

AR3200C

FRICO



Recessed air curtain for commercial premises, with remote and integrated control

AR3200C is a compact air curtain intended for recessed mounting in commercial buildings and small industrial entrances. Recommended installation height for ambient and electrically heated units is 3,2 metres and recommended installation height for water heated unit is 2,8 metres. The air curtain has an integrated control system and can also be remote controlled which makes it very easy to install and use.

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.

Reduced dimensions and integrated frame

Thanks to small dimensions and an integrated frame, AR3200 is very easy to install. The frame and hatch can be finished in any colour to perfectly match the environment.

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.

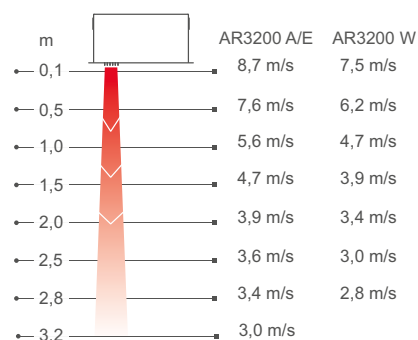
AR3200C



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.

AR3200C

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 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.

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

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 - AR3200C 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]
48350	AR3210CA	0	1000/1800	73	43/57	0,7	1078	29
48354	AR3215CA	0	1600/2900	73	43/57	1,3	1588	40
48358	AR3220CA	0	2100/3900	76	44/60	1,6	2078	55

⚡ Electrical heat - AR3200C 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]
48346	AR3210CE03	2/3	1000/1800	9/5	73	43/57	0,7	230V~/13	1078	30
48347	AR3210CE05	3,3/5	1000/1800	15/8	73	43/57	0,7	230V~/21,7 400V3N~/7,2	1078	30
48348	AR3210CE08	5/8	1000/1800	24/13	73	43/57	0,7	400V3N~/11,6	1078	31
48351	AR3215CE08	4/8	1600/2900	15/8	73	43/57	1,3	400V3N~/11,6	1588	41
48352	AR3215CE12	8/12	1600/2900	22/12	73	43/57	1,3	400V3N~/17,3	1588	42
48355	AR3220CE10	5/10	2100/3900	14/8	76	44/60	1,6	400V3N~/14,5	2078	57
48356	AR3220CE16	10/16	2100/3900	23/12	76	44/60	1,6	400V3N~/23,1	2078	59

💧 Water heat - AR3200C 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]
48349	AR3210CW	8,2	1000/1500	19/16	1,1	69	44/53	0,6	1078	30
48353	AR3215CW	14	1700/2600	19/16	1,7	72	48/56	1,0	1588	41
48357	AR3220CW	18	2500/3150	18/17	2,3	72	50/56	1,2	2078	56

*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 60/40 °C, air temperature, in +18 °C.

Manufactured in Sweden with a frame and hatch made of hot zinc-plate and powder coated steel panels. Colour frame and hatch: white, RAL 9016. Colour grille: grey, RAL 7046. The frame and hatch can be painted in an optional colour.

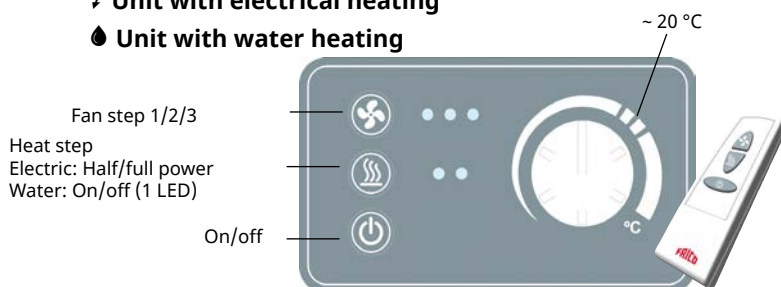


Controls

The control system is integrated in the air curtain. The air curtain can be regulated with a remote control or by the control panel placed inside the service hatch. The air speed is set manually. The heat is controlled automatically. Door switch control PA2DR is available as an accessory for a door switch function. Possibility of using external on/off.

⚡ 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

Recommended installation height for ambient and electrically heated units is 3,2 metres and recommended installation height for water heated unit is 2,8 metres. The air curtain is designed to be installed into suspended ceilings. The unit is ready for suspension with threaded bars (accessory) on its outside. The threaded bars can also be fixed on the inside of the unit e.g. when mounted on a solid suspended ceiling.

The air curtain is installed horizontally with the outlet air grille facing downwards as close to the door as possible, concealed in the false ceiling. For the protection of wider doorways, several units can be mounted in series alongside each other.

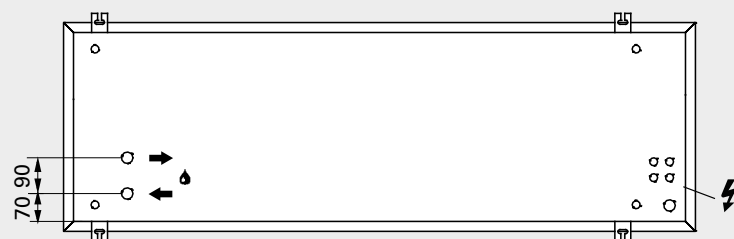
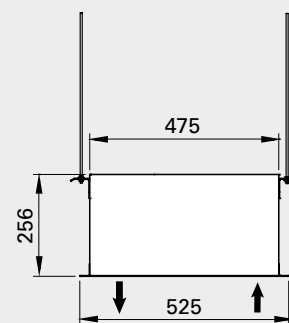
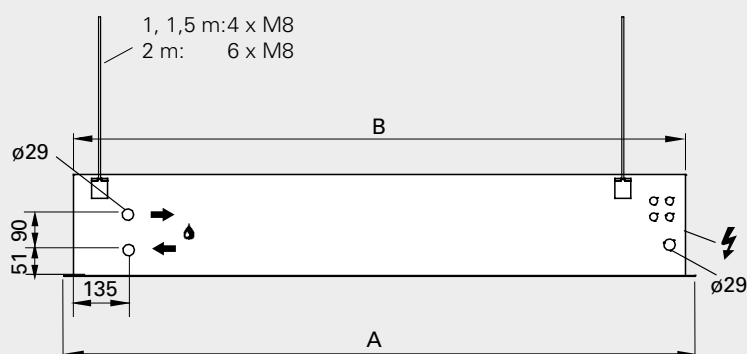
Connection

Service and maintenance are easily made through the service hatch at the bottom of the unit.

The electrical connection is made on the side or 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.

Water heated units are connected to the water system inside the unit, through holes made during installation on the top or the side of the unit. Flexible hoses are available as accessories. Water heated units must always be supplemented with a valve kit mounted outside the unit. For an easy connection of valve systems, there are three different connection kits to choose from (accessories). See Valves and Accessories.

● DN15 (1/2"), outside thread



	A	B
	[mm]	[mm]
AR3210C	1078	1028
AR3215C	1588	1538
AR3220C	2078	2028

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

AR3200C



Accessories - Control options

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
15662	PA2DR	AR3210C/3215C/3220C	1

Accessories - mounting



PA34TR, threaded bars

Threaded bars for installing unit on to a ceiling. Length 1 m. Used together with ceiling brackets (PA34CB). Supplemented with vibration dampers (PA34VD) for reduced vibration.

PA34CB, ceiling brackets

Ceiling brackets for installing the unit from the ceiling using wires or threaded bars (not included). Best combined with vibration dampers (PA34VD) when using threaded bars.

PA34VD, vibration dampers

Reduces vibrations for ceiling installations with threaded bars.

Item number	Type	Used for	Consists of
18056	PA34TR15	AR3210C/3515C	4
18057	PA34TR20	AR3220C	6
18059	PA34CB15	AR3210C/3515C	4
18060	PA34CB20	AR3220C	6
18065	PA34VD15	AR3210C/3515C	4
18066	PA34VD20	AR3220C	6

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

UNSG-R, UNSG, ANS, connection kits for valve system

UNSG-R: union set with swiveling nut and female thread.

UNSG: union set with swiveling nut and press end.

ANS: adapter nipple set with male thread and press end.

Item number	Type	DN	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
79417	VLSP32	DN32	0,22 - 1,03
19031	VOT15	DN15	
19032	VOT20	DN20	
19033	VOT25	DN25	

Item number	Type	Description	Consists of
333340	UNSG20R15	Union set G20 x R15	2
333341	UNSG25R20	Union set G25 x R20	2
333342	UNSG32R25	Union set G32 x R25	2
333343	UNSG40R32	Union set G40 x R32	2
333344	UNSG2015	Union set G20 x 15mm	2
333345	UNSG2518	Union set G25 x 18mm	2
333346	UNSG2522	Union set G25 x 22mm	2
333347	UNSG3228	Union set G32 x 28mm	2
333348	UNSG4035	Union set G40 x 35mm	2
333349	ANS1515	Adapter nipple set R15	2
333350	ANS2018	Adapter nipple set R20	2
333351	ANS2022	Adapter nipple set R20	2
333352	ANS2528	Adapter nipple set R25	2
333353	ANS3235	Adapter nipple set R32	2

Accessories - water heated units



FHDN15, flexible hoses

Flexible hoses for easy and practical installation of water heated unit. DN15, inside thread, 90° bend.

Item number	Type	Used for	Consists of
18055	FHDN15	AR3210CW/3215CW/3220CW	2