

# Compact 2.

Cutting-edge technology  
for restricted spaces.



Quiet, stylish, and easy to install, Thermoscreens new **Compact 2** air curtains offer a cost-effective and highly efficient solution for applications where space is at a premium. Featuring the latest air curtain technology, they offer both outdoor temperature adjustment and full BMS integration.

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

1m, 1.5m, 2m and 2.5m

#### Mounting Height

Surface mounted - up to 3m  
(2.5m exposed locations)

Recessed units - up to 2.75m

#### Colour

Standard RAL 9010 (White)  
RAL colour matching available

#### Warranty

2 years

## Key features.



Water



Electric



Ambient



ErP compliant



Custom Paint

- Stylish modern design with concealed air inlet grille
- Ambient, water heated or electric heated
- Surface or recessed mounting
- Choice of three new control units
- Remote operation - choice of two control units
- ErP compliant and BMS ready
- Enhanced technology fan decks reducing sound power output and tone
- Instant heat - rapid cool down, high-efficiency heating element (electric units)
- Hinged grilles and drop down access panel for easy installation and maintenance (recessed units)
- Supplied with quick hang wall brackets as standard
- Adjustable ceiling fixings with simple slide rail hanging system
- Ceiling fixings provided (excluding drop-rods)
- Joining kits available for connecting surface mounted units

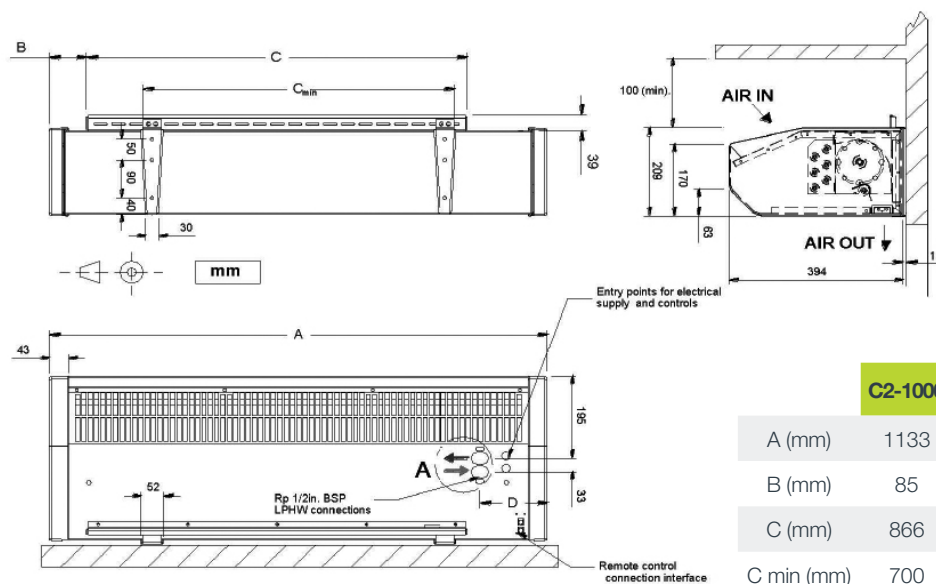


[www.thermoscreens.com](http://www.thermoscreens.com)

# Compact 2. Surface Mounted.

## Compact 2 | 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>(m <sup>3</sup> /h) | Weight<br>(kg) | Noise output<br>dB(A) @3m |    |    |
|--------------------|--------------------------------|------------------|--------------------------|------------------------|--------------------------|--|----------------|---------------------------|----|----|
|                    |                                |                  |                          |                        |                          |  |                | H                         | M  | L  |
| <b>Electric</b>    |                                |                  |                          |                        |                          |  |                |                           |    |    |
| C2-1000E           | 1133x394x209                   | 400V~3P&N        | 13.7                     | 4.9/9                  | 9.0                      | 1250                                     | 19             | 50                        | 48 | 46 |
| C2-1500E           | 1665x394x209                   | 400V~3P&N        | 18.3                     | 6.5/12                 | 9.0                      | 1800                                     | 27             | 50                        | 48 | 46 |
| C2-2000E           | 2196x394x209                   | 400V~3P&N        | 27.2                     | 9.7/18                 | 9.0                      | 2500                                     | 39             | 51                        | 49 | 47 |
| C2-2500E           | 2682x394x209                   | 400V~3P&N        | 32.0                     | 11.3/21                | 9.0                      | 3050                                     | 46             | 52                        | 50 | 48 |
| <b>Water 82/71</b> |                                |                  |                          |                        |                          |  |                |                           |    |    |
| C2-1000W           | 1133x394x209                   | 230V~1P&N        | 0.7                      | 3/6                    | 8.5                      | 1180                                     | 21             | 50                        | 48 | 46 |
| C2-1500W           | 1665x394x209                   | 230V~1P&N        | 0.9                      | 4.5/9                  | 8.5                      | 1700                                     | 30             | 50                        | 48 | 46 |
| C2-2000W           | 2196x394x209                   | 230V~1P&N        | 1.1                      | 6/12                   | 8.5                      | 2360                                     | 42             | 51                        | 49 | 47 |
| C2-2500W           | 2682x394x209                   | 230V~1P&N        | 1.6                      | 7.5/15                 | 8.5                      | 2880                                     | 51             | 52                        | 50 | 48 |
| <b>Ambient</b>     |                                |                  |                          |                        |                          |  |                |                           |    |    |
| C2-1000A           | 1133x394x209                   | 230V~1P&N        | 0.7                      |                        | 9.0                      | 1250                                     | 19             | 50                        | 48 | 46 |
| C2-1500A           | 1665x394x209                   | 230V~1P&N        | 0.9                      |                        | 9.0                      | 1800                                     | 25             | 50                        | 48 | 46 |
| C2-2000A           | 2196x394x209                   | 230V~1P&N        | 1.1                      |                        | 9.0                      | 2500                                     | 37             | 51                        | 49 | 47 |
| C2-2500A           | 2682x394x209                   | 230V~1P&N        | 1.6                      |                        | 9.0                      | 3050                                     | 44             | 52                        | 50 | 48 |



|            | C2-1000 | C2-1500 | C2-2000 | C2-2500 |
|------------|---------|---------|---------|---------|
| A (mm)     | 1133    | 1665    | 2196    | 2682    |
| B (mm)     | 85      | 89      | 89      | 85      |
| C (mm)     | 866     | 1374    | 1875    | 2382    |
| C min (mm) | 700     | 1100    | 1500    | 1900    |
| D (mm)     | 154     | 168     | 186     | 182     |

For ceiling mounted drawing, please see the instruction manual.

# Compact 2. Recessed.



## Compact 2 | 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>(m <sup>3</sup> /h) | Weight<br>(kg) | Noise output<br>dB(A) @3m |   |   |
|-------|--------------------------------|---------------------------------|------------------|-----------------------------|------------------------|--------------------------|--|----------------|---------------------------|---|---|
|       |                                |                                 |                  |                             |                        |                          |  |                | H                         | M | L |

### Electric

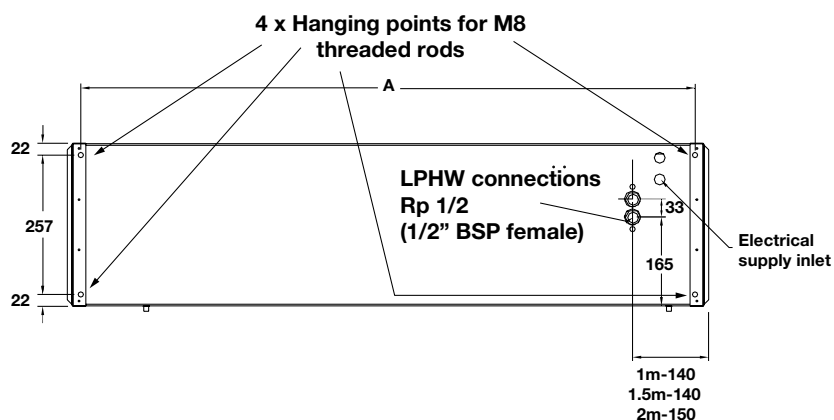
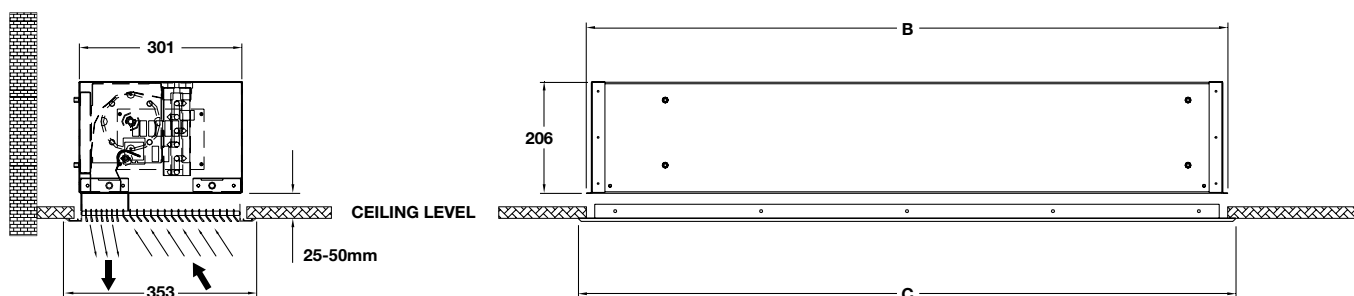
|           |              |          |           |      |       |     |      |    |    |    |    |
|-----------|--------------|----------|-----------|------|-------|-----|------|----|----|----|----|
| C2-1000ER | 1179x301x206 | 1209x353 | 400V~3P&N | 13.7 | 4.5/9 | 9.0 | 1190 | 20 | 52 | 50 | 48 |
| C2-1500ER | 1579x301x206 | 1609x353 | 400V~3P&N | 18.3 | 6/12  | 9.0 | 1730 | 27 | 52 | 50 | 48 |
| C2-2000ER | 2090x301x206 | 2120x353 | 400V~3P&N | 27.2 | 9/18  | 9.0 | 2380 | 37 | 53 | 51 | 49 |

### Water 82/71

|           |              |          |           |     |    |     |      |    |    |    |    |
|-----------|--------------|----------|-----------|-----|----|-----|------|----|----|----|----|
| C2-1000WR | 1179x301x206 | 1209x353 | 230V~1P&N | 0.7 | 6  | 8.5 | 1120 | 22 | 52 | 50 | 48 |
| C2-1500WR | 1579x301x206 | 1609x353 | 230V~1P&N | 0.9 | 9  | 8.5 | 1630 | 30 | 52 | 50 | 48 |
| C2-2000WR | 2090x301x206 | 2120x353 | 230V~1P&N | 1.1 | 12 | 8.5 | 2240 | 41 | 53 | 51 | 49 |

### Ambient

|           |              |          |           |     |  |     |      |    |    |    |    |
|-----------|--------------|----------|-----------|-----|--|-----|------|----|----|----|----|
| C2-1000AR | 1179x301x206 | 1209x353 | 230V~1P&N | 0.7 |  | 9.0 | 1190 | 19 | 52 | 50 | 48 |
| C2-1500AR | 1579x301x206 | 1609x353 | 230V~1P&N | 0.9 |  | 9.0 | 1730 | 25 | 52 | 50 | 48 |
| C2-2000AR | 2090x301x206 | 2120x353 | 230V~1P&N | 1.1 |  | 9.0 | 2380 | 35 | 53 | 51 | 49 |



|             | 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:

C2-1500W 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) =**

$$3.1 \times \left( \frac{5.8}{11.7} \right)^2 = 0.7 \text{ kPa}$$

### Conversion factors:

1 kPa = 0.102m Water column

10 l per minute = 0.6 m3/h

## Water flow rate and pressure drop.

| Compact 2          | 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) |
| 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                                     |

## Accessories.

| Description                  | Part number |
|------------------------------|-------------|
| Master and slave lead: 6m    | T5951110    |
| Ecopower extension lead: 10m | T5951112    |
| Ecopower extension lead: 15m | T5951113    |
| Ecopower extension lead: 30m | T5951114    |
| Extension lead coupler       | T5951030    |
| Joining kit                  | T7308225    |
| Ecopower controller          | T7263630    |
| Ecopower plus controller     | T7263640    |
| Ecopower touch controller    | T7263655    |

A 3-port motorised control valve is supplied loose with water heated air curtains to be fitted into the site pipework during installation.



## 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.



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v01\_07.19