PURMO

TECHNICAL POCKET BOOK

Technical info

PURMO

The Warm Society

CONTENT

THE WARM SOCIETY has been established because we think that it is time that heating is given the attention that it deserves. People have a passive attitude towards heating solutions. They simply accept what is going to be installed or leave it up to others to choose a new heating solution. It is time that this situation changed, because radiators are much more than just heating. We want the world to know about the virtually unlimited range of choices that are available in terms of design, colours and functionality.

THE WARM SOCIETY provides our customers and partners with the opportunity to find out more about heating and helps us in our mission to liberate the world from all those ancient and inadequate heating solutions.
In this brochure, you will find heating solutions that have been prepared with special care. Each of the solutions represents an uncompromising attitude towards design, and a wide choice provides you with the opportunity to create your own home. Enjoy the variety in our amazing range.

WHO CARES ABOUT HEATING? WE DO.

INSPIRATION
The Warm Society is a place where you can live life to the full. Our wide variety of heating solutions will provide you with the optimal indoor climate year-round. The Warm Society is much more than just heat. We take design seriously – and make sure all our heating solutions serve to enhance not just the feel, but also the look and style of a wide variety of interiors.

PRODUCTS
At the heart of the Warm Society is a comprehensive range of heating solutions, embracing all product types, shapes, sizes, and colours – so we can provide our partners and customers with unparalleled choice. Whether in classic panel and column radiators, bathroom radiators, decorative radiators or innovative underfloor heating, we have the functionality – and the style that is right for you and the home you live in.

QUALITY
Commitment to producing durable products forms the foundation of the Warm Society. Throughout our production and distribution chain, quality is our top priority – whether we are talking about the materials we select, the processes we use, or our meticulous testing procedures. We are accountable for all our actions. Our integrity is evident in our respected product quality. When you buy from us, you know you have a product that is in it for the long haul.

PEOPLE

What makes the Warm Society work is the sum of the know-how and attitude of the people within it. We want to rid the world of grey and boring heating solutions. We leave nothing to chance in our pursuit of that goal. Training, teamwork, support and service are all geared to ensure we get there – and to ensure we make life easier for all our customers and partners in the process. With dedication and pride in our business, we are fully prepared to do whatever it takes to build lasting business relationships and establish standards of excellence that will set us apart from the competition.

PANEL RADIATORS

Quality design for any environment

PANEL RADIATORS

Quality design for any environment

Compact

Compact Ventil

Plan Compact

Plan Compact Ventil

Plan Compact Ventil M

Ramo

Planora

Vertical

characteristics

- All Purmo panel radiators are produced with a cold rolled, high quality steel plate according to EN 10130.
- Gauge of the wall is 1,20 mm.
- Certain models have vertical profiles of 33 mm or 50 mm. Other are provided with a flat front.
- Testing pressure 13 bar. Planora + Vertical: 8 bar.
- Working pressure 10 bar. Planora + Vertical: 6 bar.
- Working temperature max. 99 °C.

production & coating process

Panel radiators are produced on fully automated, ultra-modern lines. They may be inspected at any time during the production process. The water tightness of each radiator is individually tested at the end of the production line.
Radiators are coated in a modern facility specially designed to protect the environment.

pre-treatment

Pre-treatment of radiators consists of degreasing and phosphating. In combination with the base coat, the phosphate layer provides excellent rust protection. After pre-treatment, the radiators are rinsed with deionised water.

coating

This process consists of 2 main stages. First, the radiators are immersed in a 2nd generation KTL bath to cover them with a layer of anti-rust base by means of cataphoresis. They are then dried in hot air at a temperature of around 175 °C. The final coat is then applied. This powder coat of epoxy-polyester is applied to the radiators by electrophoresis. The powder coating is then heated at a temperature of almost 185 °C. Outstandingly hard and stable, the finishing coat is resistant to scratches, moisture and acids and complies with the DIN 55900 and EN 442 standards.

colours

Standard colour RAL 9016.
Other available colours: see p. 175.
Add at the order code /.... and complete the RAL-colour. Ex. C226001300/3003 for a radiator in RAL 3003.

example order code

order code C22XXXYYYYZ
example C226001350L

radiator type
height
length
left conn.:L / right conn.:R

	Compact	*Compact Ventil*	*Plan Compact*	*Plan Compact Ventil*	*Plan Compact Ventil M*	*Ramo*	*Planora*	*Vertical*
profiled front - 33 mm	x	x	-	-	-	-	-	-
profiled front - 50 mm	-	-	-	-	-	-	-	x
flat front	-	-	x	x	x	x	x	-
testing pressure - bar	13	13	13	13	13	8	8	8
working pressure - bar	10	10	10	10	10	6	6	6
side covers	x	x	x	x	x	x	x	x
top grill	x	x	x	x	x	x	x	-
wellded on assembly points								
type 10	-	/	-	/	/	/	-	/
type 11	x	x	x	x	x	x	x	/
type 20	/	/	/	/	/	/	/	/
type 21	/	/	/	/	/	/	/	/
type 21S	x	-	x	-	-	x	x	/
type 22	x	-	x	-	-	x	x	/
type 33	x	-	x	-	-	x	x	/
number of connections	4	6	4	6	6	6	6	6
supply and return pipes invisible	-	x	-	x	x	x	x	-
thermostatic valve body including	-	x	-	x	x	x	x	-
including attachment kit	x	x	x	x	x	x	x	x
assembly packaging	x	x	x	x	x	x	x	-
bore template	-	-	-	-	-	-	-	x

x = yes; - = no; / = doesn't exsist

heat output

Heat outputs were measured according to the EN 442 standard, with a water temperature of 75/65 °C and a room temperature of 20 °C (delta ΔT=50).

packaging

The radiators are protected with cardboard, including corner edge protections. The radiators are shrink-wrapped. The radiator can remain inside the packaging until installation is complete, to prevent any damage. The entire packaging is recyclable.

number on pallet

Compact + Compact Ventil + Plan Compact + Plan Compact Ventil + Plan Compact Ventil M	
type 11	12
type 21S	10
type 22	7
type 33	5

Ramo	
type 11, 21S & 22	8
type 33	5
Planora	
type 11	12
type 21S	10
type 22	7
type 33	5
Vertical	
type 10C & 20C & 21C & 22C	8

COMPACT

A true classic. With class.

PANEL RADIATORS

The Compact is a classic panel radiator. While all piping is visible, the attractive top and side covers give the radiator a pleasing, discreet appearance.

- Connections: 4 x 1/2" BSP, ISO 228, at the side.
- Installation: ≤1600 mm: 2 fixing brackets, >1600 mm: 3 fixing brackets.
- Vertical profile: 33 mm.
- Package: top and side covers are mounted, brackets, 1 airvent, 1 blank cap.

HEIGHT
300, 450, 600, 700, 900 mm

LENGTH
400 - 3000 mm

TYPE
C11, C21s, C22, C33

FINISH
RAL 9016 White. Other RAL colours available on request.

type 11		**height**				order code C11XXXYYYY
length	Watt +	**300**	**450**	**600**	**700**	**900**
400	Watt	218	316	407	464	571
	BTU	745	1078	1389	1583	1949
500	Watt	273	395	509	581	713
	BTU	932	1348	1737	1982	2434
600	Watt	328	474	611	697	856
	BTU	1119	1617	2085	2378	2922
700	Watt	382	553	713	813	999
	BTU	1304	1887	2433	2774	3411
800	Watt	437	632	814	929	1142
	BTU	1491	2156	2777	3170	3899
900	Watt	491	711	916	1045	1284
	BTU	1677	2426	3125	3566	4384
1000	Watt	546	790	1018	1161	1427
	BTU	1863	2695	3473	3961	4872
1100	Watt	601	869	1120	1277	1570
	BTU	2050	2965	3821	4357	5360
1200	Watt	655	948	1222	1393	1712
	BTU	2236	3235	4169	4753	5845
1300	Watt	710	1027	1304	1509	
	BTU	2423	3504	4449	5149	
1400	Watt	764	1106	1425	1625	1998
	BTU	2609	3774	4862	5545	6821
1600	Watt	874	1264	1629	1858	2283
	BTU	2982	4313	5558	6339	7794
1800	Watt	983	1422	1832	2090	2569
	BTU	3354	4852	6251	7131	8771
2000	Watt	1092	1580	2036	2322	2854
	BTU	3726	5391	6947	7923	9744
2300	Watt	1256	1817	2342	2670	3282
	BTU	4286	6200	7991	9114	11205
2600	Watt	1420	2054	2647	3019	
	BTU	4845	7010	9034	10302	
3000	Watt	1638	2370	3054	3483	
	BTU	5590	8089	10423	11887	
Watt/m 90/70/20 °C		**686**	**994**	**1283**	**1463**	
value n		**1,2981**	**1,3048**	**1,3115**	**1,3133**	
volume: l/m		**1,50**	**2,30**	**3,40**	**3,66**	**4,50**
weight: kg/m		**9,00**	**14,40**	**19,50**	**21,90**	**29,00**

according EN 442 - 75/65/20 °C (ΔT 50)

stock Purmo
delivery time: 20 working days

COMPACT

A true classic. With class.

PANEL RADIATORS

type 21S			height			order code C21XXXYYYY
length	Watt +		**450**	**600**		**900**
400	Watt		424	536		744
	BTU		1447	1829		2540
500	Watt		530	670		930
	BTU		1808	2286		3175
600	Watt		636	804		1117
	BTU		2170	2743		3813
700	Watt		742	938		1303
	BTU		2532	3200		4448
800	Watt		843	1072		1489
	BTU		2876	3658		5083
900	Watt		954	1206		1675
	BTU		3255	4115		5718
1000	Watt		1060	1340		1861
	BTU		3617	4572		6353
1100	Watt		1166	1474		2047
	BTU		3978	5029		6988
1200	Watt		1272	1608		2233
	BTU		4340	5486		7623
1300	Watt		1378	1742		
	BTU		4702	5944		
1400	Watt		1484	1876		2605
	BTU		5063	6401		8893
1600	Watt		1696	2144		2978
	BTU		5787	7315		10167
1800	Watt		1908	2412		3350
	BTU		6510	8230		11437
2000	Watt		2120	2680		3722
	BTU		7233	9144		12707
2300	Watt		2544	3082		4280
	BTU		8680	10516		14612
2600	Watt		2756	3484		
	BTU		9406	11891		
3000	Watt		3180	4020		
	BTU		10853	13720		
Watt/m 90/70/20 °C			**1333**	**1691**		
value n			**1,3008**	**1,3213**		
volume: l/m			**4,80**	**6,10**		**8,80**
weight: kg/m			**21,80**	**28,40**		**42,30**

stock Purmo
delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)

type 22		**height**				order code C22XXXYYYY
length	Watt +	**300**	**450**	**600**	**700**	**900**
400	Watt	384	539	684	777	955
	BTU	1312	1839	2334	2651	3260
500	Watt	481	674	855	971	1194
	BTU	1640	2300	2917	3313	4076
600	Watt	577	808	1025	1165	1433
	BTU	1969	2757	3497	3975	4892
700	Watt	673	943	1196	1359	1672
	BTU	2296	3218	4081	4637	5708
800	Watt	769	1078	1367	1554	1910
	BTU	2624	3678	4664	5302	6521
900	Watt	865	1212	1538	1748	2149
	BTU	2952	4135	5248	5964	7337
1000	Watt	961	1347	1709	1942	2388
	BTU	3279	4596	5831	6626	8153
1100	Watt	1057	1482	1880	2136	2627
	BTU	3608	5057	6415	7288	8969
1200	Watt	1153	1616	2051	2330	2866
	BTU	3936	5514	6998	7950	9785
1300	Watt	1249	1750	2222	2524	
	BTU	4264	5971	7581	8612	
1400	Watt	1345	1886	2393	2719	3343
	BTU	4592	6435	8166	9277	11413
1600	Watt	1538	2155	2734	3107	3821
	BTU	5248	7353	9328	10601	13045
1800	Watt	1730	2425	3076	3498	4298
	BTU	5904	8274	10495	11935	14673
2000	Watt	1922	2694	3418	3884	4776
	BTU	6558	9192	11662	13256	16305
2300	Watt	2210	3097	3931	4467	5492
	BTU	7544	10567	13413	15245	18750
2600	Watt	2499	3505	4443	5049	
	BTU	8528	11962	15165	17233	
3000	Watt	2883	4044	5127	5826	
	BTU	9840	13802	17498	19884	
Watt/m 90/70/20 °C		**1211**	**1701**	**2163**	**2461**	
value n		**1,3094**	**1,3226**	**1,3358**	**1,3426**	
volume: l/m		**3,20**	**4,80**	**6,10**	**7,49**	**8,80**
weight: kg/m		**16,40**	**24,30**	**32,70**	**39,14**	**51,40**

according EN 442 - 75/65/20 °C (ΔT 50)

stock Purmo
delivery time: 20 working days

COMPACT

A true classic. With class.

PANEL RADIATORS

type 33		height				order code C33XXXYYYY
length	Watt +	**300**	**450**	**600**		**900**
400	Watt	539	680	942		1304
	BTU	1839	2319	3216		4451
500	Watt	674	850	1178		1630
	BTU	2299	2899	4021		5563
600	Watt	808	1019	1414		1956
	BTU	2758	3479	4825		6676
700	Watt	943	1189	1649		2282
	BTU	3218	4059	5629		7788
800	Watt	1078	1359	1885		2608
	BTU	3678	4639	6433		8901
900	Watt	1212	1529	2120		2934
	BTU	4138	5219	7237		10014
1000	Watt	1347	1699	2356		3260
	BTU	4597	5799	8041		11126
1100	Watt					
	BTU					
1200	Watt	1616	2039	2827		3912
	BTU	5517	6958	9649		13352
1300	Watt					
	BTU					
1400	Watt	1886	2379	3298		4564
	BTU	6436	8118	11257		15577
1600	Watt	2155	2718	3770		5216
	BTU	7356	9278	12866		17802
1800	Watt	2425	3058	4241		5868
	BTU	8275	10438	14474		20027
2000	Watt	2694	3398	4712		6520
	BTU	9195	11597	16082		22253
2300	Watt	3098	3908	5419		7498
	BTU	10574	13337	18494		25591
2600	Watt	3502	4417	6126		8476
	BTU	11953	15077	20907		28929
3000	Watt	4041	5097	7068		9780
	BTU	13792	17396	24123		33379
Watt/m 90/70/20 °C		**1698**	**2363**	**2988**		**4143**
value n		**1,3140**	**1,3255**	**1,3486**		**1,3600**
volume: l/m		**5,10**	**7,00**	**8,80**		**13,00**
weight: kg/m		**24,20**	**37,40**	**51,10**		**77,40**

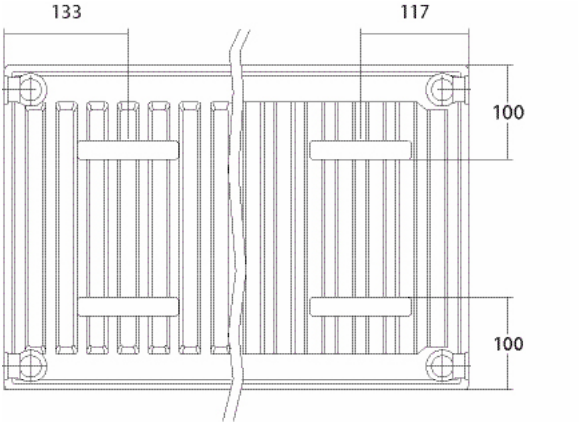
delivery time: 20 working days

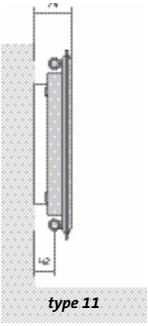
according EN 442 - 75/65/20 °C (ΔT 50)

Installation

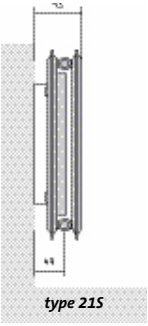
types 21S, 22, 33

type 11

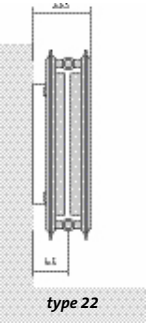




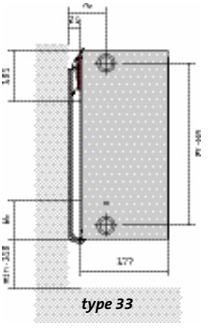
type 11



type 21S

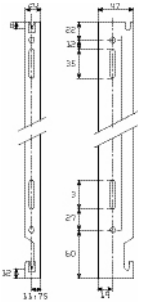


type 22

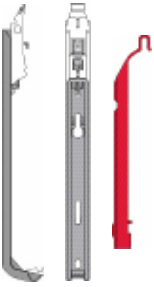


type 33

bracket



invisible bracket



COMPACT

A true classic. With class.

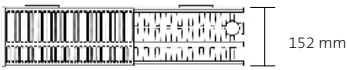
PANEL RADIATORS

type 11

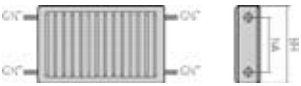
type 21S

type 22

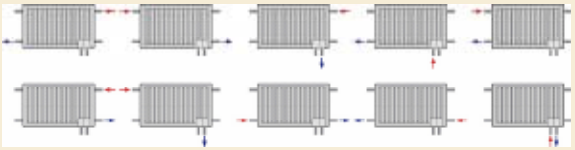
type 33



Connections



BH mm	200	300	400	450	500	600	900
NA mm	150	250	350	400	450	550	850



The Compact radiator is available in several different versions, allowing you to choose the best option for your room. The Ventil is a variation on the classic Compact model. The profiled front conceals the pipe system and valve, creating a clean, uncluttered look.

- Connections: 4 x 1/2" BSP, ISO 228, at the side + 2 x 1/2" BSP, ISO 228, at the bottom, distance 50 mm. The pipe system for the supply of hot water is integrated on the right side.
- Installation: CV - Height 300-900 are delivered with installed air-vent, valve-insert, plastic cap and plugs. The wall brackets are packed with the radiator. CV - Height 200 are delivered with air-vent, valve-insert, plastic cap and 3 plugs packed with the radiator but not installed. The floor and wall brackets need to be ordered separately.
- Vertical profile: 33 mm.
- Package: top and side covers are mounted, brackets, screws and plugs.

HEIGHT
200, 300, 450, 600, 900 mm

LENGTH
400 - 3000 mm

TYPE
CV11, CV21s, CV22, CV33

FINISH
RAL 9016 White. Other RAL colours available on request.

COMPACT VENTIL

Giving you a choice

PANEL RADIATORS

type 11		height						order code CV11XXXYYYY
length	Watt +		**300**	**400**	**450**	**500**	**600**	**900**
400	Watt		218	284	316	347	407	571
	BTU		745	971	1079	1185	1390	1948
500	Watt		273	356	385	434	509	714
	BTU		932	1213	1314	1481	1737	2435
600	Watt		328	427	474	521	611	856
	BTU		1118	1456	1618	1777	2085	2922
700	Watt		382	498	553	608	713	999
	BTU		1304	1699	1887	2074	2432	3409
800	Watt		437	569	632	694	814	1142
	BTU		1491	1941	2157	2370	2780	3896
900	Watt		491	640	711	781	916	1284
	BTU		1677	2184	2427	2666	3127	4383
1000	Watt		546	711	790	868	1018	1427
	BTU		1863	2427	2696	2962	3474	4870
1100	Watt		601	782	869	955	1120	1570
	BTU		2050	2669	2966	3259	3822	5357
1200	Watt		655	853	948	1042	1222	1712
	BTU		2236	2912	3236	3555	4169	5844
1300	Watt		710		1027		1323	1855
	BTU		2423		3505		4515	6331
1400	Watt		764	995	1106	1215	1425	1998
	BTU		2609	3397	3775	4147	4864	6818
1600	Watt		874	1138	1264	1389	1629	2283
	BTU		2982	3883	4314	4740	5559	7793
1800	Watt		983	1280	1422	1562	1832	2569
	BTU		3354	4368	4853	5332	6254	8767
2000	Watt		1092	1422	1580	1736	2036	2854
	BTU		3727	4853	5393	5925	6949	9741
2300	Watt		1256	1635	1817	1996	2341	3282
	BTU		4286	5581	6201	6814	7991	11202
2600	Watt		1420	1849	2054	2257	2647	3710
	BTU		4845	6309	7010	7702	9034	12663
3000	Watt		1638	2133	2370	2604	3054	4281
	BTU		5590	7280	8089	8887	10423	14611
Watt/m 90/70/20 °C			**686**	**895**	**994**	**1093**	**1283**	**1800**
value n			**1,2981**	**1,3026**	**1,3048**	**1,3070**	**1,3115**	**1,3170**
volume: l/m			**1,50**	**2,20**	**2,30**	**2,90**	**3,40**	**4,50**
weight: kg/m			**9,00**	**12,60**	**14,40**	**16,10**	**19,50**	**29,00**

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)

type 215		**height**						order code CV21XXXYYYY
length	Watt +	**200**	**300**	**400**	**450**	**500**	**600**	**900**
400	Watt		304	385	424	462	536	744
	BTU		1038	1314	1447	1578	1829	2541
500	Watt		381	482	530	578	670	931
	BTU		1300	1645	1809	1973	2287	3176
600	Watt	329	457	578	636	694	804	1117
	BTU	1123	1560	1973	2171	2367	2744	3811
700	Watt	384	533	674	742	809	938	1303
	BTU	1311	1819	2300	2532	2762	3201	4446
800	Watt	439	609	770	848	925	1072	1489
	BTU	1499	2079	2628	2894	3156	3659	5081
900	Watt	494	685	867	954	1040	1206	1675
	BTU	1687	2338	2959	3256	3551	4116	5716
1000	Watt	549	761	963	1060	1156	1340	1861
	BTU	1874	2597	3287	3618	3945	4573	6352
1100	Watt	604	837	1059	1166	1272	1474	2047
	BTU	2062	2857	3614	3980	4340	5031	6987
1200	Watt	659	913	1156	1272	1387	1608	2233
	BTU	2250	3116	3945	4341	4735	5488	7622
1300	Watt		969		1378		1742	
	BTU		3307		4703		5945	
1400	Watt	769	1065	1348	1484	1618	1876	2605
	BTU	2625	3635	4601	5065	5524	6403	8892
1600	Watt	878	1218	1541	1696	1850	2144	2978
	BTU	2997	4157	5259	5788	6313	7317	10163
1800	Watt	988	1370	1733	1908	2081	2412	3350
	BTU	3373	4676	5915	6512	7102	8232	11433
2000	Watt	1098	1522	1926	2120	2312	2680	3722
	BTU	3749	5195	6573	7236	7891	9147	12703
2300	Watt	1263	1750	2215	2438	2659	3082	4280
	BTU	4312	5973	7560	8321	9074	10519	14609
2600	Watt	1427	1979	2504	2756	3006	3484	4839
	BTU	4872	6754	8546	9406	10258	11891	16514
3000	Watt	1647	2283	2889	3180	3468	4020	5583
	BTU	5623	7792	9860	10853	11836	13720	19055
Watt/m 90/70/20 °C			**954**	**1210**	**1333**	**1456**	**1691**	**2356**
value n			**1,2803**	**1,2940**	**1,3008**	**1,3060**	**1,3213**	**1,3390**
volume: l/m		**2,40**			**4,80**	**5,20**	**6,10**	**8,80**
weight: kg/m		**11,80**			**21,80**	**23,70**	**28,40**	**42,30**

stock Purmo
according EN 442 - 75/65/20 °C (ΔT 50) delivery time: 20 working days

COMPACT VENTIL

Giving you a choice

PANEL RADIATORS

type 22		**height**					order code CV22XXXYYYY	
length	Watt +	**200**	**300**	**400**	**450**	**500**	**600**	**900**
400	Watt		384	488	539	588	684	955
	BTU		1312	1667	1840	2007	2333	3260
500	Watt		481	611	674	735	855	1194
	BTU		1640	2084	2300	2509	2916	4075
600	Watt	413	577	733	808	882	1025	1433
	BTU	1410	1968	2500	2758	3010	3500	4890
700	Watt	482	673	855	943	1029	1196	1672
	BTU	1646	2296	2917	3218	3512	4083	5705
800	Watt	551	769	977	1078	1176	1367	1910
	BTU	1881	2624	3334	3679	4014	4666	6520
900	Watt	620	865	1099	1212	1323	1538	2149
	BTU	2117	2952	3751	4137	4515	5250	7335
1000	Watt	689	961	1221	1347	1470	1709	2388
	BTU	2352	3280	4167	4597	5017	5833	8150
1100	Watt	758	1057	1343	1482	1617	1880	2627
	BTU	2588	3608	4584	5058	5519	6416	8965
1200	Watt	827	1153	1465	1616	1764	2051	2866
	BTU	2823	3936	5001	5515	6021	6999	9780
1300	Watt		1249		1751		2222	
	BTU		4263		5976		7584	
1400	Watt	965	1345	1709	1886	2058	2393	3343
	BTU	3295	4592	5834	6437	7024	8166	11410
1600	Watt	1102	1538	1954	2155	2352	2734	3821
	BTU	3762	5248	6668	7355	8027	9333	13040
1800	Watt	1240	1730	2198	2425	2646	3076	4298
	BTU	4233	5904	7501	8277	9031	10499	14670
2000	Watt	1378	1922	2442	2694	2940	3418	4776
	BTU	4704	6560	8335	9195	10034	11666	16300
2300	Watt	1585	2210	2808	3098	3381	3931	5492
	BTU	5411	7544	9585	10573	11539	13415	18746
2600	Watt	1791	2499	3175	3502	3822	4443	6209
	BTU	6114	8528	10835	11952	13044	15165	21191
3000	Watt	2067	2883	3663	4041	4410	5127	7164
	BTU	7057	9840	12502	13792	15051	17498	24451
Watt/m 90/70/20 °C			**1211**	**1540**	**1701**	**1857**	**2163**	**3033**
value n			**1,3094**	**1,3182**	**1,3226**	**1,3270**	**1,3358**	**1,3561**
volume: l/m		**2,50**	**3,20**	**4,20**	**4,80**	**5,20**	**6,10**	**8,80**
weight: kg/m		**12,80**	**16,40**	**21,60**	**24,30**	**27,00**	**32,70**	**51,40**

stock Purmo

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)

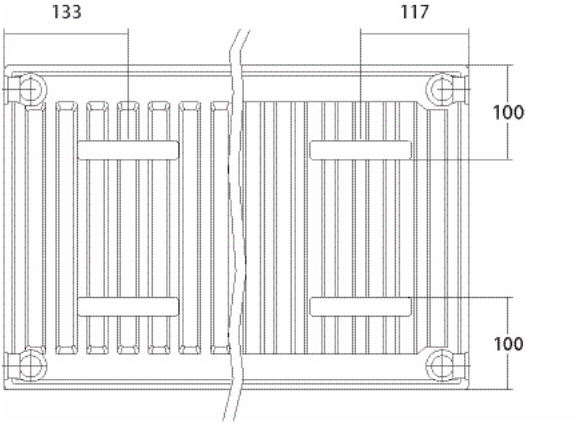
type 33		**height**						order code CV33XXXYYYY
length	Watt +	**200**	**300**	**400**	**450**	**500**	**600**	**900**
400	Watt		539	680	748	814	942	1304
	BTU		1839	2319	2553	2778	3216	4451
500	Watt		674	850	935	1018	1178	1630
	BTU		2299	2899	3191	3473	4021	5563
600	Watt	570	808	1019	1121	1221	1414	1956
	BTU	1946	2758	3479	3826	4167	4825	6676
700	Watt	665	943	1189	1308	1425	1649	2282
	BTU	2270	3218	4059	4464	4862	5629	7788
800	Watt	760	1078	1359	1495	1628	1885	2608
	BTU	2595	3678	4639	5102	5556	6433	8901
900	Watt	855	1212	1529	1682	1832	2120	2934
	BTU	2919	4138	5219	5741	6251	7237	10014
1000	Watt	950	1347	1699	1869	2035	2356	3260
	BTU	3243	4597	5799	6379	6945	8041	11126
1100	Watt	1045	1482	1869	2056	2239	2592	3586
	BTU	3568	5057	6379	7017	7640	8845	12239
1200	Watt	1140	1616	2039	2243	2442	2827	3912
	BTU	3892	5517	6958	7655	8335	9649	13352
1300	Watt							
	BTU							
1400	Watt	1330	1886	2379	2617	2849	3298	4564
	BTU	4541	6436	8118	8932	9724	11257	15577
1600	Watt	1520	2155	2718	2990	3256	3770	5216
	BTU	5189	7356	9278	10205	11113	12866	17802
1800	Watt							
	BTU							
2000	Watt							
	BTU							
2300	Watt							
	BTU							
2600	Watt							
	BTU							
3000	Watt							
	BTU							
Watt/m 90/70/20 °C			**1698**	**2146**	**2363**	**2576**	**2988**	**4143**
value n			**1,3140**	**1,3255**	**1,3313**	**1,3371**	**1,3486**	**1,3600**
volume: l/m		**3,70**	**5,10**	**6,30**	**7,00**	**7,50**	**8,80**	**13,00**
weight: kg/m		**18,90**	**24,20**	**33,20**	**37,40**	**42,20**	**51,10**	**77,40**

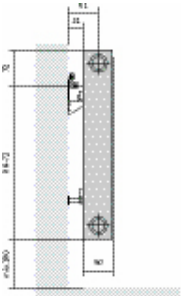
according EN 442 - 75/65/20 °C (ΔT 50)

delivery time: 20 working days

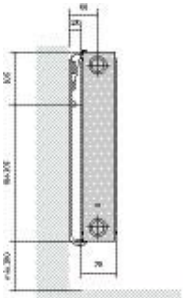
Installation

types 21S, 22, 33 *type 11*

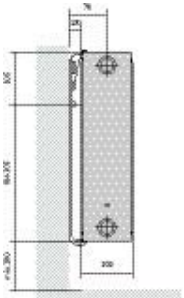




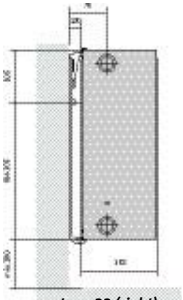
type 11



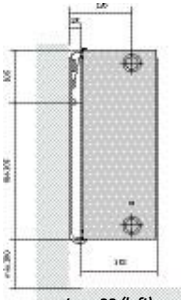
type 21S



type 22



type 33 (right)



type 33 (left)

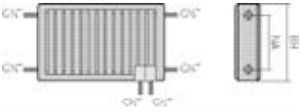
type 11

type 21S

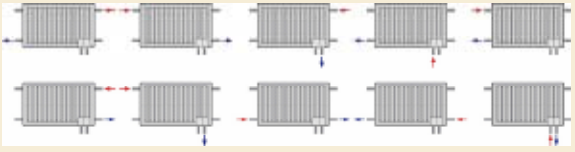
type 22

type 33

Connections



BH mm	200	300	400	450	500	600	900
NA mm	150	250	350	400	450	550	850



PLAN COMPACT

Flat front. No pipes.

PANEL RADIATORS

The most prominent characteristic of the Plan Compact is its absolutely flat front with lucent lamination. This covers the Compact Set, consisting of attached top and side panels in such a way that from the front, no overlapping corners can be seen.

- Connections: 4 x 1/2" BSP, ISO 228, at the side.
- Installation: ≤1600 mm: 2 fixing brackets, >1600 mm: 3 fixing brackets.
- Package: radiator with a flat front of which the top and side covers are mounted, brackets, 1 airvent, 1 blank cap, screws and plugs.

HEIGHT
300, 400, 500, 600, 900 mm

LENGTH
400 - 3000 mm

TYPE
FC11, FC21s, FC22, FC33

FINISH
RAL 9016 White. Other RAL colours available on request.

type 11		**height**				order code FC11XXXYYYY
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	212	272	329	384	539
	BTU	722	928	1124	1312	1839
500	Watt	265	340	412	481	674
	BTU	903	1160	1404	1640	2299
600	Watt	317	408	494	577	808
	BTU	1083	1393	1685	1968	2758
700	Watt	370	476	576	673	943
	BTU	1264	1625	1966	2296	3218
800	Watt	423	544	658	769	1078
	BTU	1444	1857	2247	2624	3678
900	Watt	476	612	741	865	1212
	BTU	1625	2089	2528	2952	4138
1000	Watt	529	680	823	961	1347
	BTU	1805	2321	2809	3280	4597
1100	Watt	582	748	905	1057	1482
	BTU	1986	2553	3090	3608	5057
1200	Watt	635	816	988	1153	1616
	BTU	2167	2785	3371	3936	5517
1400	Watt	741	952	1152	1345	1886
	BTU	2528	3249	3932	4592	6436
1600	Watt	846	1088	1317	1538	2155
	BTU	2889	3713	4494	5248	7356
1800	Watt	952	1224	1481	1730	2425
	BTU	3250	4178	5056	5904	8275
2000	Watt	1058	1360	1646	1922	2694
	BTU	3611	4642	5618	6560	9195
2300	Watt	1217	1564	1893	2210	
	BTU	4153	5338	6460	7544	
2600	Watt	1375	1768	2140	2499	
	BTU	4694	6034	7303	8528	
3000	Watt	1587	2040	2469	2883	
	BTU	5416	6963	8427	9840	
Watt/m 90/70/20 °C		**663**	**852**	**1032**	**1205**	**1694**
value n		**1,2820**	**1,2824**	**1,2827**	**1,2831**	**1,3013**
volume: l/m		**1,50**	**2,20**	**2,90**	**3,40**	**4,50**
weight: kg/m		**11,70**	**16,10**	**16,10**	**24,80**	**36,50**

according EN 442 - 75/65/20 °C (ΔT 50)

stock Purmo

PLAN COMPACT

Flat front. No pipes.

PANEL RADIATORS

type 21S		height		order code FC21XXXYYY		
length	Watt +			**500**	**600**	**900**
400	Watt			445	515	706
	BTU			1519	1758	2410
500	Watt			557	644	883
	BTU			1899	2198	3012
600	Watt			668	773	1059
	BTU			2279	2638	3614
700	Watt			779	902	1236
	BTU			2659	3077	4217
800	Watt			890	1030	1412
	BTU			3039	3517	4819
900	Watt			1002	1159	1589
	BTU			3419	3956	5422
1000	Watt			1113	1288	1765
	BTU			3799	4396	6024
1100	Watt			1224	1417	1942
	BTU			4179	4836	6626
1200	Watt			1336	1546	2118
	BTU			4558	5275	7229
1400	Watt			1558	1803	2471
	BTU			5318	6154	8434
1600	Watt			1781	2061	2824
	BTU			6078	7034	9638
1800	Watt			2003	2318	3177
	BTU			6838	7913	10843
2000	Watt			2226	2576	3530
	BTU			7597	8792	12048
2300	Watt			2560	2962	
	BTU			8737	10111	
2600	Watt			2894	3349	
	BTU			9877	11429	
3000	Watt			3339	3864	
	BTU			11396	13188	
Watt/m 90/70/20 °C				**1397**	**1619**	**2234**
value n				**1,2907**	**1,2967**	**1,3371**
volume: l/m				**5,20**	**6,10**	**8,80**
weight: kg/m				**23,70**	**33,70**	**49,80**

stock Purmo

according EN 442 - 75/65/20 °C (ΔT 50)

type 22		**height**				order code FC22XXXYYYY
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	375	479	578	670	920
	BTU	1279	1636	1971	2288	3141
500	Watt	469	599	722	838	1151
	BTU	1599	2044	2464	2860	3927
600	Watt	562	719	866	1006	1381
	BTU	1919	2453	2957	3432	4712
700	Watt	656	839	1011	1173	1611
	BTU	2239	2862	3450	4004	5497
800	Watt	750	958	1155	1341	1841
	BTU	2558	3271	3943	4576	6283
900	Watt	843	1078	1300	1508	2071
	BTU	2878	3680	4436	5148	7068
1000	Watt	937	1198	1444	1676	2301
	BTU	3198	4089	4928	5720	7853
1100	Watt	1031	1318	1588	1844	2531
	BTU	3518	4498	5421	6292	8639
1200	Watt	1124	1438	1733	2011	2761
	BTU	3838	4907	5914	6864	9424
1400	Watt	1312	1677	2022	2346	3221
	BTU	4477	5724	6900	8008	10995
1600	Watt	1499	1917	2310	2682	3682
	BTU	5117	6542	7885	9152	12565
1800	Watt	1687	2156	2599	3017	4142
	BTU	5756	7360	8871	10296	14136
2000	Watt	1874	2396	2888	3352	4602
	BTU	6396	8178	9857	11440	15707
2300	Watt	2155	2755	3321	3855	
	BTU	7355	9404	11335	13156	
2600	Watt	2436	3115	3754	4358	
	BTU	8315	10631	12814	14872	
3000	Watt	2811	3594	4332	5028	
	BTU	9594	12266	14785	17161	
Watt/m 90/70/20 °C		**1178**	**1509**	**1822**	**2119**	**2919**
value n		**1,3000**	**1,3098**	**1,3197**	**1,3295**	**1,3488**
volume: l/m		**3,20**	**4,20**	**5,20**	**6,10**	**8,80**
weight: kg/m		**19,10**	**25,10**	**27,00**	**38,00**	**58,90**

according EN 442 - 75/65/20 °C (ΔT 50)

stock Purmo

PLAN COMPACT

Flat front. No pipes.

PANEL RADIATORS

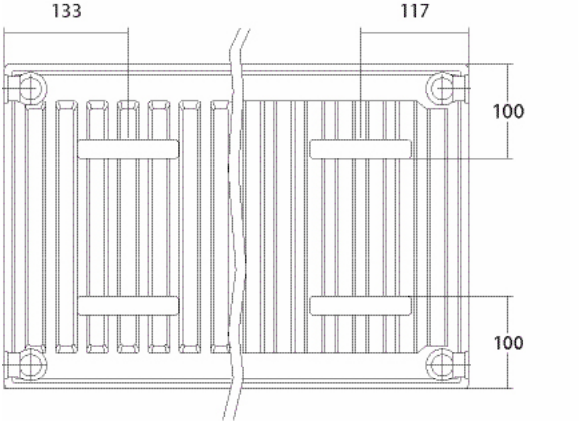
type 33		**height**				order code FC33XXXYYY
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	526	666	798	923	1261
	BTU	1794	2274	2725	3150	4303
500	Watt	657	833	998	1154	1576
	BTU	2242	2843	3406	3937	5379
600	Watt	788	1000	1198	1384	1891
	BTU	2691	3412	4087	4724	6455
700	Watt	920	1166	1397	1615	2206
	BTU	3139	3980	4769	5512	7530
800	Watt	1051	1333	1597	1846	2522
	BTU	3588	4549	5450	6299	8606
900	Watt	1183	1499	1796	2076	2837
	BTU	4036	5117	6131	7086	9682
1000	Watt	1314	1666	1996	2307	3152
	BTU	4485	5686	6812	7874	10758
1100	Watt	1445	1833	2196	2538	3467
	BTU	4933	6255	7494	8661	11834
1200	Watt	1577	1999	2395	2768	3782
	BTU	5382	6823	8175	9449	12909
1400	Watt	1840	2332	2794	3230	4413
	BTU	6279	7960	9537	11023	15061
1600	Watt	2102	2666	3194	3691	5043
	BTU	7175	9098	10900	12598	17212
1800	Watt	2365	2999	3593	4153	5674
	BTU	8072	10235	12262	14173	19364
2000	Watt	2628	3332	3992	4614	6304
	BTU	8969	11372	13625	15748	21516
2300	Watt	3022	3832	4591	5306	
	BTU	10315	13078	15668	18110	
2600	Watt	3416	4332	5190	5998	
	BTU	11660	14784	17712	20472	
3000	Watt	3942	4998	5988	6921	
	BTU	13454	17058	20437	23621	
Watt/m 90/70/20 °C		**1657**	**2102**	**2522**	**2925**	**4031**
value n		**1,3159**	**1,3245**	**1,3331**	**1,3417**	**1,3612**
volume: l/m		**5.10**	**6,30**	**7,50**	**8,80**	**13,00**
weight: kg/m		**26,90**	**36,70**	**42,20**	**56,40**	**84,90**

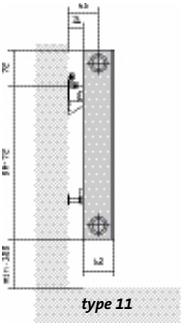
stock Purmo

according EN 442 - 75/65/20 °C (ΔT 50)

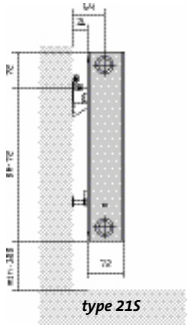
Installation

types 21S, 22, 33 *type 11*

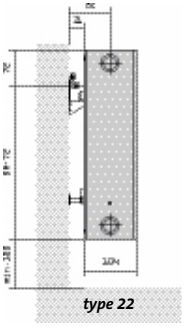




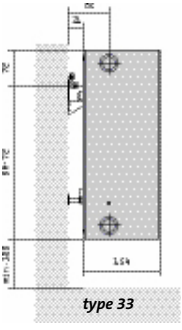
type 11



type 21S



type 22



type 33

PLAN COMPACT

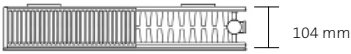
Flat front. No pipes.

PANEL RADIATORS

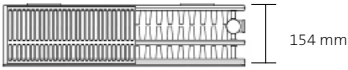
type 11

type 21S

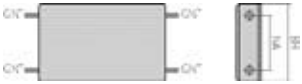
type 22



type 33



Connections



BH mm	300	400	500	600	900	600	900
NA mm	250	350	450	550	850	550	850

PLAN COMPACT VENTIL

Flat front. No pipes.
PANEL RADIATORS

The Plan Compact Ventil combines the timeless beautiful elegance of a perfectly flat front with the advantages of an integrated valve connection. It has a perfect panel front, so that from the front a smooth surface can be seen, without any disturbing elements such as overlapping side covers.

- Connections: 4 x 1/2" BSP, ISO 228, at the side + 2 x 1/2" BSP, ISO 228, at the bottom, distance 50 mm. The pipe system for the supply of hot water is integrated on the right side and the Kv-adjustable thermostatic valve body is already integrated as well as 1 airvent and 2 blank caps.
- Installation:type 11: fixing bracket, type 21S, 22 and 33: FZ brackets.
- Package: radiator with a flat front of which the top and side covers are mounted, brackets, screws and plugs.

HEIGHT
300, 400, 500, 600, 900 mm

LENGTH
400 - 3000 mm

TYPE
FCV11, FCV21s, FCV22, FCV33

FINISH
RAL 9016 White. Other RAL colours available on request.

PLAN COMPACT VENTIL

Flat front. No pipes.

PANEL RADIATORS

type 11		height				order code FCV11XXXYYYY
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	212	272	329	384	539
	BTU	722	928	1124	1312	1839
500	Watt	265	340	412	481	674
	BTU	903	1160	1404	1640	2299
600	Watt	317	408	494	577	808
	BTU	1083	1393	1685	1968	2758
700	Watt	370	476	576	673	943
	BTU	1264	1625	1966	2296	3218
800	Watt	423	544	658	769	1078
	BTU	1444	1857	2247	2624	3678
900	Watt	476	612	741	865	1212
	BTU	1625	2089	2528	2952	4138
1000	Watt	529	680	823	961	1347
	BTU	1805	2321	2809	3280	4597
1100	Watt	582	748	905	1057	1482
	BTU	1986	2553	3090	3608	5057
1200	Watt	635	816	988	1153	1616
	BTU	2167	2785	3371	3936	5517
1400	Watt	741	952	1152	1345	1886
	BTU	2528	3249	3932	4592	6436
1600	Watt	846	1088	1317	1538	2155
	BTU	2889	3713	4494	5248	7356
1800	Watt	952	1224	1481	1730	2425
	BTU	3250	4178	5056	5904	8275
2000	Watt	1058	1360	1646	1922	2694
	BTU	3611	4642	5618	6560	9195
2300	Watt	1217	1564	1893	2210	
	BTU	4153	5338	6460	7544	
2600	Watt	1375	1768	2140	2499	
	BTU	4694	6034	7303	8528	
3000	Watt	1587	2040	2469	2883	
	BTU	5416	6963	8427	9840	
Watt/m 90/70/20 °C		**663**	**852**	**1032**	**1205**	**1694**
value n		**1,2820**	**1,2824**	**1,2827**	**1,2831**	**1,3013**
volume: l/m		**1,50**	**2,20**	**2,90**	**3,40**	**4,50**
weight: kg/m		**11,70**	**16,10**	**16,10**	**24,80**	**36,50**

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)

type 215		**height**		order code FCV21XXXYYYY		
length	Watt +			**500**	**600**	**900**
400	Watt			445	515	706
	BTU			1519	1758	2410
500	Watt			557	644	883
	BTU			1899	2198	3012
600	Watt			668	773	1059
	BTU			2279	2638	3614
700	Watt			779	902	1236
	BTU			2659	3077	4217
800	Watt			890	1030	1412
	BTU			3039	3517	4819
900	Watt			1002	1159	1589
	BTU			3419	3956	5422
1000	Watt			1113	1288	1765
	BTU			3799	4396	6024
1100	Watt			1224	1417	1942
	BTU			4179	4836	6626
1200	Watt			1336	1546	2118
	BTU			4558	5275	7229
1400	Watt			1558	1803	2471
	BTU			5318	6154	8434
1600	Watt			1781	2061	2824
	BTU			6078	7034	9638
1800	Watt			2003	2318	3177
	BTU			6838	7913	10843
2000	Watt			2226	2576	3530
	BTU			7597	8792	12048
2300	Watt			2560	2962	
	BTU			8737	10111	
2600	Watt			2894	3349	
	BTU			9877	11429	
3000	Watt			3339	3864	
	BTU			11396	13188	
Watt/m 90/70/20 °C				**1397**	**1619**	**2234**
value n				**1,2907**	**1,2967**	**1,3371**
volume: l/m				**5,20**	**6,10**	**8,80**
weight: kg/m				**23,70**	**33,70**	**49,80**

according EN 442 - 75/65/20 °C (ΔT 50)

delivery time: 20 working days

PLAN COMPACT VENTIL

Flat front. No pipes.

PANEL RADIATORS

type 22		**height**				order code FCV22XXXYYYY
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	375	479	578	670	920
	BTU	1279	1636	1971	2288	3141
500	Watt	469	599	722	838	1151
	BTU	1599	2044	2464	2860	3927
600	Watt	562	719	866	1006	1381
	BTU	1919	2453	2957	3432	4712
700	Watt	656	839	1011	1173	1611
	BTU	2239	2862	3450	4004	5497
800	Watt	750	958	1155	1341	1841
	BTU	2558	3271	3943	4576	6283
900	Watt	843	1078	1300	1508	2071
	BTU	2878	3680	4436	5148	7068
1000	Watt	937	1198	1444	1676	2301
	BTU	3198	4089	4928	5720	7853
1100	Watt	1031	1318	1588	1844	2531
	BTU	3518	4498	5421	6292	8639
1200	Watt	1124	1438	1733	2011	2761
	BTU	3838	4907	5914	6864	9424
1400	Watt	1312	1677	2022	2346	3221
	BTU	4477	5724	6900	8008	10995
1600	Watt	1499	1917	2310	2682	3682
	BTU	5117	6542	7885	9152	12565
1800	Watt	1687	2156	2599	3017	4142
	BTU	5756	7360	8871	10296	14136
2000	Watt	1874	2396	2888	3352	4602
	BTU	6396	8178	9857	11440	15707
2300	Watt	2155	2755	3321	3855	
	BTU	7355	9404	11335	13156	
2600	Watt	2436	3115	3754	4358	
	BTU	8315	10631	12814	14872	
3000	Watt	2811	3594	4332	5028	
	BTU	9594	12266	14785	17161	
Watt/m 90/70/20 °C		**1178**	**1509**	**1822**	**2119**	**2919**
value n		**1,3000**	**1,3098**	**1,3197**	**1,3295**	**1,3488**
volume: l/m		**3,20**	**4,20**	**5,20**	**6,10**	**8,80**
weight: kg/m		**19,10**	**25,10**	**27,00**	**38,00**	**58,90**

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)

type 33		**height**			order code FCV33XXXYYYY	
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	526	666	798	923	1261
	BTU	1794	2274	2725	3150	4303
500	Watt	657	833	998	1154	1576
	BTU	2242	2843	3406	3937	5379
600	Watt	788	1000	1198	1384	1891
	BTU	2691	3412	4087	4724	6455
700	Watt	920	1166	1397	1615	2206
	BTU	3139	3980	4769	5512	7530
800	Watt	1051	1333	1597	1846	2522
	BTU	3588	4549	5450	6299	8606
900	Watt	1183	1499	1796	2076	2837
	BTU	4036	5117	6131	7086	9682
1000	Watt	1314	1666	1996	2307	3152
	BTU	4485	5686	6812	7874	10758
1100	Watt	1445	1833	2196	2538	3467
	BTU	4933	6255	7494	8661	11834
1200	Watt	1577	1999	2395	2768	3782
	BTU	5382	6823	8175	9449	12909
1400	Watt	1840	2332	2794	3230	4413
	BTU	6279	7960	9537	11023	15061
1600	Watt	2102	2666	3194	3691	5043
	BTU	7175	9098	10900	12598	17212
1800	Watt	2365	2999	3593	4153	5674
	BTU	8072	10235	12262	14173	19364
2000	Watt	2628	3332	3992	4614	6304
	BTU	8969	11372	13625	15748	21516
2300	Watt	3022	3832	4591	5306	
	BTU	10315	13078	15668	18110	
2600	Watt	3416	4332	5190	5998	
	BTU	11660	14784	17712	20472	
3000	Watt	3942	4998	5988	6921	
	BTU	13454	17058	20437	23621	
Watt/m 90/70/20 °C		**1657**	**2102**	**2522**	**2925**	**4031**
value n		**1,3159**	**1,3245**	**1,3331**	**1,3417**	**1,3612**
volume: l/m		**5,10**	**6,30**	**7,50**	**8,80**	**13,00**
weight: kg/m		**26,90**	**36,70**	**42,20**	**56,40**	**84,90**

according EN 442 - 75/65/20 °C (ΔT 50)

delivery time: 20 working days

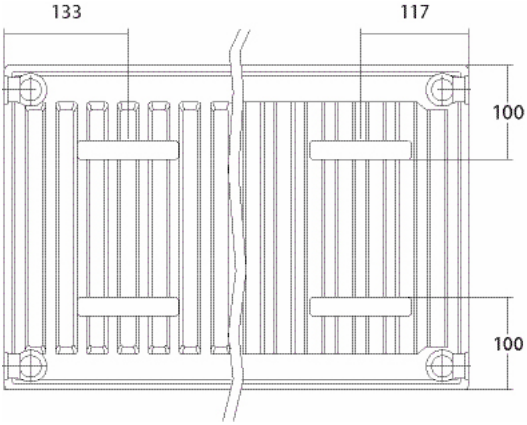
PLAN COMPACT VENTIL

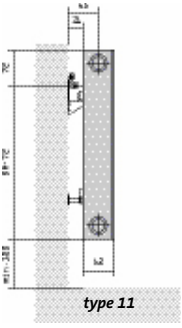
Flat front. No pipes.

PANEL RADIATORS

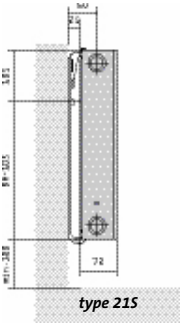
Installation

types 21S, 22, 33 *type 11*

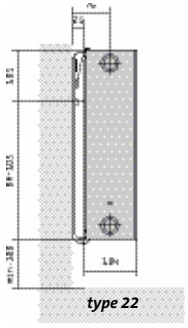




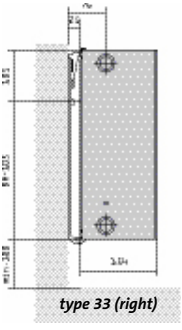
type 11



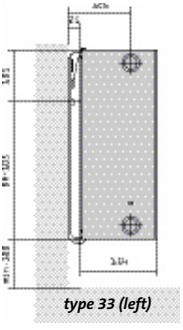
type 21S



type 22



type 33 (right)



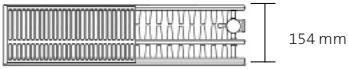
type 33 (left)

type 11

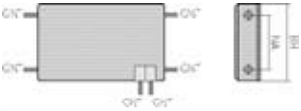
type 21S

type 22

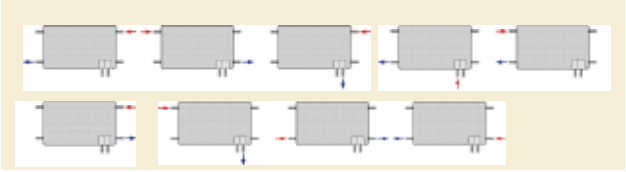
type 33



Connections



BH mm	300	400	500	600	900	600	900
NA mm	250	350	450	550	850	550	850



PLAN COMPACT VENTIL M

Flat front. No pipes.

PANEL RADIATORS

With the Plan Compact Ventil M the trick of combining timeless elegance with the highest functionality has been perfected. The very minimalist form with a perfectly smooth panel front is accompanied by a central connection from below, which creates an impression of symmetry.

- Connections: 4 x 1/2" BSP, ISO 228, at the side + 2 x 1/2" BSP, ISO 228, at the bottom in the middle, distance 50 mm. The pipe system for the supply of hot water is integrated in the middle of the radiator and the Kv-adjustable thermostatic valve body is already integrated as well as 1 airvent and 2 blank caps.
- Installation: type 11: fixing bracket, type 21S, 22 and 33: FZ brackets.
- Package: radiator with a flat front of which the top and side covers are mounted, brackets, screws and plugs.

HEIGHT
300, 400, 500, 600, 900 mm

LENGTH
400 - 3000 mm

TYPE
FCVM11, FCVM21s, FCVM22, FCVM33

FINISH
RAL 9016 White. Other RAL colours available on request.

type 11		**height**			order code FCVM11XXXYYYY	
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	212	272	329	384	539
	BTU	722	928	1124	1312	1839
500	Watt	265	340	412	481	674
	BTU	903	1160	1404	1640	2299
600	Watt	317	408	494	577	808
	BTU	1083	1393	1685	1968	2758
700	Watt	370	476	576	673	943
	BTU	1264	1625	1966	2296	3218
800	Watt	423	544	658	769	1078
	BTU	1444	1857	2247	2624	3678
900	Watt	476	612	741	865	1212
	BTU	1625	2089	2528	2952	4138
1000	Watt	529	680	823	961	1347
	BTU	1805	2321	2809	3280	4597
1100	Watt	582	748	905	1057	1482
	BTU	1986	2553	3090	3608	5057
1200	Watt	635	816	988	1153	1616
	BTU	2167	2785	3371	3936	5517
1400	Watt	741	952	1152	1345	1886
	BTU	2528	3249	3932	4592	6436
1600	Watt	846	1088	1317	1538	2155
	BTU	2889	3713	4494	5248	7356
1800	Watt	952	1224	1481	1730	2425
	BTU	3250	4178	5056	5904	8275
2000	Watt	1058	1360	1646	1922	2694
	BTU	3611	4642	5618	6560	9195
2300	Watt	1217	1564	1893	2210	
	BTU	4153	5338	6460	7544	
2600	Watt	1375	1768	2140	2499	
	BTU	4694	6034	7303	8528	
3000	Watt	1587	2040	2469	2883	
	BTU	5416	6963	8427	9840	
Watt/m 90/70/20 °C		**663**	**852**	**1032**	**1205**	**1694**
value n		**1,2820**	**1,2824**	**1,2827**	**1,2831**	**1,3013**
volume: l/m		**1,50**	**2,20**	**2,90**	**3,40**	**4,50**
weight: kg/m		**11,70**	**16,10**	**16,10**	**24,80**	**36,50**

according EN 442 - 75/65/20 °C (ΔT 50)

delivery time: 20 working days

PLAN COMPACT VENTIL M

Flat front. No pipes.

PANEL RADIATORS

type 21S		**height**		order code FCVM21XXXYYYY		
length	Watt +			**500**	**600**	**900**
400	Watt			445	515	706
	BTU			1519	1758	2410
500	Watt			557	644	883
	BTU			1899	2198	3012
600	Watt			668	773	1059
	BTU			2279	2638	3614
700	Watt			779	902	1236
	BTU			2659	3077	4217
800	Watt			890	1030	1412
	BTU			3039	3517	4819
900	Watt			1002	1159	1589
	BTU			3419	3956	5422
1000	Watt			1113	1288	1765
	BTU			3799	4396	6024
1100	Watt			1224	1417	1942
	BTU			4179	4836	6626
1200	Watt			1336	1546	2118
	BTU			4558	5275	7229
1400	Watt			1558	1803	2471
	BTU			5318	6154	8434
1600	Watt			1781	2061	2824
	BTU			6078	7034	9638
1800	Watt			2003	2318	3177
	BTU			6838	7913	10843
2000	Watt			2226	2576	3530
	BTU			7597	8792	12048
2300	Watt			2560	2962	
	BTU			8737	10111	
2600	Watt			2894	3349	
	BTU			9877	11429	
3000	Watt			3339	3864	
	BTU			11396	13188	
Watt/m 90/70/20 °C				**1397**	**1619**	**2234**
value n				**1,2907**	**1,2967**	**1,3371**
volume: l/m				**5,20**	**6,10**	**8,80**
weight: kg/m				**23,70**	**33,70**	**49,80**

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)

type 22		**height**			order code FCVM22XXXYYYY	
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	375	479	578	670	920
	BTU	1279	1636	1971	2288	3141
500	Watt	469	599	722	838	1151
	BTU	1599	2044	2464	2860	3927
600	Watt	562	719	866	1006	1381
	BTU	1919	2453	2957	3432	4712
700	Watt	656	839	1011	1173	1611
	BTU	2239	2862	3450	4004	5497
800	Watt	750	958	1155	1341	1841
	BTU	2558	3271	3943	4576	6283
900	Watt	843	1078	1300	1508	2071
	BTU	2878	3680	4436	5148	7068
1000	Watt	937	1198	1444	1676	2301
	BTU	3198	4089	4928	5720	7853
1100	Watt	1031	1318	1588	1844	2531
	BTU	3518	4498	5421	6292	8639
1200	Watt	1124	1438	1733	2011	2761
	BTU	3838	4907	5914	6864	9424
1400	Watt	1312	1677	2022	2346	3221
	BTU	4477	5724	6900	8008	10995
1600	Watt	1499	1917	2310	2682	3682
	BTU	5117	6542	7885	9152	12565
1800	Watt	1687	2156	2599	3017	4142
	BTU	5756	7360	8871	10296	14136
2000	Watt	1874	2396	2888	3352	4602
	BTU	6396	8178	9857	11440	15707
2300	Watt	2155	2755	3321	3855	
	BTU	7355	9404	11335	13156	
2600	Watt	2436	3115	3754	4358	
	BTU	8315	10631	12814	14872	
3000	Watt	2811	3594	4332	5028	
	BTU	9594	12266	14785	17161	
Watt/m 90/70/20 °C		**1178**	**1509**	**1822**	**2119**	**2919**
value n		**1,3000**	**1,3098**	**1,3197**	**1,3295**	**1,3488**
volume: l/m		**3,20**	**4,20**	**5,20**	**6,10**	**8,80**
weight: kg/m		**19,10**	**25,10**	**27,00**	**38,00**	**58,90**

according EN 442 - 75/65/20 °C (ΔT 50)

delivery time: 20 working days

PLAN COMPACT VENTIL M

Flat front. No pipes.

PANEL RADIATORS

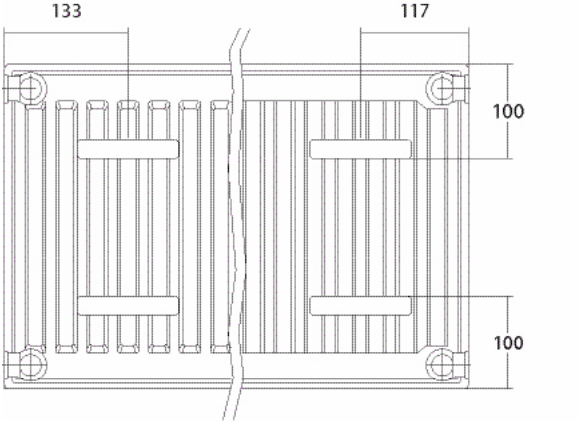
type 33		**height**			order code FCVM33XXXYYYY	
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	526	666	798	923	1261
	BTU	1794	2274	2725	3150	4303
500	Watt	657	833	998	1154	1576
	BTU	2242	2843	3406	3937	5379
600	Watt	788	1000	1198	1384	1891
	BTU	2691	3412	4087	4724	6455
700	Watt	920	1166	1397	1615	2206
	BTU	3139	3980	4769	5512	7530
800	Watt	1051	1333	1597	1846	2522
	BTU	3588	4549	5450	6299	8606
900	Watt	1183	1499	1796	2076	2837
	BTU	4036	5117	6131	7086	9682
1000	Watt	1314	1666	1996	2307	3152
	BTU	4485	5686	6812	7874	10758
1100	Watt	1445	1833	2196	2538	3467
	BTU	4933	6255	7494	8661	11834
1200	Watt	1577	1999	2395	2768	3782
	BTU	5382	6823	8175	9449	12909
1400	Watt	1840	2332	2794	3230	4413
	BTU	6279	7960	9537	11023	15061
1600	Watt	2102	2666	3194	3691	343
	BTU	7175	9098	10900	12598	1172
1800	Watt	2365	2999	3593	4153	5674
	BTU	8072	10235	12262	14173	19364
2000	Watt	2628	3332	3992	4614	6304
	BTU	8969	11372	13625	15748	21516
2300	Watt	3022	3832	4591	5306	
	BTU	10315	13078	15668	18110	
2600	Watt	3416	4332	5190	5998	
	BTU	11660	14784	17712	20472	
3000	Watt	3942	4998	5988	6921	
	BTU	13454	17058	20437	23621	
Watt/m 90/70/20 °C		**1657**	**2102**	**2522**	**2925**	**4031**
value n		**1,3159**	**1,3245**	**1,3331**	**1,3417**	**1,3612**
volume: l/m		**5,10**	**6,30**	**7,50**	**8,80**	**13,00**
weight: kg/m		**26,90**	**36,70**	**42,20**	**56,40**	**84,90**

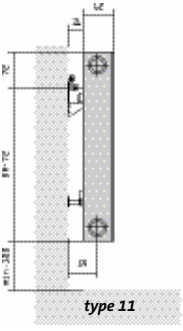
delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)

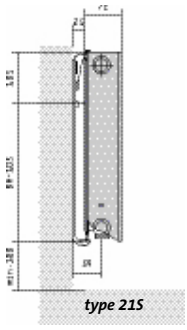
Installation

types 21S, 22, 33 *type 11*

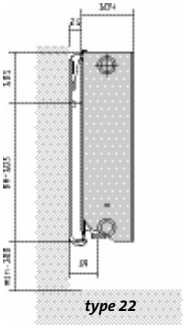




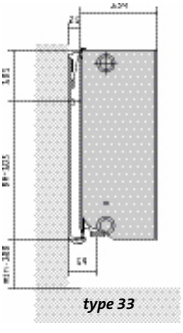
type 11



type 21S



type 22



type 33

PLAN COMPACT VENTIL M

Flat front. No pipes.

PANEL RADIATORS

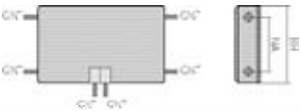
type 11

type 215

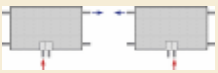
type 22

type 33

Connections



BH mm	300	400	500	600	900	600	900
NA mm	250	350	450	550	850	550	850



This streamlined panel radiator is also provided with a concealed pipe system and integrated valve body. The Ramo, however, has a sectioned front, straight side panels and a decorative top grille.

- Connections: 6 x 1/2" BSP (15/21). The hot water pipe system on the right (left on demand) and the kV-adjustable thermostatic valve-body are factory-fitted as well as the airvent and 2 blind stops and the mounting brackets.
- Installation: Radsoclic brackets: ≤1600 mm: 2 pieces, >1600 mm: 3 pieces.
- Package: radiator with a profiled front with mounted side and top covers, 1 airvent, brackets, screws and plugs.

HEIGHT
300, 400, 500, 600, 750, 900 mm

LENGTH
450 - 3000 mm

TYPE
11, 21S, 22, 33

FINISH
RAL 9016 White. Other RAL colours available on request.

type 11		**height**					order code RA11XXXYYYY
length	Watt +	**300**	**400**	**500**	**600**	**750**	**900**
450	Watt	242	306	366	424	506	584
	BTU	826	1044	1250	1447	1728	1994
600	Watt	323	408	488	565	675	779
	BTU	1102	1393	1667	1929	2304	2658
750	Watt	404	510	611	707	844	974
	BTU	1377	1741	2084	2411	2880	3323
900	Watt	484	612	733	848	1013	1168
	BTU	1653	2089	2500	2894	3456	3987
1050	Watt	565	714	855	989	1181	1363
	BTU	1928	2437	2917	3376	4032	4652
1200	Watt	646	816	977	1130	1350	1558
	BTU	2203	2785	3334	3858	4608	5316
1350	Watt	726	918	1099	1272	1519	1752
	BTU	2479	3133	3751	4340	5183	5981
1500	Watt	807	1020	1221	1413	1688	1947
	BTU	2754	3481	4167	4823	5759	6645
1650	Watt	888	1122	1343	1554	1856	2142
	BTU	3030	3829	4584	5305	6335	7310
Watt/m 90/70/20 °C		**687**	**868**	**1038**	**1200**	**1432**	**1650**
value n		**1,3436**	**1,3382**	**1,3329**	**1,3275**	**1,3224**	**1,3172**
volume: l/m		**1,83**	**2,39**	**2,94**	**3,50**	**4,36**	**5,22**
weight: kg/m		**12,42**	**16,17**	**19,92**	**23,67**	**30,22**	**36,78**

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)

type 215		**height**				order code RA21XXXYYYY	
length	Watt +	**300**	**400**	**500**	**600**	**750**	**900**
450	Watt	339	421	498	571	676	776
	BTU	1158	1438	1700	1949	2307	2648
600	Watt	452	562	664	761	901	1034
	BTU	1544	1917	2267	2599	3076	3530
750	Watt	566	702	830	952	1127	1293
	BTU	1930	2396	2834	3248	3845	4413
900	Watt	679	842	996	1142	1352	1552
	BTU	2316	2875	3400	3898	4614	5296
1050	Watt	792	983	1162	1332	1577	1810
	BTU	2702	3354	3967	4548	5383	6178
1200	Watt	905	1123	1328	1523	1802	2069
	BTU	3088	3833	4534	5197	6152	7061
1350	Watt	1018	1264	1494	1713	2028	2327
	BTU	3474	4313	5101	5847	6921	7943
1500	Watt	1131	1404	1661	1904	2253	2586
	BTU	3860	4792	5667	6497	7689	8826
1650	Watt	1244	1544	1827	2094	2478	2845
	BTU	4246	5271	6234	7146	8458	9709
1800	Watt	1357	1685	1993	2284	2704	3103
	BTU	4632	5750	6801	7796	9227	10591
1950	Watt	1470	1825	2159	2475	2929	3362
	BTU	5018	6229	7367	8446	9996	11474
2100	Watt	1583	1966	2325	2665	3154	3620
	BTU	5404	6709	7934	9095	10765	12356
2250	Watt	1697	2106	2491	2855		
	BTU	5792	7188	8502	9744		
2400	Watt	1810	2246	2657	3046		
	BTU	6178	7666	9068	10396		
Watt/m 90/70/20 °C		**957**	**1191**	**1411**	**1621**	**1924**	**2214**
value n		**1,3096**	**1,3209**	**1,3322**	**1,3435**	**1,3584**	**1,3732**
volume: l/m		**3,58**	**4,69**	**5,81**	**6,92**	**8,68**	**10,44**
weight: kg/m		**17,25**	**23,00**	**28,75**	**34,50**	**43,03**	**51,56**

according EN 442 - 75/65/20 °C (ΔT 50)

delivery time: 20 working days

type 22		**height**					order code RA22XXXYYYY
length	Watt +	**300**	**400**	**500**	**600**	**750**	**900**
450	Watt	456	569	675	773	911	1037
	BTU	1556	1943	2302	2639	3109	3540
600	Watt	608	759	899	1031	1214	1383
	BTU	2074	2590	3070	3518	4145	4720
750	Watt	760	949	1124	1289	1518	1729
	BTU	2593	3238	3837	4398	5181	5900
900	Watt	912	1139	1349	1546	1822	2075
	BTU	3112	3886	4604	5277	6217	7080
1050	Watt	1064	1328	1574	1804	2125	2420
	BTU	3630	4533	5372	6157	7253	8260
1200	Watt	1216	1518	1799	2062	2429	2766
	BTU	4149	5181	6139	7036	8289	9440
1350	Watt	1368	1708	2024	2319	2732	3112
	BTU	4667	5829	6907	7916	9326	10620
1500	Watt	1520	1898	2249	2577	3036	3458
	BTU	5186	6476	7674	8795	10362	11800
1650	Watt	1671	2087	2473	2835	3340	3803
	BTU	5705	7124	8442	9675	11398	12980
1800	Watt	1823	2277	2698	3092	3643	4149
	BTU	6223	7771	9209	10554	12434	14161
1950	Watt	1975	2467	2923	3350	3947	4495
	BTU	6742	8419	9976	11434	13470	15341
2100	Watt	2127	2657	3148	3608	4250	4841
	BTU	7260	9067	10744	12313	14507	16521
2250	Watt	2279	2846	3373	3866		
	BTU	7778	9713	11512	13195		
2400	Watt	2431	3036	3598	4123		
	BTU	8297	10362	12280	14072		
2550	Watt	2583	3226	3822	4381		
	BTU	8816	11010	13044	14952		
Watt/m 90/70/20 °C		**1288**	**1609**	**1909**	**2190**	**2589**	**2958**
value n		**1,3154**	**1,3208**	**1,3261**	**1,3315**	**1,3497**	**1,3678**
volume: l/m		**3,58**	**4,69**	**5,81**	**6,92**	**8,68**	**10,44**
weight: kg/m		**19,92**	**26,67**	**33,42**	**40,17**	**50,53**	**60,89**

delivery time: 20 working days

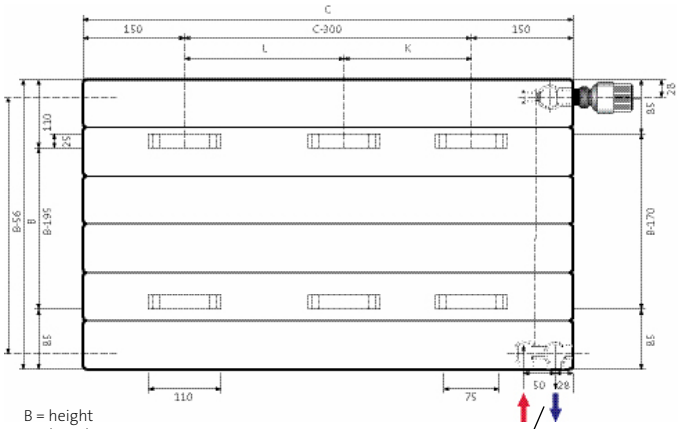
according EN 442 - 75/65/20 °C (ΔT 50)

type 33		**height**				order code RA33XXXYYYY	
length	Watt +	**300**	**400**	**500**	**600**	**750**	**900**
450	Watt	638	810	970	1120	1329	1521
	BTU	2176	2763	3310	3823	4535	5190
600	Watt	850	1079	1293	1493	1772	2027
	BTU	2902	3684	4413	5097	6047	6920
750	Watt	1063	1349	1616	1867	2215	2534
	BTU	3627	4605	5516	6371	7559	8649
900	Watt	1275	1619	1940	2240	2658	3041
	BTU	4353	5526	6620	7645	9071	10379
1050	Watt	1488	1889	2263	2613	3101	3548
	BTU	5078	6447	7723	8920	10583	12109
1200	Watt	1700	2159	2586	2987	3544	4055
	BTU	5803	7368	8826	10194	12094	13839
1350	Watt	1913	2429	2909	3360	3987	4562
	BTU	6529	8289	9929	11468	13606	15569
1500	Watt	2126	2699	3233	3734	4430	5069
	BTU	7254	9210	11033	12742	15118	17299
1650	Watt	2338	2968	3556	4107	4872	5575
	BTU	7980	10131	12136	14017	16630	19029
1800	Watt	2551	3238	3879	4480	5315	6082
	BTU	8705	11052	13239	15291	18141	20759
1950	Watt	2763	3508	4202	4854	5758	6589
	BTU	9431	11973	14342	16565	19653	22488
2100	Watt	2976	3778	4526	5227	6201	7096
	BTU	10156	12894	15446	17839	21165	24218
2250	Watt	3188	4048	4849	5600		
	BTU	10881	13816	16550	19113		
2400	Watt	3401	4318	5172	5974		
	BTU	11608	14737	17652	20389		
2550	Watt	3613	4587	5495	6347		
	BTU	12331	15655	18754	21662		
2700	Watt	3826	4857	5819	6820		
	BTU	13058	16577	19860	23277		
3000	Watt	4251	5397	6465	7467		
	BTU	14509	18420	22065	25485		
Watt/m 90/70/20 °C		**1801**	**2290**	**2748**	**3179**	**3784**	**4344**
value n		**1,3144**	**1,3234**	**1,3323**	**1,3413**	**1,3596**	**1,3779**
volume: l/m		**5,42**	**7,22**	**9,03**	**10,83**	**13,85**	**15,87**
weight: kg/m		**28,25**	**37,78**	**47,31**	**56,83**	**71,88**	**86,93**

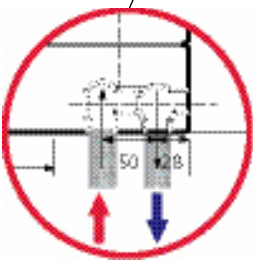
according EN 442 - 75/65/20 °C (ΔT 50)

delivery time: 20 working days

Installation



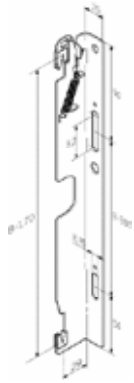
B = height
C = length

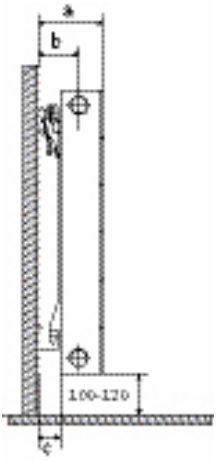


measures hanging strips		
length	**K**	**L**
1650	700	650
1800	750	750
1950	850	800
2100	900	900
2250	1000	950
2400	1050	1050
2550	1150	1100
2700	1200	1200
3000	1400	1350

Type 21S, 22 and 33 with lengths 1650, 1800 and 1950 mm, have only 2 hanging strips.

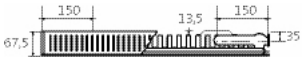
Radsoclic bracket





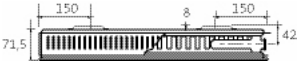
B = height radiator

type 11



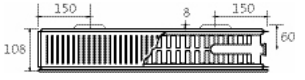
a = 98 mm
b = 62 mm
c = 37 mm

type 21S



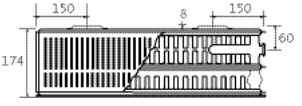
a = 109 mm
b = 71 mm
c = 37 mm

type 22



a = 145 mm
b = 89 mm
c = 37 mm

type 33



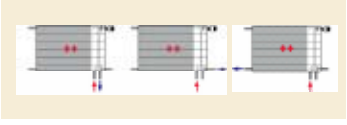
a = 211 mm
b = 89 mm
c = 37 mm

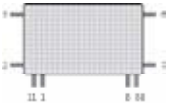
Connections

Connection possibilities WITH thermostatic valve.

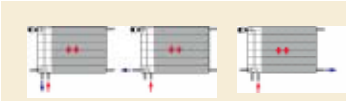
Every Ramo radiator can be connected without a thermostatic valve, as 'Compact' radiator.

right





left



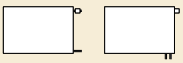
PLANORA

The proof that heat and style go hand in hand

PANEL RADIATORS

The Planora radiator has a flat front that exudes minimalist elegance and blends with every interior; demonstrating that style is timeless; and that heat and style can be effectively combined. The front not only looks nice, but also allows the water to circulate efficiently.

- Connections: 6 x 1/2" BSP (15/21). The pipe system is integrated on the right side (left on demand).
- Installation: 4 or 6 welded-on hanging strips for a quick assembly kit with 2 or 3 brackets, 2 distance holders.
- Package: radiator with a flat front of which the side ande top covers are mounted, brackets, Kv adjustable thermostatic valve body, 1 rotating airvent, 3 chromed blank caps, screws and plugs.



HEIGHT
300, 400, 500, 600, 900 mm

LENGTH
500 - 3000 mm

TYPE
PCV11, PCV21s, PCV22, PCV33

FINISH
RAL 9016 White. Other RAL colours available on request.

type 11		**height**			order code PCV11XXXYYYYZ	
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	207	269	329	386	546
	BTU	706	918	1123	1317	1863
500	Watt	259	336	411	483	683
	BTU	882	1147	1403	1647	2329
600	Watt	310	403	493	579	819
	BTU	1059	1376	1683	1976	2795
700	Watt	362	470	575	676	956
	BTU	1235	1605	1964	2305	3261
800	Watt	414	538	658	772	1092
	BTU	1412	1835	2244	2635	3727
900	Watt	465	605	740	869	1229
	BTU	1588	2064	2525	2964	4193
1000	Watt	517	672	822	965	1365
	BTU	1765	2294	2805	3294	4659
1100	Watt	569	739	904	1062	1502
	BTU	1941	2523	3086	3623	5125
1200	Watt	620	806	986	1158	1638
	BTU	2117	2752	3367	3952	5590
1400	Watt	724	941	1151	1351	1911
	BTU	2470	3211	3928	4611	6522
1600	Watt	827	1075	1315	1544	2184
	BTU	2823	3670	4489	5270	7454
1800	Watt	931	1210	1480	1737	2457
	BTU	3176	4128	5050	5928	8386
2000	Watt	1034	1344	1644	1930	2730
	BTU	3529	4587	5611	6587	9317
2300	Watt	1189	1546	1891	2220	3140
	BTU	4058	5275	6453	7575	10715
2600	Watt	1344	1747	2137	2509	3549
	BTU	4588	5963	7294	8563	12113
3000	Watt	1551	2016	1527	2895	4095
	BTU	5294	6881	5212	9881	13976
Watt/m 90/70/20 °C		**652**	**848**	**1039**	**1221**	**1733**
value n		**1,2725**	**1,2784**	**1,2842**	**1,2902**	**1,3087**
volume: l/m		**1,10**	**1,50**	**1,80**	**2,10**	**2,70**
weight: kg/m		**11,80**	**15,70**	**19,60**	**23,60**	**35,70**

according EN 442 - 75/65/20 °C (ΔT 50)

delivery time: 20 working days

PLANORA

The proof that heat and style go hand in hand

PANEL RADIATORS

type 21S		height			order code PCV21XXXYYYYZ	
length	Watt +		**400**	**500**	**600**	**900**
400	Watt		363	436	506	702
	BTU		1239	1488	1727	2396
500	Watt		454	545	633	877
	BTU		1550	1860	2160	2993
600	Watt		544	654	760	1052
	BTU		1857	2232	2593	3592
700	Watt		635	763	886	1228
	BTU		2167	2604	3025	4190
800	Watt		726	872	1013	1403
	BTU		2478	2976	3457	4789
900	Watt		816	981	1139	1579
	BTU		2785	3348	3889	5388
1000	Watt		907	1090	1266	1754
	BTU		3096	3720	4321	5986
1100	Watt		999	1199	1393	1929
	BTU		3409	4092	4753	6585
1200	Watt		1088	1308	1519	2105
	BTU		3713	4464	5185	7184
1400	Watt		1270	1526	1772	2456
	BTU		4335	5208	6049	8381
1600	Watt		1451	1744	2026	2806
	BTU		4952	5952	6913	9578
1800	Watt		1633	1962	2279	3157
	BTU		5573	6696	7778	10776
2000	Watt		1814	2180	2532	3508
	BTU		6191	7440	8642	11973
2300	Watt		2086	2507	2912	4034
	BTU		7120	8556	9938	13769
2600	Watt		2358	2834	3292	4560
	BTU		8048	9672	11234	15565
3000	Watt		2721	3270	3798	5262
	BTU		9287	11161	12963	17959
Watt/m 90/70/20 °C			**1149**	**1382**	**1607**	**2229**
value n			**1,2964**	**1,3028**	**1,3077**	**1,3139**
volume: l/m		**2,90**	**3,60**	**4,30**	**5,00**	**7,00**
weight: kg/m		**16,40**	**21,80**	**27,10**	**32,40**	**48,20**

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)

type 22		**height**		order code PCV22XXXYYYYZ		
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	367	464	559	652	928
	BTU	1253	1584	1908	2225	3167
500	Watt	459	581	699	815	1160
	BTU	1565	1981	2384	2782	3957
600	Watt	550	697	838	978	1391
	BTU	1878	2377	2861	3338	4749
700	Watt	642	813	978	1141	1623
	BTU	2191	2774	3338	3894	5540
800	Watt	734	929	1118	1304	1855
	BTU	2504	3170	3814	4451	6332
900	Watt	825	1045	1257	1467	2087
	BTU	2817	3566	4291	5007	7123
1000	Watt	917	1161	1397	1630	2319
	BTU	3130	3962	4768	5563	7915
1100	Watt	1009	1277	1537	1793	2551
	BTU	3443	4359	5245	6120	8706
1200	Watt	1100	1393	1676	1956	2783
	BTU	3756	4755	5722	6676	9498
1400	Watt	1284	1625	1956	2282	3247
	BTU	4382	5547	6675	7788	11081
1600	Watt	1467	1858	2235	2608	3710
	BTU	5008	6340	7629	8901	12664
1800	Watt	1651	2090	2515	2934	4174
	BTU	5633	7132	8582	10014	14247
2000	Watt	1834	2322	2794	3260	4638
	BTU	6259	7925	9536	11126	15829
2300	Watt	2109	2670	3213	3749	5334
	BTU	7198	9114	10966	12795	18204
2600	Watt	2384	3019	3632	4238	6029
	BTU	8137	10302	12397	14464	20578
3000	Watt	2751	3483	4191	4890	6957
	BTU	9389	11887	14304	16690	23744
Watt/m 90/70/20 °C		**1162**	**1472**	**1773**	**2071**	**2953**
value n		**1,2966**	**1,3030**	**1,3088**	**1,3139**	**1,3257**
volume: l/m		**2,90**	**3,60**	**4,30**	**5,10**	**7,10**
weight: kg/m		**19,10**	**25,50**	**31,90**	**38,40**	**58,00**

according EN 442 - 75/65/20 °C (ΔT 50)

delivery time: 20 working days

PLANORA

The proof that heat and style go hand in hand

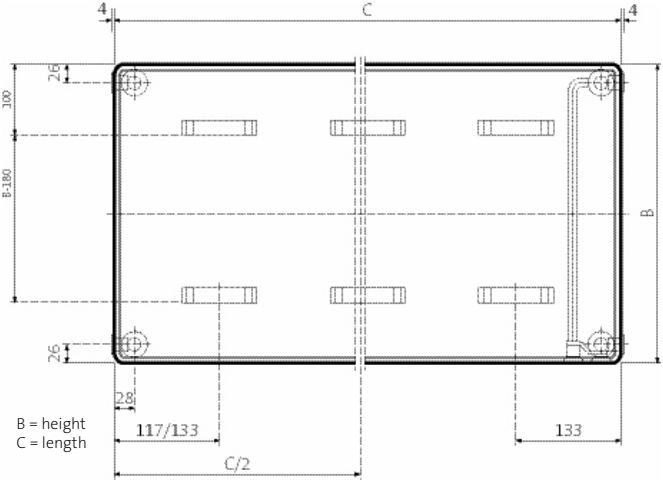
PANEL RADIATORS

type 33		height			order code PCV33XXXYYYYZ	
length	Watt +	**300**	**400**	**500**	**600**	**900**
400	Watt	531	672	806	932	1281
	BTU	1812	2294	2751	3181	4372
500	Watt	664	841	1007	1166	1601
	BTU	2266	2869	3437	3978	5464
600	Watt	797	1009	1208	1399	1921
	BTU	2719	3442	4124	4773	6557
700	Watt	930	1177	1410	1632	2241
	BTU	3173	4016	4812	5569	7650
800	Watt	1062	1345	1611	1865	2562
	BTU	3626	4590	5499	6365	8743
900	Watt	1195	1513	1813	2098	2882
	BTU	4079	5164	6186	7160	9836
1000	Watt	1328	1681	2014	2331	3202
	BTU	4532	5737	6874	7956	10928
1100	Watt	1461	1849	2215	2564	3522
	BTU	4986	6311	7561	8751	12021
1200	Watt	1594	2017	2417	2797	3842
	BTU	5439	6885	8249	9547	13114
1400	Watt	1859	2353	2820	3263	4483
	BTU	6345	8032	9623	11138	15300
1600	Watt	2125	2690	3222	3730	5123
	BTU	7252	9180	10998	12729	17485
1800	Watt	2390	3026	3625	4196	5764
	BTU	8158	10327	12373	14320	19671
2000	Watt	2656	3362	4028	4662	6404
	BTU	9065	11475	13748	15911	21857
2300	Watt	3054	3866	4632	5361	7365
	BTU	10425	13196	15810	18298	25135
2600	Watt	3453	4371	5236	6061	8325
	BTU	11784	14917	17872	20685	28414
3000	Watt	3984	5043	6042	6993	9606
	BTU	13597	17212	20621	23867	32785
Watt/m 90/70/20 °C		**1683**	**2134**	**2561**	**2968**	**4039**
value n		**1,2984**	**1,3084**	**1,3177**	**1,3260**	**1,3460**
volume: l/m		**4,50**	**5,60**	**6,80**	**7,90**	**11,60**
weight: kg/m		**27,90**	**37,30**	**46,60**	**55,90**	**83,60**

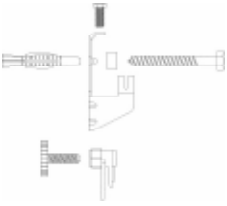
delivery time: 20 working days

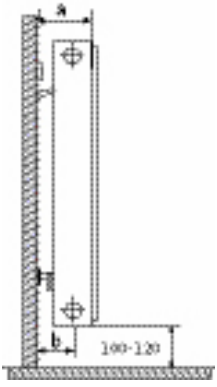
according EN 442 - 75/65/20 °C (ΔT 50)

Installation



quick assembly set





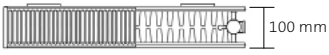
type 11

a = 88 mm
b = 60 mm

type 215

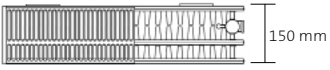
a = 95 mm
b = 65 mm

type 22



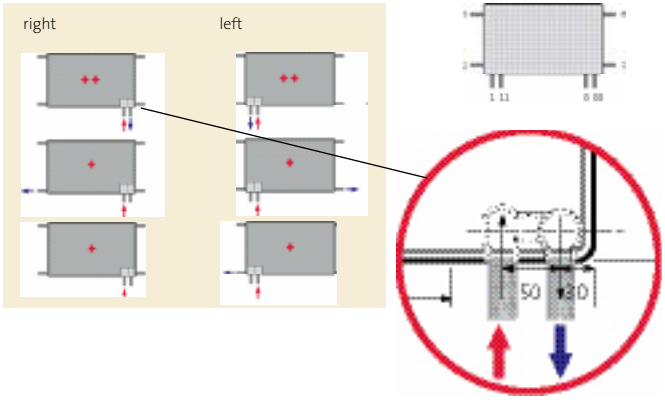
a = 130 mm
b = 81 mm

type 33



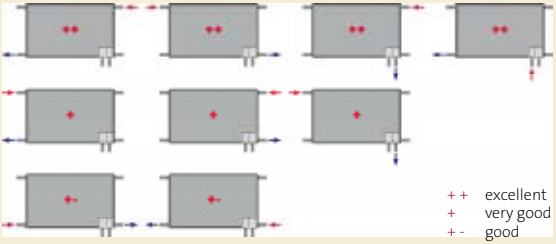
a = 180 mm
b = 81 mm

Connections
Connection possibilities WITH thermostatic valve

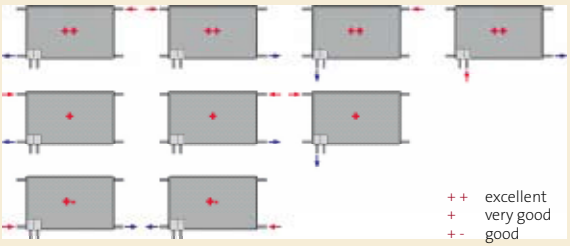


Connection possibilities WITHOUT thermostatic valve

right



left



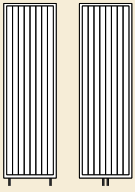
VERTICAL

When space is at a premium

PANEL RADIATORS

The Vertical is a panel radiator with a profiled front panel. The integral valve body and the pipe system are located behind this front panel. This means that pipes are not visible at the side. Ingenious and subtle, this radiator supplies you with all of the heat that you require, even when space is at a premium. You can also attach accessories such as towel holders, which are extremely practical!

- Connections: 6 x 1/2" BSP (15/21). A vertical radiator can be used in 2-pipe systems and in 1-pipe systems, when the valve set is used.
- Installation: with brackets.
- Package: profiled radiator with brackets, 2 side covers (exc. type 10C), installation clips, 1 fixing template, 1 rotating airvent, 3 blank caps, screws and plugs.



HEIGHT
1500, 1800, 1950, 2100, 2300 mm

LENGTH
450, 600, 750 mm

TYPE
VR10, VR21, VR22

FINISH
RAL 9016 White. Other RAL colours available on request.

VERTICAL

When space is at a premium
PANEL RADIATORS

type 10C		height				order code VR10XXXXYYY
length	Watt +	**1500**	**1800**	**1950**	**2100**	
450	Watt	650	765	819	876	
	BTU	2219	2611	2795	2989	
600	Watt	867	1020	1092	1168	
	BTU	2959	3481	3727	3985	
750	Watt		1275	1365	1460	
	BTU		4352	4659	4981	
Watt/m 90/70/20 °C		**1831**	**2164**	**2323**	**2490**	
value n		**1,2976**	**1,3246**	**1,3381**	**1,3516**	
volume: l/m		**9,83**	**10,13**	**11,07**	**12,00**	
weight: kg/m		**31,33**	**37,47**	**38,67**	**40,13**	

type 20C		height			order code VR20XXXXYYY
length	Watt +		**1800**	**1950**	**2100**	
300	Watt		819	877	935	
	BTU		2795	2993	3191	
450	Watt		1229	1315	1403	
	BTU		4193	4488	4787	
600	Watt		1638	1753	1870	
	BTU		5590	5984	6383	
750	Watt		2048	2192	2338	
	BTU		6988	7480	7979	
Watt/m 90/70/20 °C			**3466**	**3713**	**3963**	
value n			**1,3094**	**1,3135**	**1,3176**	
volume: l/m			**21,83**	**23,78**	**25,65**	
weight: kg/m			**71,33**	**77,07**	**81,73**	

stock Purmo

according EN 442 - 75/65/20 °C (ΔT 50)
heat outputs are measured with bottom connection

type 21C			height			order code VR21XXXXYYY
length	Watt +		**1800**	**1950**	**2100**	
300	Watt		963	1020	1081	
	BTU		3287	3481	3689	
450	Watt		1445	1530	1621	
	BTU		4930	5222	5534	
600	Watt		1926	2040	2162	
	BTU		6573	6963	7378	
750	Watt		2408	2550	2702	
	BTU		8217	8703	9223	
Watt/m 90/70/20 °C			**4097**	**4343**	**4598**	
value n			**1,3384**	**1,3422**	**1,3371**	
volume: l/m			**21,47**	**24,13**	**25,47**	
weight: kg/m			**83,07**	**91,33**	**96,93**	

type 22C			height			order code VR22XXXXYYY
length	Watt +		**1800**	**1950**	**2100**	**2300**
300	Watt		1132	1192	1252	1332
	BTU		3864	4068	4273	4546
450	Watt		1698	1788	1877	1998
	BTU		5796	6102	6408	6818
600	Watt		2264	2384	2503	2663
	BTU		7728	8136	8543	9090
750	Watt		2831	2980	3129	3329
	BTU		9660	10170	10679	11363
Watt/m 90/70/20 °C			**4833**	**5093**	**5353**	**5696**
value n			**1,3566**	**1,3619**	**1,3672**	**1,3671**
volume: l/m			**21,60**	**23,13**	**24,67**	**26,67**
weight: kg/m			**93,87**	**102,33**	**110,80**	**118,27**

according EN 442 - 75/65/20 °C (ΔT 50)
heat outputs are measured with bottom connection

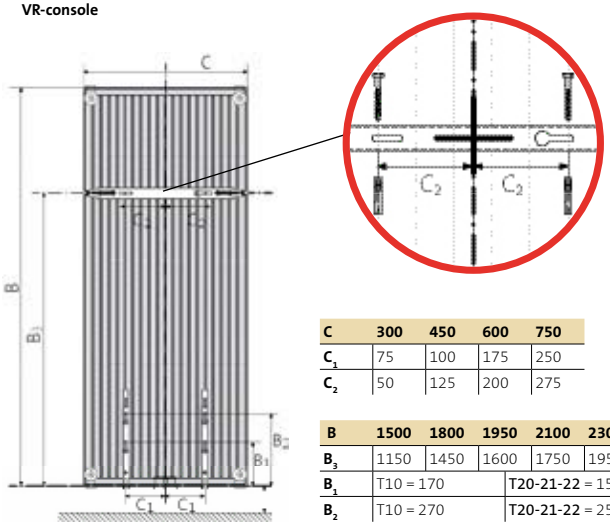
stock Purmo

VERTICAL

When space is at a premium
PANEL RADIATORS

Installation

VR-console



C	300	450	600	750
C_1	75	100	175	250
C_2	50	125	200	275

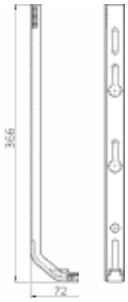
B	1500	1800	1950	2100	2300
B_3	1150	1450	1600	1750	1950
B_1	T10 = 170			**T20-21-22** = 150	
B_2	T10 = 270			**T20-21-22** = 250	

type 10 ***type 20-21*** ***type 22***

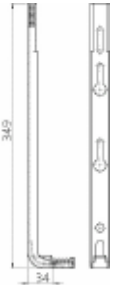
	type 10	*type20/21*	*type 22*
a	80	108	133
b	43	67	67
c	65	27	27

upper bracket type 10-20-21-22

lower bracket type 10



lower bracket type 20-21-22



mounting upper bracket type 10

mounting lower bracket type 20-21-22

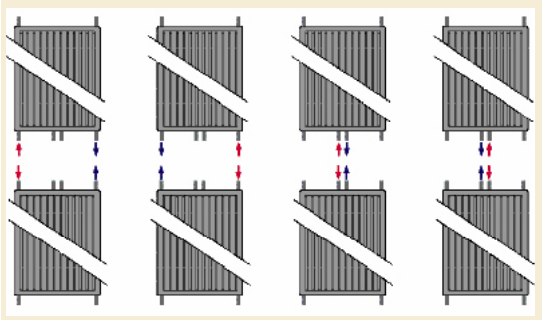
type 10

type 20

type 21

type 22

Connections
Other connections are not possible



SAFETY RADIATOR

Safety can be elegant

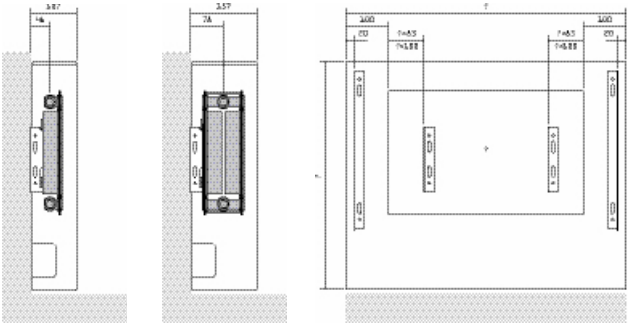
GENERAL

Safety can be elegant

SAFETY RADIATOR

The Purmo Safety Radiator is a two-part system consisting of a high efficiency panel radiator together with a highly durable powder coated outer casing, manufactured from 1.2mm steel. The outer casing prevents contact with the hot surface of the radiator and also covers pipe-work and valves. Surface temperatures are below 43°C with water inlet temperatures up to 82°C in accordance with NHS Estates Guidance Note 'Safe Hot Water and Surface Temperatures, 1998'. The robust outer casing can easily be removed to allow access for regular cleaning, maintenance and decorating.

The Purmo Safety Radiator is particularly favoured for installation in nurseries, hospitals, nursing homes, sheltered housing and of course high - risk areas in the home. They are available in single and double configuration in 42 sizes, with heights of 550mm, 650mm and 850mm, and lengths from 600mm up to 2000mm.



Purmo Safety Radiators are manufactured from 1.2mm thick cold rolled pressed steel, automatically welded and pre-treated before finishing in a stoved powder coating.

All radiators have been pressure tested in accordance with the requirements of BS EN 442.

- Test pressure 10,5 bar
- Max working pressure 8 bar
- Max working temperature 82°C

The internal emitter is fitted with 4 1/2" BSP water connections.

The Purmo Safety Radiator is only to be used on indirect or closed circuit heating systems for domestic premises, as described in BS 5449:1990. It is also recommended that a water treatment policy is adopted as per the recommendations of the Code of Practice BS 7593:1992, Treatment of Water in Domestic Hot Water Central Heating Systems.

finish & colours

Following degreasing, phosphating and primer coating, each radiator is finished with an epoxy polyester powder coating. The finished colour of the radiator is a high gloss white, RAL 9016.

heat output

The output figures quoted for the Purmo Safety Radiator have been independently certified by BSI in accordance with BS EN 442.

The heat outputs in the table are based on a mean water to air temperature difference of 50°C. When the difference is not 50°C, the output should be multiplied by the appropriate factor from within the table.

Centigrade	Factor	Fahrenheit
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

packaging

Each Purmo Safety Radiator is individually packed in a robust cardboard carton. Each carton contains outer casing, outer casing wall brackets, installation instructions, fixing templates and an individually packed radiator, complete with wall brackets, plug and air vent.

SAFETY RADIATOR

Safety can be elegant
SAFETY RADIATOR

quality & guarantee

Purmo Safety Radiators are manufactured and tested to BS EN 442, carry the BS Kite-mark and are manufactured under an ISO 9001 quality system. A 10 year warranty covers each radiator from date of installation against any defects caused by faulty materials or manufacture.

control options

A range of Purmo thermostatic radiator valves is available enabling the temperature of individual rooms to be automatically and precisely controlled.

Close Coupled Thermostatic Radiator Valve (CCTRV)

The close coupled TRV kit is suitable for TBOE or BOE connection, offering a choice of positions for both the valve body and the sensor head. The kit allows the thermal sensing head of a Purmo TRV to be mounted directly on the top left or top right of the casing. The point of fixing in the casing side has been semi punched to allow it to be easily knocked out. The body of the valve is fitted to the emitter, and is coupled to the sensor head by means of a flexible capillary lead.

- The CCTRV Kit comprises
  1 Purmo TRV head
  1 1/2" angled TRV Body 1/2", lockshield valve
- To Order CCTRV Close Coupling Unit 1/2" / 15mm lockshield valve

Remote Sensor

The Remote Sensor is suitable for BOE connections only. This allows the fitting of a Purmo TRV inside the casing with the sensor being located up to 5m away.

- To Order TRVRSHEAD5 (5m) / TRVRSHEAD2 (2m)

Remote Adjuster

The Remote Adjuster enables the Purmo TRV head / sensor to be wall mounted up to 5m away from the radiator and is suitable for both TBOE and BOE connections.

- To Order TRVADJHEAD5 (5m) / TRVADJHEAD2 (2m)

Direct Fit TRV Kit

The Direct Fit TRV kit is suitable for TBOE connection only, and allows a Purmo TRV body to be fitted directly to the emitter with the thermostatic head projecting through the casing.

- The Kit comprises 1 Reverse angled TRV body
  1 TRV head
  1 extension adapter
  1 panel bush
- To Order DIRECTFIT

Description Code	Dimensions of the casing (mm)		Weight of the casing	Dimensions of the emitter (mm)		Weight of the emitter	Total weight	Output EN 442	
	Height	Length	(kg)	Height	Length	(kg)	(kg)	Watt	BTU
SR11 550 800	550	800	7,02	300	600	4,50	11,52	282	962
SR11 550 1000	550	1000	8,49	300	800	6,00	14,49	376	1283
SR11 550 1200	550	1200	10,08	300	1000	7,50	17,58	470	1604
SR11 550 1600	550	1600	13,14	300	1400	10,50	23,64	658	2246
SR11 550 2000	550	2000	16,11	300	1800	13,50	29,61	846	2887
SR11 650 600	650	600	6,50	400	400	4,08	10,58	245	836
SR11 650 800	650	800	8,20	400	600	6,12	14,32	367	1253
SR11 650 1000	650	1000	9,91	400	800	8,16	18,07	490	1672
SR11 650 1200	650	1200	11,62	400	1000	10,20	21,82	612	2089
SR11 650 1400	650	1400	13,36	400	1200	12,24	25,60	734	2505
SR11 650 1600	650	1600	15,12	400	1400	14,28	29,40	857	2925
SR11 650 1800	650	1800	16,90	400	1600	16,32	33,22	979	3341
SR11 650 2000	650	2000	18,58	400	1800	18,36	36,94	1102	3761
SR11 850 600	850	600	8,68	600	400	6,20	14,88	351	1198
SR11 850 800	850	800	11,02	600	600	9,30	20,32	526	1795
SR11 850 1000	850	1000	13,37	600	800	12,40	25,77	702	2396
SR11 850 1200	850	1200	15,72	600	1000	15,50	31,22	877	2993
SR11 850 1400	850	1400	18,11	600	1200	18,60	36,71	1052	3590
SR11 850 1600	850	1600	20,51	600	1400	21,70	42,21	1228	4191
SR11 850 1800	850	1800	22,93	600	1600	24,80	47,73	1403	4788
SR11 850 2000	850	2000	25,26	600	1800	27,90	53,16	1579	5389
SR22 550 800	550	800	8,04	300	600	8,94	16,98	537	1833
SR22 550 1000	550	1000	9,60	300	800	11,92	21,52	716	2444
SR22 550 1200	550	1200	11,19	300	1000	14,90	26,09	895	3055
SR22 550 1600	550	1600	14,37	300	1400	20,86	35,23	1253	4276
SR22 550 2000	550	2000	17,56	300	1800	26,82	44,38	1611	5498
SR22 650 600	650	600	7,45	400	400	8,12	15,57	452	1543
SR22 650 800	650	800	9,24	400	600	12,18	21,42	677	2311
SR22 650 1000	650	1000	11,02	400	800	16,24	27,26	903	3082
SR22 650 1200	650	1200	12,81	400	1000	20,30	33,11	1129	3853
SR22 650 1400	650	1400	14,60	400	1200	24,36	38,96	1355	4625
SR22 650 1600	650	1600	16,43	400	1400	28,42	44,85	1581	5396
SR22 650 1800	650	1800	18,28	400	1600	32,48	50,76	1806	6164
SR22 650 2000	650	2000	20,04	400	1800	36,54	56,58	2032	6935
SR22 850 600	850	600	10,05	600	400	12,28	22,33	629	2147
SR22 850 800	850	800	12,52	600	600	18,42	30,94	944	3222
SR22 850 1000	850	1000	14,98	600	800	24,56	39,54	1258	4294
SR22 850 1200	850	1200	17,48	600	1000	30,70	48,18	1573	5369
SR22 850 1400	850	1400	19,95	600	1200	36,84	56,79	1888	6444
SR22 850 1600	850	1600	22,46	600	1400	42,98	65,44	2202	7515
SR22 850 1800	850	1800	25,00	600	1600	49,12	74,12	2517	8591
SR22 850 2000	850	2000	27,44	600	1800	55,26	82,70	2831	9662

Fixed TRV Kit	**40.80**	Remote Sensor Kit 5 meter	**45.52**
Close Coupled TRV Kit	**72.09**	Remote Adjuster 2 meter	**55.29**
TRV Collar	**4.42**	Remote Adjuster 5 meter	**64.40**
Remote Sensor Kit 2 meter	**36.42**		

stock Purmo

PURMO AIR

A fresh approach to heating your home

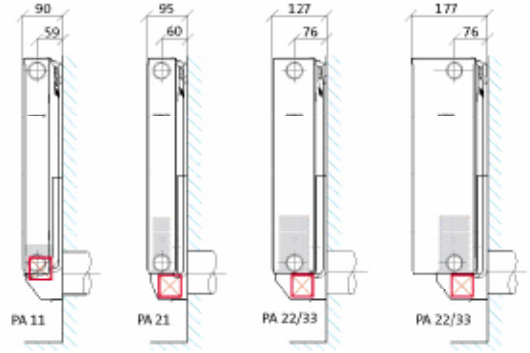
how does Purmo Air work?

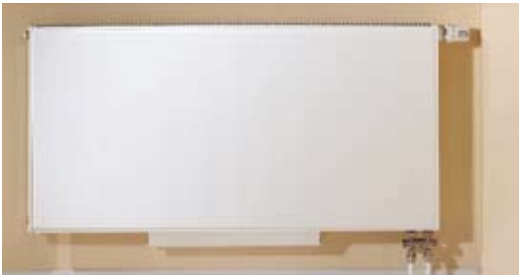
An air duct of about 100 mm diameter is built into the exterior wall, behind the radiator, through which outdoor air enters the Purmo Air supply air device and the radiator. This air is both filtered and heated simultaneously. A central extract ceiling-mounted fan creates the suction needed to draw the required levels of outside air into the occupied space and the air flows into the room almost silently and without creating draughts.

benefits

- Efficient and economical heating
- Pleasant distribution of heat and air
- Low noise levels and no draughts
- Good indoor air quality thanks to efficient filtration
- Easy cleaning and change of filter
- Long lifecycle
- Simple installation
- Structure independent of radiator height
- The air unit does not change the installation measurements of the radiator

connection





range

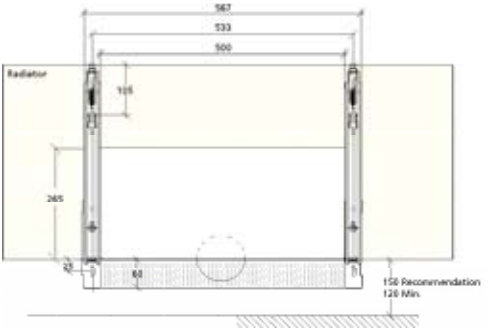
The Purmo Air range consists of 3 units for the radiator types 11, 21S and 22/33. These units are made from zinc electroplated and epoxy powder painted steel and they are equipped with condense and noise reduction insulation.

assembly

One or, when needed, several units are mounted on a Purmo Compact or alternatively Planora radiator. Standard concealed consoles are used.

installation

To enable cleaning of the unit, half of the wall duct must be placed in the area of the filter box. A 100 mm dia wall is recommended, but another shape of corresponding size is also possible. The channel should be tightened to the wall both in and outdoors to avoid moisture damages.



PURMO AIR + TELESCOPE

A fresh approach to heating your home

PURMO AIR

range

A telescopic part can easily be attached to a Purmo Air unit, by detaching the cover on top of the air supply unit.

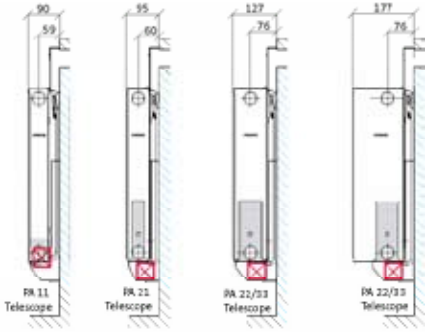
telescope

The telescopic part is used when the wall channel is placed above the radiator. The telescopes are of two heights and are equipped with condensate and noise reduction insulation. By opening the front cover of the telescope, the wall channel can be vacuum cleaned.

assembly

The upper cover of the Purmo Air unit is detached. The unit is mounted on a Purmo Compact or Purmo Planora radiator with standard concealed consoles. The telescope is placed inside the unit at the right level and is attached both to the wall and the air unit.

connection



installation

For the Purmo Air Telescope a 25 x 300 mm wall channel or corresponding size of another shape is recommended (corresponds to diameter 100 mm area).

heat losses and ventilation

Purmo Air supply air system has similar dimensions as other hot water heating systems equipped with mechanical extract ventilation: radiator heat output is equal to room heat losses plus the ventilation heat loss. Additionally, to achieve perfect performance of the supply air system, two other factors have to be taken into account when selecting radiators: first, a comfort factor, i.e. temperature of the supply air, and secondly, the operating pressure difference of supply air system created by the extract system. Fresh air radiators are sized according to total heat loss. Operation of the system should be verified for all extreme conditions, where temperatures/airflows differ from each other. Radiators should be sized to satisfy the most extreme conditions.

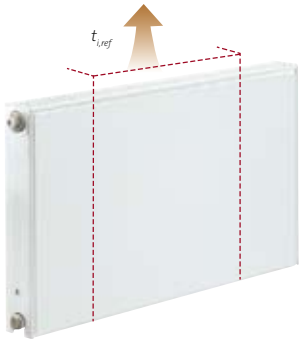
comfort

The fresh air system should be designed in such a way that it does not create annoying draughts; water flow temperature should be controlled according to heat losses and outdoor temperature. There are many factors affecting the sensation of draught: air temperature and velocity, radiation conditions, metabolic rate, clothing, age, vitality, and other sensory factors. To achieve a proper comfort level the reference temperature of air $t_{i,ref}$ may be used as criteria.

Class 1: $t_{i,ref}$ > t room –2°C

A normal target value, such as living-rooms, where the occupied areas close to the radiators. The criteria of Class 1 should be fulfilled with both full speed and low speed ventilation.

Class 2: $t_{i,ref}$ > t room –8°C

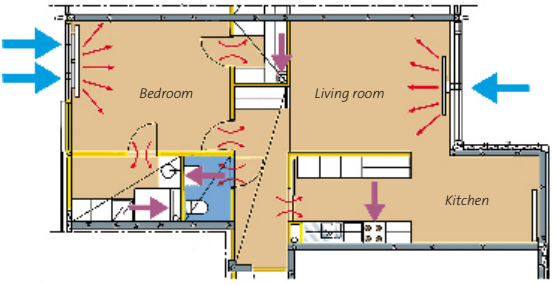


A lower target value. The criteria of Class 2 should be fulfilled with full speed and the criteria of Class 1 with low speed ventilation.

NB. A typical feature of fresh air systems is a short duration of decreased supply air temperature caused by closing of the thermostatic radiator valve.

The reference air temperature $t_{i,ref}$ denotes the average temperature above the radiator in the interaction-region of the supply air device.

dimensioning example



PURMO COMPACT RADIATOR + 1 AIR UNIT

A fresh approach to heating your home

PURMO AIR

Temperatures, 70/40/20 °C / Outdoor temperature, tout = –26 °C / Air flow Vair = 12.0 l/s /

	Radiator PC 11 + Air unit PA 11					*Radiator PC 21s + Air unit PA 21*				
	300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**
600	387	469	507	545	618	605	719	773	824	924
700	418	509	552	594	676	648	773	832	889	999
800	449	549	597	643	734	691	827	891	954	1 074
900	480	589	642	693	792	733	881	950	1 018	1 149
1 000	511	629	686	742	850	776	935	1 010	1 083	1 224
1 100	542	670	731	791	908	819	989	1 069	1 147	1 299
1 200	573	710	776	840	965	862	1 042	1 128	1 212	1 374
1 400	635	790	865	938	1 081	948	1 150	1 247	1 341	1 524
1 600	697	871	955	1 037	1 197	1 033	1 258	1 366	1 470	1 674
1 800	759	951	1 044	1 135	1 313	1 119	1 366	1 484	1 600	1 824
2 000	821	1 031	1 133	1 233	1 429	1 205	1 474	1 603	1 729	1 974
2 300	914	1 152	1 267	1 381	1 602	1 333	1 636	1 781	1 923	2 199
2 600	1 007	1 273	1 402	1 528	1 776	1 462	1 797	1 959	2 116	2 424
3 000	1 131	1 433	1 580	1 725	2 007	1 633	2 013	2 196	2 375	2 724

Air ref. temps by V_{100} Note! Very low temperature!

	300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**
$t_{i,ref}$	–1	4	6	8	11	12	18	20	22	26
	X	X	X	X	X	X				
	X	X	X	X	X	X	X			

Temperatures, 55/45/20 °C / Outdoor temperature, tout = –26 °C / Air flow Vair = 12.0 l/s /

	Radiator PC 11 + Air unit PA 11					*Radiator PC 21s + Air unit PA 21*				
	300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**
600	361	436	471	506	573	566	671	720	768	860
700	388	471	511	549	624	604	719	773	825	926
800	415	507	550	593	675	641	766	825	882	992
900	443	542	590	636	726	679	814	877	939	1 058
1 000	470	578	629	680	777	717	861	930	996	1 124
1 100	498	613	669	723	828	755	909	982	1 053	1 190
1 200	525	649	708	767	880	793	956	1 034	1 110	1 256
1 400	580	720	787	854	982	868	1 052	1 139	1 224	1 389
1 600	635	791	867	940	1 084	944	1 147	1 244	1 338	1 521
1 800	689	862	946	1 027	1 187	1 020	1 242	1 348	1 452	1653
2 000	744	933	1 025	1 114	1 289	1 095	1 337	1 453	1 566	1 785
2 300	826	1 040	1 143	1 245	1 443	1 209	1 480	1 610	1 737	1 984
2 600	908	1 146	1 262	1 375	1 596	1 322	1 623	1 767	1 908	2 182
3 000	1 018	1 289	1 420	1 549	1 801	1 474	1 813	1 976	2 136	2 447

Air ref. temps by V_{100} Note! Very low temperature!

	300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**
$t_{i,ref}$	–2	2	4	6	9	10	16	20	20	24
	X	X	X	X	X	X				
	X	X	X	X	X	X	X	X		

Air leakage, Vleak = 0 %

Radiator PC 22 + Air unit PA 22/33					*Radiator PC 33 + Air unit PA 22/33*					
300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**	
617	746	807	867	981	747	913	993	1 071	1 224	**600**
672	814	882	948	1 075	821	1 009	1 099	1 187	1 358	**700**
726	883	957	1 030	1 170	896	1 104	1 204	1 302	1 492	**800**
781	951	1 032	1 111	1 264	970	1 200	1 310	1 417	1 626	**900**
835	1 019	1 107	1 193	1 359	1 045	1 295	1 415	1 533	1 761	**1 000**
890	1 088	1 182	1 274	1 454	1 119	1 391	1 521	1 648	1 895	**1 100**
945	1 156	1 257	1 356	1 548	1 194	1 486	1 627	1 764	2 029	**1 200**
1 054	1 293	1 407	1 519	1 737	1 342	1 677	1 838	1 994	2 297	**1 400**
1 163	1 429	1 557	1 682	1 927	1 491	1 868	2 049	2 225	2 566	**1 600**
1 273	1 566	1 707	1 845	2 116	1 640	2 060	2 260	2 456	2 834	**1 800**
1 382	1 703	1 857	2 008	2 305	1 789	2 251	2 472	2 687	3 103	**2 000**
1 546	1 907	2 082	2 253	2 589	2 013	2 537	2 788	3 033	3 505	**2 300**
1 710	2 112	2 307	2 498	2 872	2 236	2 824	3 105	3 379	3 908	**2 600**
1 928	2 386	2 607	2 824	3 251	2 534	3 206	3 528	3 841	4 445	**3 000**

Note! Low temperature!

300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**	
11	18	20	23	28	11	18	20	23	27	$t_{i,ref}$
X					X					
X	X				X	X				

Air leakage, Vleak = 0 %

Radiator PC 22 + Air unit PA 22/33					*Radiator PC 33 + Air unit PA 22/33*					
300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**	
574	693	749	804	908	688	839	911	982	1 120	**600**
622	753	815	875	991	753	923	1 004	1 084	1 238	**700**
670	813	881	947	1 075	818	1 007	1 097	1 185	1 356	**800**
718	873	947	1 019	1 158	884	1 091	1 190	1 287	1 474	**900**
767	934	1 013	1 091	1 241	949	1 174	1 282	1 388	1 592	**1 000**
815	994	1 079	1 163	1 324	1 014	1 258	1 375	1 489	1 710	**1 100**
863	1 054	1 145	1 234	1 408	1 080	1 342	1 468	1 591	1 828	**1 200**
959	1 174	1 277	1 378	1 574	1 210	1 510	1 653	1 793	2 064	**1 400**
1 056	1 295	1 409	1 522	1 741	1 341	1 678	1 839	1 996	2 300	**1 600**
1 152	1 415	1 541	1 665	1 907	1 472	1 846	2 024	2 199	2 536	**1 800**
1 248	1 535	1 674	1 809	2 073	1 602	2 013	2 210	2 402	2 772	**2 000**
1 393	1 716	1 872	2 024	2 323	1 798	2 265	2 488	2 706	3 126	**2 300**
1 537	1 896	2 070	2 240	2 573	1 994	2 517	2 766	3 010	3 480	**2 600**
1 730	2 137	2 334	2 527	2 906	2 256	2 852	3 138	3 416	3 951	**3 000**

Note! Low temperature!

300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**	
9	15	18	20	25	9	15	18	20	25	$t_{i,ref}$
X					X					
X	X	X			X	X	X			

PURMO COMPACT RADIATOR + 1 AIR UNIT

A fresh approach to heating your home

PURMO AIR

Temperatures, 70/40/20 °C / Outdoor temperature, tout = –26 °C / Air flow Vair = 6.0 l/s /

	Radiator PC 11 + Air unit PA 11					***Radiator PC 21s + Air unit PA 21***				
	300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**
600	307	376	409	442	505	429	518	561	602	682
700	338	416	454	491	563	472	572	620	667	757
800	369	457	499	540	621	515	626	679	731	832
900	400	497	543	589	679	558	680	739	796	907
1 000	431	537	588	638	736	600	734	798	860	982
1 100	462	577	633	688	794	643	788	857	925	1 057
1 200	493	617	678	737	852	686	842	916	990	1 132
1 400	555	698	767	835	968	772	950	1 035	1 119	1 282
1 600	617	778	856	933	1 084	858	1 057	1 154	1 248	1 432
1 800	679	859	946	1 032	1 200	943	1 165	1 272	1 377	1 582
2 000	741	939	1 035	1 130	1 315	1 029	1 273	1 391	1 506	1 732
2 300	834	1 060	1 169	1 277	1 489	1 158	1 435	1 569	1 700	1 957
2 600	927	1 180	1 304	1 425	1 663	1 286	1 597	1 747	1 894	2 182
3 000	1 051	1 341	1 482	1 622	1 894	1 458	1 812	1 984	2 152	2 482

Air ref. temps by V100 — Note! Very low temperature!

	300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**
$t_{i,ref}$	10	15	18	20	23	22	29	31	34	38
	X									
	X	X	X							

Temperatures, 55/45/20 °C / Outdoor temperature, tout = –26 °C / Air flow Vair = 6.0 l/s /

	Radiator PC 11 + Air unit PA 11					***Radiator PC 21s + Air unit PA 21***				
	300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**
600	283	347	377	406	464	398	480	518	556	629
700	311	382	416	450	515	436	527	571	613	695
800	338	418	456	493	566	474	575	623	670	761
900	366	453	495	537	617	512	622	675	727	827
1 000	393	489	535	580	668	549	670	728	784	894
1 100	420	524	574	624	719	587	718	780	841	960
1 200	448	560	614	667	771	625	765	832	898	1 026
1 400	503	631	693	754	873	701	860	937	1 012	1 158
1 600	557	702	772	841	975	776	956	1 042	1 126	1 290
1 800	612	773	851	928	1 078	852	1 051	1 146	1 240	1 423
2 000	667	844	930	1 015	1 180	928	1 146	1 251	1 354	1 555
2 300	749	951	1 049	1 145	1 334	1 041	1 289	1 408	1 525	1 753
2 600	831	1 057	1 167	1 275	1 487	1 155	1 431	1 565	1 696	1 952
3 000	941	1 200	1 325	1 449	1 692	1 306	1 622	1 774	1 924	2 216

Air ref. temps by V100 — Note! Very low temperature!

	300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**
$t_{i,ref}$	8	13	16	18	21	20	26	29	31	35
	X									
	X	X	X	X						

Heat outputs conform to the European Standard for radiators EN 442-2. – WTP GmbH Berlin.
The heat outputs are with a tolerance of +/– 5% the same as for Planora + one PURMO Air unit.

Air leakage, Vleak = 0 %

Radiator PC 22 + Air unit PA 22/33					*Radiator PC 33 + Air unit PA 22/33*					
300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**	
478	584	634	683	779	608	751	820	888	1 022	**600**
532	652	709	765	873	682	846	925	1 003	1 156	**700**
587	720	784	846	968	756	942	1 031	1 119	1 290	**800**
642	789	859	928	1 062	831	1 037	1 137	1 234	1 424	**900**
696	857	934	1 010	1 157	905	1 133	1 242	1 350	1 558	**1 000**
751	925	1 009	1 091	1 251	980	1 228	1 348	1 465	1 693	**1 100**
805	993	1 084	1 173	1 346	1 054	1 324	1 453	1 580	1 827	**1 200**
915	1 130	1 234	1 336	1 535	1 203	1 515	1 665	1 811	2 095	**1 400**
1 024	1 267	1 384	1 499	1 724	1 352	1 706	1 876	2 042	2 364	**1 600**
1 133	1 403	1 534	1 662	1 914	1 501	1 897	2 087	2 273	2 632	**1 800**
1 243	1 540	1 684	1 825	2 103	1 650	2 088	2 298	2 504	2 901	**2 000**
1 407	1 745	1 909	2 070	2 386	1 873	2 375	2 615	2 850	3 303	**2 300**
1 570	1 950	2 134	2 315	2 670	2 097	2 661	2 932	3 196	3 706	**2 600**
1 789	2 223	2 434	2 641	3 048	2 395	3 043	3 355	3 658	4 243	**3 000**

Note! Low temperature!

300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**	
25	32	35	38	43	25	32	35	38	43	$t_{i,ref}$

Air leakage, Vleak = 0 %

Radiator PC 22 + Air unit PA 22/33					*Radiator PC 33 + Air unit PA 22/33*					
300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**	
442	539	585	630	716	556	685	747	808	929	**600**
490	599	651	701	800	621	769	840	910	1 047	**700**
538	659	717	773	883	686	853	933	1 011	1 165	**800**
586	719	783	845	966	752	936	1 025	1 113	1 282	**900**
634	779	849	917	1 049	817	1 020	1 118	1 214	1 400	**1 000**
683	840	915	989	1 132	882	1 104	1 211	1 315	1 518	**1 100**
731	900	981	1 060	1 216	948	1 188	1 304	1 417	1 636	**1 200**
827	1 020	1 113	1 204	1 382	1 078	1 356	1 489	1 620	1 872	**1 400**
923	1 140	1 245	1 348	1 549	1 209	1 524	1 675	1 822	2 108	**1 600**
1 020	1 261	1 377	1 491	1 715	1 340	1 691	1 860	2 025	2 344	**1 800**
1 116	1 381	1 509	1 635	1 882	1 470	1 859	2 046	2 228	2 580	**2 000**
1 260	1 562	1 707	1 850	2 131	1 666	2 111	2 324	2 532	2 934	**2 300**
1 405	1 742	1 905	2 066	2 381	1 862	2 362	2 602	2 836	3 288	**2 600**
1 598	1 983	2 169	2 353	2 714	2 124	2 698	2 973	3 242	3 760	**3 000**

Note! Low temperature!

300	**400**	**450**	**500**	**600**	**300**	**400**	**450**	**500**	**600**	
22	30	32	35	39	22	30	32	35	39	$t_{i,ref}$

SOUND INSULATION

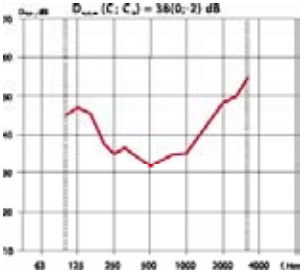
A fresh approach to heating your home
PURMO AIR

Standard: ISO 140-10:1991
Classification: ISO 717-1:1996
Absorption area: 10 m²

Reduction ring in Purmo Air models and reduction element in Telescope models improve sound insulation by about 3dB.

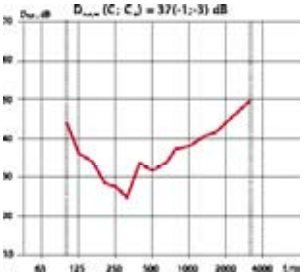
Purmo Air sound diagram

Diameter 100 mm iron-sheet, duct without additional insulation.



Purmo Air Telescope sound diagram

400 x 25 x 250 mm rectangular duct without additional insulation.

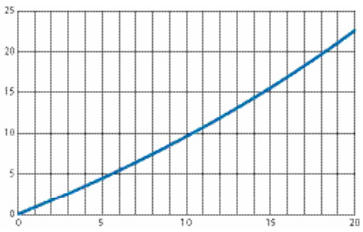


Abbreviations

f	Frequency, Hz
D n,e	Sound transmission loss for 1/3 octave band, dB
D n,e,w	Sound insulation index, dB
C	Frequency weighting parameter, general, dB
C tr	Frequency weighting parameter for traffic noise, dB

pressure difference and leakage airflows

To achieve the proper performance of ventilation and airflow through the fresh air radiator, the design value of pressure difference cannot be too high. The appropriate pressure difference depends on the air-tightness of the building: the more leaky the building the higher the rate of leakage air flow (infiltration) in the total air change rate. The design value of $\Delta p = 15$ Pa should not be exceeded even for an airtight building. The shape and size of the air duct behind the radiator as well as the outlet grille will create pressure loss (30-50%), which has to be taken into account in design. In case of excessive leakage airflow rate, the heat output of radiators might turn out to be insufficient. This uncertainty should be taken into consideration when sizing the radiator.

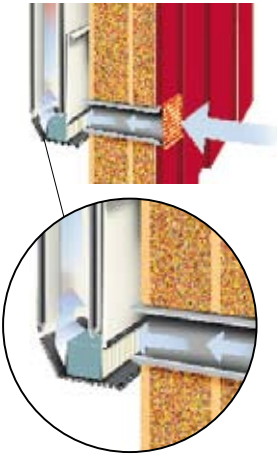


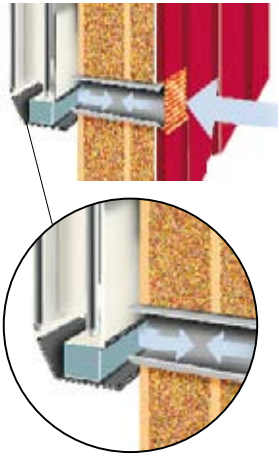
open

The overall ventilation regulations are satisfied with extractor ventilators in bathrooms, WC's, wardrobes and kitchens. The airflow is controlled by extractor fans and control plates.

closed

A fully open diameter 100 mm wall channel corresponds to ventilation for a two-person-room. In order to halve the airflow, a reduction ring or element is placed in the wall channel. These are included in the Purmo Air package.





In case of gas alarm, or if you want to close the wall channel, open the filter box and turn the filter 90°.

reduction ring

reduction element

without reduction ring

without reduction element

with reduction ring

with reduction element

protection against cooling and freezing

Water temperature in the heating system should correspond to design temperatures, and water flow temperature should be controlled according to changes in outdoor temperature. In this way, the conditions in which a properly designed fresh air system operates correctly are maintained.

In a fresh air system it is recommended that a thermostatic valve with separate temperature sensor is used with freezing protection. A properly installed thermostatic valve with separate temperature sensor provides protection against both cooling down and freezing and is an important comfort and safety factor.

When the thermostat turns off the radiator, the supply air begins to cool down, resulting in cold air dropping down to meet the temperature sensor and re-open the thermostat. This pulsed operation prevents excessive cooling of the supply air so that there is no risk of freezing.

In applications such as classrooms, with high internal heat gains over a long duration, it is recommended that control valves with bypass flow are used: Planora can be equipped with a Purmo CF valve insert with bypass. As a consequence of maintaining continuous water flow, the radiator does not cool down and supply air temperature is higher.

It is recommended that an emergency switch which switches off the extractor fan if the pump is damaged, is fitted between the pump of the heating system and the extractor fan of the ventilation system.

compensating for wind pressure

In apartments where a strong wind creates a shortcut airflow through the apartment it is recommended that non-return valves are used in the air ducts of the radiators.

ventilation and energy savings

Mechanical extraction ventilation in tall apartment buildings is thermally unstable, causing problems especially in cold weather. It is recommended that separate extract air ducts are installed for each apartment, providing stable performance of the ventilation system in all conditions. In this case, control of the ventilation system is also easier, for example by means of a timer, carbon dioxide, humidity or infrared control. Demand-controlled ventilation allows significant savings to be achieved in heating energy consumption.

Heat recovery is possible by use of an air-water-heat pump, which transfers heat from extract air to the domestic hot water of the heating system.

replacing the filter and cleaning the device

Purmo Air's filter replacement interval depends on the quality of the outdoor air. For example, in big cities at ground floor level, the outdoor air quality is significantly poorer than on upper floors.

Use a vacuum cleaner to remove dust from the air filter a couple of times a year. Clean the filter outdoors, as fine dust will blow through the vacuum cleaner indoors. For the same reason, the vacuum cleaner bag should be replaced after cleaning the filter. The filter should be inspected regularly to establish the appropriate replacement interval. The filter should be replaced when it is full of dust. A typical filter replacement interval is one year.

washing and re-painting

The exterior surfaces of Purmo Air supply air device and Purmo radiators my be cleaned with common domestic detergents. However, do not use detergents containing ammonia, or scouring powder.

If the original paint is scratched for some reason, it can be repaired with touch-up paint, which is available as a spare part.

Repainting may be done with alkyd-paints or, for a long-lasting finish, two-component urethane-paints may be used. For a good finish, the original paint should be carefully sanded and washed.

Structure	Zinc electroplated steel
Surface process	The radiator is • alkalic degreased • coated with polyester-epoxy resin powder • stoved (about 200°C)
Colour	White RAL 9016
Quality system	SFS-EN ISO 9001:2000
Heights	PA11, PA21 and PA22/33 for radiator heights 300-600 mm Telescope low for radiator heights 300-500 mm Telescope high for radiators heights 300-600 mm
Brackets	Standard concealed consoles
Number of brackets	2 brackets. If the radiator length exceeds 1600 mm, 4 brackets are recommended
Airflow control	PA11, comb sealing / PA21, PA22/33, control sealings
Airflow reduction	Reduction rings or reduction element
Fine filter	Filtration class F7 / Filter frame: ABS plastic / Filter material: Glass fibre
Basic filter	Filter frame: ABS plastic / Filter material: Polyester carpet
Heat output	Outputs conform to EN442-2 standard

Article number	Description	Weight kg
PA11	PURMO Air type 11	2,40
PA21	PURMO Air type 21	2,70
PA22	PURMO Air type 22/33	2,70
PA200	PURMO Air Filter F7	0,32

DECORATIVE RADIATORS

We care about style. Passionately.

DECORATIVE RADIATORS

We care about style. Passionately.


Kos H


Faro H


Kos V


Faro V


Pago H


Kon

characteristics

- Purmo offers you a high quality range of decorative radiators with different models, heat outputs and dimensions.
- With the many custom designs they are ideal for obtaining good heat outputs where space is at a premium.

colours

Standard colour is white RAL 9016.
Other available colours: see p. 175.

	Kos H	*Faro H*	*Kos V*	*Faro V*	*Pago H*	*Kon*
single and double version	-	-	-	-	x	x
side covers	x	x	x	x	-	-
working pressure – in bar	6	6	6	6	6	6
stock radiators	x	x	x	x	x	x
custom made	-	-	-	-	x	x
supply and return						
can be switched vertically / horizontally	-	-	-	-	x	x
can be switched vertically	-	-	x	x	-	x
can be switched horizontally	-	-	-	-	-	-
can be switched top / bottom	-	-	x	x	-	x
can be switched left / right	-	-	x	x	x	x
brackets in packaging (stock radiators)	2	2	2	2	2	2
mid connection	-	-	x	x	-	-

heat output

Heat outputs were measured according to the EN 442 standard, with a water temperature of 75/65 °C and a room temperature of 20 °C (ΔT=50).

packaging

The radiators are packed in cardboard with sturdy cardboard corner pieces and then shrink wrapped.

KOS H

Slimline elegance

DECORATIVE RADIATORS

Like all Kos models, the Kos H is the perfect fusion of form and function – with plenty of power. Let the Kos range bring a touch of slim-line elegance, and a lot of warmth, to your home.

- Accessories supplied in the package and included in the price: 2 brackets, screws and plugs.
- The thermostatic (Kv-adjustable) valve-body is factory-fitted on the right, the airvent on the left.
- Mounting: radiator without welded mounting brackets but with concealed brackets.
- Connections: 2 x diameter 1/2" (15/21) – on the bottom right.

HEIGHT
400, 600, 750, 900 mm

LENGTH
450 - 1950 mm

TYPE
KOH 20, 21, 22, 33

FINISH
RAL 9016 white. RAL and metallic colours available on request.

type 20		**height**	order code KOH20XXXYYYZ		
length	Watt +	**400**	**600**	**750**	**900**
450	Watt	306	428	512	590
	BTU	1044	1461	1747	2014
600	Watt	407	571	683	786
	BTU	1389	1949	2331	2683
750	Watt	509	713	854	983
	BTU	1737	2433	2915	3355
900	Watt	611	856	1024	1179
	BTU	2085	2922	3495	4024
1050	Watt	713	999	1195	1376
	BTU	2433	3410	4079	4696
1200	Watt	815	1141	1366	1572
	BTU	2782	3894	4662	5365
1350	Watt	917	1284	1536	1769
	BTU	3130	4382	5242	6038
1500	Watt	1019	1427	1707	1965
	BTU	3478	4870	5826	6707
1650	Watt	1120	1569		
	BTU	3823	5355		
1800	Watt	1222	1712		
	BTU	4171	5843		
1950	Watt	1324	1854		
	BTU	4519	6328		
Watt/m 90/70/20 °C		**859**	**1201**	**1437**	**1655**
value n		**1,2870**	**1,2801**	**1,2812**	**1,2823**
volume: l/m		**4,44**	**6,67**	**8,00**	**9,33**
weight: kg/m		**22,83**	**32,50**	**40,19**	**47,89**

according EN 442 - 75/65/20 °C (ΔT 50)
no extra cost for left connection

delivery time: 20 working days

KOS H

Slimline elegance

DECORATIVE RADIATORS

type 21		**height**	order code KOH21XXXYYYYZ		
length	Watt +	**400**	**600**	**750**	**900**
450	Watt	445	602	701	802
	BTU	1519	2055	2393	2737
600	Watt	593	802	934	1070
	BTU	2024	2737	3188	3652
750	Watt	742	1003	1168	1337
	BTU	2532	3423	3986	4563
900	Watt	890	1203	1401	1605
	BTU	3038	4106	4782	5478
1050	Watt	1038	1404	1635	1872
	BTU	3543	4792	5580	6389
1200	Watt	1187	1604	1868	2140
	BTU	4051	5474	6375	7304
1350	Watt	1335	1805	2102	2407
	BTU	4556	6160	7174	8215
1500	Watt	1484	2006	2336	2675
	BTU	5065	6846	7973	9130
1650	Watt	1632	2206		
	BTU	5570	7529		
1800	Watt	1780	2407		
	BTU	6075	8215		
1950	Watt	1929	2607		
	BTU	6584	8898		
Watt/m 90/70/20 °C		**1260**	**1704**	**1989**	**2278**
value n		**1,3261**	**1,3311**	**1,3433**	**1,3440**
volume: l/m		**4,76**	**6,95**	**8,67**	**10,38**
weight: kg/m		**26,48**	**37,43**	**46,67**	**56,29**

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)
no extra cost for left connection

type 22		**height**	order code KOH22XXXYYYZ		
length	Watt +	**400**	**600**	**750**	**900**
450	Watt	573	764	922	1014
	BTU	1955	2606	3145	3460
600	Watt	764	1018	1229	1352
	BTU	2607	3475	4194	4614
750	Watt	955	1273	1536	1690
	BTU	3259	4344	5242	5767
900	Watt	1146	1527	1843	2028
	BTU	3910	5213	6291	6921
1050	Watt	1337	1782	2150	2366
	BTU	4562	6081	7339	8074
1200	Watt	1528	2036	2458	2704
	BTU	5214	6950	8388	9227
1350	Watt	1719	2291	2765	3042
	BTU	5865	7819	9436	10381
1500	Watt	1910	2546	3072	3380
	BTU	6517	8688	10485	11534
1650	Watt	2100	2800		
	BTU	7169	9557		
1800	Watt	2291	3055		
	BTU	7821	10425		
1950	Watt	2482	3309		
	BTU	8472	11294		
Watt/m 90/70/20 °C		**1624**	**2176**	**2625**	**2903**
value n		**1,3318**	**1,3635**	**1,3607**	**1,3897**
volume: l/m		**4,76**	**6,95**	**8,67**	**10,38**
weight: kg/m		**29,24**	**42,67**	**53,52**	**64,38**

according EN 442 - 75/65/20 °C (ΔT 50)
no extra cost for left connection

delivery time: 20 working days

KOS H

Slimline elegance

DECORATIVE RADIATORS

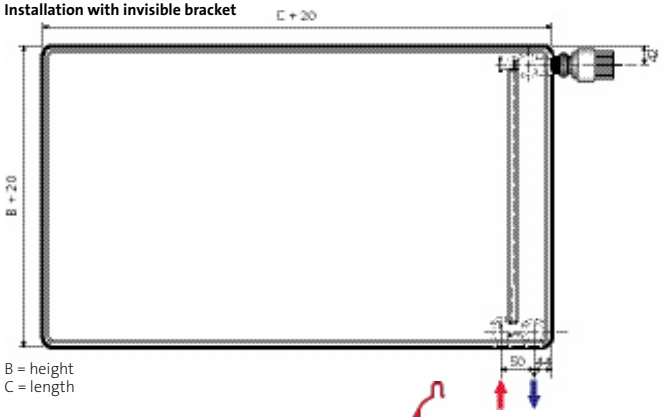
type 33		**height**	order code KOH33XXXYYYYZ		
length	Watt +	**400**	**600**	**750**	**900**
450	Watt	803	1114	1309	1471
	BTU	2741	3802	4468	5021
600	Watt	1070	1485	1745	1961
	BTU	3652	5068	5956	6693
750	Watt	1338	1856	2181	2451
	BTU	4567	6335	7444	8365
900	Watt	1606	2228	2617	2941
	BTU	5481	7604	8932	10038
1050	Watt	1873	2599	3053	3431
	BTU	6393	8870	10420	11710
1200	Watt	2141	2970	3490	3922
	BTU	7307	10137	11911	13386
1350	Watt	2408	3341	3926	4412
	BTU	8219	11403	13399	15058
1500	Watt	2676	3713	4362	4902
	BTU	9133	12672	14888	16731
1650	Watt	2944	4084		
	BTU	10048	13939		
1800	Watt	3211	4455		
	BTU	10959	15205		
1950	Watt	3479	4826		
	BTU	11874	16471		
Watt/m 90/70/20 °C		**2270**	**3168**	**3730**	**4200**
value n		**1,3222**	**1,3539**	**1,3649**	**1,3758**
volume: l/m		**6,73**	**10,10**	**11,27**	**12,44**
weight: kg/m		**42,70**	**62,38**	**77,19**	**92,00**

delivery time: 20 working days

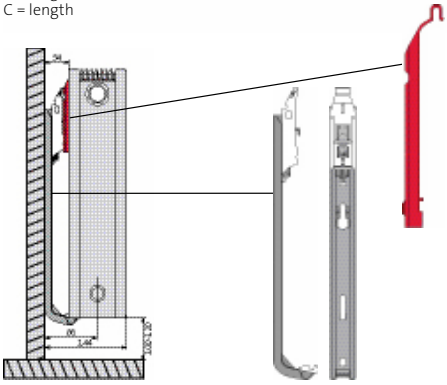
according EN 442 - 75/65/20 °C (ΔT 50)
no extra cost for left connection

Installation

Installation with invisible bracket



B = height
C = length



type 20

type 22

type 21

type 33

Connections

Connection left on demand

Other connections are not possible

FARO H

Sleek lines, curved sides.
DECORATIVE RADIATORS

For those people who wish to enjoy the austere contours of the Faro series, the horizontal version is an excellent choice. The Faro H has a profiled front panel, perforated side panels and is subtle, but still unmistakably present. Mounted on concealed consoles that are supplied with the radiator, the Faro provides heat with style.

- Accessories supplied in the package and included in the price: 2 brackets, screws and plugs.
- The thermostatic (Kv-adjustable) valve-body is factory-fitted on the right, the airvent on the left.
- Mounting: radiator without welded mounting brackets but with concealed brackets.
- Connections: 2 x diameter 1/2" (15/21) – on the bottom right.

HEIGHT
400, 600,
750, 900 mm

LENGTH
450 - 1950 mm

TYPE
FAH 20, 21,
22, 33

FINISH
RAL 9016 white.
RAL and metallic colours available on request.

type 20		**height**	order code FAH20XXXYYYZ		
length	Watt +	**400**	**600**	**750**	**900**
450	Watt	306	428	512	590
	BTU	1044	1461	1747	2014
600	Watt	407	571	683	786
	BTU	1389	1949	2331	2683
750	Watt	509	713	854	983
	BTU	1737	2433	2915	3355
900	Watt	611	856	1024	1179
	BTU	2085	2922	3495	4024
1050	Watt	713	999	1195	1376
	BTU	2433	3410	4079	4696
1200	Watt	815	1141	1366	1572
	BTU	2782	3894	4662	5365
1350	Watt	917	1284	1536	1769
	BTU	3130	4382	5242	6038
1500	Watt	1019	1427	1707	1965
	BTU	3478	4870	5826	6707
1650	Watt	1120	1569		
	BTU	3823	5355		
1800	Watt	1222	1712		
	BTU	4171	5843		
1950	Watt	1324	1854		
	BTU	4519	6328		
Watt/m 90/70/20 °C		**859**	**1201**	**1437**	**1655**
value n		**1,2870**	**1,2801**	**1,2812**	**1,2823**
volume: l/m		**4,44**	**6,67**	**8,00**	**9,33**
weight: kg/m		**22,83**	**32,50**	**40,19**	**47,89**

according EN 442 - 75/65/20 °C (ΔT 50)
no extra cost for left connection

delivery time: 20 working days

FARO H

Sleek lines, curved sides.

DECORATIVE RADIATORS

type 21		**height**	order code FAH21XXXYYYYZ		
length	Watt +	**400**	**600**	**750**	**900**
450	Watt	445	602	701	802
	BTU	1519	2055	2393	2737
600	Watt	593	802	934	1070
	BTU	2024	2737	3188	3652
750	Watt	742	1003	1168	1337
	BTU	2532	3423	3986	4563
900	Watt	890	1203	1401	1605
	BTU	3038	4106	4782	5478
1050	Watt	1038	1404	1635	1872
	BTU	3543	4792	5580	6389
1200	Watt	1187	1604	1868	2140
	BTU	4051	5474	6375	7304
1350	Watt	1335	1805	2102	2407
	BTU	4556	6160	7174	8215
1500	Watt	1484	2006	2336	2675
	BTU	5065	6846	7973	9130
1650	Watt	1632	2206		
	BTU	5570	7529		
1800	Watt	1780	2407		
	BTU	6075	8215		
1950	Watt	1929	2607		
	BTU	6584	8898		
Watt/m 90/70/20 °C		**1260**	**1704**	**1989**	**2278**
value n		**1,3261**	**1,3311**	**1,3433**	**1,3440**
volume: l/m		**4,76**	**6,95**	**8,67**	**10,38**
weight: kg/m		**26,48**	**37,43**	**46,67**	**56,29**

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)

type 22		**height**	order code FAH22XXXYYYZ		
length	Watt +	**400**	**600**	**750**	**900**
450	Watt	573	764	922	1014
	BTU	1955	2606	3145	3460
600	Watt	764	1018	1229	1352
	BTU	2607	3475	4194	4614
750	Watt	955	1273	1536	1690
	BTU	3259	4344	5242	5767
900	Watt	1146	1527	1843	2028
	BTU	3910	5213	6291	6921
1050	Watt	1337	1782	2150	2366
	BTU	4562	6081	7339	8074
1200	Watt	1528	2036	2458	2704
	BTU	5214	6950	8388	9227
1350	Watt	1719	2291	2765	3042
	BTU	5865	7819	9436	10381
1500	Watt	1910	2546	3072	3380
	BTU	6517	8688	10485	11534
1650	Watt	2100	2800		
	BTU	7169	9557		
1800	Watt	2291	3055		
	BTU	7821	10425		
1950	Watt	2482	3309		
	BTU	8472	11294		
Watt/m 90/70/20 °C		**1624**	**2176**	**2625**	**2903**
value n		**1,3318**	**1,3635**	**1,3607**	**1,3897**
volume: l/m		**4,76**	**6,95**	**8,67**	**10,38**
weight: kg/m		**29,24**	**42,67**	**53,52**	**64,38**

according EN 442 - 75/65/20 °C (ΔT 50)

delivery time: 20 working days

FARO H

Sleek lines, curved sides.
DECORATIVE RADIATORS

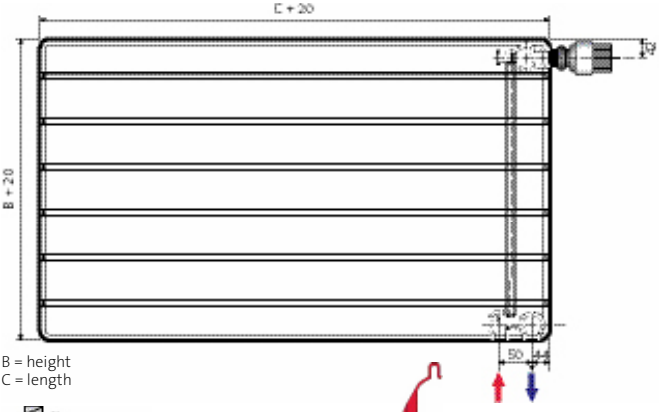
type 33		**height**	order code FAH33XXXYYYYZ		
length	Watt +	**400**	**600**	**750**	**900**
450	Watt	803	1114	1309	1471
	BTU	2741	3802	4468	5021
600	Watt	1070	1485	1745	1961
	BTU	3652	5068	5956	6693
750	Watt	1338	1856	2181	2451
	BTU	4567	6335	7444	8365
900	Watt	1606	2228	2617	2941
	BTU	5481	7604	8932	10038
1050	Watt	1873	2599	3053	3431
	BTU	6393	8870	10420	11710
1200	Watt	2141	2970	3490	3922
	BTU	7307	10137	11911	13386
1350	Watt	2408	3341	3926	4412
	BTU	8219	11403	13399	15058
1500	Watt	2676	3713	4362	4902
	BTU	9133	12672	14888	16731
1650	Watt	2944	4084		
	BTU	10048	13939		
1800	Watt	3211	4455		
	BTU	10959	15205		
1950	Watt	3479	4826		
	BTU	11874	16471		
Watt/m 90/70/20 °C		**2270**	**3168**	**3730**	**4200**
value n		**1,3222**	**1,3539**	**1,3649**	**1,3758**
volume: l/m		**6,73**	**10,10**	**11,27**	**12,44**
weight: kg/m		**42,70**	**62,38**	**77,19**	**92,00**

delivery time: 20 working days

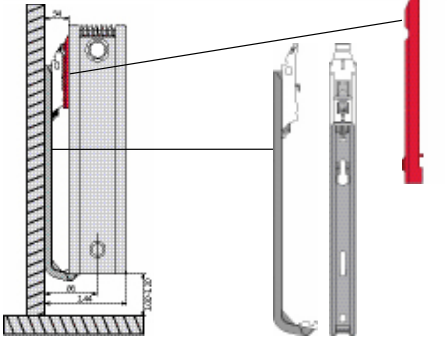
according EN 442 - 75/65/20 °C (ΔT 50)
no extra cost for left connection

Installation

Installation with invisible bracket



B = height
C = length



type 20

type 22

type 21

type 33

Connections

Connection left on demand

Other connections are not possible

KOS V

Tall. Smooth. Good-looking.
DECORATIVE RADIATORS

The contours cannot be more austere. The Kos series has a flat front panel that creates a stylised look and timeless elegance. The beautifully finished grill and the curved side covering ensures that the radiator retains its austere contour on each side.
The Kos V is available in a wide range of colours, including high-quality stainless steel. With the beautiful designed towel holder manufactured from stainless steel, you can make use of the Kos product lines to their utmost in your bathroom or kitchen. Saving space has never been so easy.

- Accessories included in the packaging and the price: brackets, 2 side covers, installation clips, 1 bore template, 1 rotating airvent, 3 blind stops, screws and plugs.
- Installation: U2V-bracket.
- Connections: 6 x Ø 1/2" (15/21). (Note: with type 22 the connecting valve is located eccentrically in the radiator.)
- If one does not connect the radiator using the connecting valve, short-circuit current can originate so the radiator heats less.
- Radiator is reversible top / bottom. Note: with top connection one must turn the radiator around and a minimum water column head of 3m is required for the radiator supply, and this with a minimum flow rate of 150 l/h.
- A Kos radiator can be used in 2-pipe systems and in 1-pipe systems, when the valve set is used.

HEIGHT
1800, 1950, 2100 mm

WIDTH
450, 600, 750 mm

TYPE
KOV 21, 22

FINISH
RAL 9016 White. Other RAL colours, stainless steel and metallic colours available on request.

type 21		**height**	order code KOV21XXXYYYYZ		
length	Watt +	**1800**	**1950**	**2100**	
300	Watt	886	936	978	
	BTU	3024	3195	3338	
450	Watt	1329	1405	1468	
	BTU	4536	4795	5010	
600	Watt	1772	1873	1957	
	BTU	6048	6393	6679	
750	Watt	2215	2341	2446	
	BTU	7560	7990	8348	
Watt/m 90/70/20 °C		**3757**	**3972**	**4158**	
value n		**1,3192**	**1,3231**	**1,3327**	
volume: l/m		**21,47**	**24,13**	**25,47**	
weight: kg/m		**21,73**	**23,47**	**25,33**	

type 22		**height**	order code KOV22XXXYYYYZ		
length	Watt +	**1800**	**1950**	**2100**	
300	Watt	1046	1103	1161	
	BTU	3570	3765	3962	
450	Watt	1569	1654	1742	
	BTU	5355	5645	5945	
600	Watt	2092	2205	2323	
	BTU	7140	7526	7928	
750	Watt	2615	2756	2903	
	BTU	8925	9406	9908	
Watt/m 90/70/20 °C		**4451**	**4766**	**4937**	
value n		**1,3387**	**1,4255**	**1,3343**	
volume: l/m		**100,27**	**109,33**	**117,07**	
weight: kg/m		**111,60**	**123,73**	**130,93**	

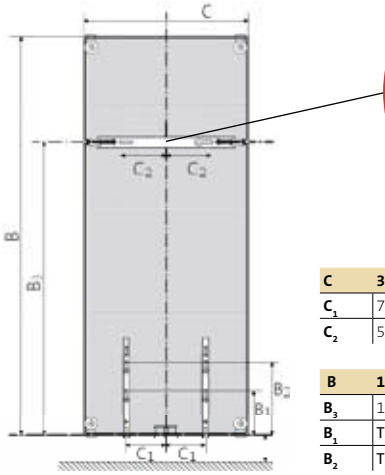
Kos V				**weight**	**volume**	**75/65/20 °C**	
stainless steel	**C**	**B**	**value n**	**(kg)**	**(l)**	**EN 442**	BTU
KOV2145018001	450	1800	1,3308	45,10	10,10	1183	4038
KOV2160019501	600	1950	1,3600	64,20	14,30	1601	5464
KOV2175021001	750	2100	1,3693	83,60	18,30	2095	7150

according EN 442 - 75/65/20 °C (ΔT 50)
heat outputs are measured with bottom connection

stock Purmo

Installation

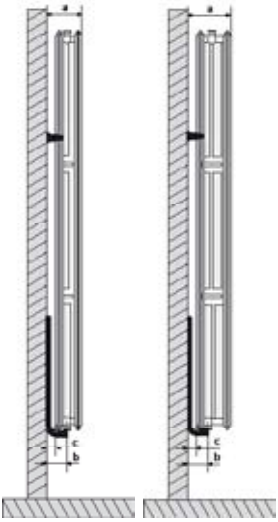
VR-bracket



C	300	450	600	750
C_1	75	100	175	250
C_2	50	125	200	275

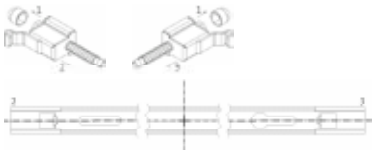
B	1500	1800	1950	2100	2300
B_3	1150	1450	1600	1750	1950
B_1	**T21-22** = 150				
B_2	**T21-22** = 250				

type 21 ***type 22***



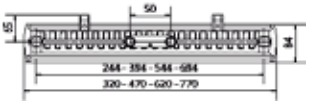
	type 21	*type 22*
a	111	136
b	67	67
c	27	27

upper bracket type 21-22

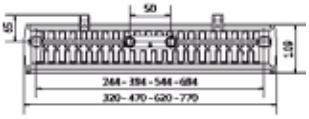


lower bracket type 21-22

type 21

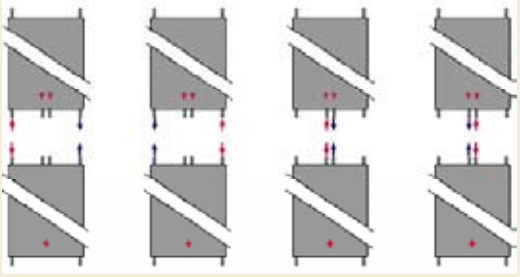


type 22



Connections
Other connections are not possible

++ excellent
+ very good

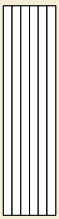


FARO V

Exceptional design, standing proud.
DECORATIVE RADIATORS

The profiled front panel emphasizes the vertical contours. The curved side panels give the radiator an austere, attractive appearance from all angles. The design not only provides the function that it has in common with other vertical elements by creating a sense of height in your interior; it also offers you the possibility to install a powerful source of heat in a confined space.

- Accessories included in the packaging and the price: brackets, 2 side covers, instal-lation clips, 1 bore template, 1 rotating airvent, 3 blind stops, screws and plugs.
- Installation: U2V-bracket.
- Connections: 6 x Ø 1/2" (15/21). (Note: with type 22 the connecting valve is located eccentrically in the radiator.)
- If one does not connect the radiator using the connecting valve, short-circuit current can originate so the radiator heats less.
- Radiator is reversible top / bottom. Note: with top connection one must turn the radiator around and a minimum water column head of 3m is required for the radiator supply, and this with a minimum flow rate of 150 l/h.
- A Faro radiator can be used in 2-pipe systems and in 1-pipe systems, when the valve set is used.



HEIGHT
1800, 1950, 2100 mm

WIDTH
470, 620, 770 mm

TYPE
FAV 21, 22

FINISH
All other RAL colours, stainless steel and metallic colours available on request.

type 21		**height**	order code FAV21XXXYYYYZ		
length	Watt +	**1800**	**1950**	**2100**	
300	Watt	886	936	978	
	BTU	3024	3195	3338	
450	Watt	1329	1405	1468	
	BTU	4536	4795	5010	
600	Watt	1772	1873	1957	
	BTU	6048	6393	6679	
750	Watt	2215	2341	2446	
	BTU	7560	7990	8348	
Watt/m 90/70/20 °C		**3757**	**3972**	**4158**	
value n		**1,3192**	**1,3231**	**1,3327**	
volume: l/m		**100,27**	**109,33**	**117,07**	
weight: kg/m		**100,27**	**109,33**	**117,07**	

type 22		**height**	order code FAV22XXXYYYYZ		
length	Watt +	**1800**	**1950**	**2100**	
300	Watt	1046	1103	1161	
	BTU	3570	3765	3962	
450	Watt	1569	1654	1742	
	BTU	5355	5645	5945	
600	Watt	2092	2205	2323	
	BTU	7140	7526	7928	
750	Watt	2615	2756	2903	
	BTU	8925	9406	9908	
Watt/m 90/70/20 °C		**4451**	**4766**	**4937**	
value n		**1,3387**	**1,4255**	**1,3343**	
volume: l/m		**111,60**	**123,73**	**130,93**	
weight: kg/m		**111,60**	**123,73**	**130,93**	

Faro V				**weight**	**volume**	**75/65/20 °C**	
stainless steel	**C**	**B**	**value n**	**(kg)**	**(l)**	**EN 442**	BTU
FAV2145018001	450	1800	1,3343	45,10	10,10	1183	4038
FAV2160019501	600	1950	1,3308	64,20	14,30	1601	5464
FAV2175021001	750	2100	1,3600	83,60	18,30	2095	7150

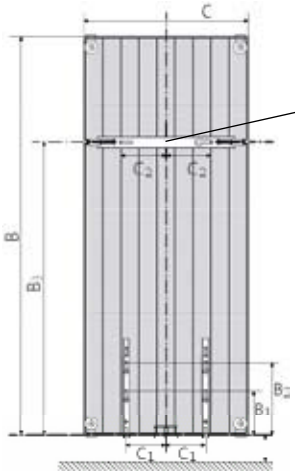
according EN 442 - 75/65/20 °C (ΔT 50)
heat outputs are measured with bottom connection

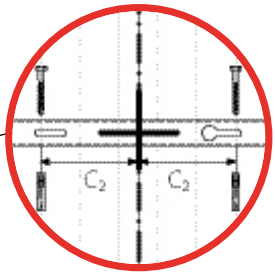
stock Purmo

FARO V

Exceptional design, standing proud.
DECORATIVE RADIATORS

Installation
VR-bracket

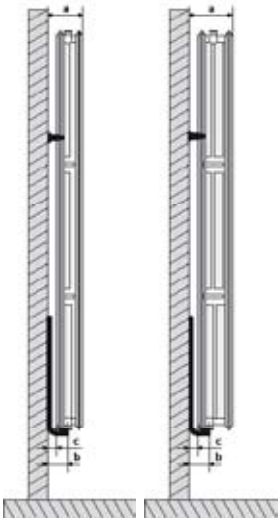




C	300	450	600	750
C_1	75	100	175	250
C_2	50	125	200	275

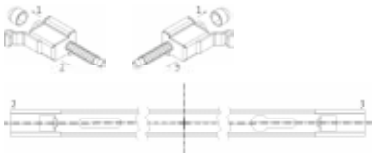
B	1500	1800	1950	2100	2300
B_3	1150	1450	1600	1750	1950
B_1	T21-22 = 150				
B_2	T21-22 = 250				

type 21 ***type 22***



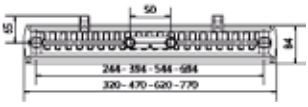
	type 21	*type 22*
a	111	136
b	67	67
c	27	27

upper bracket type 21-22

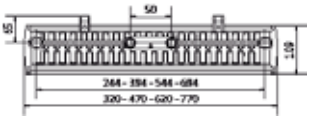


lower bracket type 21-22

type 21

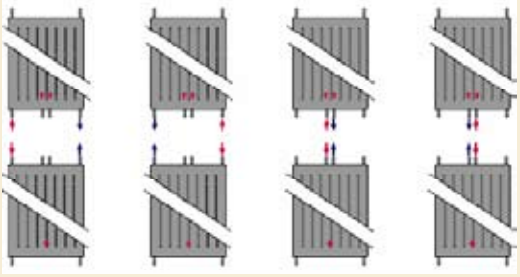


type 22



Connections
Other connections are not possible

++ excellent
+ very good

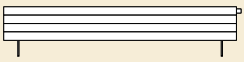


KON

Compact, yet powerful.
CONVECTOR

The Kon is the perfect solution for when you require a lot of power but have little space. This stylish convector combines compact design with high performance. A wealth of accessories make installation easy.

- Construction: EN 442-1.
- Water surfaces: Rectangular pipe EN 10130.
- Convection fins: Cold rolled steelplate EN 10130.
- Surface treatment: Surface treatment in five steps: 1) Alkalic degreased; 2) Phosphated; 3) Dipped in primer (electrical), KAT; 4) Coated with polyester-epoxy resin powder; 5) Stoved (about 200°C). The surface treatment process follows the standard DIN 55900.
- Working pressure: 8 bar.
- Connections: NS 15 -inner thread 1/2" ISO 228.
- Certification: SFS-EN ISO 9001 and ISO 14001.
- Height: 142, 214 and 286 mm.
- Length: 600–3 000 mm.
- Types: KON 21 double panel, one convection fin, KON 22 double panel, two convection fins, KON 33 triple panel, three convection fins, KON 34 triple panel, four convection fins.
- Brackets: Wallbracket or floorbracket.



HEIGHT
142, 214, 286 mm

LENGTH
600 - 3000 mm

TYPE
KON21, KON22, KON33, KON34

FINISH
RAL 9016 white. Other RAL colours available on request.

		type 21	order code KON21XXXYYYYZ		*type 22*	order code KON22XXXYYYYZ	
length	**height**	**142**	**214**	**286**	**142**	**214**	**286**
600	AB	5472112	5472142	5472172	5472212	5472242	5472272
	FE	5472112	5472142	5472172	5472212	5472242	5472272
	Watt	284	376	466	389	493	594
	BTU	969	1282	1591	1328	1683	2027
800	AB	5472114	5472144	5472174	5472214	5472244	5472274
	FE	5472114	5472144	5472174	5472214	5472244	5472274
	Watt	382	504	626	522	662	797
	BTU	1304	1720	2135	1782	2259	2719
1000	AB	5472116	5472116	5472176	5472216	5472246	5472276
	FE	5472116	5472146	5472176	5472216	5472246	5472276
	Watt	479	632	785	655	830	1000
	BTU	1635	2158	2679	2236	2834	3412
1200	AB	5472118	5472148	5472178	5472218	5472248	5472278
	FE	5472118	5482148	5472178	5472218	5472248	5472278
	Watt	576	761	944	788	999	1203
	BTU	1966	2597	3223	2690	3409	4105
1400	AB	5472120	5472150	5472180	5472220	5472250	5472280
	FE	5472120	5472150	5472180	5472220	5472250	5472280
	Watt	673	889	1104	921	1168	1406
	BTU	2297	3035	3767	3143	3985	4798
1600	AB	5472122	5472152	5472182	5472222	5472252	5472282
	FE	5472122	5472152	5472182	5472222	5472252	5472282
	Watt	770	1018	1263	1054	1336	1609
	BTU	2628	3473	4311	3597	4560	5491
1800	AB	5472124	5472154	5472184	5472224	5472254	5472284
	FE	5472124	5472154	5472184	5472224	5472254	5472284
	Watt	868	1146	1423	1187	1505	1812
	BTU	2962	3911	4855	4051	5136	6184
2000	AB	5472126	5472156	5472186	5472226	5472256	5472286
	FE	5472126	5472156	5472186	5472226	5472256	5472286
	Watt	965	1274	1582	1320	1673	2015
	BTU	3294	4349	5400	4505	5711	6876
2300	AB	5472128	5472158	5472188	5472228	5472258	5472288
	FE	5472128	5472158	5472188	5472228	5472258	5472288
	Watt	1111	1467	1821	1520	1926	2319
	BTU	3792	5007	6216	5186	6574	7916
2600	AB	5472130	5472160	5472190	5472230	5472260	5472290
	FE	5472130	5472160	5472190	5472230	5472260	5472290
	Watt	1256	1660	2060	1719	2179	2624
	BTU	4287	5664	7032	5867	7437	8955
3000	AB	5472132	5472162	5472192	5472232	5472262	5472292
	FE	5472132	5472162	5472192	5472232	5472262	5472292
	Watt	1451	1916	2379	1985	2516	3030
	BTU	4952	6541	8120	6775	8588	10341
Watt/m 90/70/20 °C		**486**	**642**	**797**	**665**	**843**	**1015**
value n		**1,2602**	**1,2776**	**1,2950**	**1,2536**	**1,2693**	**1,2850**

according EN 442 - 75/65/20 °C (ΔT 50)
no extra cost for left connection

delivery time: 20 working days

KON

Compact, yet powerful.
CONVECTOR

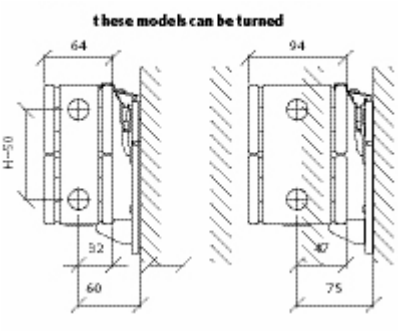
		type 33	order code KON33XXXYYYYZ		*type 34*	order code KON34XXXYYYYZ	
length	**height**	**142**	**214**	**286**	**142**	**214**	**286**
600	AB	5472312	5472342	5472372	5472412	5472442	5472472
	FE	5472812	5472842	5472872	5472912	5472942	5472972
	Watt	562	721	887	681	874	1066
	BTU	1919	2462	3029	2324	2983	3640
800	AB	5472314	5472344	5472374	5472414	5472444	5472474
	FE	5472814	5472844	5472874	5472914	5472944	5472974
	Watt	754	968	1191	914	1173	1431
	BTU	2575	3303	4064	3119	4003	4884
1000	AB	5472316	5472346	5472376	5472416	5472446	5472476
	FE	5472816	5472846	5472876	5472916	5472946	5472976
	Watt	947	1215	1494	1147	1472	1796
	BTU	3231	4145	5100	3913	5023	6129
1200	AB	5472318	5472348	5472378	5472418	5472448	5472478
	FE	5472818	5472848	5472878	5472918	5472948	5472978
	Watt	1139	1461	1798	1379	1770	2160
	BTU	3887	4987	6135	4708	6042	7373
1400	AB	5472320	5472350	5472380	5472420	5472450	5472480
	FE	5472820	5472850	5472880	5472920	5472950	5472980
	Watt	1331	1708	2101	1612	2069	2525
	BTU	4543	5828	7171	5502	7062	8617
1600	AB	5472322	5472352	5472382	5472422	5472452	5472482
	FE	5472822	5472852	5472882	5472922	5472952	5472982
	Watt	1523	1954	2404	1845	2368	2889
	BTU	5199	6670	8206	6297	8082	9862
1800	AB	5472324	5472354	5472384	5472424	5472454	5472484
	FE	5472824	5472854	5472884	5472924	5472954	5472984
	Watt	1715	2201	2708	2078	2667	3254
	BTU	5855	7512	9242	7091	9102	11106
2000	AB	5472326	5472356	5472386	5472426	5472454	5472486
	FE	5472826	5472856	5472886	5472926	5472956	5472986
	Watt	1908	2448	3011	2311	2966	3619
	BTU	6511	8353	10277	7886	10122	12350
2300	AB	5472328	5472358	5472388	5472428	5472458	5472488
	FE	5472828	5472858	5472888	5472928	5472958	5472988
	Watt	2196	2817	3466	2660	3414	4166
	BTU	7495	9616	11831	9078	11651	14217
2600	AB	5472330	5472360	5472390	5472430	5472460	5472490
	FE	5472830	5472860	5472890	5472930	5472960	5472990
	Watt	2484	3187	3921	3009	3862	4712
	BTU	8479	10878	13384	10270	13181	16084
3000	AB	5472332	5472362	5472392	5472432	5472462	5472492
	FE	5472832	5472862	5472892	5472932	5472962	5472992
	Watt	2869	3681	4528	3475	4460	5442
	BTU	9790	12562	15455	11859	15221	18572
Watt/m 90/70/20 °C		**961**	**1233**	**1517**	**1164**	**1494**	**1823**
value n		**1,2407**	**1,2676**	**1,2945**	**1,2498**	**1,2697**	**1,2895**

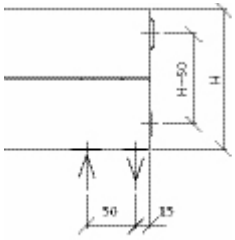
delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)
no extra cost for left connection

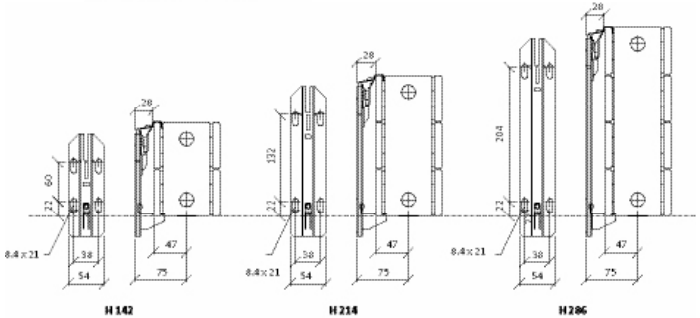
Wallbrackets - only for types 21 and 22

type 21 ***type 22***

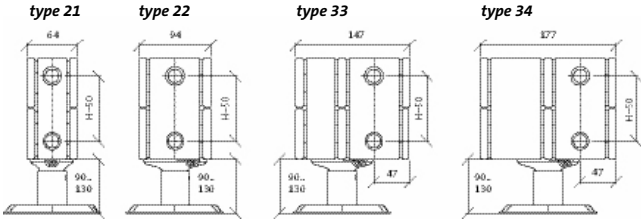




Location of connection points



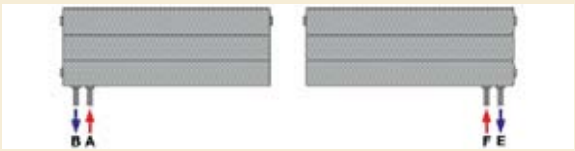
Floorbrackets for all types



Connections

Same end connection

Bottom connection



The flat profiles of the Pago H have rounded edges for a soft, gentle look and feel. It is available in single or double-sided versions to suit your heating demands. A range of accessories, including towel rails, makes it an integral part of your living space.

- Accessories included in the packaging and the price: brackets, 1 rotating airvent, 1 blind stop, screws and plugs.
- Installation: 4 welded-on hanging strips for 4 adjustable wall brackets.
- Connections: 2 x Ø 1/2" (15/21).

HEIGHT
Horizontal:
305 - 905 mm
(4 - 12 elements)

LENGTH
1200, 1500*,
1800, 2000,
2200 mm
*double only

TYPE
PAH 10, 20

FINISH
RAL 9016 white.
Other sanitary and RAL colours available on request.

PAGO H

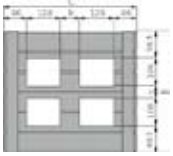
Flat and fabulous

DECORATIVE RADIATORS

Installation

Position of the brackets

C = 1200 mm

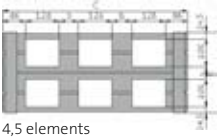


6, 8, 10 elements

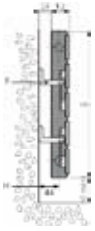
C = 1500 - 2200 mm

6,7,8,9,10,12 elements

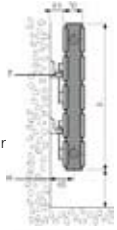
C = 1500 - 2200 mm



4,5 elements



single



double

A = centre-to-centre connection
B = height
C = length
F = brackets
H = side connection

	type	C	B	num. of elem.	A	weight (kg)	volume (l)	75/65/20 °C EN 442	BTU
single	***PA101206***	1200	455	6	387	12,50	5,33	599	2044
	PA101208	1200	605	8	537	16,61	7,10	784	2676
	PA101210	1200	755	10	687	20,80	8,88	968	3304
	PA101804	1800	305	4	237	12,50	5,33	617	2106
	PA101806	1800	455	6	387	18,70	7,99	898	3065
	PA102004	2000	305	4	237	13,80	5,92	686	2341
	PA102005	2000	380	5	312	17,30	7,40	842	2874
	PA102006	2000	455	6	387	20,80	8,88	998	3406
	PA102007	2000	530	7	462	24,20	10,36	1152	3932
	PA102008	2000	605	8	537	27,70	11,84	1306	4457
	PA102009	2000	680	9	612	31,10	13,32	1460	4983
	PA102010	2000	755	10	687	34,60	14,80	1614	5509
	PA102012	2000	905	12	837	41,50	17,76	1922	6560
	PA102210	2200	755	10	687	38,10	16,28	1775	6058
double	***PA201208***	1200	605	8	537	31,00	12,48	1428	4874
	PA201210	1200	755	10	687	38,80	15,60	1738	5932
	PA201506	1500	455	6	387	29,10	11,70	1383	4720
	PA201806	1800	455	6	387	34,90	14,04	1660	5666
	PA202004	2000	305	4	237	25,80	10,40	1280	4369
	PA202006	2000	455	6	387	38,80	15,60	1844	6294
	PA202007	2000	530	7	462	45,20	18,20	2114	7215
	PA202008	2000	605	8	537	51,70	20,80	2380	8123
	PA202010	2000	755	10	687	64,60	26,00	2896	9884
	PA202206	2200	455	6	387	42,60	17,16	2028	6922

delivery time: 20 working days

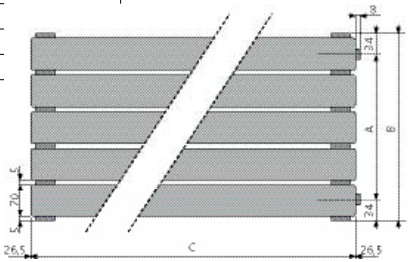
sizes in mm

according EN 442 - 75/65/20 °C (ΔT 50)

heat outputs are measured with bottom connection

num. of elements	c
4	44
5	119
6	44
7	119
8	194
9	269
10	344
12	494

C	b
1200	772
1800	622
2000	722
2200	822



Connections
Other custom designs: at demand

- All single and double models from stock can be switched left / right.
- Diameter of connections: supply and return Ø (1/2") 15/21, rotating airvent, drainage and blind stop 5/10 (1/8").

COLUMN RADIATORS

Laser-welded for a sleek look and higher quality

COLUMN RADIATORS

Laser-welded for a smooth look and high quality

Delta Laserline

Delta Laserline standard range

Fully laser-welded, steel column radiators. Pipe sections and end pieces are welded by laser to columns and blocks. Pipes are smoothed on the outside to obtain the characteristics Delta "D-tubular section". This results in higher heat outputs. Laser welding results in barely visible welded joints.

- Accessories included in the packaging and the price: brackets, 1 airvent, 1 blind stop, screws and plugs.
- Installation: a kit of 4 or 6 radiator brackets and ajustable wall brackets.
- Connections: 4 x Ø 1/2" (15/21) female thread to the 4 ends for heights 400, 500, 600, 750 and 900 mm. For the heights 1800 and 2000 mm: 2 x Ø 1/2" (mid connection).
- Colour standard range: RAL 9016. Other available colours: see p. 175. Add at the order code /.... and complete the RAL-colour. Ex. S1-2040/10/3003 for a radiator in RAL 3003.
- Accessories: see p. 168.

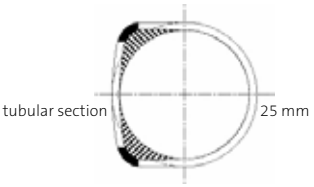
Hygiene Certificate

Delta radiators have very low dust emission and are easy to clean.

We have been awarded the "Hygiene Certificate" to demonstrate this.

This makes the radiators ideal for use in hospitals, schools etc.

[100 % LASER]

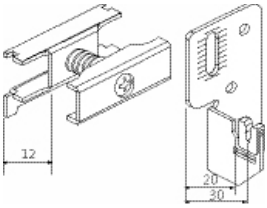


characteristics

length element	50 mm
pipe dimensions	25 x 1,25 mm
working pressure	10 bar
testing pressure	13 bar
max. working temperature	120 °C

COLUMN RADIATORS

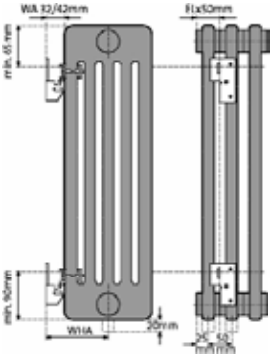
Laser-welded for a smooth look and high quality



Installation

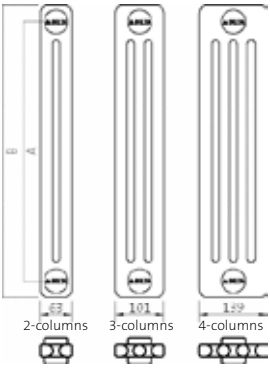
assembly kit:

- Included in the packaging and the price: brackets, airvent, radiator plug, screws and plugs.
- All Delta Laserline radiators in the standard range can be nippled to obtain higher heat emissions.
- The stock radiators of heights 600 and 900 mm can be nippled by using nipples and a nipple bar.



$$WHA = WA + \frac{depth}{2}$$

Sizes and lengths of the elements



2-columns
63 mm

3-columns
101 mm

4-columns
139 mm

height	centre-to-centre connection
B	**A**
400	335
500	435
600	535
750	685
900	835

Distance between the radiator and the wall and centre-to-centre connection for standard installation kit.

model	depth (mm)	WA (mm)
2-columns	63	32 / 42
3-columns	101	32 / 42
4-columns	139	32 / 42

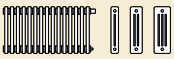
DELTA LASERLINE

Laser-welded for a smooth look and high quality
COLUMN RADIATORS

With the Delta range, laser welding eliminates all weld seams, prevents welding residue, reduces friction and reduces the risk of corrosion. The D-shaped profiles improve performance by up to 10% compared to conventional designs.

Most importantly, the Delta range allows you to have the radiator you want in the location where you want it. It's available in 28 different heights between 300 and 3000 mm.

- Accessories included in the packaging and the price: brackets, 1 airvent, 1 blind stop, screws and plugs.
- Installation: a kit of 4 or 6 radiator brackets and ajustable wall brackets.
- Connections: 4 x Ø 1/2" (15/21) female thread to the 4 ends for heights 400, 500, 600, 750 and 900 mm. For the heights 1800 and 2000 mm: 2 x Ø 1/2" (mid connection).



HEIGHT
From 155 - 3000 mm. Any height from 300 to 3000 mm is available on request.

LENGTH
Up to 2000 mm

TYPE
DL2, DL3, DL4, DL5, DL6

FINISH
RAL 9016 white. Other RAL colours available on request.

Standard range

elem.	length		*2 columns* height 450	600
12	**600**	REF.	DL20120450	DL20120600
		Watt	436	564
		BTU	1485	1925
16	**800**	REF.	DL20160450	DL20160600
		Watt	581	752
		BTU	1980	2567
20	**1000**	REF.	DL20200450	DL20200600
		Watt	726	940
		BTU	2474	3209
24	**1200**	REF.	DL20240450	DL20240600
		Watt	871	1128
		BTU	2969	3850
28	**1400**	REF.	DL20280450	DL20280600
		Watt	1016	1316
		BTU	3464	4492
36	**1800**	REF.	DL20360450	
		Watt	1307	
		BTU	4454	

elem.	length		*3 columns* height 300	450	600	750
12	**600**	REF.		DL30120450	DL30120600	DL30120750
		Watt		606	781	953
		BTU		2068	2665	3251
16	**800**	REF.	DL30160300	DL30160450	DL30160600	DL30160750
		Watt	566	808	1042	1270
		BTU	1933	2757	3554	4335
20	**1000**	REF.	DL30200300	DL30200450	DL30200600	DL30200750
		Watt	708	1010	1302	1588
		BTU	2416	3446	4442	5418
24	**1200**	REF.		DL30240450	DL30240600	DL30240750
		Watt		1212	1562	1906
		BTU		4135	5331	6502
28	**1400**	REF.	DL30280300	DL30280450	DL30280600	DL30280750
		Watt	991	1414	1823	2223
		BTU	3382	4825	6219	7586
36	**1800**	REF.	DL30360300	DL30360450		
		Watt	1274	1818		
		BTU	4348	6203		

according EN 442 - 75/65/20 °C (ΔT 50)

stock Purmo

DELTA LASERLINE

Laser-welded for a smooth look and high quality

COLUMN RADIATORS

elem.	length		*4 columns* height 600	750
12	**600**	REF.	DL40120600	DL40120750
		Watt	997	1214
		BTU	3402	4144
16	**800**	REF.	DL40160600	DL40160750
		Watt	1330	1619
		BTU	4537	5525
20	**1000**	REF.	DL40200600	DL40200750
		Watt	1662	2024
		BTU	5671	6906
24	**1200**	REF.	DL40240600	DL40240750
		Watt	1994	2429
		BTU	6805	8287
28	**1400**	REF.	DL40280600	DL40280750
		Watt	2327	2834
		BTU	7939	9668
36	**1800**	REF.		
		Watt		
		BTU		

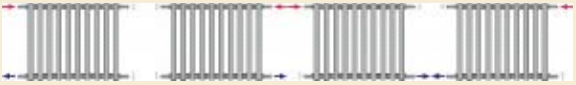
elem.	length		*2 columns* height 1800	2000	*3 columns* 1800	2000
6	**300**	REF.	DV20061800	DV20062000	DV30061800	DV30062000
		Watt	793	881	1069	1183
		BTU	2706	3006	3647	4036
8	**400**	REF.	DV20081800	DV20082000	DV30081800	DV30082000
		Watt	1058	1174	1425	1577
		BTU	3610	4008	4862	5381
10	**500**	REF.	DV20101800	DV20102000	DV30101800	DV30102000
		Watt	1322	1468	1780	1971
		BTU	4523	5010	6089	6743
12	**600**	REF.	DV20121800	DV20122000	DV30121800	DV30122000
		Watt	1586	1762	2136	2365
		BTU	5426	6012	7307	8091
15	**750**	REF.	DV20151800	DV20152000	DV30151800	DV30152000
		Watt	1983	2202	2672	2957
		BTU	6766	7513	9117	10089

stock Purmo

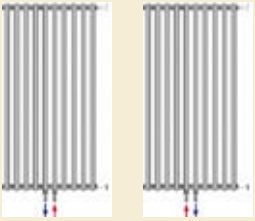
according EN 442 - 75/65/20 °C (ΔT 50)

Connections

Connections - heights 400 to 900 mm
4 x Ø 1/2" (15/21)



Connections - heights 1800 to 2000 mm
mid connection: 2 x Ø 1/2" (15/21)



1 = radiator plug
2 = airvent

BATHROOM RADIATORS

Designed for everyday luxury

BATHROOM RADIATORS

Designed for everyday luxury

Apolima

Java

Muna

Flores

Flores C

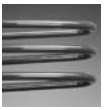
Santorini

Santorini C

Aldabra

Analfi

Kea



Sardinia

Ratea

Andros CH

Andros M

Ios M

Linosa

characteristics

- With its range of bathroom radiators for hot water systems, Purmo offers you a wide range of types, heat outputs and dimensions.
- Each design distinguishes itself by its decorative appearance.
- These bathroom radiators also give kitchens and toilets (in private homes, in hotels, in restaurants,...) added value to your interior.
- Diameter of connections: Ø 1/2" (15/21).
- Our radiators are given a protective primer coat by electrophoresis, the top coat is then provided in the colour of your choice.

colours

- Colours: standard colour is white RAL 9016.
  Other available colours: see p. 175. Add at the order code /.... and complete the RAL-colour. Ex. AP06500830/3003 for a radiator in RAL 3003.

	Apolima	*Java*	*Muna*	*Flores*	*Flores C*	*Santorini*	*Santorini C*	*Aldabra*	*Analfi*	*Kea*	*Sardinia*	*Ratea*	*Andros CH*	*Andros M*	*Ios M*	*Linosa*
n° connections	2	2	2	2-4*	2-4*	4	4	2	6	4	2w	2	2	2	2	2
working pressure – bar	4	8	4	8	8	10	10	4	10	10	10	10	4	4	4	4
supply and return bottom, left / right reversible	x	x	x	x	x	x	x	x	x	x	x	x	-	-	-	-
mid connection*	x	-	-	x	x	-	-	-	x	x	-	-	-	x	x	-
top connection (installation with fitting in the return)	-	-	-	-	-	x	x	-	-	-	-	-	-	-	-	-
airvent	1/8"	1/8"	1/8"	1/2"	1/2"	1/2"	1/2"	1/2"	1/4"	1/4"	1/4"	1/4"	1/8"	1/8"	1/2"	1/8"
adjustable brackets supplied in the packaging	2	4	4	3	4	3	4	4	4	4	4	4	4	4	4	4

heat output

Heat outputs were measured according to the EN 442 standard, with a water temperature of 75/65 °C and a room temperature of 20 °C (ΔT=50).

packaging

The radiators are protected on 4 sides with cardboard, including corner edge protections. The radiators are shrink-wrapped and then packed in a cardboard box together with the brackets.

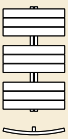
APOLIMA

Perfect curves for your bathroom or living room

BATHROOM RADIATORS

The Apolima's tiered design will accommodate plenty of towels, creating order out of chaos in the bathroom or kitchen. The Apolima is capable of delivering outputs high enough to comfortably heat a large room.

- Accessories included in the packaging and the price: brackets, 1 blind stop, 1 airvent.
- Installation: 2 welded-on hanging strips for 2 adjustable wall brackets.
- Connections: 2 x Ø 1/2" (15/21).

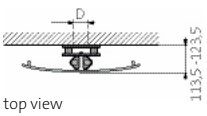


HEIGHT
830, 1130, 1430, 1730 mm

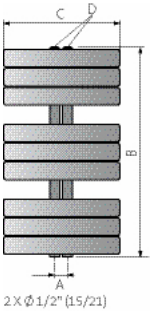
WIDTH
650, 800 mm

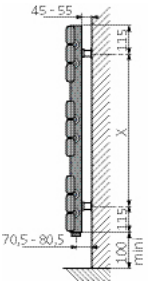
FINISH
RAL 9016 White. Other RAL colours available on request.

Installation



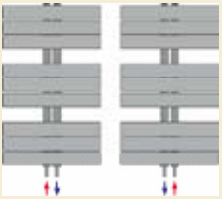
top view



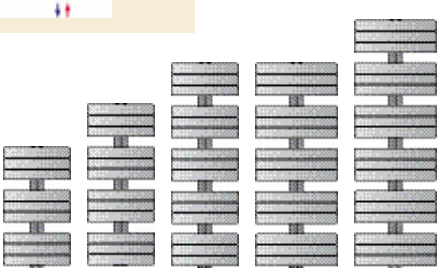


Connections

- Supply and return always at the bottom, can be switched left/right, centre-to-centre 50 mm.
- Diameter connections: supply and return Ø 1/2" (15/21).
- Working pressure: 4 bar.
- Max. working temperature: 110 °C.



A = centre-to-centre connections
B = height
C = length
D = centre-to-centre brackets HORI
X = centre-to-centre brackets VERTI



						weight	volume	75/65/20 °C	
type	A	B	C	D	X	(kg)	(l)	EN 442	BTU
AP06500830	50	830	650	50	600	12,80	5,50	558	1904
AP06501130	50	1130	650	50	900	17,10	6,50	732	2498
AP06501430	50	1430	650	50	1200	21,50	7,50	909	3102
AP08001430	50	1430	800	50	1200	25,30	8,50	1086	3707
AP08001730	50	1730	800	50	1500	29,40	11,60	1300	4437

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

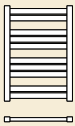
delivery time: 20 working days

JAVA

Light and airy
BATHROOM RADIATORS

Java is a classic bathroom radiator that brings a touch of luxury to your bathroom or kitchen. The heat elements are elliptical and placed at an angle, giving the Java a light and airy feel. The connections can be switched left or right to suit your installation needs.

- Accessories included in the packaging and the price: brackets, 1 blind stop, 1 airvent.
- Installation: 4 welded-on hanging strips for 4 adjustable wall brackets.
- Connections: 2 x Ø 1/2" (15/21).

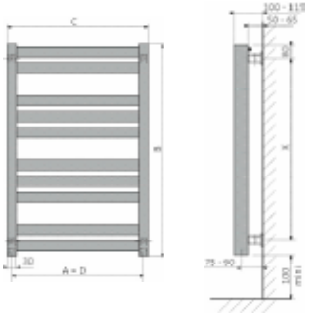


HEIGHT
700, 912, 1336, 1548, 1760 mm

WIDTH
400, 500, 600 mm

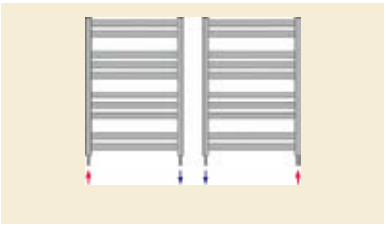
FINISH
RAL 9016 White. Other RAL colours available on request.

Installation

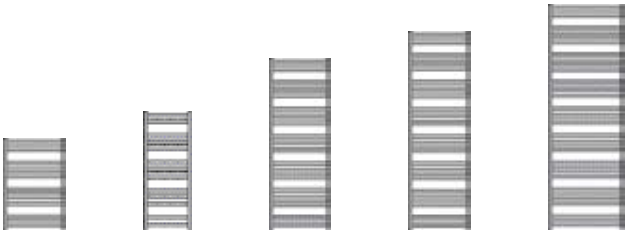


Connections

- Supply and return always at the bottom, can be switched left / right.
- Diameter connections: supply and return Ø 1/2" (15/21).
- Working pressure: 8 bar.
- Max. working temperature: 110 °C.



A = centre-to-centre connections
B = height
C = length
D = centre-to-centre brackets HORI
X = centre-to-centre brackets VERTI



						weight	volume	75/65/20 °C	
type	A	B	C	D	X	(kg)	(l)	EN 442	BTU
JA05000700	470	700	500	470	520	5,50	3,30	358	1222
JA05000912	470	912	500	470	750	7,80	4,30	463	1580
JA04001336	370	1336	400	370	1170	11,40	5,60	568	1939
JA05001336	470	1336	500	470	1170	13,20	6,30	668	2280
JA05001548	470	1548	500	470	1320	15,30	7,20	780	2662
JA06001760	570	1760	600	570	1600	19,40	9,40	1015	3464

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

delivery time: 20 working days

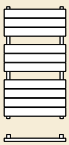
MUNA

Flat subtlety

BATHROOM RADIATORS

The Muna is a bathroom radiator for those who like a rigid look. The flat heating elements create a striking appearance, which is subtle enough to blend into almost any interior.

- Accessories included in the packaging and the price: brackets, 1 blind stop, 1 airvent.
- Installation: 4 welded-on hanging strips for 4 adjustable wall brackets.
- Connections: 2 x Ø 1/2" (15/21).

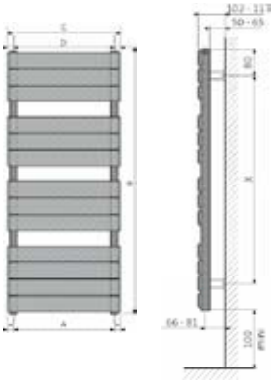


HEIGHT
905, 1205, 1655, 1730, 2030 mm

WIDTH
500, 600, 800 mm

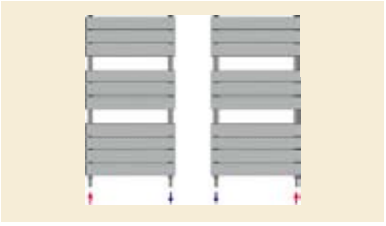
FINISH
RAL 9016 White. Other RAL colours available on request.

Installation

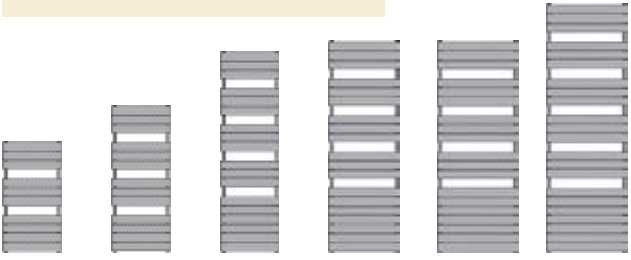


Connections

- Supply and return always at the bottom, can be switched left / right.
- Diameter connections: supply and return Ø 1/2" (15/21).
- Working pressure: 4 bar.
- Max. working temperature: 110 °C.



A = centre-to-centre connections
B = height
C = length
D = centre-to-centre brackets HORI
X = centre-to-centre brackets VERTI



						weight	volume	75/65/20 °C	
type	A	B	C	D	X	(kg)	(l)	EN 442	BTU
MU05000905	447	905	500	438	620	10,80	2,80	470	1604
MU05001205	447	1205	500	438	990	14,10	5,00	602	2055
MU05001655	447	1655	500	438	1460	19,40	7,80	815	2782
MU06001730	547	1730	600	538	1460	23,10	9,70	987	3369
MU08001730	747	1730	800	738	1460	29,10	11,60	1311	4474
MU08002030	747	2030	800	738	1790	33,60	13,60	1464	4997

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

delivery time: 20 working days

FLORES

Flush against the wall

BATHROOM RADIATORS

The timeless Flores embodies understated elegance and superior comfort. Flores is available in a range of colours including a chrome version. Classic in design but manufactured using the latest technology, it is a natural choice for bathrooms or kitchens.

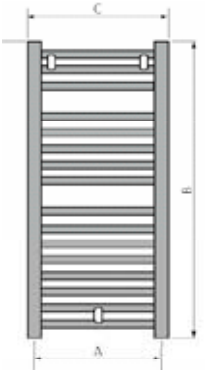
- Accesories included in the packaging and the price: brackets, 1 blind stop, 1 airvent, mounted injection pipe, screws and plugs.
- Installation: 3 adjustable hanging brackets to block between the pipes. These brackets are standard white. Chrome for radiators in colours.
- Connections: 2 x Ø 1/2" (15/21).

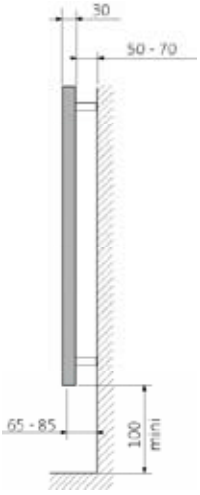
HEIGHT
547, 862, 1222, 1537, 1807 mm

WIDTH
500, 600, 750 mm

FINISH
RAL 9016 White. Other RAL colours available on request.

Installation





A = centre-to-centre connections
B = height
C = length

				weight	volume	75/65/20 °C	
type	**A**	**B**	**C**	**(kg)**	**(l)**	**EN 442**	BTU
FL05470500	455	547	500	4,10	2,60	257	877
FL08620500	455	862	500	6,20	3,90	421	1437
FL08620600	455	862	600			463	1580
FL12220500	455	1222	500	8,80	6,10	576	1966
FL12220600	555	1222	600	11,30	6,80	676	2307
FL12220750	705	1222	750	13,50	8,10	826	2819
FL15370600	555	1537	600	12,70	8,60	842	2874
FL15370750	705	1537	750	15,30	10,20	1030	3515
FL18070500	455	1807	500	13,10	8,80	866	2956
FL18070600	555	1807	600	14,90	10,10	1014	3461

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

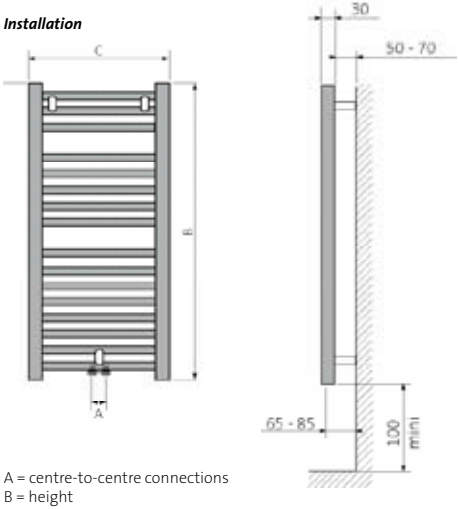
stock Purmo

FLORES M (mid connection)

Flush against the wall

BATHROOM RADIATORS

Installation



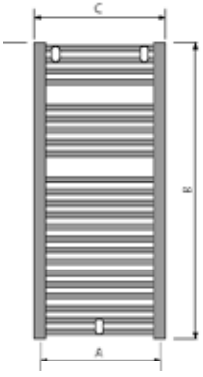
A = centre-to-centre connections
B = height
C = length

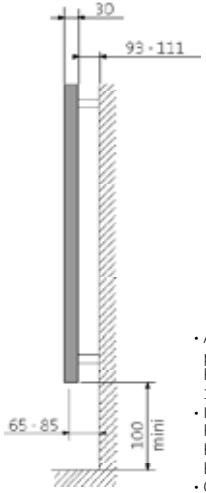
				weight	volume	75/65/20 °C	
type	A	B	C	(kg)	(l)	EN 442	BTU
FL05000547M	50	547	500	4,00	2,60	266	908
FL05000862M	50	862	500	6,50	3,90	397	1355
FL05001222M	50	1222	500	9,10	6,10	552	1884
FL06001222M	50	1222	600	11,30	6,80	676	2307
FL07501222M	50	1222	750	13,50	8,10	826	2819
FL05001537M	50	1537	500	12,40	7,40	718	2451
FL06001537M	50	1537	600	12,70	8,60	804	2744
FL07501537M	50	1537	750	15,30	10,20	976	3331
FL05001807M	50	1807	500	13,10	8,80	830	2833
FL06001807M	50	1807	600	14,90	10,10	962	3283
FL07501807M	50	1807	750	17,60	12,00	1161	3962

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

Installation





A = centre-to-centre connections
B = height
C = length

- Accesories included in the packaging and the price: brackets, 1 blind stop, 1 airvent, screws and plugs.
- Installation: 3 adjustable hanging brackets to block between the pipes. These brackets are in Chrome.
- Connections: 2 x Ø 1/2".


FL0O805CH


FLO1205CH


FLO1506CH


FLO1806CH

				weight	volume	75/65/20 °C	
type	**A**	**B**	**C**	**(kg)**	**(l)**	**EN 442**	BTU
FLO0805CH	455	760	500	7,00	3,54	258	881
FLO0806CH	455	760	600	7,70	4,04	296	1010
FLO1205CH	455	1150	500	10,10	5,2	354	1208
FLO1206CH	555	1150	600	11,30	5,92	423	1444
FLO1506CH	555	1450	600	14,00	7,3	508	1734
FLO1806CH	555	1750	600	16,90	8,84	635	2168

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

delivery time: 20 working days

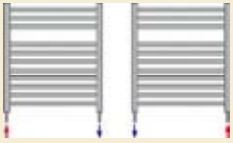
FLORES

Flush against the wall

BATHROOM RADIATORS

Connections Flores

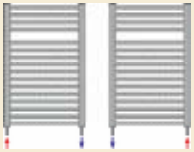
- Supply and return can be switched left / right.
- Diameter connections: supply and return Ø 1/2" (15/21).
- Working pressure: 8 bar.
- Max. working temperature: 110 °C.



***Connections Flores** M (mid connection)*

***Connections Flores** CH (chrome)*

- Diameter connections : supply and return Ø 1/2" (15/21).
- Working pressure : 6 bar.
- Max. working temperature : 110 °C.
- 1 airvent.

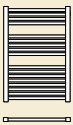


FLORES C

Curved and efficient
BATHROOM RADIATORS

The Flores C has curved round pipes, a very popular timeless design in a new guise. Naturally, it also possesses all of the other advantages of the Flores series, including accessories, for flexible and easy installation and, of course, divine heat. This radiator is available in chrome.

- Accessories included in the packaging and the price: brackets, 1 blind stop, 1 airvent, screws and plugs.
- Installation: 4 adjustable hanging brackets to block between the pipes. These brackets are standard white. Chrome for radiators in colour.
- Connections: 2 x Ø 1/2" (15/21).



HEIGHT
547, 862, 1222, 1537, 1807 mm

LENGTH
490, 590, 740 mm

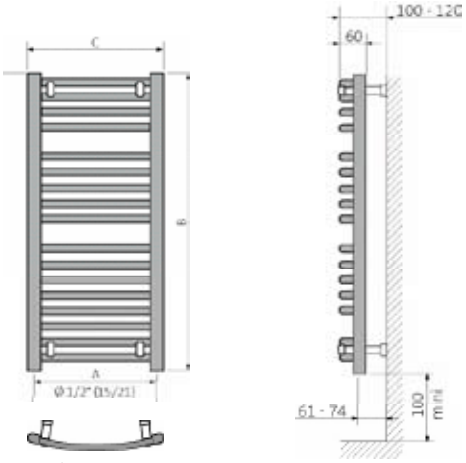
FINISH
RAL 9016 White. Other RAL colours available on request.

FLORES C

Curved and efficient

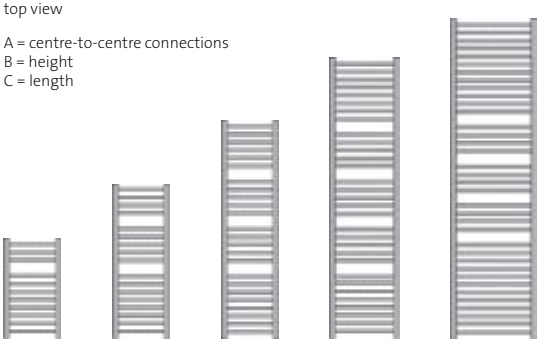
BATHROOM RADIATORS

Installation



top view

A = centre-to-centre connections
B = height
C = length



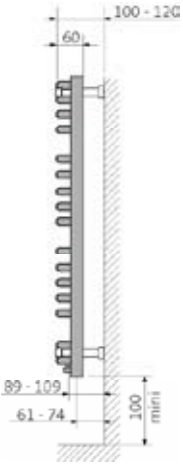
				weight	volume	75/65/20 °C	
type	A	B	C	(kg)	(l)	EN 442	BTU
FLC05470490	445	547	490	4,10	2,60	265	904
FLC08620490	445	862	490	6,20	3,90	421	1437
FLC08620590	545	862	590	7,10	4,40	487	1662
FLC12220490	445	1222	490	8,80	6,10	587	2003
FLC12220590	545	1222	590	11,30	6,80	689	2352
FLC12220740	695	1222	740	13,50	8,10	843	2877
FLC15370590	545	1537	590	12,70	8,60	856	2922
FLC15370740	695	1537	740	15,30	10,20	1051	3587
FLC18070490	445	1807	490	13,10	8,80	862	2942
FLC18070590	545	1807	590	14,90	10,10	1022	3488

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

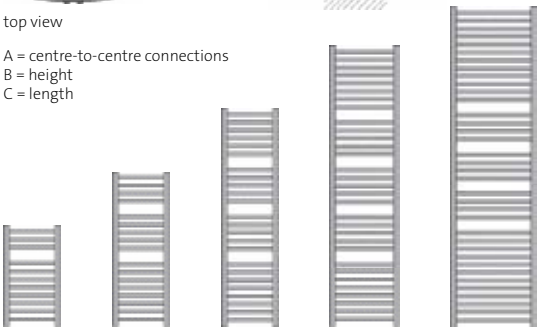
Installation

Mid connection to
the wall = 78 – 98 mm



top view

A = centre-to-centre connections
B = height
C = length



				weight	volume	75/65/20 °C	
type	**A**	**B**	**C**	**(kg)**	**(l)**	**EN 442**	BTU
FLC05000547M	50	547	500	4,10	2,60	265	904
FLC05000862M	50	862	500	6,20	3,90	421	1437
FLC05001222M	50	1222	500	8,80	6,10	587	2003
FLC06001222M	50	1222	600	11,30	6,80	689	2352
FLC07501222M	50	1222	750	13,50	8,10	843	2877
FLC05001537M	50	1537	500	12,40	7,40	726	2478
FLC06001537M	50	1537	600	12,70	8,60	856	2922
FLC07501537M	50	1537	750	15,30	10,20	1051	3587
FLC05001807M	50	1807	500	13,10	8,80	862	2942
FLC06001807M	50	1807	600	14,90	10,10	962	3283
FLC07501807M	50	1807	750	17,60	12,00	1261	4304

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

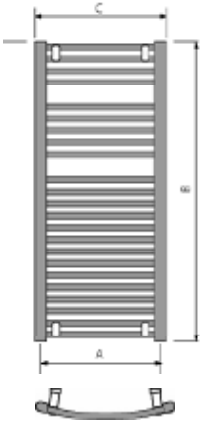
delivery time: 20 working days

FLORES C CH (chrome)

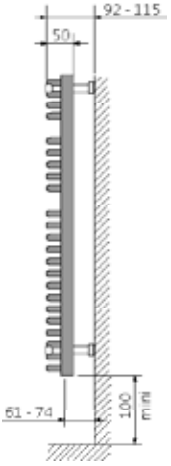
Curved and efficient

BATHROOM RADIATORS

Installation



top view



- Accesories included in the packaging and the price: brackets, 1 blind stop, 1 airvent, screws and plugs.
- Installation: 3 adjustable hanging brackets to block between the pipes. These brackets are in chrome.
- Connections: 2 x Ø 1/2".

A = centre-to-centre connections
B = height
C = length

FLC0805CH

FLC1205CH

FLC1506CH

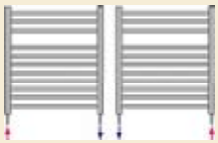
FLC1806CH

				weight	volume	75/65/20 °C	
type	**A**	**B**	**C**	**(kg)**	**(l)**	**EN 442**	BTU
FLC0805CH	455	760	500	7,00	3,58	258	881
FLC0806CH	455	760	600	7,70	4,08	296	1010
FLC1205CH	455	1150	500	10,10	5,25	354	1208
FLC1206CH	555	1150	600	11,30	5,96	423	1444
FLC1506CH	555	1450	600	14,00	7,34	508	1734
FLC1806CH	555	1750	600	16,90	8,89	635	2168

delivery time: 20 working days

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

Connections Flores C
- Supply and return always at the bottom, can be switched left/right.
- Diameter connections: supply and return Ø 1/2" (15/21).
- Working pressure: 8 bar.



***Connections Flores C** M (mid connection)*

***Connections Flores C** CH (chrome)*
- Diameter connections: supply and return Ø 1/2" (15/21).
- Working pressure: 6 bar.
- Max. working temperature: 110 °C.
- 1 airvent.

SANTORINI

A classic look

BATHROOM RADIATORS

The round pipes of the Santorini are arranged in straight lines to create a clean, classic look. The Santorini is a good all-rounder; it can be unobtrusive in period homes or quietly supportive in modern interiors. Virtually invisible mounting brackets are an added bonus.

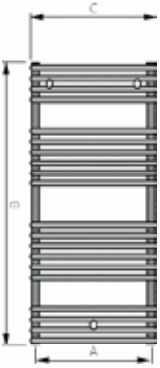
- Accessories included in the packaging and the price: brackets, 1 blind stop, 1 airvent, screws and plugs.
- Installation: 3 adjustable hanging brackets to block between the pipes.
- Connections: 4 x Ø 1/2" (15/21).
- Option: top connection with installation of an injection pipe in return: see p. 173.

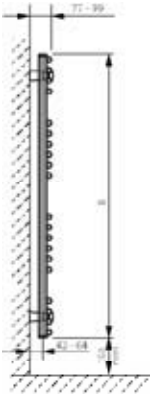
HEIGHT
714, 1134, 1764 mm

WIDTH
500, 600, 750, 900 mm

FINISH
RAL 9016 White. Other RAL colours and chrome available on request.

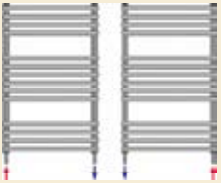
Installation



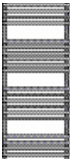


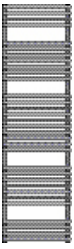
Connections

- Supply and return can be switched left / right.
- Diameter connections: supply and return Ø 1/2" (15/21).
- Working pressure: 10 bar.



A = centre-to-centre connections
B = height
C = length





				weight	volume	75/65/20 °C	
type	**A**	**B**	**C**	**(kg)**	**(l)**	**EN 442**	BTU
SA05000714	460	714	500	5,90	2,70	343	1171
SA06000714	560	714	600	6,70	3,10	404	1379
SA07500750	710	714	750	8,00	3,70	493	1683
SA05001134	460	1134	500	9,20	4,10	512	1747
SA06001134	560	1134	600	10,50	4,80	604	2061
SA07501134	710	1134	750	12,40	5,70	738	2519
SA05001764	460	1764	500	14,60	6,50	782	2669
SA06001764	560	1764	600	16,70	7,50	921	3143
SA07501764	710	1764	750	19,70	8,90	1126	3843
SA09001764	860	1764	900	22,80	10,40	1326	4526

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

delivery time: 20 working days

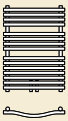
SANTORINI C

A traditional look with a whimsical touch

BATHROOM RADIATORS

The Santorini C adds a slightly curved touch to the austere contours of traditional bathroom radiators: the curved pipes soften the overall image. This solution makes heat a real treat for all of the senses.

- Accessories included in the packaging and the price: brackets, 1 radiator plug, 1 rotating airvent, screw and plugs.
- Installation: 4 adjustable hanging brackets to block between the pipes.
- Connections: 4 x Ø 1/2" (15/21).
- Option: top connection with installation of an injection pipe in return: see p. 173.



HEIGHT
714, 1134, 1764 mm

LENGTH
498, 596, 742, 887 mm

FINISH
RAL 9016 White. Other colours available on request.

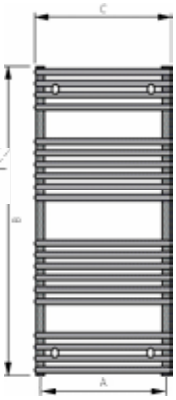
SANTORINI C

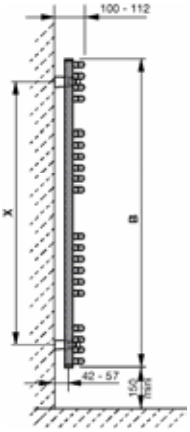
A traditional look with a whimsical touch

BATHROOM RADIATORS

Installation

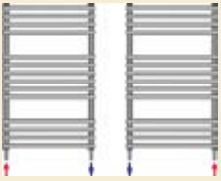
top view





Connections

- Supply and return can be switched left / right.
- Diameter connections: supply and return Ø 1/2" (15/21).
- Working pressure: 10 bar.



A = centre-to-centre connections
B = height
C = length
X = centre-to-centre brackets VERTI

					weight	volume	75/65/20 °C	
type	A	B	C	X	(kg)	(l)	EN 442	BTU
SAC05000714	451	714	498	96-119	5,90	2,70	343	1171
SAC06000714	548	714	596	104-127	6,70	3,10	404	1379
SAC07500750	691	714	742	120-143	8,00	3,70	493	1683
SAC05001134	451	1134	498	96-119	9,20	4,10	512	1747
SAC06001134	548	1134	596	104-127	10,50	4,80	604	2061
SAC07501134	691	1134	742	120-143	12,40	5,70	738	2519
SAC05001764	451	1764	498	96-119	14,60	6,50	782	2669
SAC06001764	548	1764	596	104-127	16,70	7,50	921	3143
SAC07501764	691	1764	742	120-143	19,70	8,90	1126	3843
SAC09001764	835	1764	887	138-160	22,80	10,40	1326	4526

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

delivery time: 20 working days

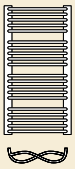
ALDABRA

Wavy and dynamic

BATHROOM RADIATORS

The Aldabra bathroom radiator will appeal to your extravagant side. Its wavy lines create a highly dynamic design, but despite all its splendour it doesn't forget function. The alternating curves make it easy to accommodate lots of towels.

- Accessories included in the packaging and the price: brackets, 1 rotating airvent, screws and plugs.
- Installation: Discreetly placed behind the collectors, the brackets are in the same colour as the radiator, and are adjustable for a perfect installation.
- Connections: 2 x Ø 1/2" (15/21).



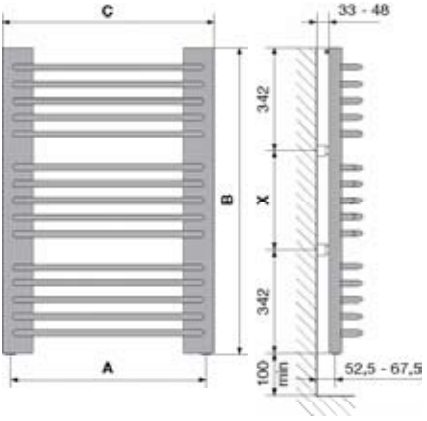
HEIGHT
1014, 1344, 1674 mm

WIDTH
700 mm

FINISH
RAL 9016 White. Other RAL colours available on request.

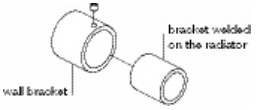
Installation

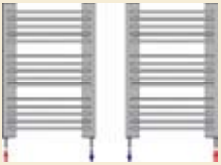
top view



Connections

- 2 x Ø 1/2" (15/21).
- 1 rotating airvent.
- 1-pipe installation: use only a four-channel tap with monotube probe (not supplied).





A = centre-to-centre connections
B = height
C = length
D = centre-to-centre brackets HORI
X = centre-to-centre brackets VERTI

						weight	volume	75/65/20 °C	
type	A	B	C	D	X	(kg)	(l)	EN 442	BTU
ALD1570C	660	1014	700	590	330	19,30	655	2236	1171
ALD2070C	660	1344	700	590	660	24,60	877	2993	1379
ALD2570C	660	1674	700	590	990	31,30	1092	3727	1683

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

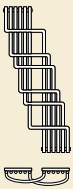
delivery time: 20 working days

ANAFI

Stunningly sculptural
BATHROOM RADIATORS

The Anafi is stunningly sculpturesque. The daring design sweeps upwards to create a work of art. This sophisticated unit is also available in chrome and gold for those who want the ultimate in luxury.

- Accessories included in the packaging and the price: brackets, 1 rotating airvent, screws and plugs.
- Installation: Discreetly placed behind the collectors, the brackets are in the same colour as the radiator, and are adjustable for a perfect installation.
- Connections: 2 x Ø 1/2" (15/21).

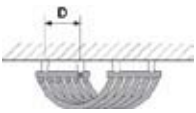


HEIGHT
1250, 1500, 1600, 1800 mm

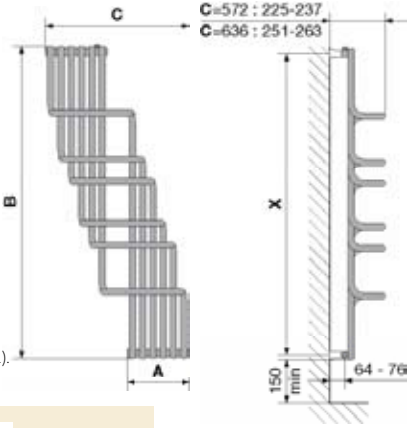
WIDTH
572, 636 mm

FINISH
RAL 9016 White. Other RAL colours available on request.

Installation



top view

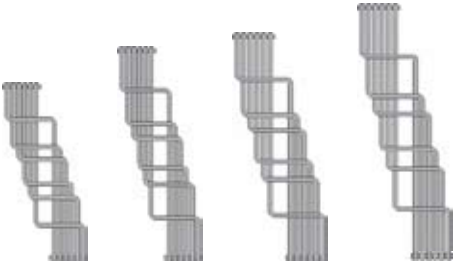


Connections

- Diameter connections:
  supply and return Ø 1/2" (15/21).
- Working pressure: 10 bar.

Ø tube: length 572: 25 mm
636: 28 mm

A = centre-to-centre connections
B = height
C = length
D = centre-to-centre brackets HORI
X = centre-to-centre brackets VERTI



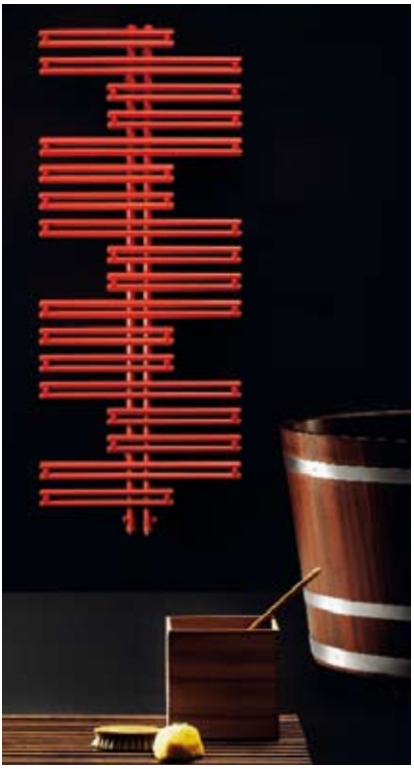
						weight	volume	75/65/20 °C	
type	A	B	C	D	X	(kg)	(l)	EN 442	BTU
ANA1205	247	1250	572	164	1210	8,00	4,20	486	1659
ANA1505	247	1500	572	164	1460	9,00	4,70	550	1877
ANA1606	272	1600	636	184	1560	10,80	6,60	675	2304
ANA1806	272	1800	636	184	1760	11,80	7,20	735	2509

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

delivery time: 20 working days

KEA

Straight style. Great space.
BATHROOM RADIATORS



The straight lines of the Kea bathroom radiator spread out to the left and right. The Kea can be fitted with accessories such as towel rails and glass shelves to bring even more functionality to your bathroom.

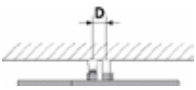
- Accessories: air vent plug, 2 plugs, a wall-mounting set in the colour of the heater unit, mounting aid and directions for assembly. These accessories are included at no extra charge.
- Installation: 4 welded-on hanging strips for 4 adjustable wall brackets.
- Connections: The Kea is supplied with 4x1/2" IG and 1x1/4" IG connections (for bleeder plugs).

WIDTH
1022, 1262, 1502, 1742 mm

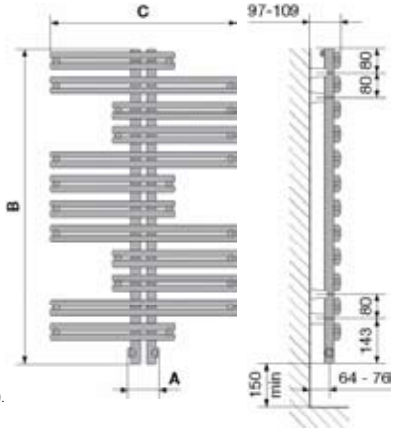
WIDTH
600, 750, 900 mm

FINISH
RAL 9016 White. Other RAL colours available on request.

Installation

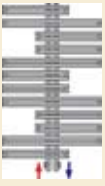


top view

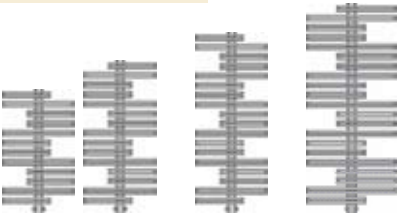


Connections

- Diameter connections: supply and return Ø 1/2" (15/21).
- Working pressure: 10 bar.



A = centre-to-centre connections
B = height
C = length
D = centre-to-centre brackets HORI



					weight	volume	75/65/20 °C		white	metallic	colour
type	A	B	C	D	(kg)	(l)	EN 442	BTU			
KEA1006	99	1022	600	50	10,60	4,40	499	1703			
KEA1306	99	1262	600	50	13,30	5,30	613	2092			
KEA1307	99	1262	750	50	15,70	5,70	739	2522			
KEA1506	99	1502	600	50	16,00	6,10	724	2471			
KEA1507	99	1502	750	50	18,70	6,70	870	2969			
KEA1509	99	1502	900	50	21,60	7,60	1030	3515			
KEA1807	99	1742	750	50	21,70	7,70	1008	3440			
KEA1809	99	1742	900	50	24,90	9,20	1194	4075			

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

delivery time: 20 working days
stock Purmo

SARDINIA

Dare to be different

BATHROOM RADIATORS

The strongly sweeping curves of the Sardinia's round pipes make it a popular choice, even outside the bathroom. It's easy to see why: with its relaxed charm the Sardinia seems to reach out to you.

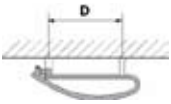
- Accessories: a air vent plug, a wall-mounting set in the colour of the heater unit, mounting guide and directions for assembly. These accessories are included at no extra charge.
- Installation: 4 welded-on hanging strips for 4 adjustable wall brackets.
- Connections: supplied with 2x1/2" IG and 1x1/4" IG connectors (for air vent plugs).

HEIGHT
1239, 1815 mm

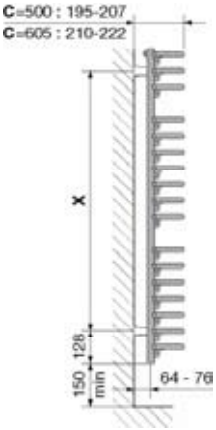
WIDTH
500, 605 mm

FINISH
RAL 9016 White. Other RAL colours available on request.

Installation



top view



Connections

- Diameter connections: supply and return Ø 1/2" (15/21).
- Working pressure: 10 bar.

A = centre-to-centre connections
B = height
C = length
D = centre-to-centre brackets HORI
X = centre-to-centre brackets VERTI

						weight	volume	75/65/20 °C	
type	A	B	C	D	X	(kg)	(l)	EN 442	BTU
SD1239500	50	1239	500	337	1024	12,40	5,40	744	2539
SD1239600	50	1239	605	443	1024	14,50	6,20	909	3102
SD1815500	50	1815	500	337	1600	18,70	8,20	1103	3765
SD1815600	50	1815	605	443	1600	21,90	8,80	1348	4601

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

delivery time: 20 working days

RATEA

Clean practical lines

BATHROOM RADIATORS

Remarkable elegance can arise from altering just one thing. In the Ratea bathroom radiator, both vertical pipes are placed to one side. This not only makes its lines clean and crisp; it also makes it easy to slide in towels from the side.

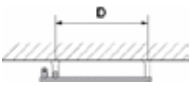
- Accessories: plug, a wall-mounting set in the colour of the heater unit, mounting aid and directions for assembly. These accessories are included at no extra charge.
- Installation: 4 welded-on hanging strips for 4 adjustable wall brackets.
- Connections: 2x1/2" IG and 1x1/4" IG connectors (for air vent plugs).

HEIGHT
796, 1196, 1756 mm

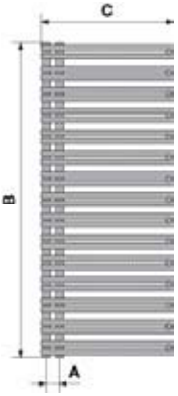
WIDTH
500, 600, 750 mm

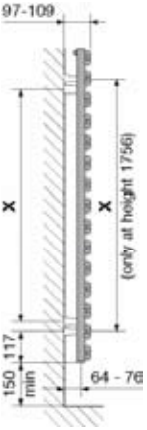
FINISH
RAL 9016 White. Other RAL colours available on request.

Installation



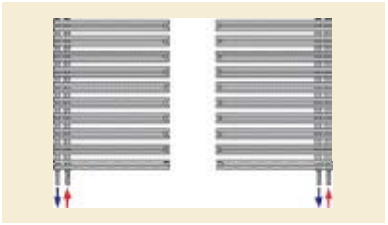
top view

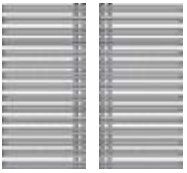


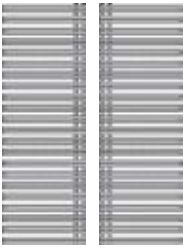


Connections
- Diameter connections: supply and return Ø 1/2" (15/21).
- Working pressure: 10 bar.

A = centre-to-centre connections
B = height
C = length
D = centre-to-centre brackets HORI
X = centre-to-centre brackets VERTI







						weight	volume	75/65/20 °C				
type	A	B	C	D	X	(kg)	(l)	EN 442	BTU	white	metallic	colour
RAT0805	50	796	500	410	480	8,80	3,80	446	1522			
RAT0806	50	796	600	510	480	10,00	4,30	530	1809			
RAT0807	50	796	750	660	480	11,90	5,00	653	2229			
RAT1205	50	1196	500	410	880	12,90	5,90	650	2218			
RAT1206	50	1196	600	510	880	14,80	6,70	773	2638			
RAT1207	50	1196	750	660	880	17,60	8,00	955	3259			
RAT1805	50	1756	500	410	1520	19,20	8,00	897	3061			
RAT1806	50	1756	600	510	1520	21,80	9,50	1081	3689			
RAT1807	50	1756	750	660	1520	25,70	11,70	1357	4631			

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

delivery time: 20 working days
stock Purmo

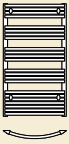
ANDROS CH (chrome)

Low depth. Top shine.

BATHROOM RADIATORS

With its elegant lines rising gently out from the wall, the Andros design is a winner in any interior. This chrome version further accentuates the aesthetic lines.

- Accessories are supplied and included in the price: 4 brackets, 1 airvent 1/8".
- Connection: 2 x 1/2"

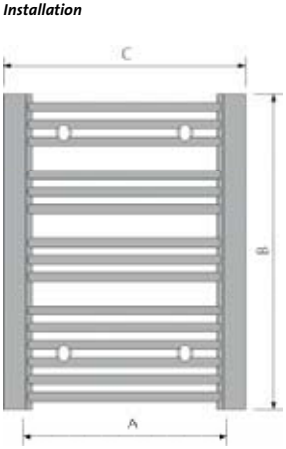


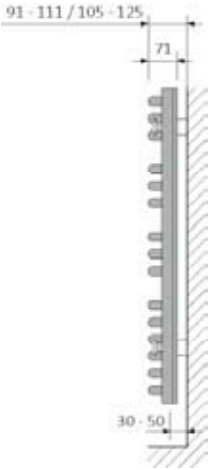
HEIGHT
776, 1154, 1742 mm

WIDTH
595, 746 mm

FINISH
RAL 9016 White. Other RAL colours available on request.

Installation





top view

A = centre-to-centre connections
B = height
C = length

				weight	volume	75/65/20 °C	
type	A	B	C	(kg)	(l)	EN 442	BTU
AN05950776CH	500	776	595	9,00	4,30	267	911
AN05951154CH	500	1154	595	13,30	6,50	400	1365
AN05951742CH	500	1742	595	20,10	10,00	610	2082
AN07461742CH	650	1742	746	23,40	11,80	740	2526

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

delivery time: 20 working days

ANDROS M (mid connection)

Modern comfort

BATHROOM RADIATORS

The Andros M provides you with an even cleaner look: the central connection and the connection point are covered by a stylish front panel. Nothing disrupts the elegant design.

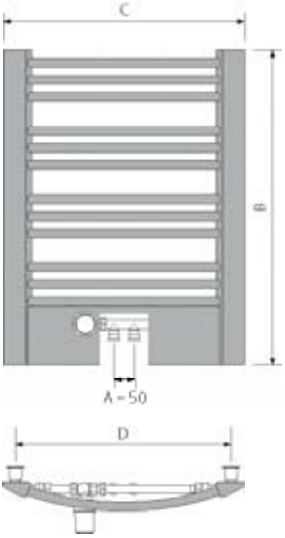
- Accessories are supplied and included in the price: brackets, 1 airvent 1/8", 2 screwed-in radiator plugs.
- Installation: 4 welded-on hanging strips for 4 wall brackets.
- Connection: mid connection 2 x 1/2". Distance between connectors 50 mm, in addition 2 x 1/2" for use e.g. when connecting up the radiator.

HEIGHT
776, 1154, 1742 mm

LENGTH
595, 746 mm

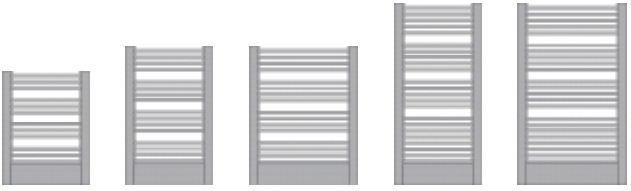
FINISH
RAL 9016 White half-matt. Other colours available on request.

Installation



top view

A = centre-to-centre connections
B = height
C = length
D = centre-to-centre brackets HORI
X = centre-to-centre brackets VERTI



						weight	volume	75/65/20 °C	
type	A	B	C	D	X	(kg)	(l)	EN 442	BTU
AN05950776M	50	776	595	525	546	9,00	4,30	461	1573
AN05951154M	50	1154	595	525	924	13,30	6,50	689	2352
AN07461154M	50	1154	746	676	924	15,40	7,60	823	2809
AN05951742M	50	1742	595	525	1512	20,10	10,00	1051	3587
AN07461742M	50	1742	746	676	1512	23,40	11,80	1275	4352

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

delivery time: 20 working days

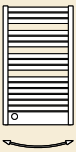
IOS M (mid connection)

Going against conventions

BATHROOM RADIATORS

Who said pipes have to be round? The Ios range has completely flat horizontal pipes, offset by an outward curve. The entire rail exudes good taste. The Ios has centre connections, making the installation point completely invisible.

- Accessories are supplied and included in the price: brackets, 1 airvent 1/8", 2 screwed-in radiator plugs.
- Installation: 4 welded-on hanging strips for 4 wall brackets.
- Connection: mid connection 2 x 1/2". Distance from connectors 50 mm, in addition 2 x 1/2" for use e.g. when connecting up the radiator.



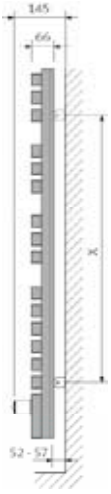
HEIGHT
1154, 1724 mm

WIDTH
600 mm

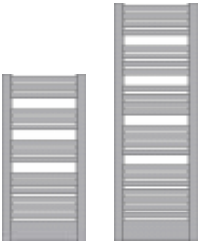
FINISH
RAL 9016 White. Other RAL colours available on request.

Installation

top view



A = centre-to-centre connections
B = height
C = length
D = centre-to-centre brackets HORI
X = centre-to-centre brackets VERTI



						weight	volume	75/65/20 °C	
type	A	B	C	D	X	(kg)	(l)	EN 442	BTU
IO06001154	50	1154	600	595	855	16,00	5,20	674	2300
IO06001724	50	1724	600	595	1311	23,00	7,60	1005	3430

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

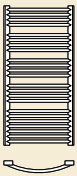
delivery time: 20 working days

LINOSA

Stainless steel or wengé? Express your style.
BATHROOM RADIATORS

The Linosa bathroom radiator's design stands out in two ways. First, the horizontal pipes are elegantly tapered on the front, giving the whole design an airy feel. Second, it is framed by upright columns finished with profiles in stainless steel or wengé look.

- Accessories are supplied and included in the price: brackets, 1 airvent 1/8".
- Installation: 4 welded-on hanging strips for 4 wall brackets.
- Connection: 2 x 1/2".
- Choice decorative strips: stainless steel (I) or Wengé look (W).

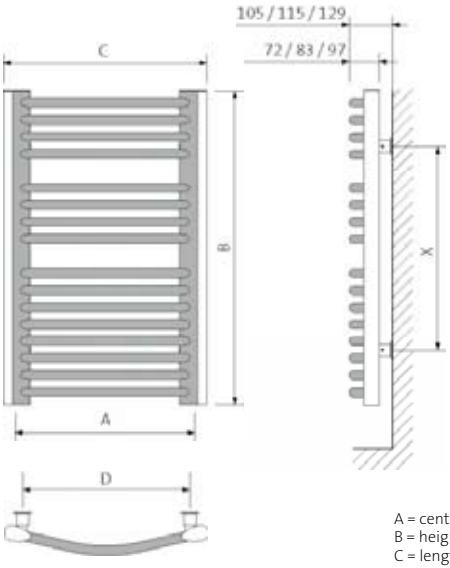


HEIGHT
776, 1154, 1742 mm

WIDTH
500, 595, 749 mm

FINISH
RAL 9016 white. Stainless steel and other RAL colours available on request.

Installation



top view

A = centre-to-centre connections
B = height
C = length
D = centre-to-centre brackets HORI
X = centre-to-centre brackets VERTI

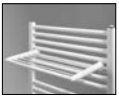
						weight	volume	75/65/20 °C	
type	**A**	**B**	**C**	**D**	**X**	**(kg)**	**(l)**	**EN 442**	BTU
LI05000776	465	776	500	413	504	7,70	4,00	342	1167
LI05001154	465	1154	500	413	504	11,10	5,70	498	1700
LI05951154	563	1154	595	508	600	12,40	6,50	593	2024
LI07491154	716	1154	749	662	726	14,40	7,70	746	2546
LI05951742	563	1742	595	508	600	19,20	10,10	917	3130
LI07491742	716	1742	749	662	755	23,00	11,80	1153	3935

according EN 442 - 75/65/20 °C (ΔT 50)
sizes in mm

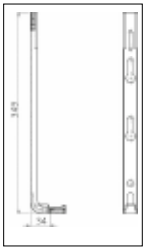
delivery time: 20 working days

ACCESSORIES

description		details	packaging	reference
towel bar Vertical		300 mm		9050900300
		450 mm		9050900450
		600 mm		9050900600
		750 mm		9050900750
brackets		300 mm	each	RH003
		450 mm	each	RH004
		600 mm	each	RH006
		700 mm	each	RH007
1/2" to 3/42 adaptors				A1234
air vent key				RH008
touch-up paint				TJUP001
1/2" plug and air vent				RH001
universal floor fixing bracket			each	RH033
concealed consoles	type 11	300 mm	each	SA781130
	type 11	450 mm	each	SA781145
	type 11	500 mm	each	SA781150
	type 11	600 mm	each	SA781160
	type 22/33	300 mm	each	SA782230
	type 22/33	450 mm	each	SA782245
	type 22/33	500 mm	each	SA782250
	type 22/33	600 mm	each	SA782260
RAMO				
Radsoclic bracket		300 mm	each	575300
		400 mm	each	575400
		500 mm	each	575500
		600 mm	each	575600
		750 mm	each	575750
		900 mm	each	575900
PLANORA				
bracket			each	579000
SAFETY RADIATOR				
fixed TRV kit				DIRECTFIT
close coupled TRV kit				CCKTV
TRV collar				TRVCOLLAR
remote sensor kit		2 meter		TRVSHEAD2
		5 meter		TRVSHEAD2
remote adjuster		2 meter		TRVADJHEAD2
		5 meter		TRVADJHEAD5
TRV body only - chrome				TRVBOC
PURMO AIR				
invisible bracket	type 11	300 mm	each	SA781130
	type 11	450 mm	each	SA781145
	type 11	500 mm	each	SA781150
	type 11	600 mm	each	SA781160
	type 22/33	300 mm	each	SA782230
	type 22/33	450 mm	each	SA782245
	type 22/33	500 mm	each	SA782250
	type 22/33	600 mm	each	SA782260
Purmo Air filter F7			each	53PA200

	description	details	reference
	**towel bar** Kos V & Faro V mat brushed stainless steel	300 mm	9025970300
		450 mm	9025970450
		600 mm	9025970600
		750 mm	9025970750
	**V-knob** - *per pair* Pago, Muna, Apolima	white	PATVPBL
		chrome	PATVPCH
	V-knob - *per pair* Santorini, Santorini C, Flores, Flores C	white	PATVRBL
		chrome	PATVRCH
	**towel ring** Pago, Muna, Apolima	white	ANOPBL
		chrome	ANOPCH
	towel ring Santorini, Santorini C, Flores, Flores C	white	ANORBL
		chrome	ANORCH
	**round knobs** - *per pair* Santorini, Santorini C, Flores, Flores C	white	PATRBL
		chrome	PATRCH
	**grill** Santorini, Flores length radiator: min. 600 mm	white	GRILLBL
		chrome	GRILLCH
	**towel bar** Santorini, Flores - right 370 mm length radiator min. 500 mm	white	BARR40BL
		chrome	BARR40CH
	towel bar Santorini, Flores - right 470 mm length radiator min. 600 mm	white	BARR50BL
		chrome	BARR50CH
	**towel bar** right 375 mm Pago, Muna	white	BARP40BL
		chrome	BARP40CH
	**towel bar** curved 370 mm Santorini C, Flores C length rad. min. 500 mm	white	BARR40CBL
		chrome	BARR40CCH
	towel bar curved 470 mm Santorini C, Flores C lenth rad. min. 600 mm	chrome	BARR50CBL
		white	BARR50CCH
	**towel bar** Delta Laserline	RAL 9016	D881-2125XX
		other colours	D881-2115XX XX = number of elements

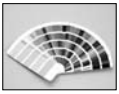
ACCESSORIES

	description	details	reference
	**bracket set VR 20-21-22**	300 450 600 750	9025980300 9025980450 9025980600 9025980750
	**installation set VR 20-21-22**	 chrome	9025980100 9025980101
	**bracket set VR 10**	450 600 750	9025981450 9025981600 9025981750
	**installation set VR 10**	 chrome	9025981100 9025981101

	description	details	reference
	**template & bypass**		593334
	**template**		593331
	**bypass**		593332
	**multifunctional key**		590009
	**blind drain stop 1/2"** each		590013
	**rotating airvent 1/2"**		590014
	**reduction 1/2-3/8"** each		590001
	**bottom connection block** angle		595525
	**bottom connection block** straight		595524
	thermostatic head chrome		595591

ACCESSORIES

	description	details	reference
	**two-pipe valve set straight** 2 x 3/4", 2 adapter nipples 1/2" incl. thermostat button and **guard white** supply and return reversible		9025980001
	two-pipe valve set straight 2 x 3/4", 2 adapter nipples 1/2" incl. thermostat button and **guard chrome** supply and return reversible		902598006
	**two-pipe valve set angle** 2 x 3/4", 2 adapter nipples 1/2" incl. thermostat button and **guard white** supply and return reversible		9025980000
	two-pipe valve set angle 2 x 3/4", 2 adapter nipples 1/2" incl. thermostat button and **guard chrome** supply and return reversible		9025980005
	**radiator brush**		592010
	**touch-up stick**		592002
	**aerosol spray**		592001

	description	details	reference
	**RAL colour range**		90259200
	electric element kit Flores & Flores C		PCE450W
	**regulation key Kv**		508057
	injection pipe Santorini & Santorini C		9026100005
	assembly kit Delta Laserline		
	nipple		DC820230
	nipple stop		DC820220
	nipple bar (1600 mm)		D8810311
	nipple bar (long model)		D8110312

CONVERSION

PANEL RADIATORS - CONVERSION TABLE EN 442 - APPROXIMATE EMISSIONS

ST	ROT	RT 25	30	35	40	45	50	55	60	65	70	75	80	85
90	24	4,56	2,45	1,88	1,57	1,36	1,21	1,10	1,01	0,93	0,87	0,82	0,77	0,73
	22	3,11	2,11	1,69	1,44	1,27	1,14	1,04	0,96	0,89	0,83	0,78	0,74	0,70
	20	2,50	1,87	1,54	1,33	1,19	1,07	0,98	0,91	0,85	0,80	0,75	0,71	0,67
	18	2,13	1,68	1,42	1,24	1,11	1,01	0,93	0,87	0,81	0,76	0,72	0,68	0,65
	15	1,76	1,46	1,26	1,13	1,02	0,93	0,87	0,81	0,76	0,72	0,68	0,64	0,61
	12	1,51	1,29	1,14	1,03	0,94	0,87	0,81	0,76	0,71	0,67	0,64	0,61	0,58
85	24	1,93	2,63	2,00	1,67	1,45	1,29	1,16	1,07	0,99	0,92	0,86	0,81	
	22	3,34	2,26	1,80	1,53	1,34	1,21	1,10	1,01	0,94	0,88	0,82	0,78	
	20	2,67	1,99	1,64	1,41	1,25	1,13	1,04	0,96	0,89	0,84	0,79	0,75	
	18	2,27	1,78	1,50	1,31	1,18	1,07	0,98	0,91	0,85	0,80	0,75	0,72	
	15	1,87	1,54	1,33	1,19	1,07	0,98	0,91	0,85	0,80	0,75	0,71	0,67	
	12	1,60	1,36	1,20	1,08	0,99	0,91	0,85	0,79	0,75	0,70	0,67	0,64	
80	24	5,38	2,83	2,15	1,78	1,54	1,37	1,24	1,13	1,05	0,97	0,91		
	22	3,61	2,42	1,93	1,63	1,43	1,28	1,16	1,07	0,99	0,93	0,87		
	20	2,87	2,12	1,75	1,50	1,33	1,20	1,10	1,01	0,94	0,88	0,83		
	18	2,42	1,90	1,60	1,39	1,24	1,13	1,04	0,96	0,90	0,84	0,79		
	15	1,99	1,64	1,41	1,25	1,13	1,04	0,96	0,89	0,84	0,79	0,75		
	12	1,69	1,44	1,27	1,14	1,04	0,96	0,89	0,83	0,78	0,74	0,70		
75	24	5,90	3,07	2,32	1,92	1,66	1,47	1,32	1,21	1,12	1,04			
	22	3,92	2,61	2,07	1,75	1,53	1,37	1,24	1,14	1,05	0,98			
	20	3,10	2,28	1,87	1,61	1,42	1,28	1,17	1,08	1,00	0,94			
	18	2,61	2,03	1,70	1,48	1,32	1,20	1,10	1,02	0,95	0,89			
	15	2,12	1,75	1,50	1,33	1,20	1,10	1,01	0,94	0,88	0,83			
	12	1,80	1,53	1,34	1,21	1,10	1,01	0,94	0,88	0,82	0,78			
70	24	6,54	3,36	2,52	2,08	1,79	1,58	1,42	1,30	1,19				
	22	4,30	2,84	2,24	1,89	1,64	1,47	1,33	1,22	1,13				
	20	3,38	2,47	2,01	1,73	1,52	1,37	1,25	1,15	1,07				
	18	2,82	2,19	1,83	1,59	1,42	1,28	1,17	1,08	1,01				
	15	2,28	1,87	1,61	1,42	1,28	1,17	1,08	1,00	0,94				
	12	1,93	1,63	1,43	1,28	1,16	1,07	0,99	0,93	0,87				
65	24	7,32	3,70	2,76	2,27	1,94	1,71	1,54	1,40					
	22	4,75	3,11	2,44	2,05	1,78	1,58	1,43	1,31					
	20	3,70	2,69	2,19	1,87	1,64	1,47	1,34	1,23					
	18	3,07	2,37	1,98	1,17	1,52	1,37	1,26	1,16					
	15	2,47	2,01	1,73	1,52	1,37	1,25	1,15	1,07					
	12	2,07	1,75	1,53	1,37	1,24	1,14	1,05	0,98					
60	24	8,32	4,13	3,06	2,50	2,13	1,87	1,68						
	22	5,32	3,44	2,69	2,24	1,94	1,73	1,56						
	20	4,10	2,96	2,39	2,03	1,78	1,60	1,45						
	18	3,38	2,59	2,15	1,86	1,65	1,48	1,35						
	15	2,69	2,19	1,87	1,64	1,47	1,34	1,23						
	12	2,24	1,89	1,64	1,47	1,33	1,22	1,13						
55	24	9,62	4,67	3,43	2,78	2,37	2,07							
	22	6,03	3,87	2,99	2,48	2,15	1,90							
	20	4,60	3,29	2,64	2,24	1,96	1,75							
	18	3,75	2,86	2,36	2,03	1,80	1,62							
	15	2,96	2,39	2,03	1,78	1,60	1,45							
	12	2,44	2,05	1,78	1,58	1,43	1,31							
50	24	11,38	5,39	3,92	3,15	2,67								
	22	6,97	4,39	3,37	2,79	2,40								
	20	5,23	3,70	2,96	2,50	2,17								
	18	4,22	3,19	2,63	2,25	1,98								
	15	3,29	2,64	2,24	1,96	1,75								
	12	2,69	2,24	1,94	1,73	1,56								
45	24	13,93	6,38	4,58	3,65									
	22	8,26	5,11	3,89	3,19									
	20	6,08	4,25	3,37	2,83									
	18	4,84	3,63	2,96	2,53									
	15	3,70	2,96	2,50	2,17									
	12	2,99	2,48	2,15	1,90									
40	24	17,93	7,87	5,54										
	22	10,16	6,14	4,62										
	20	7,28	5,01	3,93										
	18	5,68	4,21	3,41										
	15	4,25	3,37	2,83										
	12	3,37	2,79	2,40										
35	24	25,15	10,36											
	22	13,27	7,76											
	20	9,12	6,14											
	18	6,91	5,04											
	15	5,01	3,93											
	12	3,89	3,19											
30	24	42,40												
	22	19,37												
	20	12,34												
	18	8,89												
	15	6,14												
	12	4,62												

approximate N-value = 1,30

ST: supply temperature (°C) | **ROT:** room temperature (°C) | **RT:** return temperature (°C)

example of a conversion to another system than ΔT 50

You require 2150 Watt for a bathroom at 24 °C in 90/70. In the table you see 90/70/24 for 0,87. You look in the Technical pocket book for ΔT 50 with a radiator in the vicinity of 1871 W.

possible solutions

			75/65/20	90/70/24
11	750	1650	1959 W	2252 W
21S	600	1350	1821 W	2093 W
22	400	1350	1804 W	2074 W
33	450	900	1904 W	2189 W

COLOURS

panel radiators
standard colour = RAL 9016
other available RAL colours, add at the order code /.... and complete the RAL-colour.
Ex. C226001300/3003 (for a radiator in RAL 3003.)

decorative radiators
standard colour = RAL 9016
other available RAL colours, add at the order code /.... and complete the RAL-colour.
Ex. KOH206001350/3003 for a radiator in RAL 3003.

bathroom radiators
standard colour = RAL 9016
other available RAL colours, add at the order code /.... and complete the RAL-colour.

column radiators
standard colour Delta Laserline = RAL 9016
other available RAL colours, add at the order code /.... and complete the RAL-colour.

Intern. RAL-code
RAL 1000
RAL 1001
RAL 1002
RAL 1003
RAL 1004
RAL 1005
RAL 1006
RAL 1007
RAL 1011
RAL 1012
RAL 1013
RAL 1014
RAL 1015
RAL 1016
RAL 1017
RAL 1018
RAL 1019
RAL 1020
RAL 1021
RAL 1023
RAL 1024
RAL 1027
RAL 1028
RAL 1032
RAL 1033
RAL 1034
RAL 2000
RAL 2001
RAL 2002
RAL 2003
RAL 2004
RAL 2008
RAL 2009
RAL 2010
RAL 2011
RAL 2012
RAL 3000
RAL 3001

Intern. RAL-code
RAL 3002
RAL 3003
RAL 3004
RAL 3005
RAL 3007
RAL 3009
RAL 3011
RAL 3012
RAL 3013
RAL 3014
RAL 3015
RAL 3016
RAL 3017
RAL 3018
RAL 3020
RAL 3022
RAL 3027
RAL 3031
RAL 4001
RAL 4002
RAL 4003
RAL 4004
RAL 4005
RAL 4006
RAL 4007
RAL 4008
RAL 4009
RAL 4010
RAL 5000
RAL 5001
RAL 5002
RAL 5003
RAL 5004
RAL 5005
RAL 5007
RAL 5008
RAL 5009
RAL 5010

Intern. RAL-code
RAL 5011
RAL 5012
RAL 5013
RAL 5014
RAL 5015
RAL 5017
RAL 5018
RAL 5019
RAL 5020
RAL 5021
RAL 5022
RAL 5023
RAL 5024
RAL 6000
RAL 6001
RAL 6002
RAL 6003
RAL 6004
RAL 6005
RAL 6006
RAL 6007
RAL 6008
RAL 6009
RAL 6010
RAL 6011
RAL 6012
RAL 6013
RAL 6014
RAL 6015
RAL 6016
RAL 6017
RAL 6018
RAL 6019
RAL 6020
RAL 6021
RAL 6022
RAL 6024
RAL 6025

Intern. RAL-code
RAL 6026
RAL 6027
RAL 6028
RAL 6029
RAL 6032
RAL 6033
RAL 6034
RAL 7000
RAL 7001
RAL 7002
RAL 7003
RAL 7004
RAL 7005
RAL 7006
RAL 7008
RAL 7009
RAL 7010
RAL 7011
RAL 7012
RAL 7013
RAL 7015
RAL 7016
RAL 7021
RAL 7022
RAL 7023
RAL 7024
RAL 7026
RAL 7030
RAL 7031
RAL 7032
RAL 7033
RAL 7034
RAL 7035
RAL 7036
RAL 7037
RAL 7038
RAL 7039
RAL 7040

Intern. RAL-code
RAL 7042
RAL 7043
RAL 7044
RAL 7045
RAL 7046
RAL 7047
RAL 8000
RAL 8001
RAL 8002
RAL 8003
RAL 8004
RAL 8007
RAL 8008
RAL 8011
RAL 8012
RAL 8014
RAL 8015
RAL 8016
RAL 8017
RAL 8019
RAL 8022
RAL 8023
RAL 8024
RAL 8025
RAL 8028
RAL 9001
RAL 9002
RAL 9003
RAL 9004
RAL 9005
RAL 9006
RAL 9007
RAL 9010
RAL 9011
RAL 9016
RAL 9017
RAL 9018

Intern. RAL-code
ALBA
EDELWEISS
PERGAMON
CAMEE
JASMIJN
NATURA
ANEMONE
BAHAMA
STELLA
MAGNOLIA
SUNSET
MANHATTAN
AGAIS
GREENWICH
CALYPSO
TURKIS ROYAL
MENTO GRUEN
SATIN LASER
CHINCHILLA
FLANEL
KEY WEST
CROCUS
WHISPER BLAU
BERMUDA BLAU
ALOA
LILAC


Metal Alu 0201


Metal Grey 0102

metallic colours

Purmo also supplies metallic colours: Metal Alu 0201 Metal Grey 0102 - Metal Black 0104.

GENERAL

DELIVERY TIME

PANEL RADIATORS	stock Purmo: available from stock on demand: 20 working days
BATHROOM AND DECORATIVE RADIATORS	stock Purmo: available from stock on demand: please contact Purmo
DELTA LASERLINE	stock Purmo: available from stock on demand: please contact Purmo

GENERAL CONDITIONS OF SALE AND DELIVERY

1. INTERPRETATION

1.1 In these conditions of sale the following words will (unless the context otherwise requires) have the following meanings:
"Conditions" means the conditions set out below and overleaf. Where any terms below conflict with any terms overleaf the terms overleaf will take precedence.
"Contract" means any contract between Rettig and the Customer for the sale of any Works.
"Customer" means the company, firm, body, person, individual or other party purchasing the Works.
"Customer's Property" means any patterns, drawings, specifications, designs, packagings and any other equipment, goods, materials, instructions or information supplied by or on behalf of the Customer (or a third party nominated by the Customer) to Rettig in connection with the Works. "Goods" means any goods agreed in the Contract to be provided by Rettig to the Customer (including but not limited to the whole or any part or parts of them, any raw materials, finished or semi-finished materials, parts, spares, commodities and any materials, articles or commodities supplied in connection with the Services).
"IPR" means patents, trade marks and service marks, rights in designs, trade or business names, copyright (including rights in computer software), database rights and topography rights (whether or not any of these is registered and including applications for registration of any such thing) and all rights or forms of protection of a similar nature or having equivalent or similar effect to any of these which may subsist anywhere in the world.
"Services" means any work and/or services agreed in the Contract to be provided by Rettig to the Customer (including but not limited to the whole or any part or parts of them).
"Warranty Period" means unless otherwise agreed in writing the warranty period set out in clause 7.3.
"Works" means the Goods and/or the Services (as appropriate).

1.2 Any reference to any statute or statutory provision will (unless the context otherwise requires) be construed as a reference to that statute or statutory provision as may be amended, consolidated, modified, extended, re-enacted or replaced from time to time.

1.3 The headings are for reference only and will not affect the interpretation of these Conditions.

1.4 Rettig reserves the right at anytime without liability to correct any clerical, typographical or other similar errors or omissions made by its employees.

2. QUOTATIONS

2.1 Any quotation (whether written or oral) is given on the basis that no contract will come into existence otherwise than in accordance with the provisions of clauses 3.5 and 3.6.

2.2 Unless otherwise agreed in writing any quotation is valid only for a period of 45 days from its date of issue provided that Rettig has not previously withdrawn it by written or oral notice to the Customer.

2.3 Each quotation clearly sets out the scope of the Works and is based on any instructions, information and specification provided by the Customer. Rettig reserves the right (in its absolute discretion) to amend the quoted price to cover any increase which may arise as a result of additional Works being requested (and agreed) or additional or incomplete instructions or information being provided.

3. APPLICATION OF TERMS

3.1 (Subject to clause 3.4) these Conditions are the only conditions on which Rettig is prepared to deal with the Customer and they will apply to and govern the Contract and all of Rettig's future supplies to the Customer.

3.2 No terms, conditions or warranties endorsed upon, delivered with, referred to or stipulated or contained in any purchase order or other similar document delivered or sent by the Customer to Rettig, whether before or after the date of the Contract, will form part of the Contract.

3.3 Any reference overleaf to the Customer's purchase order or other similar document will not be deemed to imply that any terms, conditions or warranties endorsed upon, delivered with, referred to or stipulated or contained in such purchase order or other similar document will have effect to the exclusion or amendment of these Conditions.

3.4 Any variation to or waiver of or addition to these Conditions and any representation or advise about the Works will have no effect unless it is expressly agreed in writing, contains a specific reference to these Conditions and is signed by a duly authorised officer of both parties.

3.5 Each purchase order for Works issued by the Customer will be deemed to be an offer by the Customer to purchase Works subject to these Conditions.

3.6 No purchase order placed by the Customer will be deemed to be accepted by Rettig until a written acknowledgement of order is issued by Rettig or (if earlier) Rettig supplies the Works to the Customer. If Rettig has not given a written acknowledgement of order provided the Customer has had prior notice of these Conditions these Conditions will apply to the Contract.

3.7 The Customer must ensure that the content of its purchase order and any applicable specification are complete and accurate.

3.8 Unless otherwise agreed in writing all samples, software, drawings, illustrations, descriptions, specifications, technical data, advertising and other similar information issued by Rettig or contained in Rettig's catalogues, brochures, trade literature, price lists or other similar published materials are issued or published only for the purpose of giving an approximate idea of the Works described in them and will not form part of the Contract.

3.9 Any purchase order which has been accepted by Rettig in accordance with clauses 3.5 and 3.6 may only be cancelled, suspended, deferred, postponed or varied by the Customer with the prior written consent of Rettig and on terms that the Customer will indemnify Rettig in full against all losses (including but not limited to loss of profit), costs (including but not limited to inventory and other commitments made by Rettig as a result of such purchase order), damages, charges and expenses incurred (directly or indirectly) by Rettig as a result of such cancellation, suspension, deferment, postponement or variation.

4. DELIVERY

4.1 Any times specified or agreed by Rettig for the delivery of the Works are given in good faith but are an estimate only. If no time is specified or agreed by Rettig delivery will take place within a reasonable time. The time for the delivery of the Works will not be of the essence of the Contract.

4.2 Rettig will use its reasonable endeavours to deliver the Works within the times set out in clause 4.1 but Rettig will not be liable for the consequences of any delay or failure to deliver if the duration of the delay is not substantial or if the delay or failure is due to any circumstances beyond Rettig's reasonable control or of an unexpected or exceptional nature.

4.3 (Subject to the provisions of clause 4.4) delivery will be deemed to take place and the Customer will be responsible for off loading when the Works are delivered to the Customer at such place as the parties may agree.

4.4 If Rettig agrees to permit the Customer to collect the Works from Rettig's place of business Rettig will notify the Customer that the Works are ready for collection and delivery will be deemed to take place when the Customer collects the Works from Rettig's place of business. The Customer will be responsible for loading. Unless otherwise agreed in writing the Customer will collect the Works within 7 working days of the issue of such notice.

4.5 Rettig will use its reasonable endeavours to ensure where necessary that the Works will be packed so as to be adequately protected against damage in normal conditions of transit of usual duration. Unless it has agreed to permit the Customer to collect the Works Rettig will make its normal arrangements for the carriage of the Works. The Customer will indemnify Rettig against any additional costs or expenses which Rettig incurs as a result of any carriage which is agreed between the parties which is outside Rettigs normal carriage arrangements. Such additional costs and/or expenses to be paid by the Customer when it is due to pay for the Works.

4.6 Rettig may deliver the Works in instalments. Deliveries of further instalments may be withheld until the Works comprised in earlier instalments have been paid for in full. Default by Rettig (howsoever caused) in respect of one or more instalments will not entitle the Customer to terminate the relevant Contract as a whole.

4.7 In the event of any delay in the delivery or collection of any Goods and/or the performance of any Services which are attributable to the Customers actions or failure to act then:

(a) delivery of the Goods and/or performance of the Services will be deemed to have taken place at the time at which but for such delay or delays such delivery or performance would have taken place and any extra costs (including but not limited to storage, insurance and redelivery costs) incurred as a result of such delay or delays will be added to the Contract price and will be payable by the Customer; and

(b) Rettig may sell or otherwise dispose of such Goods [as it sees fit] by giving not less than 28 days written notice of its intention to the Customer and deduct any monies payable to Rettig by the Customer from the sale proceeds and account to the Customer for any excess or charge the Customer for any shortfall.

4.8 Where the Works are to be supplied from stock such supply is subject to the availability of the stock at the date of delivery.

4.9 On delivery to the Customer all Works should be examined. Rettig will not be liable for any shortages in or non-delivery of the Works (even if caused by Rettig's negligence) unless the same is notified in writing by the Customer to Rettig (together with all relevant details) within 3 days of the actual or anticipated date of delivery (as appropriate). Subject to such notice being provided Rettig will, if it is reasonably satisfied that any Works have not been delivered as a result of Rettig's fault (in its sole discretion) either arrange for redelivery as soon as reasonably possible or give credit (at the pro rata Contract price) to the Customer for such Works. Any shortages in or non-delivery of part of the Works will not affect the Contract in respect of the other parts of the Works.

4.10 If Rettig complies with clause 4.9 it will (subject to clause 8.2) have no further liability (in contract, tort or delict (including but not limited to negligence) or otherwise) for such shortages or non delivery.

4.11 Whilst Rettig will use reasonable endeavours to supply the exact quantity of the Works ordered by the Customer all quantities are approximate only and Rettig may supply and the Customer will accept more or less than the exact quantity ordered where such variance is within reasonable limits. A pro rata charge or allowance at the Contract price will be made to cover any such variation.

4.12 The Customer (at its own expense) will ensure that the place where delivery of the Goods or performance of the Services is to take place is adequate and appropriate for such delivery or performance and will provide such access, assistance, equipment, facilities, protection, manual labour and information as may be required to enable Rettig to perform its obligations under this Contract and any relevant statutory obligations.

5. RISK AND OWNERSHIP

5.1 (Unless otherwise agreed in writing) the Goods are at the risk of the Customer from the time of delivery or deemed delivery of such Goods to the Customer (as appropriate) or payment of the price for such Goods in accordance with these Conditions (whichever is the sooner) and loading (under clause 4.4) and off loading (under clause 4.3) will be at the Customer's risk.

5.2 (Notwithstanding that risk in the Goods will pass to the Customer in accordance with the provisions of clause 5.1) ownership of the Goods (both legal and equitable) will remain with Rettig (unless ownership is properly vested in some other person by the operation of any statute) until Rettig has received in full (in cash or cleared funds):

(a) all sums due in respect of the Goods; and

(b) all other sums which are or which become due to Rettig from the Customer on any account.

5.3 Until ownership of the Goods has passed to the Customer under clause 5.2, the Customer will:

(a) hold the Goods on a fiduciary basis as Rettig's bailee and trustee;

(b) keep the Goods free from any charge, lien or other encumbrance;

(c) store the Goods (at no cost to Rettig) separately from all other goods or materials of the Customer or any third party in such a way that they remain readily identifiable as Rettig's property and easily accessible to Rettig;

(d) allow Rettig access at any reasonable time to enable Rettig to verify that the Customer has complied with its obligations under clause 5.3(c) above; (e) not destroy, deface or obscure any identifying mark on the Goods or their packaging;

(f) maintain the Goods in a satisfactory condition, insured on Rettig's behalf for their full price against all usual risks to the reasonable satisfaction of Rettig and on request produce such policy of insurance to Rettig;

(g) hold all proceeds of the insurance referred to in clause 5.3(f) on trust for Rettig and not mix it with any other money or pay the proceeds into any overdrawn bank account; and

(h) not incorporate, attach or annex the Goods to any real property without Rettig's prior written consent.

5.4 The Customer may resell, use or otherwise dispose of the Goods before ownership has passed to it only if any such sale, use or disposition:

(a) will be effected in the ordinary course of the Customer's business in an arms length transaction; and

(b) will be a sale, use or disposition on the Customers own behalf and the Customer will deal as principal when marking such sale, use or disposition.

5.5 Once payment becomes overdue, Rettig may while the owner of the Goods (without prejudice to its other rights) demand the immediate return of the Goods at any time and the Customer must comply with (and bear the cost of) such demand immediately. If the Customer fails to return such Goods,Rettig or its successors in title, and their respective employees and agents, may enter the Customer's premises (with or without vehicles) to remove the Goods (the cost of which shall be borne by the Customer) and/or may sell or otherwise deal with the Goods.

5.6 Rettig will be entitled to recover payment for the Goods notwithstanding that ownership of any of the Goods has not passed from Rettig.

5.7 The Goods will be deemed sold or used in the sequence delivered to the Customer.
5.8 Each clause and sub clause in the clause 5 is separate, distinct and severable from the others.
6. PRICE AND PAYMENT
6.1 Where the Works are sold by reference to Rettig's published price list, the price payable for the Works will be the price as published in the price list current at the date of delivery of the Works.
6.2 Where the Works are not sold by reference to Rettig's published price list the price stated in the Contract is based on the cost to Rettig of goods, materials, fuel, power, transport, taxes, duties, services, labour and all other costs at the date of Rettig's quotation or acknowledgement of order (whichever is earlier). If at the date of delivery or deemed delivery of the Works there has been any increase in all or any of such costs, the price payable for the Works may be increased by Rettig accordingly.
6.3 Quotations given in a currency other than sterling are based on the rate of exchange at the time of quoting and (unless otherwise agreed in writing between the parties) the price may be subject to revision if any different rate of exchange is ruling at the date of invoice.
6.4 (Unless otherwise agreed in writing) the price for the Works is exclusive of any value added tax (and any other tax or duty relating to the manufacture, transportation, sale or delivery of the Works) and any costs or charges in relation to export and/or import. Such costs and expenses will be paid by the Customer when it is due to pay for the Works. The price includes carriage in accordance with Rettigs normal arrangements.
6.5 Where Rettig agrees (in its discretion) to bring forward the date of delivery of the Works at the Customers request any overtime or other additional costs reasonably incurred by Rettig will be charged to the Customer in addition to the Contract price.
6.6 Unless otherwise agreed in writing, Rettig may invoice the Customer for the Works at any time after the delivery or deemed delivery of the Works or the delivery or deemed delivery of any instalment (as appropriate). If any delivery is postponed at the request or by the default of the Customer then Rettig may submit its invoice at any time after the Works are ready for delivery or would have been ready in the ordinary course but for the request or default on the part of the Customer.
6.7 Customers who have been granted by Rettig (in its sole discretion) a credit account facility will (unless otherwise agreed in writing) pay the price within 30 days of the date of Rettig's invoice. Rettig may (in its sole discretion) amend the terms of or withdraw such credit account facility at any time without notice with immediate effect and on such withdrawal all amounts due or accruing to Rettig under the Contract will become immediately payable despite any other provision of these Conditions.
6.8 Where Rettig grants a credit account facility under clause 6.7 Rettig may in its absolute discretion (from time to time) set or vary any existing credit limit in relation to such credit account.
6.9 Where the Customer has placed a purchaser order which exceeds the current credit limit determined in accordance with clause 6.8 (even where Rettig has accepted such purchase order in accordance with these Conditions) Rettig may without any liability to the Customer defer or suspend delivery of any Works of any instalment or deliver a quantity less than that ordered until payment has been received from the Customer which brings the whole of the Customers current orders within such credit limit.
6.10 Customers who have not been granted a credit account facility will (unless otherwise agreed in writing) pay the price 10 days prior to delivery of the Works.
6.11 No payment will be deemed to have been received until Rettig has received cleared funds.
6.12 Time for payment will be of the essence of the Contract.
6.13 All payments payable to Rettig under the Contract will become due immediately on termination of this Contract notwithstanding any other provision of these Conditions.
6.14 The Customer will make all payments due under the Contract without any deduction whether by way of set-off, counterclaim, discount, abatement or otherwise unless the Customer has a valid court order requiring an amount equal to such deduction to be paid by Rettig to the Customer.
6.15 Rettig may (but will not be obliged) at any time or times without notice to the Customer set off any liability of the Customer to Rettig against any liability of Rettig to the Customer (in either case howsoever arising and whether such liability is present, future, liquidated or unliquidated). Any exercise by Rettig of its rights under this Contract will be without prejudice to any other rights or remedies available to Rettig under this Contract or otherwise.
6.16 If the Customer delays or fails to pay Rettig any sum due pursuant to the Contract the Customer will be liable to pay interest to Rettig on such sum from the due date for payment at an annual rate of 3% above the base lending rate of Barclays Bank Plc from time to time accruing on a daily basis until payment is made in full (whether before or after any judgement). Rettig reserves the right to claim interest under the Late Payment of Commercial Debts (Interest) Act 1998.
6.17 Without prejudice to the provision of clause 6.16 if the Customer delays or fails or Rettig reasonably believes that the Customer will delay or fail to pay for the Work or any other work under any other contract when due Rettig may:

(a) demand payment of all outstanding balances whether due or not under this Contract or any other contract between the Customer and Rettig;
(b) treat the Contract or any other contract between the Customer and Rettig as repudiated by the Customer;
(c) suspend any future performance by Rettig of the Contract or any other contract between the Customer and Rettig until all overdue sums have been paid; and/or
(d) appropriate any payments made by the Customer to such of the Works (or such works supplied under any other contract between the Customer and Rettig) as Rettig may think fit (notwithstanding any purported appropriation by the Customer).

6.18 The Customer will indemnify Rettig against all costs and expenses (including but not limited to legal and other debt collection expenses) incurred by Rettig in recovering and/or attempting to recover any amounts due to Rettig from the Customer under these Conditions.

7. QUALITY

7.1 Where Rettig is not the manufacturer of the Goods or the performer of the Services Rettig will use all reasonable endeavours to transfer to the Customer the benefit of any warranty or guarantee given to Rettig by such manufacturer or service performer.

7.2 Where Rettig is the manufacturer of the Goods or the performer of the Services Rettig warrants (subject to the provisions of this clause 7) that:
(a) on delivery of the Goods and for the relevant Warranty Period the Goods will:
(i) be of satisfactory quality, within the meaning of the Sale of Goods Act 1979 (as amended); and
(ii) be reasonably fit for any particular purpose for which the Works are commonly supplied or are being bought (if the Customer has made known that purpose to Rettig in writing and Rettig has confirmed in writing that it is reasonable for the Customer to rely on the skill and judgement of Rettig); and
(b) the Services will be performed with reasonable skill and care by properly qualified and experienced persons.

7.3 The Warranty Period means: 10 years from date of manufacture.

7.4 Rettig will not be liable for any breach of any of the warranties in clause 7.2 unless:
(a) the Customer gives written notice of the defect to Rettig within 28 days of the date when the Customer discovers or ought reasonably to have discovered the defect;
(b) (if the defect is as a result of damage in transit) the Customer gives written notice of the defect to the carrier in the manner and within the appropriate time limit as set out in the carriers terms of business; and
(c) Rettig is given a reasonable opportunity after receiving such notice to examine such Works and the Customer (if reasonably requested to do so by Rettig) returns such Works to Rettig's place of business (at the Customer's cost) for the examination to take place there.

7.5 Rettig will not be liable for a breach of any of the warranties in clause 7.2 where and to the extent that:
(a) the defect arises from the Customer's Property or as a result of the Customer's negligence;
(b) the defect arises as a result of fair wear and tear, accident, misuse, misservice, wilful damage, neglect, or abnormal or incorrect working conditions after delivery;
(c) the defect arises as a result of any changes or modifications made to the Goods not made by Rettig (including but not limited to bending or curving of the Goods);
(d) the defect arises as a result of any parts, materials or equipment not manufactured or workmanship not performed by Rettig;
(e) the Customer makes any further use of such Works after giving written notice of the defect;
(f) the defect arises because of any failure to follow Rettig's instructions (whether oral or in writing) as to the storage, assembly, installation, commissioning, use, processing, handling or maintenance of the Works or (if there are none) good trade practice;
(g) the defect arises as a result of any installation, testing or commissioning of the Works not performed by Rettig or its sub-contractor;
(h) the defect arises as a result of any alteration, servicing or repair of the Works not made by Rettig and without the written consent of Rettig; or
(i) the Contract states that the Works are sold in their actual state without warranty.

7.6 (Subject to clauses 7.4 and 7.5) if any of the Works do not confirm with any of the warranties set out in clause 7.2 Rettig will at its option and cost repair or replace such Goods (or the defective part), reperform such Services or refund the price of such Works at the pro rata Contract rate.

7.7 If Rettig complies with clause 7.6 it will (subject to clause 8.2) have no further liability (in contract, tort or delict (including but not limited to negligence) or otherwise) for breach of any of the warranties in clause 7.2 in respect of such Works.

7.8 Any Goods replaced by Rettig in accordance with the provisions of clause 7.6 will belong to Rettig and any repaired or replacement Goods will be guaranteed on these terms for the unexpired portion of the relevant Warranty Period.

7.9 Where and to the extent that Rettig can show upon examination of the Works that there is no breach of any of the warranties set out in clause 7.2 the Customer will:

(a) reimburse to Rettig all Rettig's reasonable costs and expenses associated with such examination; and

(b) if appropriate, recollect (at the Customer's own risk and expense) such Works within 28 days from the date of Rettig's notice that such Works are not in breach of such warranties.

7.10 Where Rettig has refunded or credited to the Customer's credit account the price of any Works returned by the Customer, title to such Works will pass to Rettig which may in its absolute discretion dispose of such Works.

7.11 The Customer will keep Rettig indemnified in full against all liability, loss, damage, injury, cost, claim, expense or proceeding incurred or suffered by Rettig as a result of or in connection with any claim brought against Rettig arising as a direct or indirect consequence of:

(a) the Customers failure to pass to and in a proper and reasonable manner drawing to the attention of all persons using or proposing to use the Goods (including but not limited to any purchaser of the Goods from the Customer or any subcontractor of the Customer) all information and instructions relating to and warnings in respect of the Goods as supplied by Rettig; and

(b) the use of the Works with any other incompatible or defective equipment, goods or systems (including but not limited to heating systems).

8. LIMITATION OF LIABILITY. THE PRICES CHARGED FOR THE WORKS ARE BASED STRICTLY ON THE UNDERSTANDING OF ACCEPTANCE BY THE CUSTOMER OF THE PROVISIONS IN THE CONTRACT FOR THE LIMITATION OF RETTIG'S LIABILITY. SHOULD THE CUSTOMER REQUIRE RETTIG TO ACCEPT ADDITIONAL LIABILITY THIS MAY BE DISCUSSED BETWEEN THE PARTIES AND THE PRICE INCREASED ACCORDINGLY.

8.1 All warranties, conditions and other terms implied by statute or common law (except for the conditions implied by section 12 of the Sale of Goods Act 1979) are, to the fullest extent permitted by law, excluded from the Contract.

8.2 Nothing in these Conditions excludes or limits the liability of Rettig for fraudulent misrepresentation or for any death or personal injury caused by Rettig's negligence. THE CUSTOMER'S ATTENTION IS IN PARTICULAR DRAWN TO THE PROVISIONS OF CLAUSES 8.3 AND 8.4

8.3 (Subject to clause 8.1, 8.2 and 9.2) Rettig will not be liable to the Customer in contract, tort, or delict (including but not limited to negligence), misrepresentation or otherwise for any:

(a) economic loss of any kind (including but not limited to loss of use, profit, anticipated profit, business, contracts, overhead recovery, machining costs, revenue or anticipated savings);

(b) any damage to the Customer's reputation or goodwill;

(c) any product recall or business interruption costs: or

(d) any other special, indirect or consequential loss or damage (even if Rettig has been advised of such loss or damage) arising out of or in connection with the Contract.

8.4 (Subject to the provisions of clause 8.1, 8.2, 8.3 and 9.2) Rettig's total liability in contract, tort or delict (including but not limited to negligence), misrepresentation or otherwise arising out of or in connection with this Contract will be limited to the amount received by Rettig for the claim under its insurance policy covering such risks (provided that nothing in these Conditions will oblige Rettig to obtain any insurance or claim upon any insurance which it holds) or £1 million (whichever is the greater). The Customer acknowledges that delay in notifying any claim may prevent Rettig recovering any money under such policy.

8.5 The provisions of this clause 8 shall survive the termination or expiry (for whatever reason) of this Contract.

9. THE CUSTOMER'S PROPERTY

9.1 While Rettig will take reasonable care of the Customer's Property whilst it is in Rettig's possession, control or custody the Customer's Property will (unless otherwise agreed in writing) remain at the Customer's risk and all replacements and alterations of and repairs to the Customer's Property will be the Customer's responsibility.

9.2 Rettig will not be liable for any loss or damage to the Customer's Property unless such loss or damage arises as a direct result of Rettig's negligence. Where Rettig is liable under this clause 9.2 Rettig's liability to the Customer will be limited to the actual cost of the replacement or repair of the loss or damage to the Customer's Property.

9.3 The Customer will ensure that the Customer's Property is accurate, adequate and suitable for use by Rettig in the performance of the Contract and in good condition. While Rettig will use reasonable endeavours to verify any relevant aspects of the Customer's Property no responsibility is accepted by Rettig for its accuracy, adequacy, suitability or condition.

9.4 Any defect in the Works which is due in whole or in part to the Customer's Property will not entitle the Customer to terminate the Contract, reject the Works, make any deductions from the Contract price or claim damages in respect of such defect.

9.5 The Customer will keep Rettig indemnified in full against all liability, loss, damage, injury, claim, action, demand, expense or proceeding awarded against or incurred by Rettig as a result of or in connection with the use by Rettig of the Customer's Property.
9.6 Customers Property will for the purposes of clauses 9.1 and 9.2 of these Conditions only also include any Goods which the Customer has paid for in advance of delivery.
10. PALLETS AND SKIDS. (Unless otherwise stated) pallets and skids will not be charged extra but if not returned to Rettig's place of business (carriage paid) in good condition, within 3 weeks of receipt by the Customer Rettig will be entitled to charge the Customer for such pallets and skids.
11. CONFIDENTIALITY
11.1 The Customer will keep confidential all technical data, commercial information, know-how, specifications, inventions, processes, initiatives and other information which is of a confidential nature and which has been disclosed to the Customer by Rettig or its agents and any other confidential information concerning Rettig's business or its products which the Customer may obtain ("Confidential Information").
11.2 The Customer will restrict disclosure of the Confidential Information to such of its employees, agents or subcontractors as need to know the same and will ensure that such employees, agents or subcontractors are subject to equivalent obligations of confidentiality as bind the Customer.
11.3 The Customer will not without the prior written consent of Rettig publish or disclose the Confidential Information to any third party or make any use of the Confidential Information except to the extent necessary to implement the Contract.
12. IPR
12.1 The Customer will keep Rettig indemnified in full against all liability, loss, damage, injury, claim, action, demand, expense or proceeding in respect of any infringement or alleged infringement of any IPR resulting from any use by Rettig of any Customers Property or any compliance by Rettig with the Customer's instructions, whether express or implied.
12.2 Rettig reserves the right to cease any Work where it becomes aware that such Work (as a result of any use by Rettig of any Customer's Property or compliance by Rettig with the Customer's instructions) infringes or may infringe the IPR of any third party.
12.3 Rettig will have no liability to deliver any Work which (as a result of any use by Rettig of any Customers Property or compliance by Rettig with the Customer's instructions) infringes or may infringe the IPR of any third party.
12.4 Without prejudice to any other rights Rettig may have, Rettig will be entitled to claim prompt reimbursement by the Customer upon submission of Rettig's invoice for all work undertaken and for all costs and expenses incurred up to the date of cessation of the Work under clause 14.2.
12.5 (Unless otherwise agreed in writing) ownership in all IPR subsisting in, resulting from or relating to the Works, or any associated instructions, plans, illustrations, descriptions, blue prints, designs, technical information, drawings, sketches, documents or specifications (except where these relate solely to the Customer's Property) will vest in or be assigned to Rettig. If the Customer in any way acquires any such rights it will promptly inform Rettig and take such steps as Rettig may reasonably require to assign such rights or vest such title in Rettig.
12.6 Provided that the Customer is not in default of any payment obligations under the Contract Rettig grants to the a Customer a non-exclusive, royalty free licence to use such IPR as may be owned by Rettig in accordance with clause 12.5 for the purpose of selecting the appropriate Works.
12.7 Whilst Rettig has used its reasonable endeavours to ensure that Works manufactured or performed by Rettig do not infringe any third party intellectual property rights nothing in these Conditions will be construed as any representation or warranty by Rettig that the design, manufacture, use or sale of the Works is not an infringement of any third party intellectual property rights.
13. TERMINATION
13.1 Rettig may terminate the Contract immediately if:
(a) the Customer fails to pay the price on the due date;
(b) the Customer is in breach of any term of the Contract (other than the obligation to pay the price) and has failed to remedy such breach within 28 days of receipt of written notice specifying the breach and requiring it to be remedied;
(c) there is a material change in the ownership or control of the Customer; or
(d) the Customer is wound up or becomes insolvent or has a receiver or administrative receiver appointed or suffers the appointment or the presentation of a petition for the appointment of an administration or any equivalent or analogous event occurs in any other jurisdiction.
13.2 The termination of the Contract (howsoever arising) will be without prejudice to any rights and remedies which may have accrued to either party.
13.3 Any Conditions which impliedly have effect after termination or expiry will continue to be enforceable notwithstanding termination or expiry.

14. EXPORT SALES
14.1 Where the Works are supplied for export from the United Kingdom the provisions of this clause 14 will (subject to any special terms agreed in writing between the parties) apply despite any other provision of these Conditions.
14.2 The Uniform Laws on International Sales Act 1967 will not apply.
14.3 Unless otherwise agreed in writing the currency will be pounds sterling. The Customer will establish and maintain in favour of Rettig an irrevocable and confirmed letter of credit in English with a UK clearing bank payable on drafts drawn at sight on presentation to the bank by Rettig of a certified copy of Rettig's invoice. All bank charges and other expenses in relation to the letter of credit will be borne by the Customer.
14.4 Unless otherwise agreed in writing Works will be sold C.I.F (as defined in INCOTERMS 2000 Edition).
14.5 The Customer will be responsible for complying with any legislation or regulation governing the export of the Works from the United Kingdom and the importation of the Works into the country of destination and for payment of any relevant duties or taxes.
15. LIEN. Rettig will have in respect of unpaid debts due to it from the Customer a general lien on all property of the Customer which is in Rettig's possession for whatever reason and whether worked upon or not.
16. FORCE MAJEURE. Rettig will not be liable to the Customer or be deemed to be in breach of these Conditions by reason of any delay in performing or failure to perform any of its obligations under these Conditions if such delay or failure was beyond the Rettig's reasonable control. If Rettig is unable to perform its obligations under these Conditions in accordance with this clause 16 it will promptly notify the Customer of the nature and extent of the circumstances in question.
17. ASSIGNMENT AND SUBCONTRACTING
17.1 The Customer will not without the prior written consent of Rettig assign or transfer the Contract or any part of it to any other person.
17.2 Rettig may without the prior written consent of the Customer assign, transfer or subcontract the Contract or any part of it to any other person.
18. GENERAL
18.1 Each right or remedy of Rettig under these Conditions is without prejudice to any other right or remedy which Rettig may have under these Conditions or otherwise.
18.2 Any notice or other document to be served under the Contract must be in writing and may be delivered or sent by prepaid first class post or facsimile transmission to the recipient's registered office.
18.3 Any notice or document shall be deemed served, if delivered at the time of delivery, if posted, 48 hours after posting and if sent by facsimile transmission, at the time of transmission.
18.4 If any provision of the Contract is found by any court, tribunal or administrative body of competent jurisdiction to be wholly or partly illegal, invalid, void, unenforceable or unreasonable it will, to the extent of such illegality, invalidity, voidness, unenforceability or unreasonableness, be deemed severable and the remaining provisions of the Contract and the remainder of such provision shall continue in full force and effect.
18.5 Failure or delay by either party in exercising any right or remedy provided by the Contract or by law will not be construed as a waiver of such right or remedy or a waiver of any other right or remedy.
18.6 Any waiver by either party of any breach of, or any default under, any provision of the Contract by the other party will not be deemed a waiver of any subsequent breach or default and will in no way affect the other terms of the Contract.
18.7 A person who is not a party to the Contract will have no right under the Contracts (Rights of Third Parties) Act 1999 or any other rule of law to enforce any term of the Contract. This clause 18.7 does not affect any right or remedy of any person which exists or is available otherwise than pursuant to that Act.
18.8 The Customer agrees that it will have no remedy in respect of any untrue statement innocently or negligently made by or on behalf of Rettig prior to the Contract upon which the Customer relied in entering into the Contract whether such statement was made orally or in writing.
18.9 The Contract will be governed by English law and the parties submit to the exclusive jurisdiction of the English courts.

WWW.PURMO.COM

Purmo, Rettig Park, Drum Lane, Birtley,
County Durham, DH2 1AB
T 0845 070 1090, F 0845 070 1080
uk@purmo.co.uk

PURMO
The Warm Society

DM20150000690710