



Design air curtain for entrances

Portier is an exclusive air curtain in brushed stainless steel intended for entrance doors in e.g. shops, banks, hotels and restaurants. The elegant design of the air curtain makes it particularly suitable for environments where demands are made on a high standard of design. Its recommended installation height is 2,5 m.

Create comfort

Adjustable outlet grille makes it possible to direct the air for optimum air curtain effect. For the protection of wider openings, several units can be mounted next to each other using a joining kit.

Installation options

Simple suspension using fixing nuts on the upper side for installation with wall brackets, suspension kit or wire/ threaded rod.




High performance

Frico air curtains are developed and manufactured in Sweden. The air curtains are tested in one of the most modern and advanced air and sound laboratories in Europe which means that we can guarantee a high performance product.

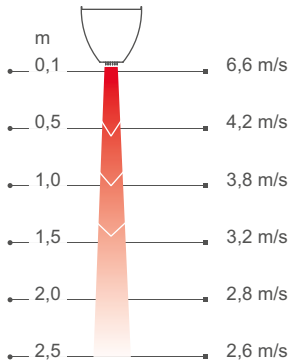
Portier



Available in 2 versions:

-  Ambient (without heat)
-  Electrical heating
-  Recommended installation height for entrances: 2,5 m

Air velocity profile



Measurements according to ISO 27327-1. Average values for products in the series.

Frico air curtains create an invisible barrier at openings and doors which separates different temperature zones without limiting access for people and vehicles. Thermozone technology creates a highly uniform air barrier with a perfect balance between air volume and air velocity, regardless of whether it is the heat or the cold that you want to keep inside. The adjustable outlet grille makes it possible to direct the air for an optimal air curtain effect.



Great energy savings

In many premises doors remain open for a significant part of the day, this results in huge losses of expensively heated or cooled air, especially when the temperature difference between outdoor and indoor air is great. With correctly installed air curtains great energy savings can be obtained.

Comfortable indoor climate

Air curtains with Thermozone technology have optimized performance to provide a comfortable indoor climate free from draughts. The air curtain also keeps out emissions and insects.

Low sound level

With Thermozone technology Frico manufactures air curtains with very high airflow performance. This does not just make the air curtain more efficient, but also has other advantages such as extremely low sound levels and reduced turbulence.

Technical specifications

🌀 Ambient, no heat - Portier A (IP21)

Voltage motor: 230V~

Item number	Type	Output [kW]	Airflow [m ³ /h]	Sound power* ¹ [dB(A)]	Sound pressure* ² [dB(A)]	Amperage [A]	Length [mm]	Weight [kg]
2163	PS210A	0	1000/1300	70	44/54	0,45	1020	14
2351	PS215A	0	1300/2000	72	46/56	0,55	1530	20

⚡ Electrical heat - Portier E (IP21)

Item number	Type	Output steps [kW]	Airflow [m ³ /h]	Δt* ³ [°C]	Sound power* ¹ [dB(A)]	Sound pressure* ² [dB(A)]	Voltage [V]	Amperage [A]	Length [mm]	Weight [kg]
2164	PS210E03	1,5/3	950/1200	10/8	66	44/50	230V~/400V3N~* ⁴	13,4/4,8	1020	17
2140	PS210E06	3/6	950/1200	19/15	66	44/50	400V3N~* ⁴	9,2	1020	17
2077	PS210E09	4,5/9	950/1200	28/23	66	44/50	400V3N~* ⁴	13,5	1020	17
2085	PS215E09	4,5/9	1200/1900	23/14	66	39/50	400V3N~* ⁴	13,5	1530	24
2079	PS215E14	6,7/13,5	1200/1900	34/21	66	39/50	400V3~ + 230V~	20,0	1530	24

*¹) Sound power (L_{WA}) measurements according to ISO 27327-2: 2014, Installation type E.

*²) Sound pressure (L_{pA}). Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m². At lowest/highest airflow.

*³) Δt = temperature rise of passing air at maximum heat output and highest airflow.

*⁴) Alternative 400 V3~ + 230 V~ (operating supply) if the current is greater than 16 A. Applies when connecting several units.

Approved for 220V/1ph/60Hz and 380V/3ph/60Hz. Product performance for 220V/1ph/60Hz and 380V/3ph/60Hz will differ from stated data.

Manufactured in Sweden. Housing in brushed stainless steel. Colour outlet grille and ends: black, RAL 9005.



🌀 Unit without heating

Level 1

Airflow is set manually.

Control kit:

- CB20, control box, 2 fan steps.

Level 2

Airflow is set manually. The door contact regulates the airflow on/off.

Control kit:

- CB20, control box, 2 fan steps.
- MDC, magnetic door contact with a time relay.

⚡ Unit with electrical heating

Level 1

Airflow is set manually. The room thermostat controls the heat output in two steps.

Control kit:

- CB22, control box, 2 fan steps and 2 heating steps.
- RTI2, electronic 2-step thermostat.

Level 2

Airflow and heat output are controlled automatically based on the opening of the door and the room temperature. When the door is open the fan runs at high speed, when the door closes the fan will continue to run at high speed for the desired time (2s-10 min.) set on MDC. When the door is closed the fan runs at low speed if there is a need for heating, if not the fan is switched off.

The room thermostat controls the heat output. E.g. the thermostat is set on 23 °C and the difference between the steps 4 °C. The thermostat will activate below 19 °C when the door is closed. When the door opens, the thermostat will activate below 23 °C and normally the heat is switched on.

Control kit:

- CB22, control box, 2 fan steps and 2 heating steps.
- MDC, magnetic door contact with a time relay.
- RTI2, electronic 2-step thermostat.



Mounting

The recommended installation height of Portier is 2,5 m. The air curtain is installed horizontally with the outlet air grille facing downwards as close to the door as possible.

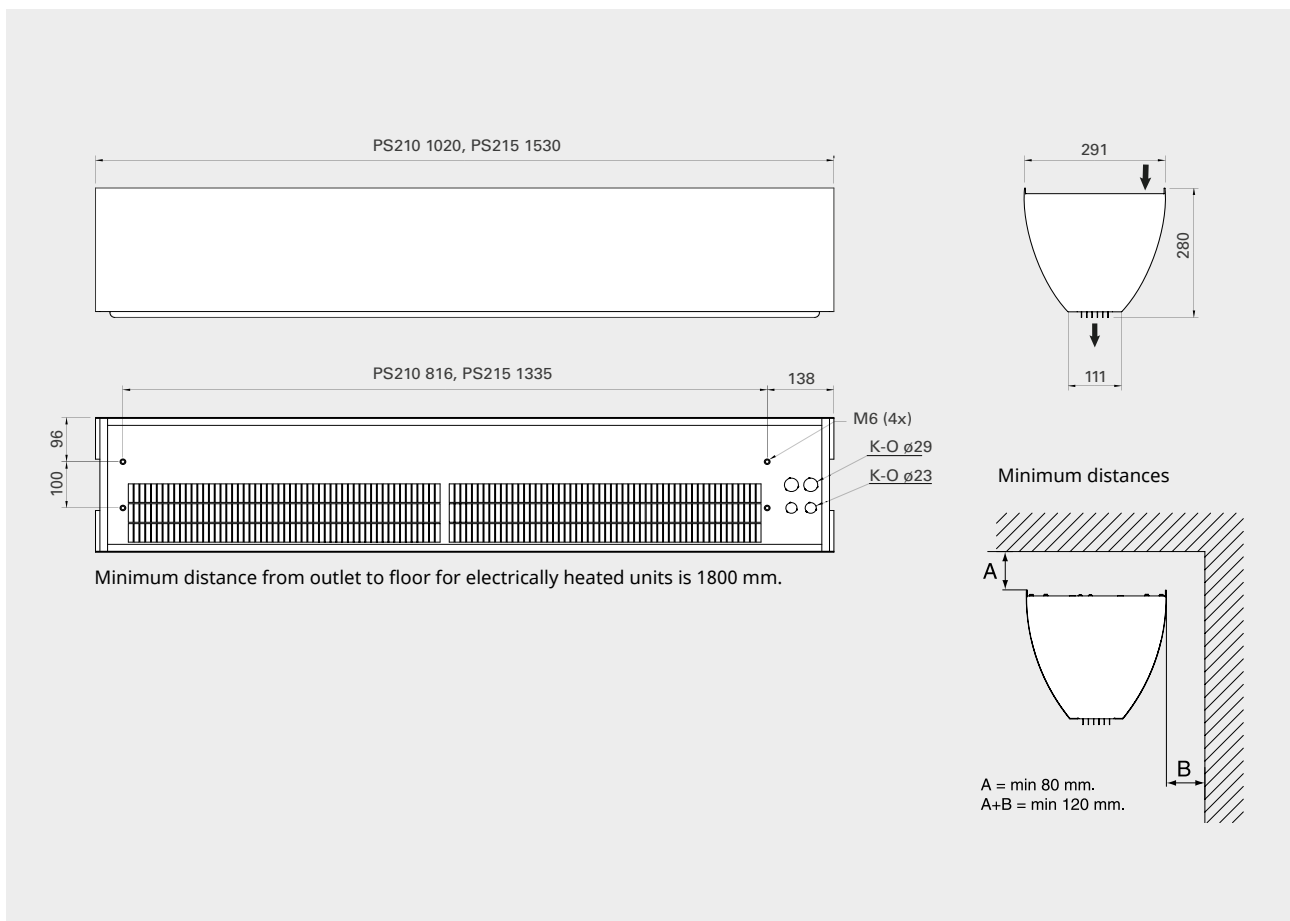
Numerous installation options are available: wall mounting with the wall mounting kit or ceiling mounting with pendulum mounting kit and suspension bracket. The air curtain can be suspended from wires or threaded rods.

Minimum distance from outlet to floor for electrically heated units is 1800 mm.

For the protection of wider openings, several units can be mounted next to each other using a joining kit.

Connection

The electrical connection is made on the top of the unit. Control (230V~) and power supply for heat (400V3~) should be connected to a terminal block in the terminal box. For units with electrical heating, power and control should be supplied separately.





CB20, control box

Controls the airflow in 2 steps. Can control several units. Max input 12 A. IP44.



CB22, control box

Controls the airflow in 2 steps and heat output in 2 steps. Can control several units. Max input 10 A. IP44.



RTI2, electronic 2-step thermostat

Processor controlled 2-step thermostat with concealed dial. Setting range +5 – +35 °C. Connection voltage 230 V (two potential free contacts). Max. breaking current: 16/10 A (230/400 V). IP44.



MDC, magnetic door contact with time relay

Starts the air curtain or increases from low to high speed when the door is opened. When the door is closed, the fan continues to run for the preset time (2 s–10 min). This prevents the fan from starting/stopping continuously and is especially suitable for doors that are frequently opened. Three alternating volt-free contacts 10 A, 230 V~ activated when the contacts make. A MDCDC is included in MDC. IP44.

Item number	Type	Used for	Consists of
10737	CB20	PS210A/15A	1
10738	CB22	PS210E/15E	1
10231	RTI2	PS210E/15E	1
11600	MDC	PS210A/15A/10E/15E	1

Accessories - mounting



P2WB, wall mounting kit

Used for installing unit horizontally on a wall. Consists of wall brackets and mounting parts.



P2JK, joining kit

Used to join horizontal units together for a sleek and unified installation. Consists of joint bracket and mounting parts.



ADPK1, suspension kit

The hanging brackets are covered by a white plastic trim to cover the cables. The brackets may be cut to shorter length, if required.



ADPF1, suspension brackets

Ceiling brackets for installing the unit from the ceiling using wires or threaded bars (not included). Consists of 4 brackets, 2 for the unit and 2 for the ceiling.

Item number	Type	Used for	Consists of
10695	P2WB	PS210A/15A/10E/15E	2
10696	P2JK	PS210A/15A/10E/15E	1
10727	ADPK1	PS210A/15A/10E/15E	2
10728	ADPF1	PS210A/15A/10E/15E	4