



# VIENNALINE Compact.



## General Specifications

### Approval and Certification

**VOGEL&NOOT** offers strong products that meet the highest quality standards during manufacture and operation. All information on the quality and performance of **VOGEL&NOOT** panel radiators is verified and confirmed by recognised European institutions on an ongoing basis, thereby guaranteeing the highest level of heating performance and optimum product quality.



When used in systems designed and installed in accordance with the good practice recommendations given in the 'Application' section, the **VOGEL&NOOT VIENNALINE Compact** range carries a ten year guarantee from date of purchase against defects caused by faulty materials or manufacture. However, failure to pay attention to these recommendations (in new or existing systems) may invalidate the manufacturer's warranty.

### Material and Paint Finish

Every **VIENNALINE Compact** radiator is subjected to a thorough painting process involving degreasing, phosphating and primer coating (stoved) prior to the final finishing coat of white semi-gloss epoxy paint, which is cured at 210°C. Colour options are available, see pages 36 & 37, for a small extra charge and with a 6-8 week delivery lead time. This means that **VIENNALINE Compact** radiators can be installed without further painting, although if desired (e.g. colour change), overpainting can be carried out using a good quality, oil-based gloss paint. Additionally, white touch-up paint is available.

**VIENNALINE Compact** radiators are made of cold-rolled sheet steel, and in accordance with EN 442-1, with stylish and robust waterways at 40 mm intervals.

### Packaging

All our radiators are individually wrapped in heavy duty polythene shrink-wrapping and are clearly marked externally with type and size. The radiator panels are also wrapped in cardboard and all corners are further protected with preformed caps.

The packaging is designed to enable full fitting and assembly of radiators into the heating system, without removal of the protective packaging - a real plus point for new building installations. Radiators left protected in this way can be filled and run up to 40°C during initial cleaning and commissioning of the heating system.

### Fixings

All **VIENNALINE Compact** radiators are supplied with concealed wall mounting brackets. The table of dimensions on page 8 gives further details.

For the correct installation of radiators it is essential that the fixing of the radiator is carried out in such a way that it is suitable for intended use AND predictable misuse. A number of elements

need to be taken into consideration including the fixing method used to secure the radiator to the wall, the type and condition of the wall itself, and any additional potential forces or weights that may happen to be applied to the radiator, prior to finalising installation. **IN ALL CASES IT IS STRONGLY RECOMMENDED THAT A SUITABLY QUALIFIED PROFESSIONAL INSTALLER OR SIMILAR TRADESPERSON CARRIES OUT THE INSTALLATION.**

PLEASE NOTE: The fixing materials provided are only intended for installation on walls made of solid wood, bricks, concrete or on timber-frame stud walls where the fixing is into the timber. All walls being considered should have no more than a maximum of 3mm wall finishing. For walls made of other materials, for example hollow bricks, please consult your installer and/or specialist supplier. **ONCE AGAIN, IF YOU ARE UNSURE, IT IS STRONGLY RECOMMENDED THAT A SUITABLY QUALIFIED PROFESSIONAL INSTALLER OR SIMILAR TRADESPERSON CARRIES OUT THE INSTALLATION.**

Each radiator is supplied complete with wall fixing brackets, blanking plug, air vent plug and vent key.

### Connections

All **VIENNALINE Compact** radiators are fitted with 4 x 1/2" BSP connections.

### Operating Pressures

Every **VIENNALINE Compact** radiator is tested to a pressure of 13 bar (189 psi) and is suitable for a working pressure of up to 10 bar (145 psi).

### Application

**VIENNALINE Compact** radiators are for use in indirect or closed circuit heating systems only, which have been properly designed and installed in accordance with the recommendations of BS EN 12828:2003 or BS EN 12831:2003. In open-vented systems, special attention should be paid to the correct location of the pump in relation to the cold feed and vent pipe connections, to avoid ingress of air or water discharge through the open vent.

All installation work should be carried out in accordance with recognised good practice to ensure long life. In particular, careful attention should be paid to the following:

- Soldered joints should be made with a minimum amount of solder and flux. Choose a flux which is readily soluble in water.
- Copper pipes should be cut and cleaned in such a way as to avoid small copper particles being left in the system (this can lead to electrolytic action and eventual corrosion in the radiator).
- Corrosion inhibitors should be used strictly in accordance with the manufacturer's instructions.

Individual installation instructions are supplied in each radiator package.

### Safety Precautions

Radiators are hot when in use, and as such, present a risk of burns to users on prolonged contact. The temperature of a radiator is dependent on the temperature of the system water, as set by the system installer or user. Installers and users should ensure that those who may come into close proximity to hot radiators are aware of the risk of burns. Installers and users should take all necessary steps to minimise the risks of burns. If the risk is significant, consideration should be given to installing low surface temperature radiators, or to placing guards in front of the radiators.

General Specifications (continued...)

Distinguished by the ECO seal of quality



The panel radiators from **VOGEL&NOOT** bear the ECO seal of quality, which stands for all-round compatibility with all (renewable) energy sources. It guarantees that the radiators can be operated in an economical and ecologically-sound manner, with significant savings on heating costs (an average of 15%\*) and an enormous reduction in CO<sub>2</sub> emissions.

\*On average, in comparison with old sectional radiators, test results based on data from Pinkafeld University of Applied Sciences.

Heat Output

The **VIENNALINE Compact** range has an advanced design giving high efficiency characteristics. The high outputs per unit surface area for the convector models have been achieved by ensuring excellent contact between the convector plates and both the water channels and dividing metal of the radiator panels. The convector surface is spot-welded to the metal channels and fits neatly into grooves on the water channels, thus ensuring high heat transfer rates.

The radiator outputs quoted in this brochure are based on a mean water temperature in the radiator of 70°C (158°F) and a room temperature of 20° (68°F) - Delta T50.

For other operating conditions - i.e. differences between mean water temperature and room temperature other than 50°C - the correction factors below should be applied (see example right).

Centigrade	Factor	Fahrenheit
15°C	0.21	27°F
20°C	0.30	36°F
25°C	0.41	45°F
30°C	0.51	54°F
35°C	0.63	63°F
40°C	0.75	72°F
45°C	0.87	81°F
50°C	1.00	90°F
55°C	1.13	99°F
60°C	1.27	108°F
65°C	1.41	117°F
70°C	1.55	126°F

An example of radiator selection at a non-standard temperature difference is given below:

Example:

Heat emission required: 2000 Watts  
 Room air temperature required: 20°C  
 Mean water temperature in radiator: 65°C

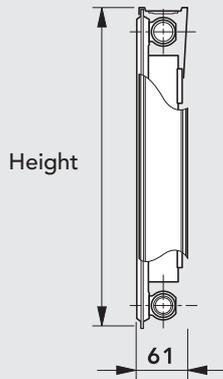
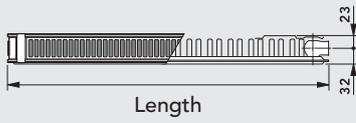
1. Temperature difference = 65-20 = 45°C
2. From Factor Table 45°C gives a factor of: 0.87
3. Divide required heat emission by factor =  $\frac{2000}{0.87}$  = 2298 Watts
4. From selection tables choose any radiator rated at 2298 Watts or more.

In accordance with BSEN 442: 1997, the heat output figures in this leaflet have been derived from tests made with top and bottom same side connection (T.B.S.E.). When bottom opposite end connections are used (B.O.E.), there will be a small reduction in heat output.

Weight and Water Content per Metre Length (approx.)

Type	Height (mm)									
	300		400		500		600		750	
	Water Content (l)	Weight (kg)	Water Content (l)	Weight (kg)	Water Content (l)	Weight (kg)	Water Content (l)	Weight (kg)	Water Content (l)	Weight (kg)
K1SPG	2.00	10.52	2.60	13.93	3.30	15.81	3.70	17.57	4.40	22.56
P+	3.90	15.81	5.00	20.92	6.10	24.63	7.10	28.14	8.60	35.63
K2	3.90	18.83	5.00	25.39	6.10	29.14	7.10	32.68	8.60	42.47
K3	6.00	28.10	7.60	38.14	9.40	43.75	10.80	49.07	N/A	N/A

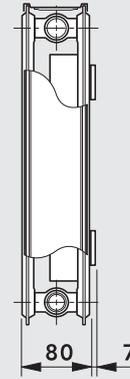
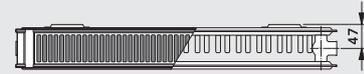
Model Overview



**K1SPG**

(Single Panel, Single Convector with  
 Factory Fitted Top Grille and Side Panels)

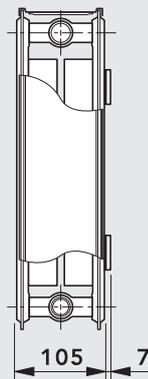
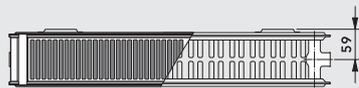
Height (mm)	300	400	500*	600*	750*
Length (mm)	up to 2000		up to 2600		up to 2000
Steps	All lengths start at 400mm and are in increments of 200mm. *Also available in some lengths of 520, 720, 920, 1120 and 1320mm.				



**P+**

(Double Panel, Single Convector with  
 Factory Fitted Top Grille and Side Panels)

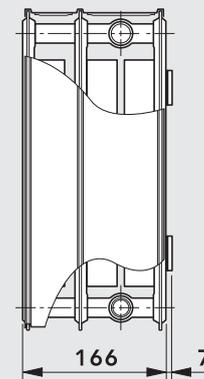
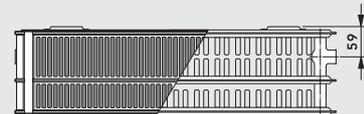
Height (mm)	300	500*	600*	750*
Length (mm)	up to 2000	up to 2200		up to 2000
Steps	All lengths start at 400mm and are in increments of 200mm. *Also available in some lengths of 520, 720, 920, 1120 and 1320mm.			



**K2**

(Double Panel, Double Convector with  
 Factory Fitted Top Grille and Side Panels)

Height (mm)	300	400	500*	600*	750*
Length (mm)	up to 3000	up to 2000	up to 2600		up to 2000
Steps	All lengths start at 400mm and are in increments of 200mm. *Also available in some lengths of 520, 720, 920, 1120 and 1320mm.				



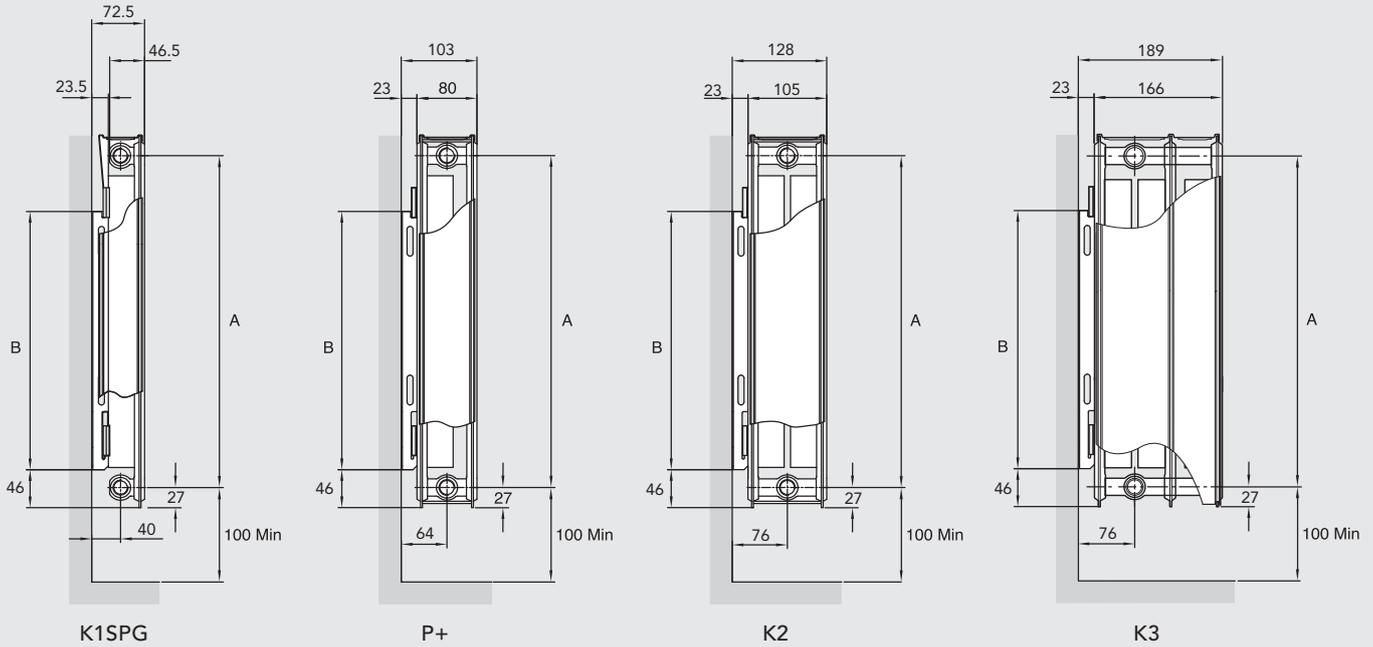
**K3\*\***

(Triple Panel, Triple Convector with  
 Factory Fitted Top Grille and Side Panels)

Height (mm)	300	400	500*	600*
Length (mm)	up to 3000	up to 2000	up to 2200	up to 2000
Steps	All lengths start at 400mm and are in increments of 200mm. *Also available in some lengths of 520, 720, 920, 1120 and 1320mm.			

\*\*VIENNALINE Compact K3 radiators are available to order only. Additional sizes are also available. Please call Customer Services for details.

Mounting Positions and Dimensions

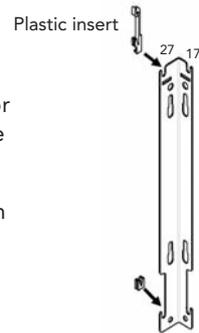


Nominal Height (mm)	A (mm)	B (mm)
300	246	153
400	346	253
500	446	353
600	546	453
750	696	603

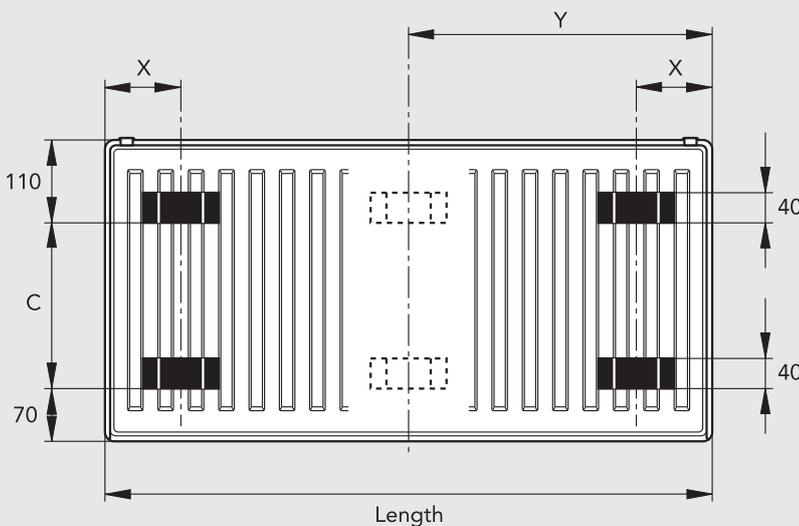
Wall Brackets

The brackets supplied are suitable for mounting all types of radiators of the same height.

The bracket position diagrams shown above are based on the wide flange being fixed to the wall.



Bracket Positions and Installation

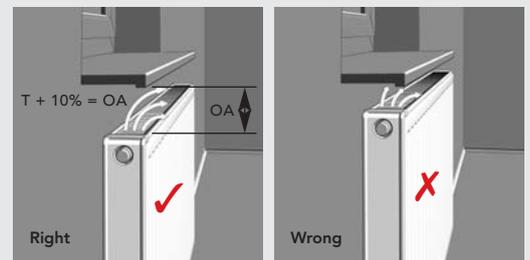


Dimension Y =  $\frac{\text{Overall Length}}{2}$

For all radiators with an overall length of 1800mm and above.

Type	X (mm)
K1SPG	93
P+	100
K2	100
K3	100

Installation



T = Depth of radiator.

Nominal Height (mm)	C (mm)
300	120
400	220
500	320
600	420
750	570

Heat Outputs

K1SPG



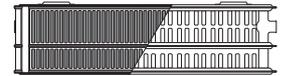
P+



K2



K3\*



	Nominal Length (mm - inches)	Output (watts)	Output (Btu/h)	Order Code	Output (watts)	Output (Btu/h)	Order Code	Output (watts)	Output (Btu/h)	Order Code	Output (watts)	Output (Btu/h)	Order Code
Height 300mm - 12in	400 - 15.7	226	771	K1SPG 030 040	335	1144	P+ 030 040	438	1495	K2 030 040	624	2129	K3 030 040
	600 - 23.6	339	1157	K1SPG 030 060	503	1716	P+ 030 060	657	2242	K2 030 060	937	3197	K3 030 060
	800 - 31.5	452	1542	K1SPG 030 080	670	2287	P+ 030 080	876	2989	K2 030 080	1249	4262	K3 030 080
	1000 - 39.4	565	1928	K1SPG 030 100	838	2859	P+ 030 100	1095	3736	K2 030 100	1561	5326	K3 030 100
	1200 - 47.2	678	2313	K1SPG 030 120	1006	3431	P+ 030 120	1314	4484	K2 030 120	1873	6391	K3 030 120
	1400 - 55.1	791	2699	K1SPG 030 140	1173	4003	P+ 030 140	1533	5231	K2 030 140	2185	7455	K3 030 140
	1600 - 63.0	904	3085	K1SPG 030 160	1341	4575	P+ 030 160	1752	5978	K2 030 160	2498	8523	K3 030 160
	1800 - 70.9	1017	3470	K1SPG 030 180	1508	5147	P+ 030 180	1971	6725	K2 030 180	2810	9588	K3 030 180
	2000 - 78.7	1130	3856	K1SPG 030 200	1676	5719	P+ 030 200	2190	7473	K2 030 200	3122	10652	K3 030 200
	2200 - 86.6							2409	8220	K2 030 220			
	2400 - 94.5							2628	8967	K2 030 240	3746	12781	K3 030 240
	2600 - 102.4							2847	9714	K2 030 260			
2800 - 110.2							3066	10462	K2 030 280	4371	14914	K3 030 280	
3000 - 118.1							3285	11209	K2 030 300	4683	15978	K3 030 300	
Height 400mm - 16in	400 - 15.7	283	966	K1SPG 040 040				543	1852	K2 040 040	774	2641	K3 040 040
	600 - 23.6	425	1449	K1SPG 040 060				814	2778	K2 040 060	1162	3965	K3 040 060
	800 - 31.5	566	1933	K1SPG 040 080				1086	3704	K2 040 080	1549	5285	K3 040 080
	1000 - 39.4	708	2416	K1SPG 040 100				1357	4630	K2 040 100	1936	6606	K3 040 100
	1200 - 47.2	850	2899	K1SPG 040 120				1628	5556	K2 040 120	2323	7926	K3 040 120
	1400 - 55.1	991	3382	K1SPG 040 140				1900	6482	K2 040 140	2710	9247	K3 040 140
	1600 - 63.0	1133	3865	K1SPG 040 160				2171	7408	K2 040 160	3098	10570	K3 040 160
	1800 - 70.9	1274	4348	K1SPG 040 180				2443	8334	K2 040 180	3485	11891	K3 040 180
	2000 - 78.7	1416	4832	K1SPG 040 200				2714	9261	K2 040 200	3872	13211	K3 040 200
	Height 500mm - 20in	400 - 15.7	337	1151	K1SPG 050 040	491	1675	P+ 050 040	617	2106	K2 050 040	891	3040
520 - 20.4		438	1496	K1SPG 050 052	638	2177	P+ 050 052	802	2738	K2 050 052	1159	3955	K3 050 052
600 - 23.6		506	1726	K1SPG 050 060	736	2512	P+ 050 060	926	3159	K2 050 060	1337	4562	K3 050 060
720 - 28.3		607	2071	K1SPG 050 072	883	3014	P+ 050 072	1111	3791	K2 050 072	1604	5473	K3 050 072
800 - 31.5		674	2301	K1SPG 050 080	982	3349	P+ 050 080	1234	4212	K2 050 080	1782	6080	K3 050 080
920 - 36.2		776	2646	K1SPG 050 092	1129	3852	P+ 050 092	1420	4844	K2 050 092	2050	6995	K3 050 092
1000 - 39.4		843	2876	K1SPG 050 100	1227	4187	P+ 050 100	1543	5265	K2 050 100	2228	7602	K3 050 100
1120 - 44.1		944	3222	K1SPG 050 112	1374	4689	P+ 050 112	1728	5897	K2 050 112	2495	8513	K3 050 112
1200 - 47.2		1012	3452	K1SPG 050 120	1472	5024	P+ 050 120	1852	6318	K2 050 120	2674	9124	K3 050 120
1320 - 52.0		1113	3797	K1SPG 050 132	1620	5526	P+ 050 132	2037	6950	K2 050 132	2941	10035	K3 050 132
1400 - 55.1		1180	4027	K1SPG 050 140	1718	5861	P+ 050 140	2160	7371	K2 050 140	3119	10642	K3 050 140
1600 - 63.0		1349	4602	K1SPG 050 160	1963	6699	P+ 050 160	2469	8424	K2 050 160	3565	12164	K3 050 160
1800 - 70.9		1517	5178	K1SPG 050 180	2209	7536	P+ 050 180	2777	9477	K2 050 180	4010	13682	K3 050 180
2000 - 78.7		1686	5753	K1SPG 050 200	2454	8373	P+ 050 200	3086	10530	K2 050 200	4456	15204	K3 050 200
2200 - 86.6		1855	6328	K1SPG 050 220	2699	9211	P+ 050 220	3395	11583	K2 050 220	4902	16726	K3 050 220
2400 - 94.5		2023	6903	K1SPG 050 240				3703	12636	K2 050 240			
2600 - 102.4	2192	7479	K1SPG 050 260				4012	13689	K2 050 260				
Height 600mm - 24in	400 - 15.7	376	1282	K1SPG 060 040	543	1852	P+ 060 040	685	2338	K2 060 040	981	3347	K3 060 040
	520 - 20.4	488	1666	K1SPG 060 052	706	2408	P+ 060 052	891	3039	K2 060 052	1276	4354	K3 060 052
	600 - 23.6	563	1922	K1SPG 060 060	814	2778	P+ 060 060	1028	3507	K2 060 060	1472	5022	K3 060 060
	720 - 28.3	676	2307	K1SPG 060 072	977	3334	P+ 060 072	1233	4208	K2 060 072	1766	6026	K3 060 072
	800 - 31.5	751	2563	K1SPG 060 080	1086	3704	P+ 060 080	1370	4676	K2 060 080	1962	6694	K3 060 080
	920 - 36.2	864	2948	K1SPG 060 092	1248	4260	P+ 060 092	1576	5377	K2 060 092	2257	7701	K3 060 092
	1000 - 39.4	939	3204	K1SPG 060 100	1357	4630	P+ 060 100	1713	5845	K2 060 100	2453	8370	K3 060 100
	1120 - 44.1	1052	3588	K1SPG 060 112	1520	5186	P+ 060 112	1919	6546	K2 060 112	2747	9373	K3 060 112
	1200 - 47.2	1127	3845	K1SPG 060 120	1628	5556	P+ 060 120	2056	7014	K2 060 120	2944	10045	K3 060 120
	1320 - 52.0	1239	4229	K1SPG 060 132	1791	6112	P+ 060 132	2261	7715	K2 060 132	3238	11048	K3 060 132
	1400 - 55.1	1315	4486	K1SPG 060 140	1900	6482	P+ 060 140	2398	8183	K2 060 140	3434	11717	K3 060 140
	1600 - 63.0	1502	5126	K1SPG 060 160	2171	7408	P+ 060 160	2741	9352	K2 060 160	3925	13392	K3 060 160
	1800 - 70.9	1690	5767	K1SPG 060 180	2443	8334	P+ 060 180	3083	10521	K2 060 180	4415	15064	K3 060 180
	2000 - 78.7	1878	6408	K1SPG 060 200	2714	9261	P+ 060 200	3426	11690	K2 060 200	4906	16739	K3 060 200
	2200 - 86.6	2066	7049	K1SPG 060 220	2985	10187	P+ 060 220	3769	12859	K2 060 220			
	2400 - 94.5	2254	7690	K1SPG 060 240				4111	14028	K2 060 240			
2600 - 102.4	2441	8330	K1SPG 060 260				4454	15197	K2 060 260				
Height 750mm - 30in	400 - 15.7	451	1540	K1SPG 075 040	653	2229	P+ 075 040	820	2797	K2 075 040			
	600 - 23.6	677	2309	K1SPG 075 060	980	3343	P+ 075 060	1229	4195	K2 075 060			
	720 - 28.3	812	2771	K1SPG 075 072	1176	4012	P+ 075 072	1475	5034	K2 075 072			
	800 - 31.5	902	3079	K1SPG 075 080	1306	4458	P+ 075 080	1639	5593	K2 075 080			
	920 - 36.2	1038	3541	K1SPG 075 092	1502	5126	P+ 075 092	1885	6432	K2 075 092			
	1000 - 39.4	1128	3849	K1SPG 075 100	1633	5572	P+ 075 100	2049	6991	K2 075 100			
	1120 - 44.1	1263	4311	K1SPG 075 112	1829	6241	P+ 075 112	2295	7830	K2 075 112			
	1200 - 47.2	1354	4619	K1SPG 075 120	1960	6686	P+ 075 120	2459	8390	K2 075 120			
	1320 - 52.0	1489	5081	K1SPG 075 132	2156	7355	P+ 075 132	2705	9229	K2 075 132			
	1400 - 55.1	1579	5388	K1SPG 075 140	2286	7801	P+ 075 140	2869	9788	K2 075 140			
	1600 - 63.0	1805	6158	K1SPG 075 160	2613	8915	P+ 075 160	3278	11186	K2 075 160			
	1800 - 70.9	2030	6928	K1SPG 075 180	2939	10030	P+ 075 180	3688	12585	K2 075 180			
2000 - 78.7	2256	7698	K1SPG 075 200	3266	11144	P+ 075 200	4098	13983	K2 075 200				

\*Type K3 radiators are available to order only.

N.B. The tabulated heat outputs are quoted at a mean water to air temperature difference of 50°C.