

PA2200C

FRICO



Stylish air curtain for entrances, with remote and integrated control

PA2200C is a compact air curtain, suitable for most small entrances. The air curtain has an integrated control system and can also be remote controlled which makes it very easy to install and use. Its recommended installation height is 2,2 m. The air curtain is available for horizontal installation with wall brackets included. The front is easy to remove, which facilitates installation and allows easy maintenance.

Leading technology and design

Frico collaborates with leading architects and product designs in the product development. The air curtains blends in well in the environment and the designed for fit into both exclusive shop interiors as industrial environments.

Plug & play

The air curtain has a control panel discretely integrated in the gable end and can be controlled by a separate remote control.

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.

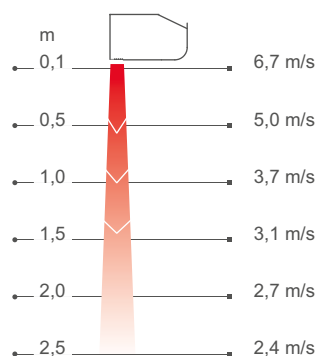
PA2200C



Available in 3 versions:

- 🌀 Ambient (without heat)
- ⚡ Electrical heating
- 💧 Water heating

Air velocity profile



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

PA2200C

Frico's Thermozone technology optimizes the air curtain



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.



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 drafts. 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 effective, but also has other advantages such as extremely low sound levels and reduced turbulence.

Create the optimal solution to suit your specific needs

After you selected the air curtain to suit your specific needs (ambient, electrical heating, water heating) and length 1, 1.5, or 2 m you assemble your control and accessory options:

Accessories - Control options

Motor alarm board or Door switch control .



Add valve system

Water heated units must be supplemented with a valve system.



Select mounting options

Add mounting accessories if needed.



🌀 Ambient, no heat - PA2200C A (IP21)

Voltage motor: 230V~

Item number	Type	Output [kW]	Airflow* ¹ [m³/h]	Sound power* ² [dB(A)]	Sound pressure* ³ [dB(A)]	Amperage motor [A]	Length [mm]	Weight [kg]
8051	PA2210CA	0	900/1200	67	42/51	0,45	1050	16
8220	PA2215CA	0	1150/1800	67	40/52	0,5	1560	24
8659	PA2220CA	0	1800/2400	68	43/53	0,9	2050	32

⚡ Electrical heat - PA2200C E (IP20)

Item number	Type	Output steps [kW]	Airflow* ¹ [m³/h]	Δt * ⁴ [°C]	Sound power* ² [dB(A)]	Sound pressure* ³ [dB(A)]	Amperage motor [A]	Voltage [V] Amperage [A] (heat)	Length [mm]	Weight [kg]
8040	PA2210CE03	2/3	900/1200	10/7,5	67	42/51	0,45	230V~/13	1050	17
8042	PA2210CE05	3,3/5	900/1200	17/12,5	67	42/51	0,45	400V3~/7,2	1050	17
19422	PA2210CE08	5/8	900/1200	27/20	67	42/51	0,45	400V3~/11,5	1050	18
8158	PA2215CE08	4/8	1150/1800	21/13	67	40/52	0,5	400V3~/11,5	1560	26
8668	PA2215CE12	8/12	1150/1800	31/20	67	40/52	0,5	400V3~/17,3	1560	28
8454	PA2220CE10	5/10	1800/2400	17/12,5	69	43/53	0,9	400V3~/14,4	2050	34
8749	PA2220CE16	10/16	1800/2400	27/20	69	43/53	0,9	400V3~/23,1	2050	36

💧 Water heat - PA2200C W (IP21)

Item number	Type	Output* ⁵ [kW]	Airflow* ¹ [m³/h]	Δt * ^{4,5} [°C]	Water volume [l]	Sound power* ² [dB(A)]	Sound pressure* ³ [dB(A)]	Amperage motor [A]	Length [mm]	Weight [kg]
8052	PA2210CW	7	700/1200	21/17	0,38	67	39/52	0,4	1050	17
8222	PA2212CW	11	1000/1750	23/18	0,81	68	37/53	0,5	1560	26
8660	PA2220CW	14	1400/2400	22/18	0,74	68	40/53	0,8	2050	35

*¹) Lowest/highest airflow of totally 3 fan steps.

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

*³) Sound pressure (L_{pA}). Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m². At lowest/highest airflow.

*⁴) Δt = temperature rise of passing air at maximum heat output and lowest/highest airflow.

*⁵) Applicable at water temperature 80/60 °C, air temperature, in +18 °C.

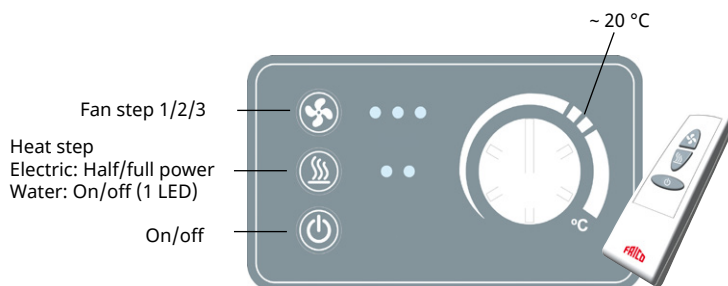


Manufactured in Sweden with a corrosion proof housing made of hot zinc-plate and powder coated steel panels. Plastic ends. Colour front: white, RAL 9016, NCS S 0500-N. Colour grille, rear section, ends and brackets: grey, RAL 7046.

Controls

⚡ Unit with electrical heating

💧 Unit with water heating



- Remote control.
- Integrated control panel on end of unit
 - 3 fan steps, 2 electrical heating steps (electrical), heating on /off (water).
- Manual regulation of the fan.
- Automatic heating control.

🌀 Unit without heating



- Remote control.
- Integrated control panel on end of unit
 - 3 fan steps.
- Manual regulation of the fan.



Mounting

The recommended installation height of PA2200C is 2,2 m. The air curtain is installed horizontally with the outlet air grille facing downwards as close to the door as possible. The unit can be mounted with included wall brackets or be supplemented with accessories for mounting from the ceiling.

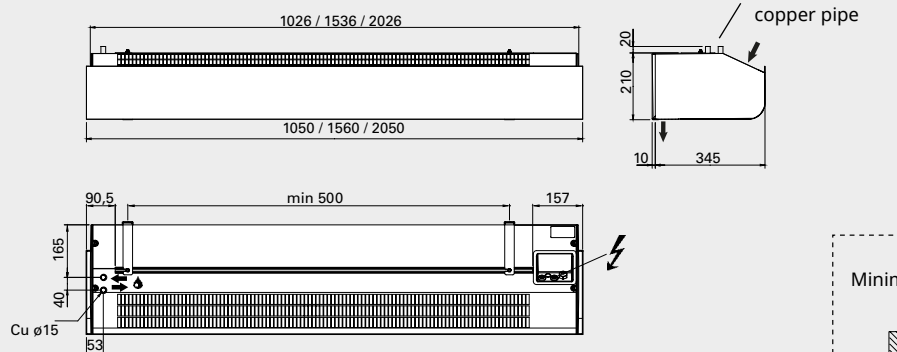
Connection

The front is easy to remove, which facilitates installation and allows easy maintenance.

Units without heat and with water heat are connected with 1,5 m cord and plug. The electrical connection is made on the top of the unit. The 3 kW unit is connected via the integrated control card using a 1,5 m cable and plug. Other units are intended for permanent installation. Control (230V~) and power supply for heat (400V3~) should be connected to a terminal block in the terminal box.

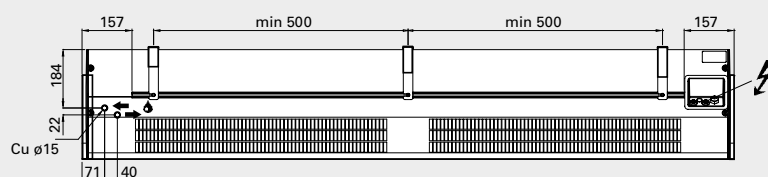
Water heated units are connected to the water system on top of the unit. Flexible hoses are available as accessories. Water heated units must always be supplemented with a valve kit mounted outside the unit. See Valves and Accessories.

All models

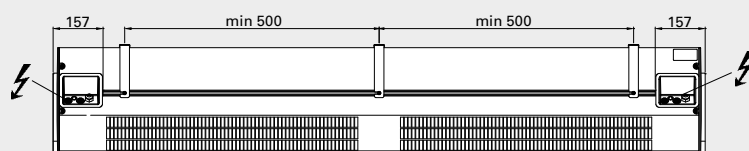


2 metre units

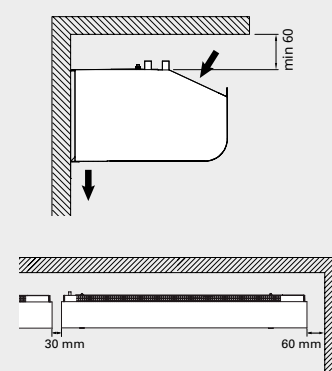
Unit without heating or with water heating



Unit with electrical heating



Minimum distances



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

PA2200C



Accessories - Control options

PAMLK, motor alarm board

Accessory allows connection for a motor alarm signal in units where this facility is not already available. PAMLK plugs between motor wiring harness and main PC board. Use potential free contact on PAMLK board.

PA2DR, door switch control

Contains a door switch for door indication and a special remote control intended to activate auto mode in the unit.

Item number	Type	Used for	Consists of
18690	PAMLK	PA2210C/2215C/2220C	1
15662	PA2DR	PA2210C/2215C/2220C	1

Accessories - mounting



PA2PF, ceiling mounting brackets

Mountings for installing the unit in the ceiling using hanging brackets or threaded bars (not included).

PA34TR, threaded bars

Threaded bars for installing unit on to a ceiling. Length 1 m. Used together with ceiling mounting brackets PA2PF.

PA2P, hanging brackets

Hanging brackets for installing the unit suspended from the ceiling. Length 1 m. The hanging brackets are covered by a white plastic trim to cover the cables. The brackets may be cut to shorter length, if required. Used together with ceiling mounting brackets PA2PF.

Item number	Type	Used for	Consists of
19415	PA2PF15	PA2210C/2215C	4
19417	PA2PF20	PA2220C	6
18056	PA34TR15	PA2210C/2215C	4
18057	PA34TR20	PA2220C	6
19568	PA2P15	PA2210C/2215C	2
19569	PA2P20	PA2220C	3

Water heated units must be supplemented with valves. The valve system controls the water flow and activates maximum heat only when needed. By activating the built-in bypass feature, a small leakage flow is let through to make sure there is always hot water in the heating coil, providing frost protection and faster heating.



VLSP, pressure independent valve system on/off

Two way pressure independent control and adjustment valve with on/off actuator, shut-off valve and bypass. DN15/20/25/32. 230V.

VOT, three way control valve and actuator on/off

3-way control valve with on/off actuator, DN15/20/25. 230V.

The valve kit consists of the following:

TRVS, 3-way control valve

SD230, actuator on/off 230V

Item number	Type	Dimension valves	Flow range l/s
79379	VLSP15LF	DN15	0,012 - 0,068
79380	VLSP15NF	DN15	0,024 - 0,13
79381	VLSP20	DN20	0,058 - 0,32
79382	VLSP25	DN25	0,10 - 0,60
19031	VOT15	DN15	
19032	VOT20	DN20	
19033	VOT25	DN25	

Accessories - water heated units



FHDN15, flexible hoses

Flexible hoses for easy and practical installation of water heated unit. Used together with water connection kit PAWAK or similar. DN15, inside thread, 90° bend.



PA2EF, external intake filter

Fine mesh filter that prevents ingress of dirt and deposits to water heated units. The filter is easy to attach and remove thanks to the integrated magnetic strips. Makes maintenance easier since the unit does not need to be opened.



PAWAK15, water connection kit

Kit with pipe connections with compression fitting on one end and outside thread (1/2" DN15) on the other to facilitate the connection of the plain copper pipes at the water coil.

Item number	Type	Used for	Consists of
77179	FHDN15	PA2210CW/2215CW/2220CW	2
14875	PA2EF10	PA2210CW	1
14876	PA2EF15	PA2215CW	1
14877	PA2EF20	PA2220CW	1
27279	PAWAK15	PA2210CW/2215CW/2220CW	1