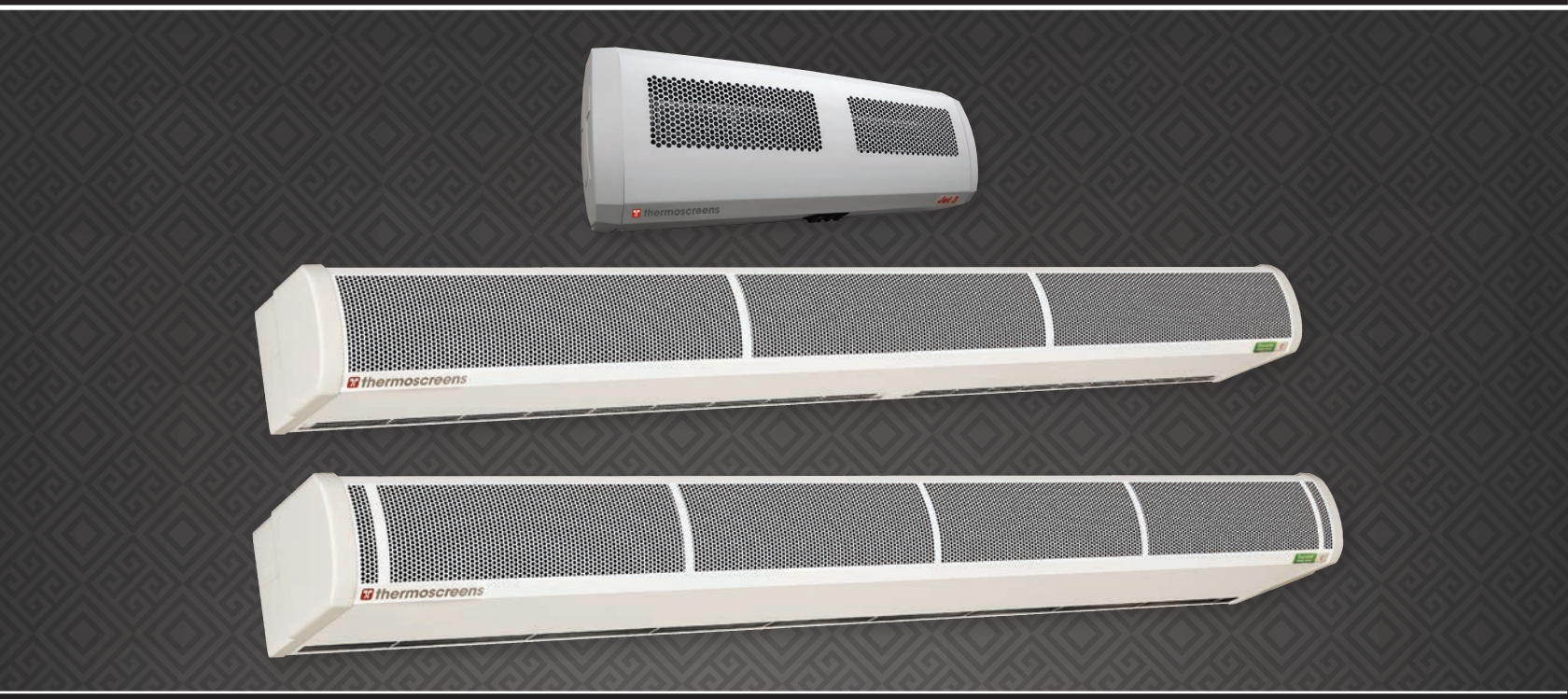
OUELLET
ELECTRIC HEATING

— THE BRAND —
of professionals

for 50 YEARS



Air Curtains
ORA Series

Thermoscreens

Partnership

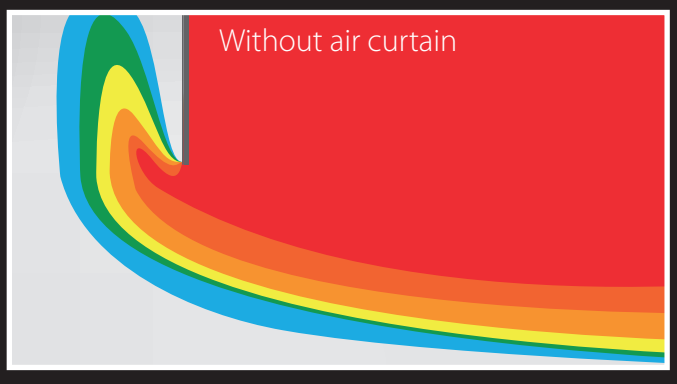
The UK manufacturer Thermoscreens® and Ouellet Canada have entered into a partnership agreement for the distribution of air curtains for commercial and public buildings. Thermoscreens® is a member of the Carver group, a company founded more than 250 years ago. The Carver group is one of the world's leading suppliers of air curtain technologies and established in more than 50 countries.

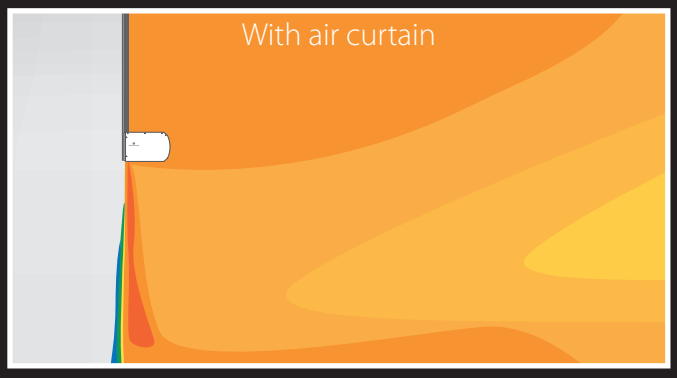
The air curtains offered by Ouellet Canada stand out for their excellent energy efficiency, ease of use and superior quality.

How an air curtain works

A building opening without an air curtain is subject to two-way air flow: warm air escapes outside at the top, while cold air enters the building at the bottom.

An air curtain creates a laminar air flow that produces a thermal barrier between two distinct environments. By blowing a uniform air flow toward the ground, the air curtain generates a climate separation, which decreases air exchange, halts the natural convection effect and temperates the warm air or cold air that enters a space.



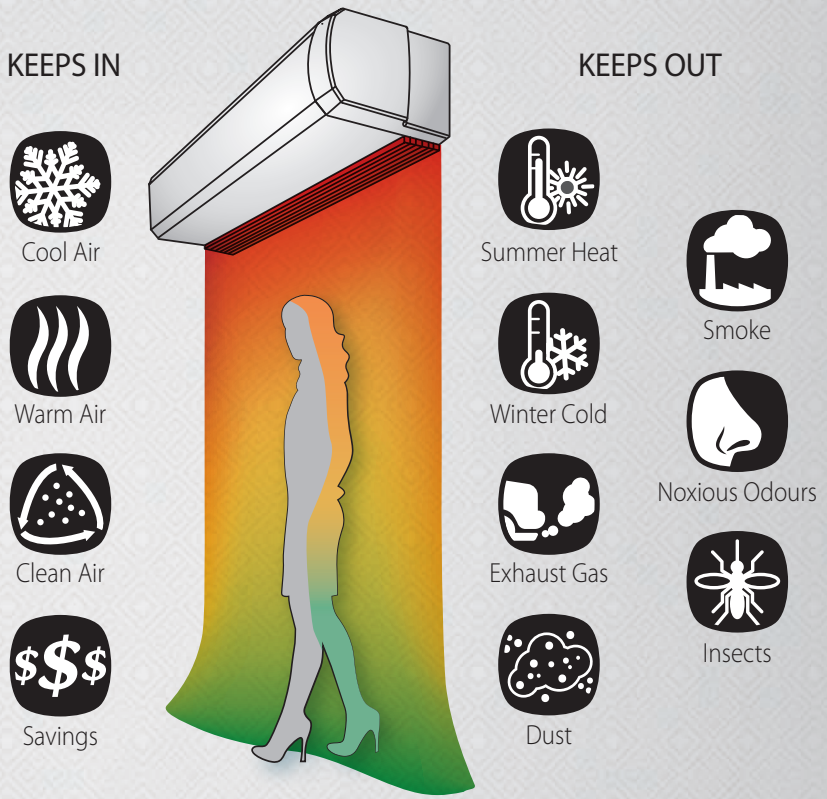


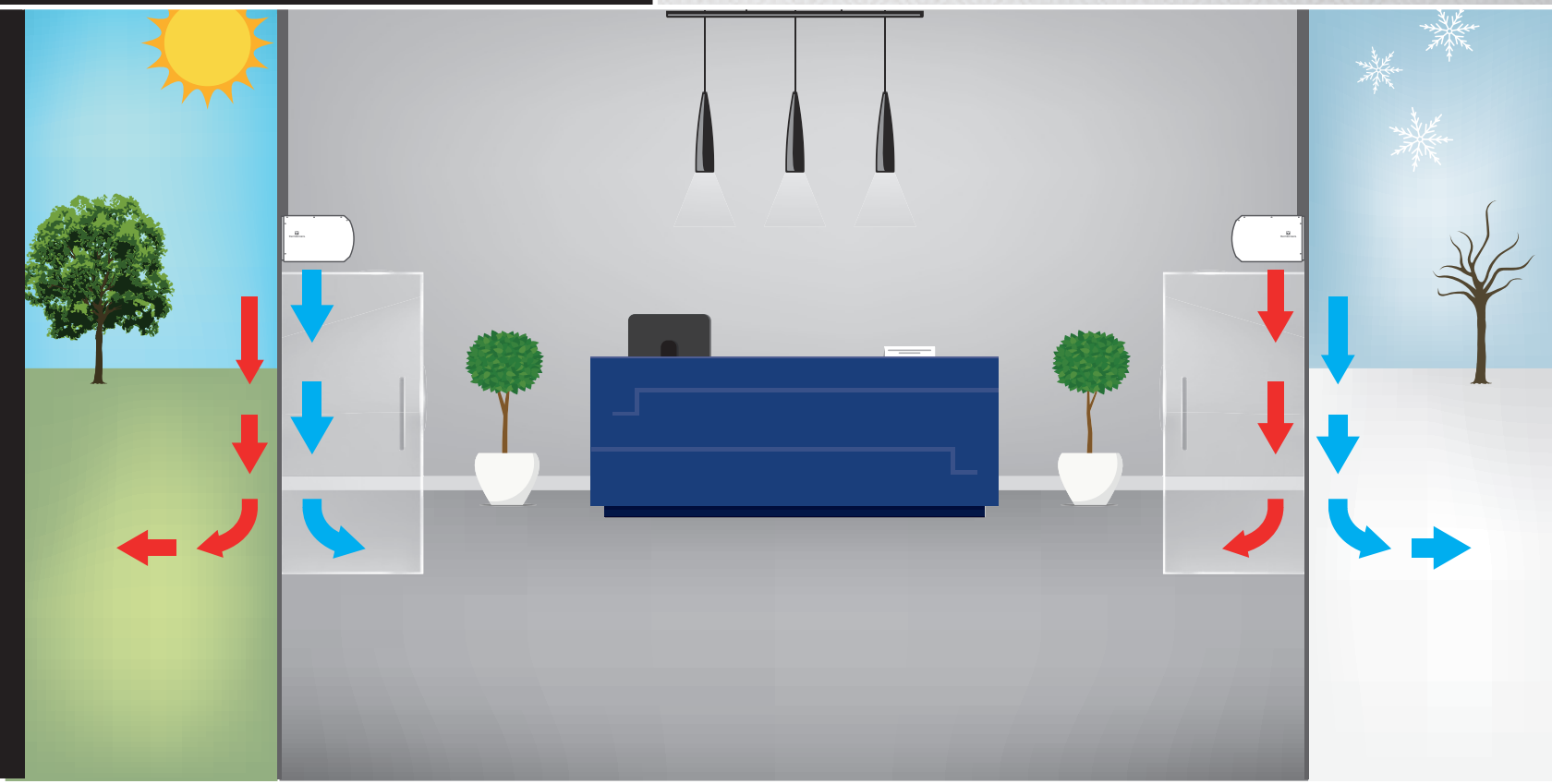
Energy savings

It is estimated that an air curtain reduces the natural convection effect by 70% and temperates 30% of outside air that enters the building. Therefore, much less energy is needed to keep the room at the temperature setpoint.

An air curtain is designed to create a thermal barrier between two environments so that the internal temperature inside the building is maintained – a relevant goal in both summer and winter.

Air curtains are an ideal solution for maintaining a comfortable environment for employees and customers. Furthermore, air curtains improve air quality by minimizing the ingress of exhaust gases, dust, smoke, bad odors and insects.

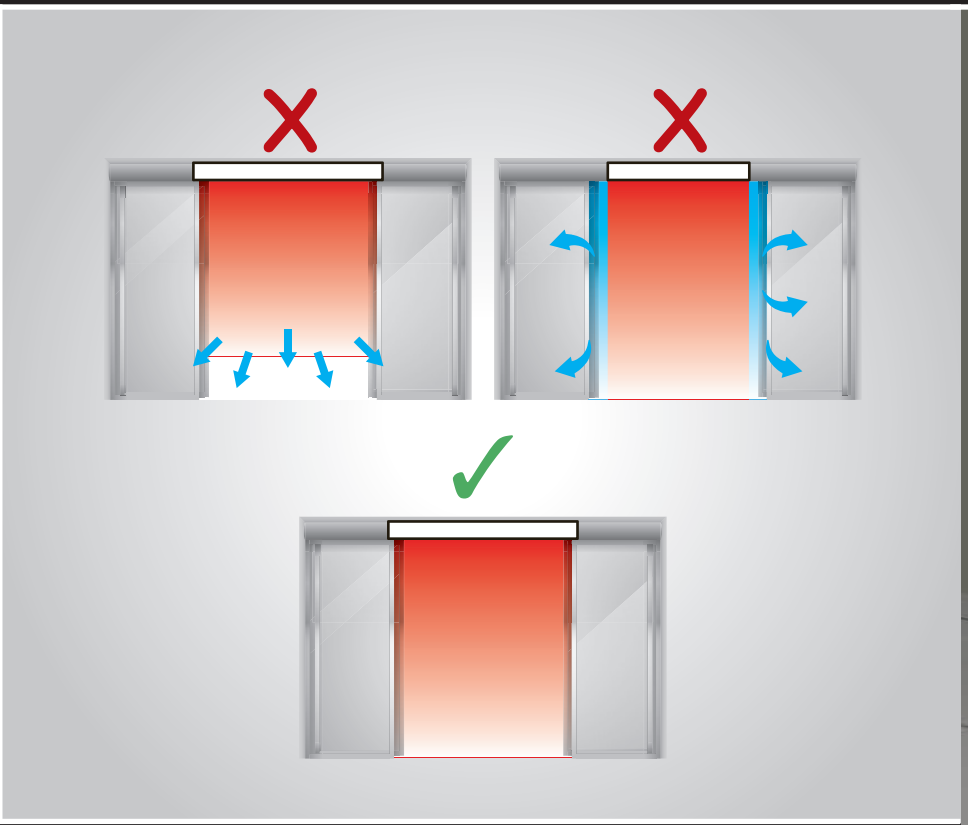




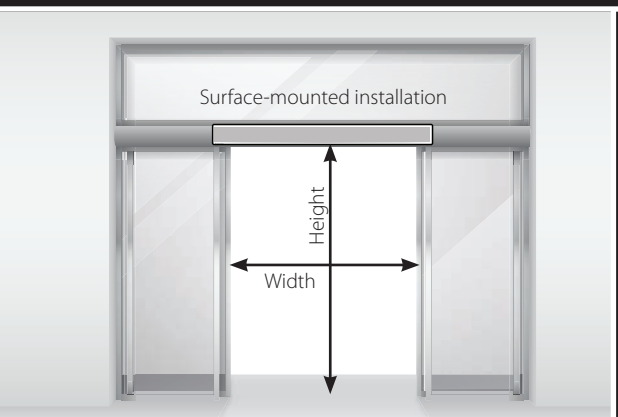
Installation

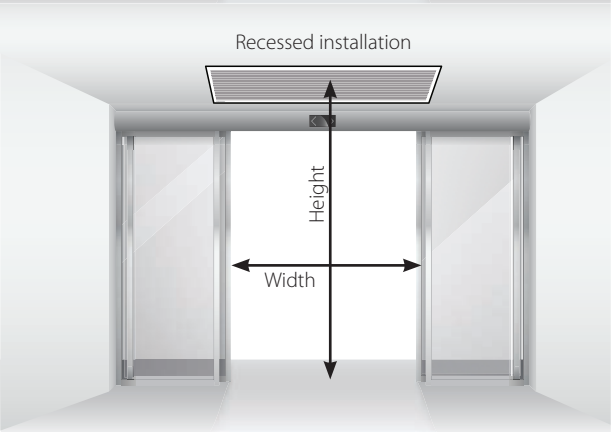
The size of the opening must always be considered when choosing an air curtain. The unit must cover the full width of the opening; it should never be smaller because air will escape from the sides, which will negate the thermal separation effect.

The unit must be installed as close to the opening as possible and must respect the maximum installation height to minimize gaps between the air flow and the opening.



Choosing the right air curtain





Choosing the appropriate air curtain for the specific application is very important for energy efficiency.

The following should be considered:

- width of the opening where the air curtain will be installed;
- installation height;
- potential air flow through the door;
- interior air pressure of the building;
- recessed or surface-mounted installation;
- power supply.

Ouellet Canada offers three air curtain ranges:

- ORA-J: Jet Drive-Through Air Curtain;
- ORA-C: C Range Commercial Air Curtain;
- ORA-HX: HX Range Commercial Air Curtain.

Features: Jet drive-through air curtain

ORA-J Series

The Jet air curtain features a high-output element and full-width air outlet to create instant heat as required.

The compact dimensions and design of this air curtain are ideal for installing above drive-through windows. The unit can be installed up to a maximum height of 1 m.

The unit is compatible with a door switch and offers the following integrated controls:

- fan switch On or Off;
- heating switch low;
- heating switch high.

Made of galvanized steel and finished in RAL 9010 (white).

Models

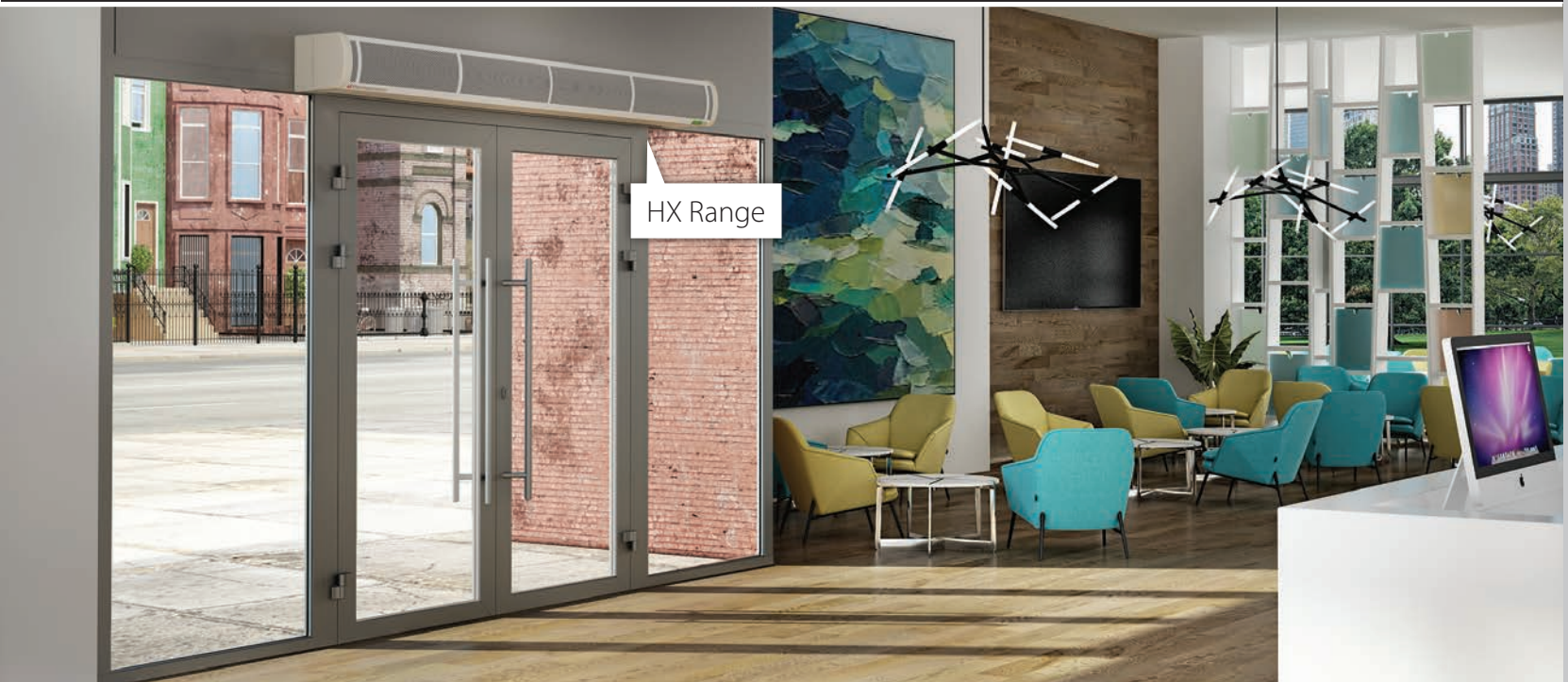
Volts (1 ph)	Product #	kW Lo/Hi	Amp.	cfm	dB(A) at 3 m	Length	
						in.	mm
208	**JET3HO**	1.13/2.25	12	120	46.5	23 5/8	600
208	**JET6**	2.46/4.91	25	220	56.0	31 1/2	800

Shared features:
C Range and HX Range commercial air curtains

C Range and HX Range air curtains are ideal for small and medium-size buildings such as entrances, hallways, restaurants, retail stores, service doors, hospitals, commercial buildings, etc.

- 2 models: electric heat or no heat;
- 2 installation types: surface-mounted or recessed;
- 3 lengths: 1 m, 1.5 m, 2 m.

The two ranges are made of galvanized steel and finished in RAL 9010 (white). Custom colors are available on request (RAL chart).



Control options:
C Range and HX Range commercial air curtains

Several control options are available thanks to Ecopower technology.

Control unit

There are two modes available:
- Manual mode for controlling the fan and heat output;
- Automatic mode using the temperature sensor in the control unit to maintain comfort levels.

Weather compensation

The outside air temperature is used as the trigger to adjust the air curtain heat output. For this option, the unit must be controlled by an outside thermostat (not included) or connected to a Building Management System (BMS).

Door switch

A door switch can be used in a heat control strategy in conjunction with a room thermostat or Building Management System (BMS).

Fan heat interlock

Allows fan speed to govern heat output (on electric heated units).

Master/Slave

Up to 8 air curtains can be controlled from a single control unit.

Operation or fault indicator light

The air curtain can produce an operation signal and/or an alarm.

Remote control

With the Modbus communication protocol, remote control is possible using a laptop and ECObus® software.

The Modbus interface provides other functionality, such as:
- control of fan and heat output levels;
- locking of wall controller buttons;
- viewing operation time;
- built-in 7-day timer module.

Note: Certain features require installation of 24LC32A EEPROMs (programmable memory).

Building management

The Ecopower control unit can also be connected to a Building Management System (BMS) for full integration with the building's control systems.

Features: C Range commercial air curtain

ORA-C Series

C Range air curtains feature a tangential fan that produces a linear air flow. The electric heating model is equipped with low-inertia wire wound elements, which are the same width as the fan.

With its compact and discreet design, the compact C Range is an affordable solution for environments where space is at a premium.

The C Range air curtain can be installed up to a maximum height of 3 m.

C Range Models - ORA-C Series

Volts (ph)	Product #[1]	kW Lo/Hi	Amp.	cfm	Max velocity (ft./min)	dBA at 3 m	Effective width of air stream	
							in.	mm
Surface-mounted								
Electric heat								
600 (3) + 208 ou 240[2]	**C1000ENTECO600V**	4.5/9	9.3	740	1500	55.0	33	838
600 (3) + 208 ou 240[2]	**C1500ENTECO600V**	6/12	12.8	1060	1500	55.0	52	1320
600 (3) + 208 ou 240[2]	**C2000ENTECO600V**	9/18	18.6	1470	1500	56.0	66	1676
480 (3) + 208 ou 240[2]	**C1000ENTECO480V**	4.5/9	10.9	740	1500	55.0	33	838
480 (3) + 208 ou 240[2]	**C1500ENTECO480V**	6/12	14.5	1060	1500	55.0	52	1320
480 (3) + 208 ou 240[2]	**C2000ENTECO480V**	9/18	21.7	1470	1500	56.0	66	1676
208 (3)	**C1000ENTECO208V**	4.5/9	27	740	1500	55.0	33	838
208 (3)	**C1500ENTECO208V**	6/12	36	1060	1500	55.0	52	1320
208 (3)	**C2000ENTECO208V**	9/18	54	1470	1500	56.0	66	1676
No heat								
208/240 (1)[3]	**C1000ANTECO208-230V**	-	0.5	740	1500	55.0	33	838
208/240 (1)[3]	**C1500ANTECO208-230V**	-	0.7	1060	1500	55.0	52	1320
208/240 (1)[3]	**C2000ANTECO208-230V**	-	1	1470	1500	56.0	66	1676
Recessed								
Electric heat								
600 (3) + 208 ou 240[2]	**C1000ERECO600V**	4.5/9	9.3	700	1500	55.0	33	838
600 (3) + 208 ou 240[2]	**C1500ERECO600V**	6/12	12.8	1020	1500	55.0	52	1320
600 (3) + 208 ou 240[2]	**C2000ERECO600V**	9/18	18.6	1400	1500	56.0	66	1676
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208 (3)	**C1000ERECO208V**	4.5/9	27	740	1500	55.0	33	838
208 (3)	**C1500ERECO208V**	6/12	36	1060	1500	55.0	52	1320
208 (3)	**C2000ERECO208V**	9/18	54	1470	1500	56.0	66	1676
No heat								
208/240 (1)[3]	**C1000ARECO208-230V**	-	0.5	740	1500	55.0	33	838
208/240 (1)[3]	**C1500ARECO208-230V**	-	0.7	1060	1500	55.0	52	1320
208/240 (1)[3]	**C2000ARECO208-230V**	-	1	1470	1500	56.0	66	1676

[1] *To order any custom colors from the RAL chart, add "SP" at the end of the Product # and specify RAL color # on the order. Contact our customer service department for lead times.*

[2] **IMPORTANT: 600V and 480V models need 2 power sources (E.g.: 600V+208V or 230V) or an external transformer (E.g.: 600V/240V).**
The VA requirement varies between models: C1000 = 200VA, C1500 and C2000 = 350VA.

[3] *Maximum installation height when connected to 208V is 2.6 m.*

Features: HX Range commercial air curtain

ORA-HX Series

The HX range features several squirrel-cage fans. In the electric heating model, each of these fans has its own heating element. The unit also features a Venturi effect air shaft and washable filters.

The HX Range is an ideal solution for areas where:

- noise levels must be kept to a minimum;
- the heating capacity is high;
- the exterior environment is unpleasant.

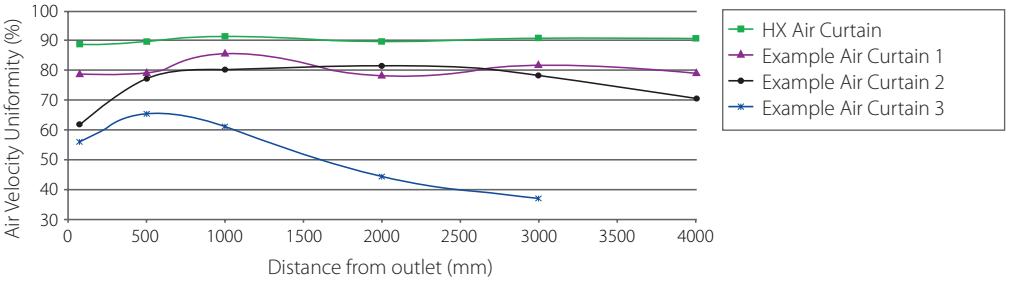
It can be installed up to a maximum height of 3.5 m.

HX Range: Exceptionnal performance

All air curtains without Ecopower technology can achieve air velocity uniformity of 40% to 60%. A superior-quality air curtain can achieve 80% uniformity. The HX Range achieves an exceptional 90% uniformity when measured against the ISO 27327-1 test requirements.

Comparison of data

(from ISO 27327-1 performance tests)



HX Range Models - ORA-HX Series

Volts (ph)	Product #[1]	kW Lo/Hi	Amp.	cfm	Max velocity (ft./min)	dBA at 3 m	Effective width of air stream in.	Effective width of air stream mm
Surface-mounted								
Electric heat								
600 (3) + 208 ou 240[2]	**HX1000ENTECO600V**	6/12	13	900	1500	60/58/54	43	1100
600 (3) + 208 ou 240[2]	**HX1500ENTECO600V**	12/18	19.3	1315	1500	60/56/53	64	1630
600 (3) + 208 ou 240[2]	**HX2000ENTECO600V**	12/24	25.9	1735	1500	60/58/54	85	2150
480 (3) + 208 ou 240[2]	**HX1000ENTECO480V**	6/12	15.9	900	1500	60/58/54	43	1100
480 (3) + 208 ou 240[2]	**HX1500ENTECO480V**	12/18	23.7	1315	1500	60/56/53	64	1630
480 (3) + 208 ou 240[2]	**HX2000ENTECO480V**	12/24	31.7	1735	1500	60/58/54	85	2150
208 (3)	**HX1000ENTECO208V**	6/12	36	790	1500	58/54/50	43	1100
208 (3)	**HX1500ENTECO208V**	12/18	54	1155	1500	58/52/49	64	1630
208 (3)	**HX2000ENTECO208V**	12/24	72	1520	1500	58/54/50	85	2150
No heat								
208/240 (1)[3]	**HX1000ANTECO208-230V**	-	1.4	900	1500	60/58/54	43	1100
208/240 (1)[3]	**HX1500ANTECO208-230V**	-	2.0	1315	1500	60/56/53	64	1630
208/240 (1)[3]	**HX2000ANTECO208-230V**	-	2.8	1735	1500	60/58/54	85	2150
Recessed								
Electric heat								
600 (3) + 208 ou 240[2]	**HX1000ERECO600V**	6/12	13	900	1500	60/58/54	43	1100
600 (3) + 208 ou 240[2]	**HX1500ERECO600V**	12/18	19.3	1315	1500	60/56/53	64	1630
600 (3) + 208 ou 240[2]	**HX2000ERECO600V**	12/24	25.9	1735	1500	50/58/54	85	2150
480 (3) + 208 ou 240[2]	**HX1000ERECO480V**	6/12	15.9	900	1500	60/58/54	43	1100
480 (3) + 208 ou 240[2]	**HX1500ERECO480V**	12/18	23.7	1315	1500	60/56/53	64	1630
480 (3) + 208 ou 240[2]	**HX2000ERECO480V**	12/24	31.7	1735	1500	50/58/54	85	2150
208 (3)	**HX1000ERECO208V**	6/12	36	790	1500	58/54/50	43	1100
208 (3)	**HX1500ERECO208V**	12/18	54	1155	1500	58/52/49	64	1630
208 (3)	**HX2000ERECO208V**	12/24	72	1520	1500	58/54/50	85	2150
No heat								
208/240 (1)[3]	**HX1000ARECO208-230V**	-	1.4	900	1500	60/58/54	43	1100
208/240 (1)[3]	**HX1500ARECO208-230V**	-	2	1315	1500	60/56/53	64	1630
208/240 (1)[3]	**HX2000ARECO208-230V**	-	2.8	1735	1500	60/58/54	85	2150

[1] *To order any custom colors from the RAL chart, add "SP" at the end of the Product # and specify RAL color # on the order. Contact our customer service department for lead times.*

[2] **IMPORTANT: 600V and 480V models need 2 power sources (E.g.: 600V+208V or 230V) or an external transformer (E.g.: 600V/240V).**
The VA requirement varies between models: HX1000 = 500VA, HX1500 = 750VA and HX2000 = 1000VA.

[3] *Maximum installation height when connected to 208V is 3 m.*

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