



## HX Series.

Exceptional performance powered by EcoPower Air Technology.



Combining the latest EcoPower controls with industry-leading air separation technology, **HX commercial air curtains** are one of the most advanced solutions available. Very powerful and highly efficient, HX units deliver exceptional performance and outstanding energy savings.

### Size

Door Opening Width: 1m (36"), 1.5m (60"), 2m (72")

### Mounting Height

Up to 3.5 metres (11' 6")

### Colour

Standard RAL 9010 (Off-White)

### Warranty

2 years parts only

## Key features.



Water



Electric



Ambient



Custom Paint

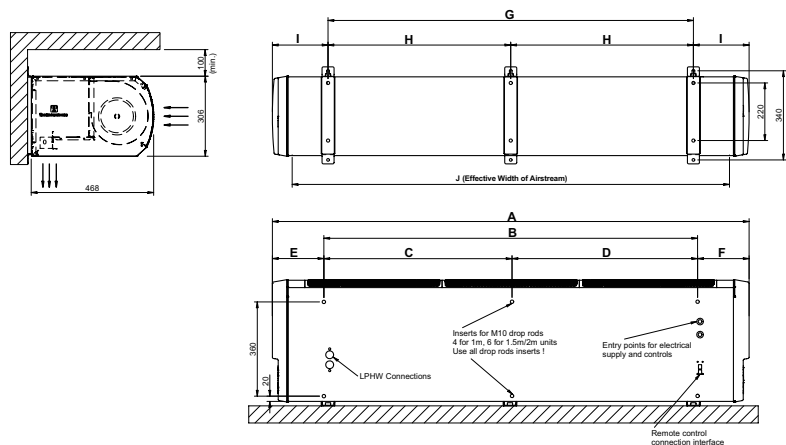
- Industry-leading EcoPower Air Technology
- Ambient, water heated or electric heated
- Surface or recessed mounting
- EcoPower energy saving controls
- Modbus or dry contact(s)
- Air plenum - delivers even air flow from the discharge nozzle
- Converging nozzles - creates a Venturi effect, fortifying the air barrier
- Active cellular grille - shapes air as it passes through the grille
- Water heated units fitted with a motorised three-port valve
- 2 or 4 row coil options - water temperatures 45 - 90°C
- One control unit operates up to eight HX units
- Filters supplied as standard (surface mounted units only)
- Instant heat - rapid cooldown, high efficiency heating element (electric)



### HX Series | Surface Mounted

Model	Dimensions (L x H x W) (mm)/(in)	Supply (V/ph/Hz)	Heat output (kW)/(Btu/h)	Loading per (A) current	Max air volume (m³/h)	Weight (kg)	Noise output dB(A) @3m		
							H	M	L
<b>Electric</b>									
HX1000E (208V)	1300x306x468 51.2x12.1x18.4	208/3/60	5/10.2 17,417/34,835	29.7	1375	46	57	55	50
HX1500E (208V)	1825x306x468 71.9x12.1x18.4	208/3/60	10.2/15.3 34,835/52,252	44.5	1980	67	58	56	52
HX2000E (208V)	2350x306x468 92.5x12.1x18.4	208/3/60	10.2/20.4 34,835/69,670	59.4	2480	84	58	56	52
HX1000E (480V)	1300x306x468 51.2x12.1x18.4	480/3/60 + 208...240/1/60	6/12 20,473/40,946	14.5 + 1.4	1500	46	58	56	53
HX1500E (480V)	1825x306x468 71.9x12.1x18.4	480/3/60 + 208...240/1/60	12/18 40,946/61,418	21.7 + 2.0	2160	67	60	58	56
HX2000E (480V)	2350x306x468 92.5x12.1x18.4	480/3/60 + 208...240/1/60	12/24 40,946/81,891	28.9 + 2.8	2660	84	60	58	56
HX1000E (600V)	1300x306x468 51.2x12.1x18.4	600/3/60 + 208...240/1/60	6/12 20,473/40,946	11.6 + 1.4	1500	46	58	56	53
HX1500E (600V)	1825x306x468 71.9x12.1x18.4	600/3/60 + 208...240/1/60	12/18 40,946/61,418	17.3 + 2.0	2160	67	60	58	56
HX2000E (600V)	2350x306x468 92.5x12.1x18.4	600/3/60 + 208...240/1/60	12/24 40,946/81,891	23.1 + 2.8	2660	84	60	58	56
<b>Water</b>									
HX1000W	1300x306x468 51.2x12.1x18.4	208...240/1/60	6/12 20,473/40,946	1.4	1500	52	58	56	53
HX1500W	1825x306x468 71.9x12.1x18.4	208...240/1/60	9/18 30,709/61,418	2.0	2160	75	60	58	56
HX2000W	2350x306x468 92.5x12.1x18.4	208...240/1/60	12/24 40,946/81,891	2.8	2660	93	60	58	56
<b>Ambient</b>									
HX1000A	1300x306x468 51.2x12.1x18.4	208...240/1/60	0	1.4	1500	45	58	56	53
HX1500A	1825x306x468 71.9x12.1x18.4	208...240/1/60	0	2.0	2160	66	60	58	56
HX2000A	2350x306x468 92.5x12.1x18.4	208...240/1/60	0	2.8	2660	80	60	58	56

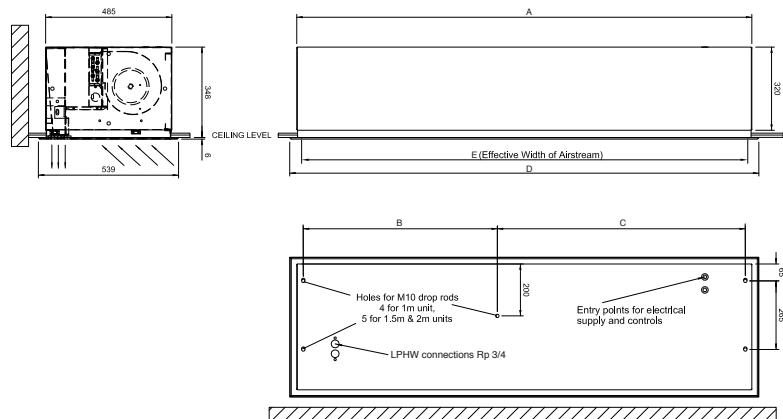
	C-1000	C-1500	C-2000
A (mm)	1300	1825	2350
B (mm)	895	1430	2005
C (mm)	-	720	1032
D (mm)	-	710	973
E (mm)	202	197	143
F (mm)	202	197	202
G (mm)	898	1398	1904
H (mm)	-	699	952
I (mm)	201	213	223
J (mm)	1100	1630	2150



### HX Series | Recessed

Model	Dimensions (L x H x W) (mm)/in)	Supply (V/ph/Hz)	Heat output (kW)/[Btu/hr]	Loading per (A) current	Max air volume (m³/h)	Weight (kg)	Noise output dB(A) @3m		
							H	M	L
<b>Electric</b>									
HX1000ER (208V)	1185x348x485 46.7x13.7x19.1	208/3/60	5/10.2 17,417/34,835	29.7	1375	46	57	55	50
HX1500ER (208V)	1710x348x485 67.3x13.7x19.1	208/3/60	10.2/15.3 34,835/52,252	44.5	1980	67	58	56	52
HX2000ER (208V)	2235x345x485 88.0x13.7x19.1	208/3/60	10.2/20.4 34,835/69,670	59.4	2480	84	58	56	52
HX1000ER (480V)	1185x348x485 46.7x13.7x19.1	480/3/60 + 208...240/1/60	6/12 20,491/40,982	14.5 + 1.4	1500	67	58	56	53
HX1500ER (480V)	1710x348x485 67.3x13.7x19.1	480/3/60 + 208...240/1/60	12/18 40,982/61,473	21.7 + 2.0	2160	84	60	58	56
HX2000ER (480V)	2235x345x485 88.0x13.7x19.1	480/3/60 + 208...240/1/60	12/24 40,982/81,964	28.9 + 2.8	2660	67	60	58	56
HX1000ER (600V)	1185x348x485 46.7x13.7x19.1	600/3/60 + 208...240/1/60	6/12 20,491/40,982	11.6 + 1.4	1500	84	58	56	53
HX1500ER (600V)	1710x348x485 67.3x13.7x19.1	600/3/60 + 208...240/1/60	12/18 40,982/61,473	17.3 + 2.0	2160	67	60	58	56
HX2000ER (600V)	2235x345x485 88.0x13.7x19.1	600/3/60 + 208...240/1/60	12/24 40,982/81,964	23.1 + 2.8	2660	84	60	58	56
<b>Water</b>									
HX1000WR	1185x348x485 46.7x13.7x19.1	208...240/1/60	6/12 20,491/40,982	1.4	1500	52	58	56	53
HX1500WR	1710x348x485 67.3x13.7x19.1	208...240/1/60	9/18 30,737/61,473	2.0	2160	75	60	58	56
HX2000WR	2235x345x485 88.0x13.7x19.1	208...240/1/60	12/24 40,982/81,964	2.8	2660	93	60	58	56
<b>Ambient</b>									
HX1000AR	1185x348x485 46.7x13.7x19.1	208...240/1/60	0	1.4	1500	45	58	56	53
HX1500AR	1710x348x485 67.3x13.7x19.1	208...240/1/60	0	2.0	2160	66	60	58	56
HX2000AR	2235x345x485 88.0x13.7x19.1	208...240/1/60	0	2.8	2660	80	60	58	56

	HX1000R	HX1500R	HX2000R
A (mm)	1185	1710	2235
B (mm)	1238	726	1077
C (mm)	-	933	1109
D (mm)	1238	1763	2290
E (mm)	1100	1630	2150
<b>Aperture</b>			
Length (mm)	1185	1710	2235
Width (mm)	485	485	485



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

To calculate water flow rate and pressure drop for an air curtain with 2 row coil 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:

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

### Example:

HX1000WR at 85/65°C, EAT = 20°C

82/71 Water flow rate = 15.6 l/min  
(from water flow rate and pressure drop table below)

**New** water flow rate = 9.0 l/min  
(from Thermoscreens coil calculation programme)

**New** water pressure drop (coil) = 3.4 kPa  
(from Thermoscreens coil calculation programme)

### Therefore:

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

$$5.5 \times \left( \frac{9.0}{15.6} \right)^2 = 1.8 \text{ kPa}$$

## Water flow rate and pressure drop.

HX Series	2 row coil (based on 82/71°C/180/160°F)			4 row coil (based on 60/40°C/140/104°F)		
	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)
HX1000W / HX1000WR	15.6	1.3	5.5	8.6	7.1	2.5
HX1500W / HX1500WR	23.4	6.4	7.0	12.9	6.8	3.5
HX2000W / HX2000WR	31.2	12.6	10.0	17.1	6.0	4.5

Water heated HX air curtains have a control valve factory fitted inside the unit.

## Accessories.

Description	Part number
3 Way mid position control valve	T7260111
End Caps	Lh T7661204 Rh T7661205
EcoPower extension leads: 6m	T5951001
EcoPower extension lead: 10m	T5951050
EcoPower extension lead: 15m	T5951060
EcoPower extension lead: 30m	T5951020

# 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.

