

A range of commercial air curtains designed for use in the entrances of shops, offices, leisure facilities, hotels, schools, hospitals and most other public buildings



### Features

- Ostro is available in 3 versions – W hydronic, E Electric and C Ambient.
- Ostro air curtains are designed for use in regions with moderate or cold climates in spaces where the temperature range is -10°C to +40°C, in conditions that are free from external contaminants such as pollen and hydrometeor (horizontal precipitation).
- In winter Ostro air curtains protect against heat loss in rooms by directing a warm air stream across doorways preventing cold air from entering the heated space. In summer, the air curtains can be used as cooling devices to prevent the entry of hot air and pollutants from the outside.
- Available in hydronic versions (Ostro W) and electric versions (Ostro E), and ambient versions (Ostro C) without a heater for applications with entrances where no additional comfort heat is required.
- There are 3 sizes, 1084mm, 1554mm and 2024mm available in all 3 versions.

### Ostro W (hydronic)

- Heat outputs from 10 - 40kW (inlet temperature of 0°C and inlet/outlet temperature of 90/70°C)
- 3 fan speeds the hydronic version is fully controllable
- Air throughput from 1200 – 4800m<sup>3</sup>/h
- Low noise levels – 61dB at maximum fan speed
- Maximum mounting height 4m

### Ostro E (electric)

- Heat output up to 14kW
- Air throughput from 1200 – 4800m<sup>3</sup>/h
- Low noise levels – 61dB at maximum fan speed
- Featuring a new type of PTC electric coil which minimises the voltage on the surface of the coil.
- Large heat exchanger surface area
- Fully automatic heat control dependent on airflow
- Auto shut-off if the airflow is compromised preventing overheating
- Low energy consumption
- Maximum mounting height 4m

### Ostro C (ambient)

- Air throughput from 1250 – 5000m<sup>3</sup>/h
- Low noise levels – 61dB at maximum fan speed
- Low energy consumption
- Maximum mounting height 4m

### Controls



#### Panel COMFORT

Control of up to two Ostro Air Curtains Curtain is managed using the COMFORT control panel, which allows adjustment of the airflow and air temperature.

#### Magnetic door switch

A magnetic door switch is available to manage Ostro Air Curtain in conjunction of the operation of the doorway.

#### BMS communication module

Ostro Air Curtains are compatible with BMS via a communication module, available as an accessory.

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### Applications

Entrances of shops, offices, leisure facilities, hotels, schools, hospitals and most other public buildings.

### Finish

Materials: EPP and steel.

End caps: grey finish. Steel main body: white finish.

### Installation

Ostro can be mounted vertically or horizontally and side by side in tandem for larger doorways. To enable the correct method of installing Ostro Air Curtain mounting brackets are available as accessories. These are available as horizontal mounting kits and vertical mounting kits.

### Specification

To specify state:

Universally mounted hydronic air curtain with 3 fan speeds and temperature control with heat output of 16kW, or 29kW or 40kW. As Smith's Ostro 100W, or Smith's Ostro 150W, or Smith's Ostro 200W

Universally mounted electric air curtain with 3 fan speeds and temperature control with heat output of 7kW, or 11kW or 14kW. As Smith's Ostro 100E, or Smith's Ostro 150E, or Smith's Ostro 200E

Universally mounted ambient air curtain with 3 fan speeds. As Smith's Ostro 100C, or Smith's Ostro 150C, or Smith's Ostro 200C

### Technical data

		Ostro W with water heater			Ostro E with electric heater		
		100W	150W	200W	100E	150E	200E
Length of unit	m	1	1.5	2	1	1.5	2
Max. installation height	m	4	4	4	4	4	4
Max air output	m <sup>3</sup> /h	1200/1550/2000	2200/3000/3600	2900/4000/4800	1200/1550/2000	2200/3000/3600	2900/4000/4800
Heat output	kW	10-16	20-29	25-40	4-7	6.5-11	8.5-14
Max working pressure	MPa	1.6	1.6	1.6	-	-	-
Diameter of connection nozzles	inches	1/2"	1/2"	1/2"	-	-	-
Motor power supply, consumption	V/Hz A	230/50 1.95A	230/50 2.6A	230/50 2.6A	230/50 1.95A	230/50 2.6A	230/50 2.6A
Motor power	kW	51/106/220	75/162/320	75/162/320	51/106/220	75/162/320	75/162/320
Electric heating power supply, consumption	V/Hz A	-	-	-	400/50 11.0A	400/50 16.6A	400/50 22.4A
Weight filled with water/without water	kg	18.0/16.5	22.6/20.5	31.0/28.0	17	21.5	29
Volume level I/II/III*	dB (A)	44/49/59	45/49/61	46/49/61	44/49/59	45/49/61	46/49/61
Protection class IP	-	IP21	IP21	IP21	IP21	IP21	IP21

		Ostro C without heater		
		100C	150C	200C
Length of unit	m	1	1.5	2
Max. installation height	m	4	4	4
Max air output	m <sup>3</sup> /h	1250/1600/2100	2250/3100/3700	3000/4200/5000
Heat output	kW	-	-	-
Max working pressure	MPa	-	-	-
Diameter of connection nozzles	inches	-	-	-
Motor power supply, consumption	V/Hz A	230/50 1.95A	230/50 2.6A	230/50 2.6A
Motor power	kW	51/106/220	75/162/320	75/162/320
Electric heating power supply, consumption	V/Hz A	-	-	-
Weight filled with water/without water	kg	15	18.5	25
Volume level I/II/III*	dB (A)	45/50/60	46/50/61	47/50/61
Protection class IP	-	IP21	IP21	IP21

\* Noise level measured in distance of 3m in an open space

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## OSTRO 100W

inlet/outlet water temperature	water 50/30 °C					water 60/40 °C					water 70/50 °C					water 80/60 °C					water 90/70 °C				
	inlet air temperature (°C)																								
III max air flow - 2000 m³/h																									
heat output (kW)	6.6	5.6	4.6	3.6	2.6	9.0	7.9	6.9	5.8	4.8	11.3	10.3	9.2	8.1	7.1	13.7	12.6	11.5	10.5	9.4	16.0	14.9	13.9	12.8	11.7
outlet air temperature (°C)	11.4	14.9	18.3	21.9	25.4	14.9	18.3	21.8	25.2	28.7	18.4	21.8	25.2	28.7	32.1	21.9	25.3	28.7	32.1	35.5	25.4	28.8	32.2	35.6	39.0
water flow (m³/h)	0.2	0.2	0.2	0.1	0.1	0.4	0.3	0.3	0.2	0.2	0.5	0.4	0.4	0.3	0.3	0.6	0.5	0.5	0.4	0.4	0.7	0.6	0.6	0.5	0.5
pressure drop (kPa)	1.0	1.0	0.6	0.6	0.3	2.0	2.0	1.0	1.0	1.0	4.0	3.0	2.0	2.0	1.0	5.0	5.0	4.0	3.0	2.0	7.0	6.0	5.0	5.0	4.0
III max air flow - 1550 m³/h																									
heat output (kW)	5.9	5.0	4.2	3.3	2.4	7.9	7.0	6.1	5.3	4.4	10.0	9.1	8.2	7.2	6.3	12.0	11.1	10.2	9.2	8.3	14.0	13.1	12.2	11.2	10.3
outlet air temperature (°C)	12.5	15.8	19.1	22.4	25.8	16.4	19.6	22.9	26.2	29.5	20.3	23.5	26.8	30.0	33.3	24.2	27.4	30.6	33.9	37.1	28.0	31.3	34.5	37.7	40.9
water flow (m³/h)	0.2	0.2	0.1	0.1	0.1	0.3	0.3	0.2	0.2	0.2	0.4	0.4	0.3	0.3	0.2	0.5	0.4	0.4	0.4	0.3	0.6	0.5	0.5	0.5	0.4
pressure drop (kPa)	1.0	1.0	0.5	0.5	0.2	2.0	2.0	1.0	1.0	0.0	3.0	2.0	2.0	1.0	1.0	4.0	3.0	3.0	2.0	2.0	6.0	5.0	4.0	4.0	3.0
III max air flow - 1200 m³/h																									
heat output (kW)	5.3	4.5	3.8	3.0	2.3	7.0	6.3	5.5	4.7	3.9	8.8	8.0	7.2	6.4	5.6	10.5	9.7	8.9	8.1	7.3	12.2	11.4	10.6	9.8	9.0
outlet air temperature (°C)	13.7	16.8	19.9	23.0	26.2	18.0	21.1	24.1	29.2	30.3	22.3	25.3	28.4	31.5	34.5	26.6	29.6	32.7	35.7	38.8	30.9	33.9	36.9	40.0	43.0
water flow (m³/h)	0.2	0.2	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.3	0.3	0.3	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.5	0.5	0.4	0.4	0.4
pressure drop (kPa)	1.0	0.8	0.5	0.5	0.2	1.0	1.0	1.0	0.7	0.6	2.0	2.0	1.0	1.0	1.0	3.0	3.0	2.0	2.0	1.0	4.0	4.0	3.0	3.0	2.0

## OSTRO 150W

inlet/outlet water temperature	water 50/30 °C					water 60/40 °C					water 70/50 °C					water 80/60 °C					water 90/70 °C				
	inlet air temperature (°C)																								
III max air flow - 3600 m³/h																									
heat output (kW)	13.5	11.7	10.0	8.2	6.4	17.4	15.6	13.8	12.1	10.3	21.3	19.5	17.7	15.9	14.1	25.1	23.3	21.6	19.7	18.0	29.0	27.2	25.4	23.6	21.8
outlet air temperature (°C)	11.9	15.4	18.9	22.5	26.0	15.1	18.6	22.1	25.7	29.2	18.3	21.8	25.3	28.9	32.4	21.5	25.0	28.6	32.0	35.6	24.7	28.2	31.7	35.2	38.7
water flow (m³/h)	0.5	0.4	0.3	0.2	0.2	0.6	0.6	0.5	0.4	0.3	0.8	0.7	0.7	0.6	0.5	1.0	0.9	0.8	0.7	0.7	1.2	1.1	1.0	0.9	0.8
pressure drop (kPa)	4.0	3.0	2.0	1.0	1.0	8.0	6.0	4.0	3.0	2.0	12.0	10.0	8.0	6.0	5.0	17.0	14.0	12.0	10.0	8.0	22.0	19.0	17.0	14.0	12.0
III max air flow - 3000 m³/h																									
heat output (kW)	12.5	10.9	9.3	7.8	6.1	16.1	14.4	12.8	11.2	9.6	19.6	17.9	16.3	14.7	13.1	23.1	21.4	19.8	18.2	16.6	26.5	24.9	23.3	21.6	20.0
outlet air temperature (°C)	12.7	16.1	19.5	22.9	26.3	16.2	19.6	23.0	26.4	29.8	19.7	23.1	26.5	29.9	33.2	23.2	26.5	29.9	33.3	36.7	26.6	30.0	33.4	36.7	40.1
water flow (m³/h)	0.4	0.4	0.3	0.2	0.2	0.6	0.5	0.4	0.4	0.3	0.7	0.7	0.6	0.5	0.5	0.9	0.8	0.8	0.7	0.6	1.1	1.0	0.9	0.8	0.8
pressure drop (kPa)	4.0	3.0	2.0	1.0	0.6	6.0	5.0	4.0	3.0	2.0	10.0	8.0	6.0	5.0	4.0	14.0	12.0	10.0	8.0	7.0	18.0	16.0	14.0	12.0	10.0
III max air flow - 2200 m³/h																									
heat output (kW)	11.0	9.7	8.4	7.0	5.7	14.0	12.6	11.3	9.9	8.6	16.9	15.5	14.2	12.9	11.5	19.8	18.4	17.1	15.7	14.4	22.7	21.3	20.0	18.6	17.3
outlet air temperature (°C)	14.2	17.4	20.6	23.7	26.9	18.2	21.3	24.5	27.7	30.9	22.1	25.3	28.5	31.6	34.8	26.1	29.2	32.4	35.6	38.7	30.0	33.1	36.3	39.5	42.6
water flow (m³/h)	0.4	0.3	0.2	0.2	0.1	0.5	0.4	0.4	0.3	0.3	0.6	0.6	0.5	0.4	0.4	0.8	0.7	0.6	0.6	0.5	0.9	0.8	0.8	0.7	0.6
pressure drop (kPa)	3.0	2.0	1.0	1.0	0.6	5.0	4.0	3.0	2.0	1.0	7.0	6.0	5.0	4.0	3.0	10.0	8.0	7.0	6.0	5.0	13.0	11.0	10.0	8.0	7.0

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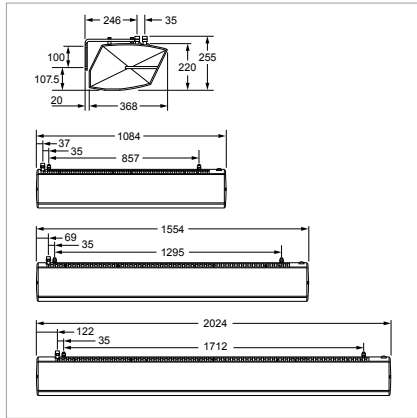
## OSTRO 200W

inlet/outlet water temperature	water 50/30 °C					water 60/40 °C					water 70/50 °C					water 80/60 °C					water 90/70 °C				
	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
III max air flow - 4800 m³/h																									
heat output (kW)	19.5	17.2	14.8	12.4	9.9	24.7	22.3	19.9	17.5	15.1	29.8	27.4	25.0	22.6	20.2	34.9	32.5	30.1	27.7	25.3	40.0	37.6	35.2	32.8	30.4
outlet air temperature (°C)	12.5	16.0	19.5	23.0	26.5	15.7	19.2	22.7	26.2	29.7	18.9	22.4	25.9	29.4	32.9	22.1	25.6	29.1	32.6	36.1	25.2	28.7	32.2	36.7	39.2
water flow (m³/h)	0.7	0.6	0.5	0.4	0.2	0.9	0.8	0.7	0.6	0.5	1.1	1.0	0.9	0.8	0.7	1.4	1.2	1.1	1.0	0.9	1.6	1.5	1.4	1.3	1.2
pressure drop (kPa)	9.0	6.0	4.0	3.0	1.0	15.0	12.0	9.0	7.0	5.0	22.0	19.0	15.0	12.0	9.0	32.0	27.0	23.0	19.0	15.0	42.0	37.0	32.0	27.0	23.0
III max air flow - 4000 m³/h																									
heat output (kW)	18.2	16.0	13.8	11.7	9.4	22.8	20.7	18.5	16.3	14.1	27.5	25.3	23.1	20.9	18.8	32.1	29.9	27.7	25.5	23.4	36.6	34.5	32.3	30.1	27.9
outlet air temperature (°C)	13.3	16.7	20.1	23.5	26.8	16.8	20.2	23.6	27.0	30.3	20.3	23.7	27.0	30.4	33.8	23.7	27.1	30.5	33.8	37.2	27.1	30.5	33.9	37.3	40.6
water flow (m³/h)	0.6	0.5	0.4	0.3	0.2	0.8	0.7	0.6	0.5	0.4	1.0	0.9	0.8	0.7	0.6	1.2	1.1	1.0	0.9	0.8	1.4	1.3	1.2	1.1	1.0
pressure drop (kPa)	7.0	5.0	4.0	2.0	1.0	12.0	10.0	7.0	5.0	4.0	19.0	16.0	13.0	10.0	8.0	26.0	22.0	19.0	16.0	13.0	35.0	30.0	26.0	22.0	19.0
III max air flow - 2900 m³/h																									
heat output (kW)	15.9	14.1	12.3	10.5	8.7	19.8	18.0	16.2	14.4	12.6	23.6	21.8	20.0	18.2	16.4	27.4	25.6	23.8	22.0	20.2	31.2	29.4	27.6	25.8	24.0
outlet air temperature (°C)	15.0	18.1	21.3	24.4	27.5	18.9	22.1	25.2	28.4	31.5	22.9	26.0	29.2	32.3	25.5	26.8	29.9	33.1	36.2	39.4	30.7	33.8	37.0	40.1	43.3
water flow (m³/h)	0.5	0.4	0.4	0.3	0.2	0.7	0.6	0.5	0.4	0.4	0.8	0.8	0.7	0.6	0.5	1.0	0.9	0.9	0.7	0.7	1.2	1.1	1.0	1.0	0.9
pressure drop (kPa)	5.0	4.0	3.0	2.0	1.0	9.0	7.0	5.0	4.0	3.0	13.0	11.0	9.0	7.0	5.0	18.0	16.0	13.0	11.0	9.0	24.0	21.0	18.0	16.0	13.0

## OSTRO 100, 150 and 200 Electric

inlet air temperature	100E					150E					200E				
	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
heat output (kW)	7.0	7.0	7.0	7.0	7.0	11.0	11.0	11.0	11.0	11.0	14.0	14.0	14.0	14.0	14.0
outlet air temperature (°C)	12	17	22	27	32	13	18	23	28	33	14	19	24	29	34

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## Ordering guide

Model	Wt (kg)	Product Codes
<b>Ostro W Hydronic</b>		
OSTRO 100W WATER EXCHANGER	18.0 / 16.5	HPAC310014
OSTRO 150W WATER EXCHANGER	22.6 / 20.5	HPAC310015
OSTRO 200W WATER EXCHANGER	31.0 / 28.0	HPAC310016
<b>Ostro E Electric</b>		
OSTRO 100E ELECTRIC EXCHANGER	17.0	HPAC310017
OSTRO 150E ELECTRIC EXCHANGER	21.5	HPAC310018
OSTRO 200E ELECTRIC EXCHANGER	29.0	HPAC310019
<b>Ostro C Ambient</b>		
OSTRO 100C WITHOUT EXCHANGER	15.0	HPAC310020
OSTRO 150C WITHOUT EXCHANGER	18.5	HPAC310021
OSTRO 200C WITHOUT EXCHANGER	25.0	HPAC310022

Accessories	Product Codes
OSTRO HORIZONTAL HOLDER SET	HPAC310023
OSTRO VERTICAL HOLDER SET	HPAC310024
1/2" STRAIGHT VALVE	HPUH310026
ACTUATOR TS LITE M30X1,5	HPUH310027
<b>Controls</b>	
TR-110L PANEL COMFORT - speed regulation & thermostat	HPUH310009
OSTRO DOOR SWITCH	HPAC310025
OSTRO AIR CURTAIN BMS MODULE	HPUH310028

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