

# Designer C Range

Where aesthetics are important combined with optimum performance



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The Designer C range takes the functionality of Thermoscreens market leading C range and combines it with a stainless steel finish.

The compact design is complimented by a range of finishes such as bright stainless or galvanised steel with bespoke mounting options and a RAL paint colour matching service. The range also includes a vertical mounting option.

The Designer C horizontal has a mounting height of 2.75m whilst the vertical unit has an effective coverage of 1.5m width but can be paired with an additional unit to cover openings up to 3m wide.

There are options for ambient, water or electrical heating. The electrical and water units are supplied complete with the Ecopower controller. Water units are designed for inlet water temperatures of 82°C and come complete with a three port motorised valve.

Horizontal units are available in 1, 1.5, 2 and 2.5m widths (1.5, 2 and 2.5m available for vertical) and can be joined together to cover wider spans.

## Key Features



- 2 year warranty
- Supplied with Ecopower controller as standard
- Horizontal or vertical mounting options
- IP21 rated
- RAL colour match service available on request
- Bright stainless steel as standard (brushed stainless steel and other finishes available on request)
- Bespoke bracket and mounting options available
- 2.75m mounting height horizontal 1.5m throw on vertical unit
- Electrical units can be downrated from three phase to single phase operation with reduced heat outputs (available on request)

## Water flow rate and pressure drop

Designer C Range	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)
D1000W	7.8	3.2	2.0
D1500W	11.7	7.8	3.0
D2000W	15.6	15.2	4.0
D2500W	19.5	7.8	3.0

A control valve is supplied loose with Designer C series air curtains which can 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 drop 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: D1500W 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:

$$\text{New water pressure drop (valve)} = 3.0 \times \left( \frac{5.8}{11.7} \right)^2 = 0.7 \text{ kPa}$$

### 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 (1m, 1.5 and 2m)	T7308185



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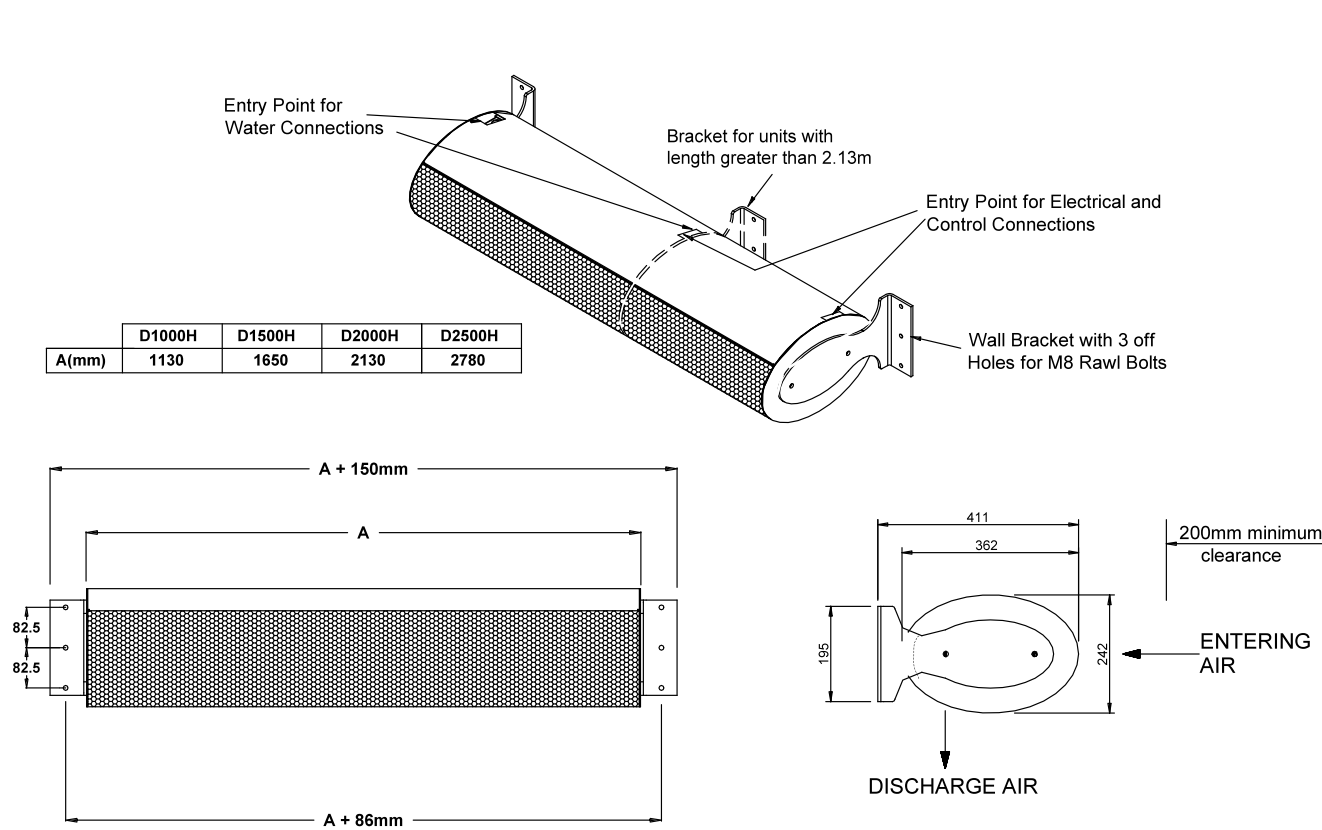
# Designer C Range



## Horizontal

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
<b>Electric</b>										
D1000E	1130 x 362 x 242	400V~3P&N	13.7	4.5/9	8.5	1125	31	55	53	50
D1500E	1650 x 362 x 242		18.3	6/12		1620	44	55	53	49
D2000E	2130 x 362 x 242		27.2	9/18		2250	60	56	54	50
D2500E	2780 x 362 x 242		32.0	10.5/21		2745	75	58	55	51
<b>Water 2 row 82/71</b>										
D1000W	1130 x 362 x 242	230V~1P&N	0.7	6	8.0	1060	32	55	53	50
D1500W	1650 x 362 x 242		0.9	9		1530	45	55	53	49
D2000W	2130 x 362 x 242		1.1	12		2124	62	56	54	50
D2500W	2780 x 362 x 242		1.6	15		2590	77	58	55	51
<b>Ambient</b>										
D1000A	1130 x 362 x 242	230V~1P&N	0.7	-	8.5	1125	30	55	53	50
D1500A	1650 x 362 x 242		0.9	-		1620	43	55	53	49
D2000A	2130 x 362 x 242		1.1	-		2250	59	56	54	50
D2500A	2780 x 362 x 242		1.6	-		2745	73	58	55	51

## Horizontal



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# Designer C Range



## Vertical

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
<b>Electric</b>										
D1500E V	1650 x 362 x 242	400V~3P&N	18.3	6/12	8.5	1620	44	55	53	49
D2000E V	2130 x 362 x 242		27.2	9/18		2250	60	56	54	50
D2500E V	2780 x 362 x 242		32.0	10.5/21		2745	75	58	55	51
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D2000A V	2130 x 362 x 242		1.1	-		2250	59	56	54	50
D2500A V	2780 x 362 x 242		1.6	-		2745	73	58	55	51

## Vertical

