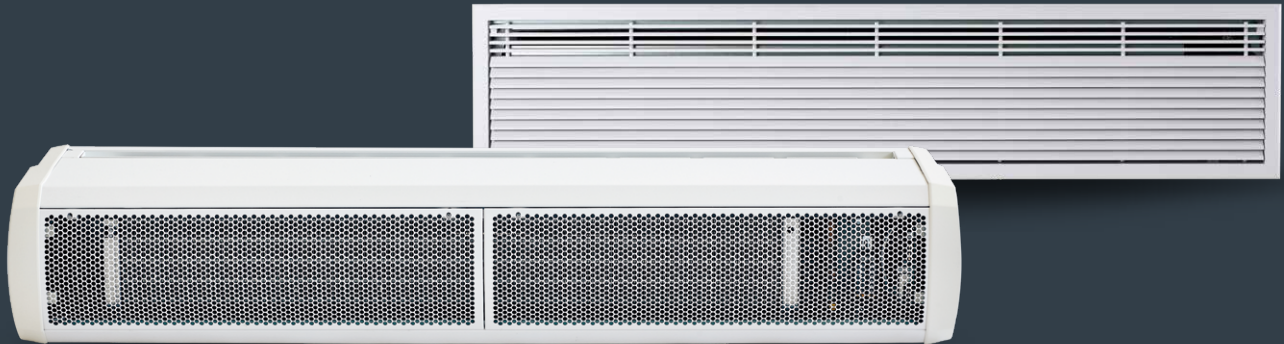


## C Series.

An affordable solution for applications where space is at a premium.



Compact and cost-effective, Thermoscreens C Series air curtains are specifically designed for applications where there's limited headspace above the door. With a choice of surface or recessed mounting, there's a C Series solution to suit any doorway, no matter how restricted the space may be.

### Sizes (Width) (Joining kits available)

1m, 1.5m and 2m

### Mounting Height

Surface mounted - up to 3m  
Recessed units - up to 2.75m

### Colour

Standard RAL 9010 (White)  
RAL colour matching available

### Warranty

2 years

## Key features.



Water



Electric



Ambient



ErP Ready

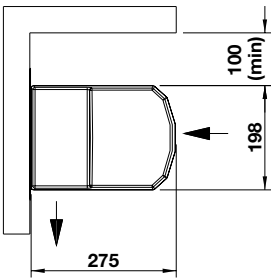
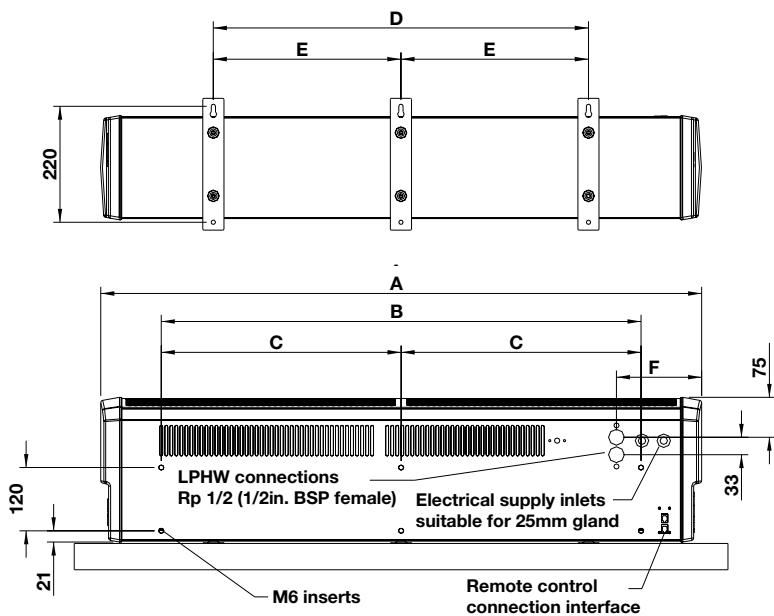


Custom Paint

- Compact, space-saving design
- Ambient, water heated or electric heated
- Surface or recessed mounting
- Ecopower energy saving controls (water heated and electric heated units)
- ErP compliant and BMS ready
- Last man switch friendly
- Tangential fans - powerful linear air flow
- Integrated thermostat
- Water heated units supplied with a motorised three-port valve
- Instant heat, high-efficiency heating element (electric)
- Downrated single phase output (electric units)
- Filters (water heated and ambient)
- Supplied with wall brackets as standard
- Ceiling fixings provided (excluding drop-rods)
- Joining kits available for connecting surface mounted units
- Hinged grilles for easy installation and maintenance (recessed units)

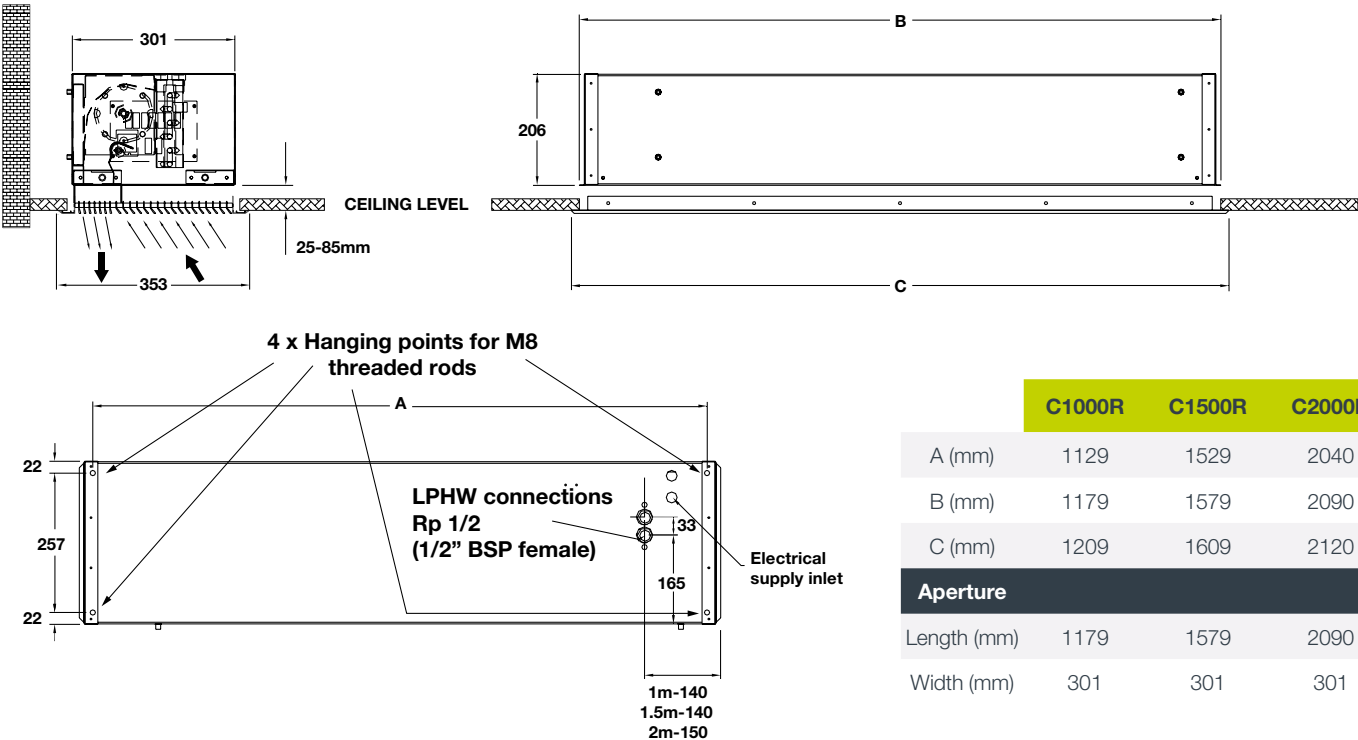


| C Series   Surface Mounted |                                |                  |                          |                        |                          |                             |                |                           |    |    |
|----------------------------|--------------------------------|------------------|--------------------------|------------------------|--------------------------|-----------------------------|----------------|---------------------------|----|----|
| Model                      | Dimensions<br>(L x W x D) (mm) | Supply<br>(50Hz) | Loading (A)<br>per phase | Heat<br>output<br>(kW) | Max<br>velocity<br>(m/s) | Max air<br>volume<br>(m³/h) | Weight<br>(kg) | Noise output<br>dB(A) @3m |    |    |
|                            |                                |                  |                          |                        |                          |                             |                | H                         | M  | L  |
| Electric                   |                                |                  |                          |                        |                          |                             |                |                           |    |    |
| C1000E                     | 1137x275x198                   | 400V~3P&N        | 13.7                     | 4.5/9                  | 9.0                      | 1250                        | 16             | 55                        | 53 | 50 |
| C1500E                     | 1669x275x198                   | 400V~3P&N        | 18.3                     | 6/12                   | 9.0                      | 1800                        | 23             | 55                        | 53 | 49 |
| C2000E                     | 2200x275x198                   | 400V~3P&N        | 27.2                     | 9/18                   | 9.0                      | 2500                        | 33             | 56                        | 54 | 50 |
| Water 82/71                |                                |                  |                          |                        |                          |                             |                |                           |    |    |
| C1000W                     | 1137x275x198                   | 230V~1P&N        | 0.7                      | 3/6                    | 8.5                      | 1180                        | 18             | 55                        | 53 | 50 |
| C1500W                     | 1669x275x198                   | 230V~1P&N        | 0.9                      | 4.5/9                  | 8.5                      | 1700                        | 26             | 55                        | 53 | 49 |
| C2000W                     | 2200x275x198                   | 230V~1P&N        | 1.1                      | 6/12                   | 8.5                      | 2360                        | 37             | 56                        | 54 | 50 |
| Ambient                    |                                |                  |                          |                        |                          |                             |                |                           |    |    |
| C1000A                     | 1137x275x198                   | 230V~1P&N        | 0.7                      |                        | 9.0                      | 1250                        | 16             | 55                        | 53 | 50 |
| C1500A                     | 1669x275x198                   | 230V~1P&N        | 0.9                      |                        | 9.0                      | 1800                        | 21             | 55                        | 53 | 49 |
| C2000A                     | 2200x275x198                   | 230V~1P&N        | 1.1                      |                        | 9.0                      | 2500                        | 31             | 56                        | 54 | 50 |



|        | C1000 | C1500 | C2000 |
|--------|-------|-------|-------|
| A (mm) | 1137  | 1669  | 2200  |
| B (mm) | 908   | 1408  | 1928  |
| C (mm) | -     | 704   | 964   |
| D (mm) | 710   | 1208  | 1748  |
| E (mm) | -     | 604   | 874   |
| F (mm) | 161   | 170   | 161   |

| C Series   Recessed |                                |                                 |                  |                             |                        |                          |                             |                |                                    |    |    |
|---------------------|--------------------------------|---------------------------------|------------------|-----------------------------|------------------------|--------------------------|-----------------------------|----------------|------------------------------------|----|----|
| Model               | Dimensions<br>(L x W x D) (mm) | Standard<br>grille size<br>(mm) | Supply<br>(50Hz) | Loading<br>(A) per<br>phase | Heat<br>output<br>(kW) | Max<br>velocity<br>(m/s) | Max air<br>volume<br>(m³/h) | Weight<br>(kg) | Noise output<br>dB(A) @3m<br>H M L |    |    |
| Electric            |                                |                                 |                  |                             |                        |                          |                             |                |                                    |    |    |
| C1000ER             | 1179x301x206                   | 1209x353                        | 400V~3P&N        | 13.7                        | 4.5/9                  | 9.0                      | 1190                        | 20             | 55                                 | 53 | 50 |
| C1500ER             | 1579x301x206                   | 1609x353                        | 400V~3P&N        | 18.3                        | 6/12                   | 9.0                      | 1730                        | 27             | 55                                 | 53 | 49 |
| C2000ER             | 2090x301x206                   | 2120x353                        | 400V~3P&N        | 27.2                        | 9/18                   | 9.0                      | 2380                        | 37             | 56                                 | 54 | 50 |
| Water 82/71         |                                |                                 |                  |                             |                        |                          |                             |                |                                    |    |    |
| C1000WR             | 1179x301x206                   | 1209x353                        | 230V~1P&N        | 0.7                         | 6                      | 8.5                      | 1120                        | 22             | 55                                 | 53 | 50 |
| C1500WR             | 1579x301x206                   | 1609x353                        | 230V~1P&N        | 0.9                         | 9                      | 8.5                      | 1630                        | 30             | 55                                 | 53 | 49 |
| C2000WR             | 2090x301x206                   | 2120x353                        | 230V~1P&N        | 1.1                         | 12                     | 8.5                      | 2240                        | 41             | 56                                 | 54 | 50 |
| Ambient             |                                |                                 |                  |                             |                        |                          |                             |                |                                    |    |    |
| C1000AR             | 1179x301x206                   | 1209x353                        | 230V~1P&N        | 0.7                         |                        | 9.0                      | 1190                        | 19             | 55                                 | 53 | 50 |
| C1500AR             | 1579x301x206                   | 1609x353                        | 230V~1P&N        | 0.9                         |                        | 9.0                      | 1730                        | 25             | 55                                 | 53 | 49 |
| C2000AR             | 2090x301x206                   | 2120x353                        | 230V~1P&N        | 1.1                         |                        | 9.0                      | 2380                        | 35             | 56                                 | 54 | 50 |



|             | C1000R | C1500R | C2000R |
|-------------|--------|--------|--------|
| A (mm)      | 1129   | 1529   | 2040   |
| B (mm)      | 1179   | 1579   | 2090   |
| C (mm)      | 1209   | 1609   | 2120   |
| Aperture    |        |        |        |
| Length (mm) | 1179   | 1579   | 2090   |
| Width (mm)  | 301    | 301    | 301    |

## Water flow rate and pressure drop calculations for different water temperatures.

To calculate water flow rate and coil pressure drop, use our coil calculation programme. Then calculate the new water drop (valve) using the following formula:

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

### 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 below)

**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:

**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 m<sup>3</sup>/h

## Water flow rate and pressure drop.

| C Series       | 1 row coil (based on 82/71°C) |                                        |                                         |
|----------------|-------------------------------|----------------------------------------|-----------------------------------------|
|                | Water flow rate<br>(l/min)    | Water pressure drop (coil)<br>ΔP (kPa) | Water pressure drop (valve)<br>ΔP (kPa) |
| C1000W/C1000WR | 7.8                           | 3.1                                    | 1.4                                     |
| C1500W/C1500WR | 11.7                          | 7.9                                    | 3.1                                     |
| C2000W/C2000WR | 15.6                          | 15.5                                   | 5.5                                     |

## Accessories.

| Description                  | Part number |
|------------------------------|-------------|
| Master and slave lead: 6m    | T5951001    |
| Ecopower extension lead: 10m | T5951050    |
| Ecopower extension lead: 15m | T5951060    |
| Ecopower extension lead: 30m | T5951020    |
| Extension lead coupler       | T5951030    |
| Joining kit                  | T7308220    |

A control valve is supplied loose with C Series air curtains which can be fitted into the pipework during installation if required by the customer.

# Thermoscreens



## Your environment is our expertise.

Thermoscreens were one of the pioneers of modern air curtain technology, and we remain at the forefront of its evolution today. Our sales team work hand-in-hand with an international network of distributors, providing solutions to customers of all types and sizes, in more than 50 countries. Across the globe, our name is synonymous with the highest quality standards; our products renowned for their energy efficiency, reliability and ease of use.

