

PSI

The solution for Industrial premises



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As green issues become more prevalent in society, industry has been tasked with saving energy in its processes as well as developing more environmentally friendly products. With the necessity for doors and goods in areas to be open for long periods of time, there is a need to provide a solution to prevent heat loss and reduce energy bills.

PSI can provide climate separation for doors up to 6m in height and at the same time provide additional comfort to employees working near open doors, and giving significant savings on energy bills.

PSI is supplied in standard widths to cover openings of 1, 1.5 or 2m and units can be joined to provide separation for wider spans.

Available as ambient, electrical or water heating PSI can fit seamlessly into your current heating system and has simple controls which can be integrated into existing door operation, the PSI offers a solution to industrial climate separation.

Water heated versions are available as either 2 row for water inlet temperatures above 70°C or 3 row coils for water inlet temperatures of less than 70°C.

Key Features

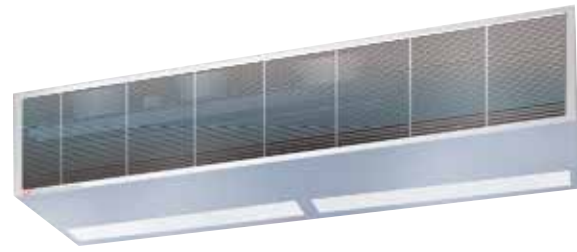


- 2 year warranty
- 6m maximum mounting height
- RAL 9010 finish as standard
- 2 row or 3 row heating coil options to cover a wide range of water temperatures
- Switch box control
- 1, 1.5 and 2m widths
- Wall brackets supplied as standard
- Fixings provided for ceiling hanging (drop rods not supplied)



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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										
PSI1000E	1000 x 700 x 400	400V~3P&N	38.3	12/24	17.5	4020	63	72	69	66
PSI1500E	1500 x 700 x 400		57.5	18/36		6000	86	74	71	68
PSI2000E	2000 x 700 x 400		76.6	24/48		8040	110	75	72	69
Water 2 row 82/71										
PSI1000W	1000 x 700 x 400	230V~1P&N	5.0	24	16.0	3675	63	72	69	66
PSI1500W	1500 x 700 x 400		7.5	36		5485	86	74	71	68
PSI2000W	2000 x 700 x 400		10.0	48		7350	110	75	72	69
Water 3 row 60/40										
PSI1000W	1000 x 700 x 400	230V~1P&N	5.0	24	15.5	3310	63	72	69	66
PSI1500W	1500 x 700 x 400		7.5	36		4935	86	74	71	68
PSI2000W	2000 x 700 x 400		10.0	48		6615	110	75	72	69
Ambient										
PSI1000A	1000 x 700 x 400	230V~1P&N	5.0	-	17.5	4020	58	72	69	66
PSI1500A	1500 x 700 x 400		7.5	-		6000	80	74	71	68
PSI2000A	2000 x 700 x 400		10.0	-		8040	110	75	72	69

Water flow rate and pressure drop

PSI Range	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 Flow Rate (l/min)	Water Pressure Drop (coil) ΔP (kPa)
PSI 1000W	31.2	6.6	17.1	13.1
PSI 1500W	46.8	15.4	25.7	17.1
PSI 2000W	62.3	27.7	34.3	22.0

Water flow rate and pressure drop calculations for different water temperatures

To calculate water flow rate and pressure drops for the 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).

Example: PSI 1500W at 85/65°C, EAT = 20°C

New water flow rate = 26.64 l/min (from Thermoscreens coil calculation programme)

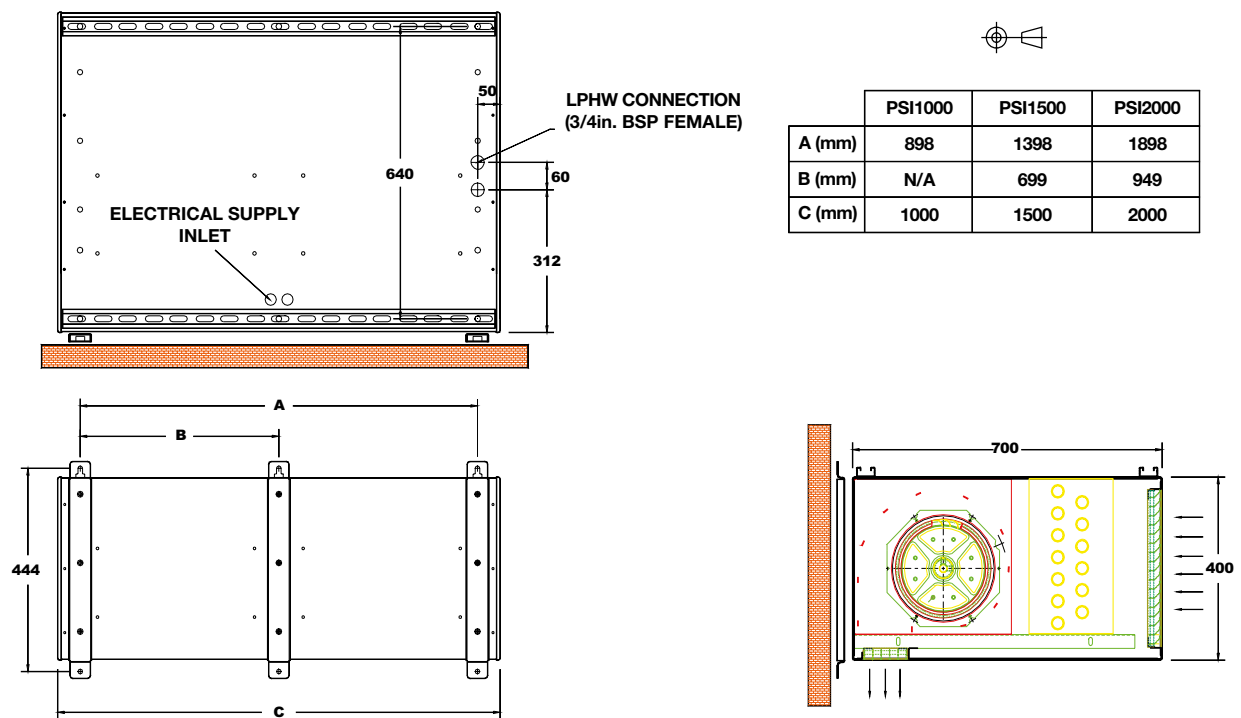
New water pressure drop (coil) = 5.1 kPa (from Thermoscreens coil calculation programme)

Conversion factors:

1 kPa = 0.102m Water column

10 l per minute = 0.6 m³/h

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Heat output on water units based on LPHW at 82°C/71°C