

# HP Series.

A high-velocity solution for high power applications.



Powerful and very energy efficient, Thermoscreens HP air curtains deliver a heat output of up to 24kW at an air velocity of eight meters per second. Multiple units can be joined together to cover wider openings, with up to eight units being operated from a single Ecopower control unit.

**Sizes (Width)** (Joining kits available)

1m, 1.5m and 2m

**Mounting Height**

Up to 3m

**Colour**

Standard RAL 9010 (White)  
RAL colour matching available

**Warranty**

2 years

## Key features.



Water



Electric



Ambient



ErP Ready



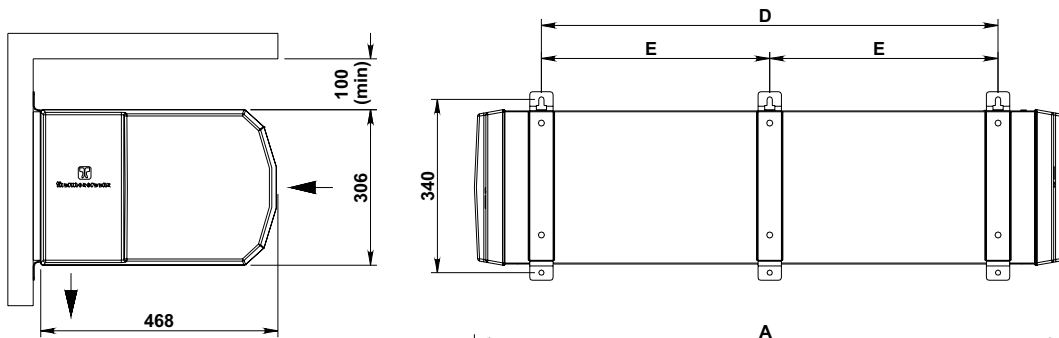
Custom Paint

- High air velocity - eight meters per second
- Ambient, water heated or electric heated
- Surface mounted
- Ecopower energy saving controls (water heated and electric heated units)
- ErP compliant and BMS ready
- Heating coils options for low or high-grade water temperatures (60°C to 90°C)
- Heat output up to 24kW
- Single control unit operates up to eight units
- Water heated units supplied with a motorised three-port valve
- Filters supplied as standard
- Downrated single phase output (electric units)
- Supplied with wall brackets as standard
- Ceiling fixings provided (excluding drop-rods)
- Joining kits available for connecting surface mounted units

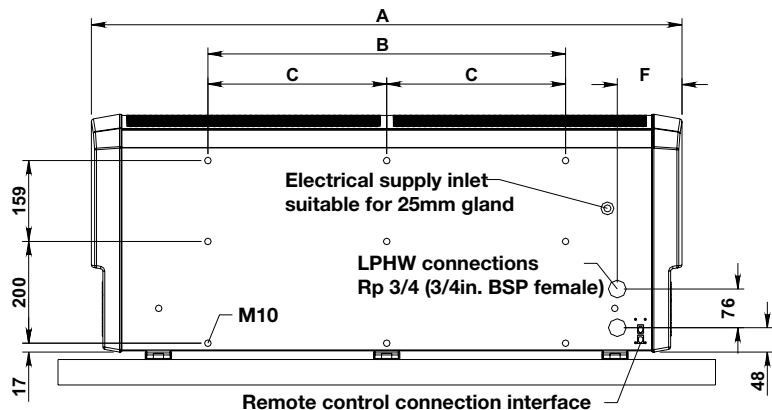


## HP Series | Surface Mounted

Model	Dimensions (L x W x D) (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>										
HP1000E	1164x468x306	400V~3P&N	18.5	6/12	8.0	2000	37	57	54	52
HP1500E12	1689x468x306	400V~3P&N	18.9	6/12	8.0	3000	53	58	54	52
HP1500E18	1689x468x306	400V~3P&N	27.9	9/18	8.0	3000	53	58	54	52
HP2000E	2214x468x306	400V~3P&N	36.8	12/24	8.0	4000	65	59	55	53
<b>Water 2 row 82/71</b>										
HP1000W	1164x468x306	230V~1P&N	1.1	6	7.5	1870	38	57	54	52
HP1500W	1689x468x306	230V~1P&N	1.7	9	7.5	2800	54	58	54	52
HP2000W	2214x468x306	230V~1P&N	2.0	12	7.5	3750	65	59	55	53
<b>Water 3 row 60/40</b>										
HP1000W	1164x468x306	230V~1P&N	1.1	6	7.0	1680	38	57	54	52
HP1500W	1689x468x306	230V~1P&N	1.7	9	7.0	2520	54	58	54	52
HP2000W	2214x468x306	230V~1P&N	2.0	12	7.0	3375	65	59	55	53
<b>Ambient</b>										
HP1000A	1164x468x306	230V~1P&N	1.1		8.0	2000	36	57	54	52
HP1500A	1689x468x306	230V~1P&N	1.7		8.0	3000	52	58	54	52
HP2000A	2214x468x306	230V~1P&N	2.0		8.0	4000	63	59	55	53



	HP1000	HP1500	HP2000
A (mm)	1164	1689	2214
B (mm)	750	1305	1750
C (mm)	-	-	852
D (mm)	900	1400	1910
E (mm)	-	-	955
F (mm)	128	141	150



## 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:

HP1500W at 85/65°C, EAT = 20°C  
82/71 Water flow rate = 23.4 l/min  
(from water flow rate and pressure drop table below)

**New water flow rate = 10.9 l/min**  
(from Thermoscreens coil calculation programme)

**New water pressure drop (coil) = 0.9 kPa**  
(from Thermoscreens coil calculation programme)

### Therefore:

**New water pressure drop (valve) =**

$$7.0 \times \left( \frac{10.9}{23.4} \right)^2 = 1.5 \text{ kPa}$$

### Conversion factors:

1 kPa = 0.102m Water column  
10 l per minute = 0.6 m³/h

## Water flow rate and pressure drop.

HP Series	2 row coil (based on 82/71°C)			3 row coil (based on 60/40°C)		
	Water flow rate (l/min)	Water pressure drop (coil) ΔP (kPa)	Water pressure drop (valve) ΔP (kPa)	Water flow rate (l/min)	Water pressure drop (coil) ΔP (kPa)	Water pressure drop (valve) ΔP (kPa)
HP1000W	15.6	12.4	5.5	8.6	5.7	2.5
HP1500W	23.4	3.2	7.0	12.9	15.0	3.5
HP2000W	31.2	6.4	10.0	17.1	10.4	4.5

## 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
Filters (Water/Ambient)	T7402520
Joining kit	T7308210

A 3- port motorised control valve is supplied loose with water heated HP series air curtains can be fitted into the on site pipework during installation if required by the customer.



## 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.

