



Carat

Flat fronted six connection heavy gauge steel radiator



Features and Benefits

- 6 tappings
- Quality Tested to EN442
- Fully Compliant with Criterion 16 of the Lifetime Homes Standard

Horizontal Model

Types: 11, 20, 22 and 33
Heights: 250, 400, 550 and 950mm
Widths: 405 - 3005mm
Sizes: 117
Outputs: 367 - 4691

Vertical Model

Types: 10, 11, 20 and 21
Heights: 1605, 1805 and 2005mm
Widths: 400 and 500mm
Sizes: 24
Outputs: 653 - 1758

Material: 1.75mm Flat steel with 1.25mm profiled rear waterway
Finish: RAL9016 Traffic White
Pressure: 6 bar (8 bar test)



Carat

This is just about the most discreet wall mounted radiator you can buy. For the true minimalist, Carat is the ultimate in clean lined elegance. Its flat panel simplicity will suit any contemporary setting from the modern apartment to the art gallery or high tech office. This tough, hard wearing heat emitter has a strong geometric form which complements efficient and uncluttered environments, and provides an impressive heat output.

There are no less than 117 models in the Carat horizontal range, giving the interior designer the maximum scope for positioning the radiator in keeping with the room's overall décor. Type 11, 20, 22 and 33 versions are available, in four heights; 250, 400, 550 and 950mm. Lengths start at 405mm, and go up to 3005mm long, with vertical models also available, all achieving a versatility not normally associated with minimalist radiators in this price bracket.



Connection utilising Variocon valve

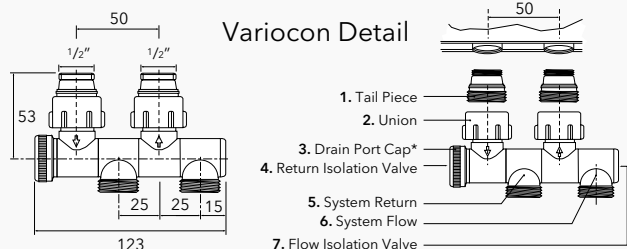
The MHS Carat radiator is manufactured using 1.75mm flat steel with a profiled rear waterway of 1.25mm steel. Finished in powder coat RAL 9016 Traffic White side panels on all models with a top grille on the horizontal versions only (excluding the Type 11 horizontal). All radiators are supplied complete with wall brackets, plugs, air vent and top grille clamps. The Carat has a maximum working pressure of 6 bar (max test 8.0 bar). The Carat has 6 x 1/2" bsp-f connections and is complete with integral flow tube. This integrated flow tube links the right hand central connection to the top right hand connection (on the horizontal models) where the TRV head can be mounted via a unique TRV insert piece (additional cost). The Carat radiator carries a 10 year guarantee against manufacturing defects.

Carat Accessories

Each Carat radiator can be supplied with the Variocon Valve Set, Integrated Thermostatic Valve Body & Thermostatic Head.

Variocon

Part NR	
VLVVAR-KIT A	Variocon Valve with 15mm Copper Connections
VLVVAR-KIT B	Variocon Valve with 1/2" BSP Connections



The Variocon connections are positioned centrally on each radiator. For the pipework centres when using the Variocon, set 25mm off centre to the right. The flow connection is always on the right when using the Variocon valve (when viewed from the front).

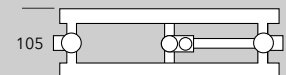
Carat Horizontal

Type 11



Height (mm)	400		550		950	
Width (mm)	Product Code	Output Watts	Product Code	Output Watts	Product Code	Output Watts
405	-	-	CH110550-B-04	367	CH110950-B-04	581
505	-	-	CH110550-B-05	458	CH110950-B-05	725
605	-	-	CH110550-B-06	548	CH110950-B-06	868
705	-	-	CH110550-B-07	639	-	-
805	CH110400-B-08	576	CH110550-B-08	729	CH110950-B-08	1155
905	-	-	CH110550-B-09	820	-	-
1005	CH110400-B-10	720	CH110550-B-10	911	-	-
1205	CH110400-B-12	863	CH110550-B-12	1092	-	-
1405	CH110400-B-14	1006	CH110550-B-14	1273	-	-
1605	CH110400-B-16	1149	CH110550-B-16	1454	-	-
1805	CH110400-B-18	1292	CH110550-B-18	1635	-	-
2005	CH110400-B-20	1436	CH110550-B-20	1817	-	-
Weight kg/metre	15.20		21.30		36.60	
Water cont. litres/metre	0.90		1.30		1.70	
Output Watts @ Δt 50°C/metre	716		906		1435	

Type 20



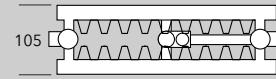
Height (mm)	400		550		950	
Width (mm)	Product Code	Output Watts	Product Code	Output Watts	Product Code	Output Watts
405	-	-	CH200550-B-04	393	CH200950-B-04	656
505	-	-	CH200550-B-05	490	-	-
605	-	-	CH200550-B-06	587	CH200950-B-06	980
705	-	-	CH200550-B-07	685	-	-
805	CH200400-B-08	613	CH200550-B-08	782	CH200950-B-08	1304
905	-	-	CH200550-B-09	879	-	-
1005	CH200400-B-10	766	CH200550-B-10	976	CH200950-B-10	1628
1205	CH200400-B-12	918	CH200550-B-12	1170	-	-
1405	CH200400-B-14	1071	CH200550-B-14	1364	-	-
1605	CH200400-B-16	1223	CH200550-B-16	1558	-	-
1805	CH200400-B-18	1375	CH200550-B-18	1753	-	-
2005	CH200400-B-20	1528	CH200550-B-20	1947	-	-
Weight kg/metre	24.10		31.00		51.20	
Water cont. litres/metre	1.50		2.10		3.40	
Output Watts @ Δt 50°C/metre	762		971		1620	

Lead time for these models is 3-5 days

Lead time for these models is 2-3 weeks

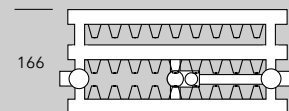
Carat Horizontal

Type 22



Height (mm)	250		400		550		950	
Width (mm)	Product Code	Output Watts	Product Code	Output Watts	Product Code	Output Watts	Product Code	Output Watts
405	-	-	-	-	CH220550-B-04	632	CH220950-B-04	972
505	-	-	-	-	CH220550-B-05	788	CH220950-B-05	1211
605	-	-	CH220400-B-06	744	CH220550-B-06	944	CH220950-B-06	1451
705	-	-	-	-	CH220550-B-07	1101	CH220950-B-07	1691
805	CH220250-B-08	593	CH220400-B-08	990	CH220550-B-08	1257	CH220950-B-08	1931
905	-	-	-	-	CH220550-B-09	1413	CH220950-B-09	2171
1005	CH220250-B-10	741	CH220400-B-10	1236	CH220550-B-10	1569	CH220950-B-10	2411
1205	CH220250-B-12	888	CH220400-B-12	1482	CH220550-B-12	1881	CH220950-B-12	2891
1405	CH220250-B-14	1035	CH220400-B-14	1728	CH220550-B-14	2193	-	-
1605	CH220250-B-16	1183	CH220400-B-16	1974	CH220550-B-16	2505	-	-
1805	CH220250-B-18	1330	CH220400-B-18	2220	CH220550-B-18	2818	-	-
2005	CH220250-B-20	1478	CH220400-B-20	2466	CH220550-B-20	3130	-	-
2205	CH220250-B-22	1625	CH220400-B-22	2712	CH220550-B-22	3442	-	-
2605	CH220250-B-26	1920	CH220400-B-26	3204	CH220550-B-26	4066	-	-
3005	CH220250-B-30	2215	CH220400-B-30	3696	CH220550-B-30	4691	-	-
Weight kg/metre	19.60		32.00		44.20		74.80	
Water cont. litres/metre	1.20		1.50		2.60		3.60	
Output Watts @ Δt 50°C/metre	737		1230		1561		2399	

Type 33



Height (mm)	250		400		550	
Width (mm)	Product Code	Output Watts	Product Code	Output Watts	Product Code	Output Watts
605	-	-	-	-	CH330550-B-06	1338
705	-	-	-	-	CH330550-B-07	1559
805	CH330250-B-08	927	CH330400-B-08	1431	CH330550-B-08	1781
905	-	-	-	-	CH330550-B-09	2002
1005	CH330250-B-10	1157	CH330400-B-10	1787	CH330550-B-10	2223
1205	CH330250-B-12	1387	CH330400-B-12	2142	CH330550-B-12	2665
1405	CH330250-B-14	1617	CH330400-B-14	2498	CH330550-B-14	3108
1605	CH330250-B-16	1847	CH330400-B-16	2854	CH330550-B-16	3550
1805	CH330250-B-18	2078	CH330400-B-18	3209	CH330550-B-18	3993
2005	CH330250-B-20	2308	CH330400-B-20	3565	CH330550-B-20	4435
2205	CH330250-B-22	2538	-	-	-	-
2605	CH330250-B-26	2998	-	-	-	-
3005	CH330250-B-30	3459	-	-	-	-
Weight kg/metre	28.70		44.80		59.70	
Water cont. litres/metre	2.20		3.10		4.10	
Output Watts @ Δt 50°C/metre	1151		1778		2212	

Lead time for these models is 3-5 days

Lead time for these models is 2-3 weeks

Carat Vertical

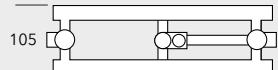
Type 10

Width (mm)	Height (mm)	1605	1805	2005	
400	Product Code	CV101605-B-400	CV101805-B-400	CV102005-B-400	
	Output Watts	653	704	755	
	Weight kg	17.80	18.80	19.80	
	Water cont. litres	1.40	1.60	1.80	
550	Product Code	CV101605-B-550	CV101805-B-550	CV102005-B-550	
	Output Watts	837	903	969	
	Weight kg	20.30	25.70	27.70	
	Water cont. litres	1.90	2.20	2.50	

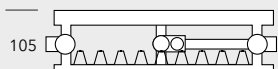
Type 11

Width (mm)	Height (mm)	1605	1805	2005	
400	Product Code	CV111605-B-400	CV111805-B-400	CV112005-B-400	
	Output Watts	751	845	906	
	Weight kg	21.05	23.85	27.50	
	Water cont. litres	1.40	1.60	1.80	
550	Product Code	CV111605-B-550	CV111805-B-550	CV112005-B-550	
	Output Watts	941	1058	1135	
	Weight kg	23.70	34.70	37.25	
	Water cont. litres	1.90	2.20	2.50	

Type 20

Width (mm)	Height (mm)	1605	1805	2005	
400	Product Code	CV201605-B-400	CV201805-B-400	CV202005-B-400	
	Output Watts	1062	1165	1267	
	Weight kg	37.80	42.70	47.20	
	Water cont. litres	2.60	3.00	3.40	
550	Product Code	CV201605-B-550	CV201805-B-550	CV202005-B-550	
	Output Watts	1292	1418	1542	
	Weight kg	49.80	55.80	61.80	
	Water cont. litres	3.60	4.20	4.70	

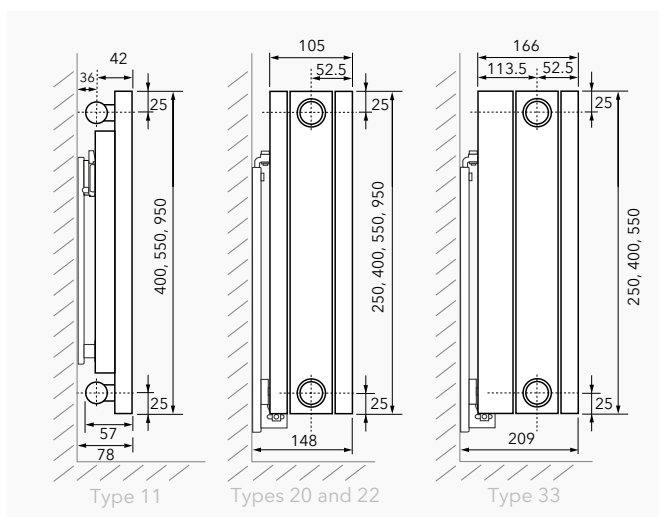
Type 21

Width (mm)	Height (mm)	1605	1805	2005	
400	Product Code	CV211605-B-400	CV211805-B-400	CV212005-B-400	
	Output Watts	1149	1262	1371	
	Weight kg	38.20	45.49	51.50	
	Water cont. litres	2.60	3.00	3.40	
550	Product Code	CV211605-B-550	CV211805-B-550	CV212005-B-550	
	Output Watts	1474	1618	1758	
	Weight kg	55.30	63.00	68.20	
	Water cont. litres	3.60	4.20	4.70	

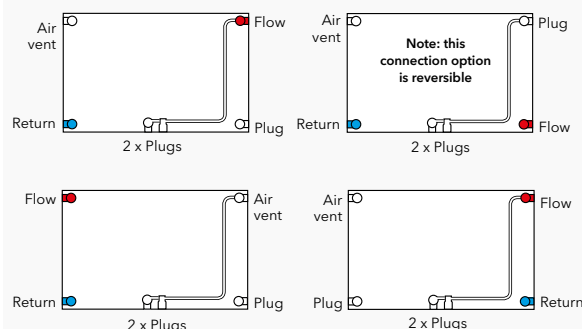
Lead time for these models is 3-5 days

Lead time for these models is 2-3 weeks

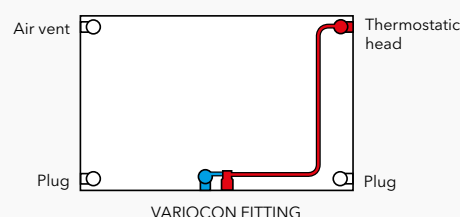
Connections



TBOE, BBOE or TBSE Connection Details



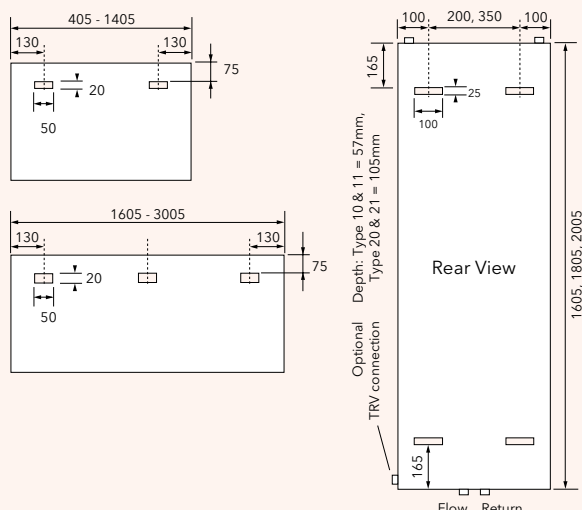
Connection Detail Utilising Variocon Valve & Thermostatic Head.



Lug Positions / Bracket Requirements

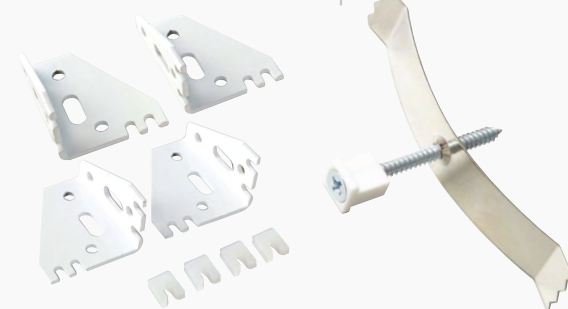
Types 11, 20, 22 and 33

Vertical Types 11, 10, 20 & 21



Vertical wall brackets

Top grille clamp



Δt	CF	Δt	CF
60	1.267	53	1.079
59	1.24	52	1.052
58	1.213	51	1.026
57	1.186	50	1.000
56	1.159	45	0.872
55.5	1.145	40	0.748
55	1.132	35	0.629
54	1.105		

Correction Factor Table

The outputs shown within this brochure are based on BS EN442, 75-65-20°C operating conditions, giving a Δt of 50°C, for Δt 's other than this, a correction factor must be applied. This correction factor table assumes an averaged exponent of 1.30.

If a more accurate exponent / correction factor is required, please contact MHS Radiators.

Example: Output required @ 82-71-21°C Δt 55.5 the CF = 1.145, therefore multiply the listed output by the correction factor to give actual radiator output under these operating conditions.

Water Treatment: These products are for use on closed heating systems only; they are not suitable for installation on secondary HWS circuits. On completion of the installation the entire system MUST be thoroughly cleaned and flushed to remove debris/flux residues etc. If a chemical cleanser is used, it must be thoroughly flushed from the system. Following this, the system MUST be dosed with a good eminence water treatment to prevent corrosion. System design, flushing and dosing must be in accordance with BS 5449: 1990, BS EN 12828 & 12831: 2003 and BS 7593: 2006

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

Corrosion inhibitor must be used in accordance with the manufacturer's instructions and recommendations and should take into account the particular metals within the system.

This publication is issued subject to alteration or withdrawal without notice.

The illustrations and specifications are not binding in detail.



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