

Compact 2 Range

The Compact 2 range is the greatest amount of cutting edge air-curtain technology for a truly economical price



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Thermoscreens Compact 2 range aircurtains delivers enhanced efficiency and are the ideal solution where space is at a premium. The air curtain can be mounted up to a maximum of 3m. For exposed locations, 2.5m is the recommended mounting height.

The Compact 2 range is available as surface mounted or recessed versions and either ambient, water or electrically heated units. Electrical units use wire wound elements which provide instant heat.

Constructed out of galvanised sheet steel and finished in RAL 9010 (white) the Compact 2 range series comes complete with a mounting brackets, Ecopower controller (water and electric) and two new choices of remote controller. In addition the units are available in widths 1, 1.5, 2 and the new 2.5m long unit.

Key Features



- 2 year warranty
- Modern Styling
- Lower noise levels
- Additional 2.5m long unit
- 3 choices of Remote Controller
- Inlet air grill concealed from view
- Easy-Install hanging system
- Easier access to internal components
- RAL 9010 colour finish as standard
- Colour match service available on request
- Recessed units supplied with hinged core grilles for easy installation and maintenance
- High efficiency electric elements for instant heat
- Joining kits available for connecting multiple surface mounted units
- Improved packaging

Water flow rate and pressure drop

Compact 2	2 row coil (based on 82/71°C)		
	Water Flow Rate (l/min)	Water Pressure Drop (coil) ΔP (kPa)	Water Pressure Drop (valve) ΔP (kPa)
C2-1000W / C2-1000WR	7.8	3.1	1.4
C2-1500W / C2-1500WR	11.7	7.9	3.1
C2-2000W / C2-2000WR	15.6	15.5	5.5
C2-2500W	19.5	21.2	8.6

A 4kvs control valve is supplied loose with water heated air curtains which should be fitted into the pipework during installation if required by the customer.

Water flow rate and pressure drop calculations for different water temperatures

To calculate water flow rate and pressure drops for coil and valve at different water temperatures than 82/71°C :- For the new water temperatures use the Thermoscreens coil calculation programme to get the new water flow rate and the new water pressure drop (coil). Then calculate the new water pressure drop (valve) using the following formula:

$$\text{New Water Pressure Drop (valve)} = 82/71 \text{ Water Pressure Drop (valve)} \times \left(\frac{\text{New Water Flow Rate}}{82/71 \text{ Water Flow Rate}} \right)^2$$

Example: C1500W at 85/65°C, EAT = 20°C

82/71 Water flow rate = 11.7 l/min (from water flow rate and pressure drop table above)

New water flow rate = 5.8 l/min (from Thermoscreens coil calculation programme)

New water pressure drop (coil) = 2.2 kPa (from Thermoscreens coil calculation programme)

Therefore:

$$\text{New water pressure drop (valve)} = 3.1 \times \left(\frac{5.8}{11.7} \right)^2 = 0.7 \text{ kPa}$$

Conversion factors:

1 kPa = 0.102m Water column

10 l per minute = 0.6 m³/h

Accessories

Description	Part Number
Master and slave lead: 3m	T5951001
Ecopower extension lead: 10m	T5951050
Ecopower extension lead: 15m	T5951060
Ecopower extension lead: 30m	T5951020
Extension lead coupler	T5951030
Joining kit	T7308225
Ecopower Controller	T7263630
Ecopower Plus Controller	T7263640
Ecopower Touch Controller	T7263655



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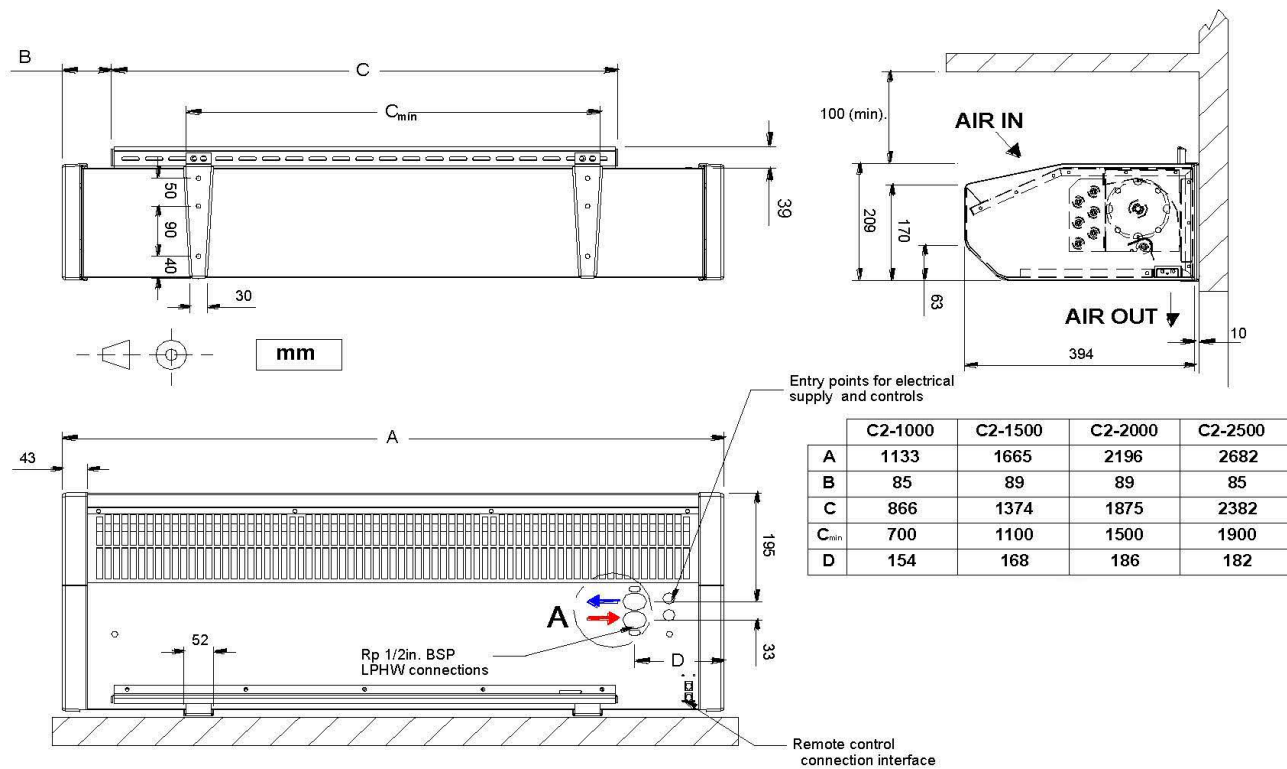
Compact 2 Range



Surface Mounted

Model	Dimensions (L x D x H) (mm)	Supply (50Hz)	Loading (A) per phase	Heat output (kW)	Max velocity (m/s)	Max air volume (m³/h)	Weight (kg)	Noise output dB(A) @3m		
								H	M	L
Electric										
C2-1000E	1133 x 394 x 209	400V~3P&N	13.7	4.9 / 9	9.0	1250	19	50	48	46
C2-1500E	1665 x 394 x 209		18.3	6.5 / 12		1800	27	50	48	46
C2-2000E	2196 x 394 x 209		27.2	9.7 / 18		2500	33	51	49	47
C2-2500E	2682 x 394 x 209		32.0	11.3 / 21		3050	39	52	50	48
Water 82/71										
C2-1000W	1133 x 394 x 209	230V~1P&N	0.7	3 / 6	8.5	1180	21	50	48	46
C2-1500W	1665 x 394 x 209		0.9	4.5 / 9		1700	30	50	48	46
C2-2000W	2196 x 394 x 209		1.1	6 / 12		2360	37	51	49	47
C2-2500W	2682 x 394 x 209		1.6	7.5 / 15		2880	44	52	50	48
Ambient										
C2-1000A	1133 x 394 x 209	230V~1P&N	0.7	-	9.0	1250	19	50	48	46
C2-1500A	1665 x 394 x 209		0.9	-		1800	25	50	48	46
C2-2000A	2196 x 394 x 209		1.1	-		2500	31	51	49	47
C2-2500A	2682 x 394 x 209		1.6	-		3050	37	52	50	48

Surface Mounted



For ceiling drawing, please see the instruction manual.



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C2 Range



Recessed

Model	Overall dimensions (L x D x H) (mm)	Standard grille size (mm)	Supply (50Hz)	Loading (A) per phase	Heat output (kW)	Max velocity (m/s)	Max air volume (m³/h)	Weight (kg)	Noise output dB(A) @3m		
									H	M	L
Electric											
C2-1000ER	1161 x 301 x 206	1209 x 353	400V~3P&N	13.7	4.5 / 9	9.0	1205	20	52	50	48
C2-1500ER	1561 x 301 x 206	1609 x 353		18.3	6 / 12		1800	27	52	50	48
C2-2000ER	2072 x 301 x 206	2120 x 353		27.2	9 / 18		2500	37	53	51	49
Water 82/71											
C2-1000WR	1161 x 301 x 206	1209 x 353	230V~1P&N	0.7	6	8.5	1250	22	52	50	48
C2-1500WR	1561 x 301 x 206	1609 x 353		0.9	9		1800	30	52	50	48
C2-2000WR	2072 x 301 x 206	2120 x 353		1.1	12		2500	41	53	51	49
Ambient											
C2-1000AR	1161 x 301 x 206	1209 x 353	230V~1P&N	0.7	-	9.0	1250	19	52	50	48
C2-1500AR	1561 x 301 x 206	1609 x 353		0.9	-		1800	25	52	50	48
C2-2000AR	2072 x 301 x 206	2120 x 353		1.1	-		2500	35	53	51	49

For recessed units, aperture sizes are shown in the table below.

Recessed

