRV	-	70
	1/2" BSP Straight TRV	-	70
	Reverse Angled TRV	89	43
	1/2" BSP Reverse Angled TRV	89	43



Important Note: All dimensions are given in good faith however it is always advisable to await delivery of your radiator and valves before setting the pipework in its final positions. MHS cannot accept any liability for pre delivery installed pipework not matching up with the final item.

All MHS valves are suitable for connection to 15mm copper pipe only (except where stated)

Water treatment: These products are for use on closed heating systems only; they are not suitable for installation on secondary HWS circuits. On completion of the installation the entire system must be thoroughly cleaned and flushed to remove debris/flus residues etc. If a chemical cleaner is used, it must be thoroughly flushed from the system.

Following this, the system must be dosed with a good eminence water treatment to prevent corrosion. System design, flushing and dosing must be in accordance with BS 7593: 2019 and BS EN 12828: 2012.

Alternatively, the system should be compliant with the criteria defined in VDI 2035.

IMPORTANT: Failure to observe these requirements will render the guarantee on the product void.



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