

T Range

The industry standard for air curtains designed to meet a wide range of needs in commercial and retail environments



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The T range has become the industry standard for air curtain design. The T range will provide climate separation for entrances up to 3m in height and comes in standard widths of 1, 1.5 and 2m. Surface mounted units may be joined in order to cover wider spans.

The T series is available as an ambient unit (without heating) or electrical or water heated versions. Water heated versions are available with 2 row coils for water inlet temperatures of 70°C or above. In addition, recessed units are also available with 3 row coils for lower water temperatures.

The T series units are finished in RAL 9010 as standard but can be colour matched to your specific paint requirement on request. Electrical and water heated versions of T series are supplied complete with Ecopower control. Motorised three port valves are supplied as standard with water versions.

Key Features



- 2 year warranty
- Ecopower controller supplied as standard (heated versions)
- Surface or recessed mounted
- RAL 9010 finish as standard
- Colour match service available
- Filters supplied as standard on surface mounted only
- LPHW heated versions supplied with a motorised three port valve
- Wall brackets supplied as standard
- Fixings provided for ceiling hanging (drop rods not supplied)
- Heating coil options to cover a wide range of water temperatures
- Joining kits available for joining multiple surface mounted units
- Electrical units can be downrated from three phase to single phase operation with reduced heat output (available on request)

Water flow rate and pressure drop

| T Range Surface | 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) |
| T1000W | 11.7 | 6.0 | 3.0 |
| T1500W | 15.6 | 12.6 | 4.0 |
| T2000W | 23.4 | 5.5 | 7.0 |

| T Range Recessed | 2 row coil (based on 82/71°C) | | | 3 row coil (based on 60/40°C) | | |
|------------------|-------------------------------|----------------|---------------|-------------------------------|----------------|---------------|
| | Water Flow (l/min) | Valve ΔP (kPa) | Coil ΔP (kPa) | Water Flow (l/min) | Valve ΔP (kPa) | Coil ΔP (kPa) |
| T1000WR | 15.6 | 12.1 | 4.0 | 8.6 | 5.8 | 2.5 |
| T1500WR | 23.4 | 3.4 | 7.0 | 12.9 | 14.7 | 3.5 |
| T2000WR | 31.2 | 6.3 | 10.0 | 17.1 | 10.5 | 4.5 |

A control valve is supplied loose with T 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: T1500W at 85/65°C, EAT = 20°C
82/71 Water flow rate = 15.6 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:
New water pressure drop (valve) = 3.0 x $\left(\frac{5.8}{15.6} \right)^2 = 0.7 \text{ kPa}$

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 | T7308200 |



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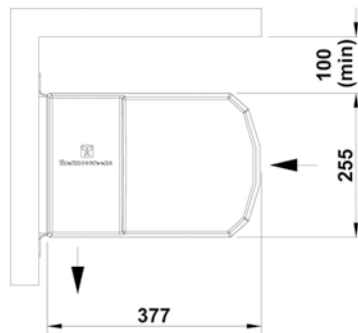
T Range



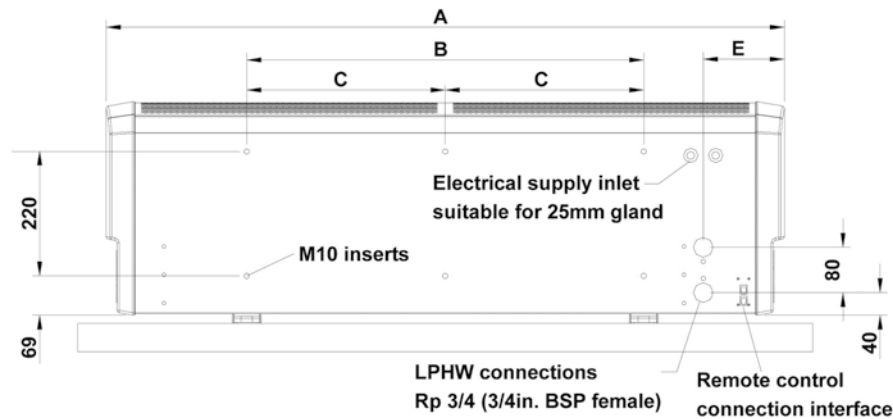
Surface Mounted

| 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 | | | | | | | | | | |
| T1000E | 1196 x 377 x 255 | 400V~3P&N | 14.1 | 6/9 | 8.0 | 1320 | 28 | 56 | 55 | 54 |
| T1500E | 1746 x 377 x 255 | | 18.9 | 6/12 | | 1925 | 41 | 57 | 56 | 55 |
| T2000E | 2296 x 377 x 255 | | 28.1 | 12/18 | | 2640 | 52 | 57 | 56 | 54 |
| Water 2 row 82/71 | | | | | | | | | | |
| T1000W | 1196 x 377 x 255 | 230V~1P&N | 1.1 | 9 | 7.8 | 1250 | 29 | 56 | 55 | 54 |
| T1500W | 1746 x 377 x 255 | | 1.5 | 12 | | 1825 | 42 | 57 | 56 | 55 |
| T2000W | 2296 x 377 x 255 | | 2.0 | 18 | | 2500 | 53 | 57 | 56 | 54 |
| Ambient | | | | | | | | | | |
| T1000A | 1196 x 377 x 255 | 230V~1P&N | 1.1 | - | 8.0 | 1320 | 27 | 56 | 55 | 54 |
| T1500A | 1746 x 377 x 255 | | 1.5 | - | | 1925 | 40 | 57 | 56 | 55 |
| T2000A | 2296 x 377 x 255 | | 2.0 | - | | 2640 | 50 | 57 | 56 | 54 |

Surface Mounted



| | T1000 | T1500 | T2000 |
|-------|-------|-------|-------|
| A(mm) | 1196 | 1746 | 2296 |
| B(mm) | 700 | 1200 | 1700 |
| C(mm) | N/A | N/A | 850 |
| D(mm) | 700 | 1200 | 1700 |
| E(mm) | 143 | 156 | 206 |



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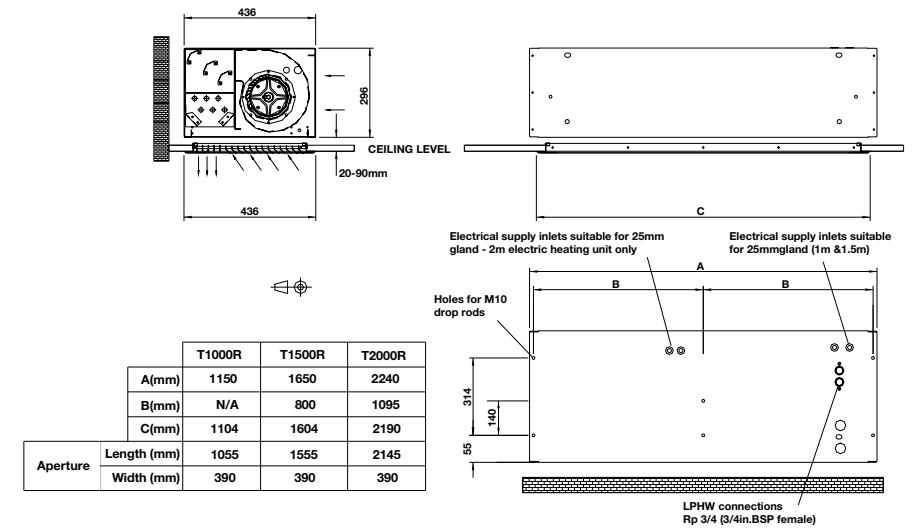


Recessed

| 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 | | | | | | | | | | | |
| T1000ER | 1150 x 436 x 296 | 1104 x 436 | 400V~3P&N | 14.1 | 6/9 | 7.5 | 2000 | 28 | 57 | 54 | 50 |
| T1000ER | 1150 x 436 x 296 | 1104 x 436 | | 18.7 | 6/12 | | 2000 | 28 | 57 | 54 | 50 |
| T1500ER | 1650 x 436 x 296 | 1604 x 436 | | 18.9 | 6/12 | | 3000 | 41 | 58 | 56 | 54 |
| T1500ER | 1650 x 436 x 296 | 1604 x 436 | | 27.9 | 9/18 | | 3000 | 41 | 58 | 56 | 54 |
| T2000ER | 2240 x 436 x 296 | 2190 x 436 | | 28.1 | 12/18 | | 4000 | 52 | 59 | 57 | 55 |
| T2000ER | 2240 x 436 x 296 | 2190 x 436 | | 36.8 | 12/24 | | 4000 | 52 | 59 | 57 | 55 |
| Water 2 row 82/71 | | | | | | | | | | | |
| T1000WR | 1150 x 436 x 296 | 1104 x 436 | 230V~1P&N | 1.1 | 12 | 7.0 | 1950 | 29 | 57 | 54 | 50 |
| T1500WR | 1650 x 436 x 296 | 1604 x 436 | | 1.7 | 18 | | 2950 | 42 | 58 | 56 | 54 |
| T2000WR | 2240 x 436 x 296 | 2190 x 436 | | 2.0 | 24 | | 3950 | 53 | 59 | 57 | 55 |
| Water 3 row 60/40 | | | | | | | | | | | |
| T1000WR | 1150 x 436 x 296 | 1104 x 436 | 230V~1P&N | 1.1 | 12 | 6.5 | 1755 | 29 | 57 | 54 | 50 |
| T1500WR | 1650 x 436 x 296 | 1604 x 436 | | 1.7 | 18 | | 2655 | 42 | 58 | 56 | 54 |
| T2000WR | 2240 x 436 x 296 | 2190 x 436 | | 2.0 | 24 | | 3555 | 53 | 59 | 57 | 55 |
| Ambient | | | | | | | | | | | |
| T1000AR | 1150 x 436 x 296 | 1104 x 436 | 230V~1P&N | 1.1 | - | 7.5 | 2000 | 27 | 57 | 54 | 50 |
| T1500AR | 1650 x 436 x 296 | 1604 x 436 | | 1.7 | - | | 3000 | 40 | 58 | 56 | 54 |
| T2000AR | 2240 x 436 x 296 | 2190 x 436 | | 2.0 | - | | 4000 | 50 | 59 | 57 | 55 |

Aperture size for grille shown in the table below

Standard Recessed Grille



Wider Recessed Grille

