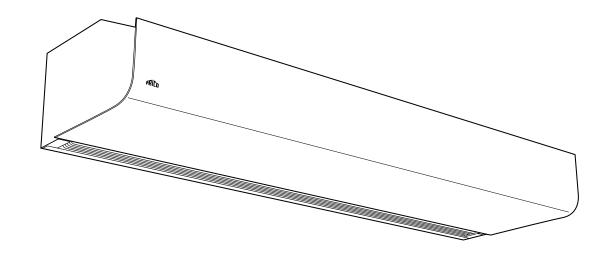


# Original instructions

# **PAEC3200**







NO) ... 15

DE) ... 18

(ES) ... 21

(FR) ... 24

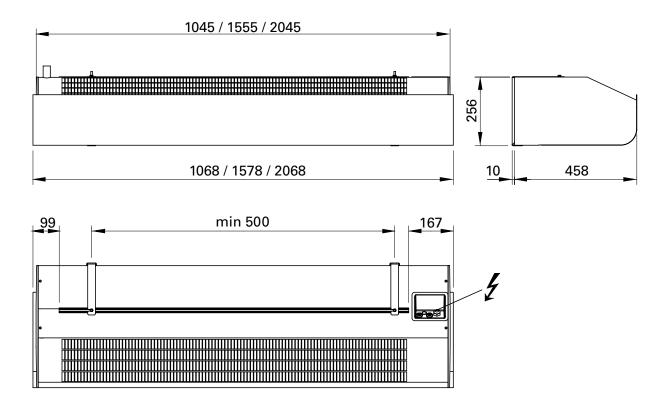
(IT) ... 27

NL) ... 30

PL) ... 33

(RU) ... <sup>36</sup>

SE	Introduktionssidorna består huvudsakligen av bilder. För översättning av de engelska texter som används, se respektive språksidor.
GB	The introduction pages consist mainly of pictures. For translation of the English texts used, see the respective language pages.
NO	Introduksjonssidene består hovedsakelig av bilder. For oversettelse av de engelske tekstene, se de respektive språksidene
FR	Les pages de présentation contiennent principalement des images. Pour la traduction des textes en anglais, consultez la page correspondante à la langue souhaitée.
DE	Die Einleitungsseiten bestehen hauptsächlich aus Bildern. Für die Übersetzung der verwendeten Texte in englischer Sprache, siehe die entsprechenden Sprachseiten.
ES	Las páginas introductorias contienen básicamente imágenes. Consulte la traducción de los textos en inglés que las acompañan en las páginas del idioma correspondiente.
NL	De inleidende pagina's bevatten hoofdzakelijk afbeeldingen. Voor een vertaling van de gebruikte Engelse teksten, zie de pagina's van de resp. taal.
(IT)	Le pagine introduttive contengono prevalentemente immagini. Per le traduzioni dei testi scritti in inglese, vedere le pagine nelle diverse lingue.
PL	Początkowe strony zawierają głównie rysunki. Tłumaczenie wykorzystanych tekstów angielskich znajduje się na odpowiednich stronach językowych.
RU	Страницы в начале Инструкции состоят в основном из рисунков, схем и таблиц. Перевод встречающегося там текста приведен в разделе RU.





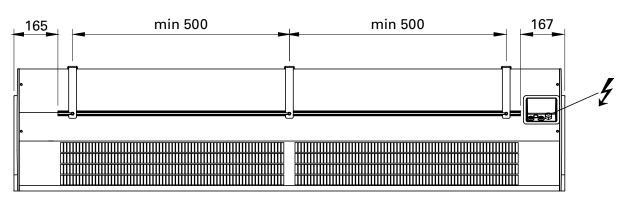


Fig. 1

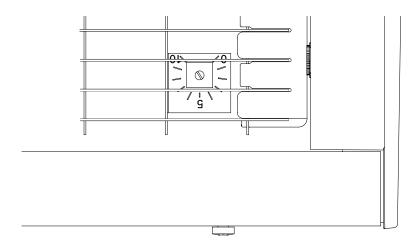


Fig. 2: Stepless regulation of airflow. Internal potentiometer (accessible through the outlet grille).

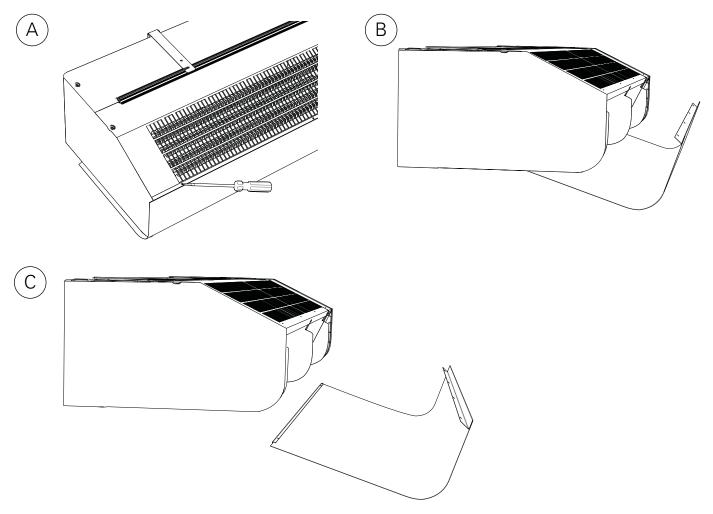


Fig. 3: Open the unit.

# Mounting with wall brackets

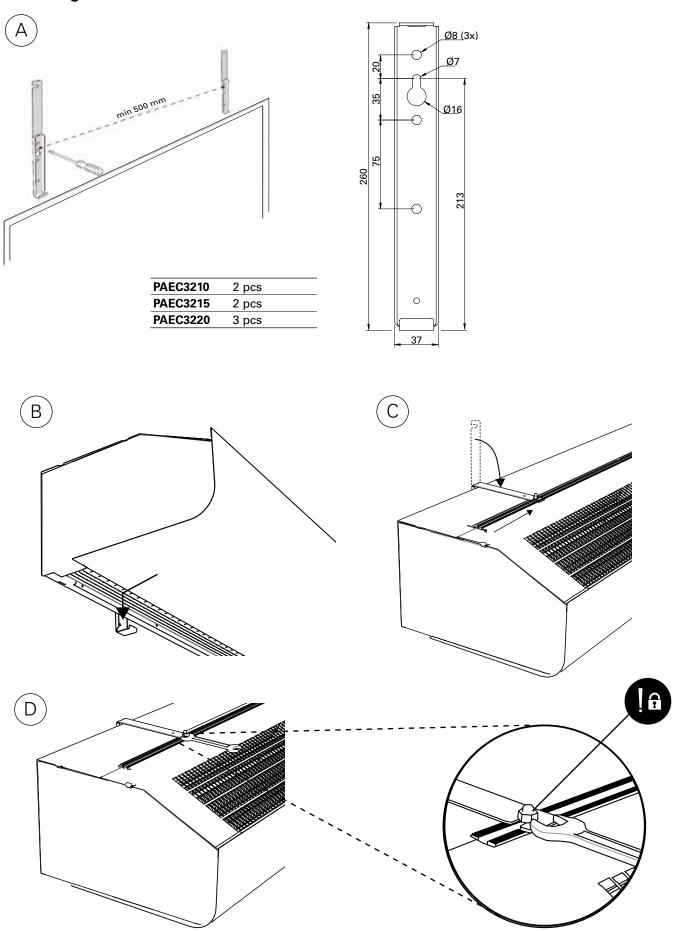
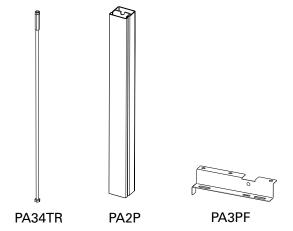


Fig. 4: Mounting with wall brackets

## **Accessories**

PA34TR15	PAEC3210, PAEC3215, 1 m
PA34TR20	PAEC3220, 1 m
PA2P15	PAEC3210, PAEC3215, 1 m
PA2P20	PAEC3220, 1 m
PA3PF15	PAEC3210, PAEC3215
PA3PF20	PAEC3220



PAMP10	
SIReDC	



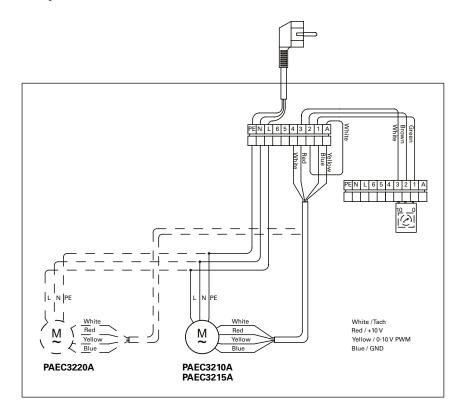


PAMP10

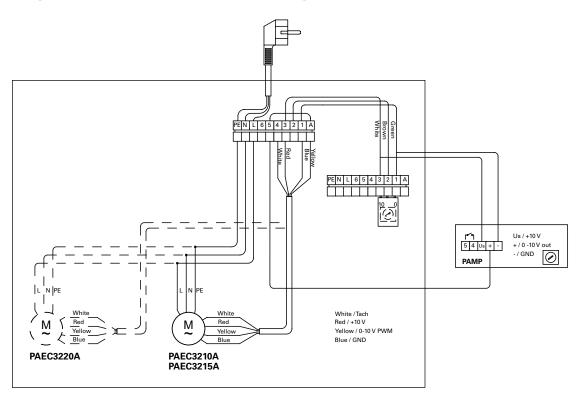
SIReDC

#### **PAEC3200**

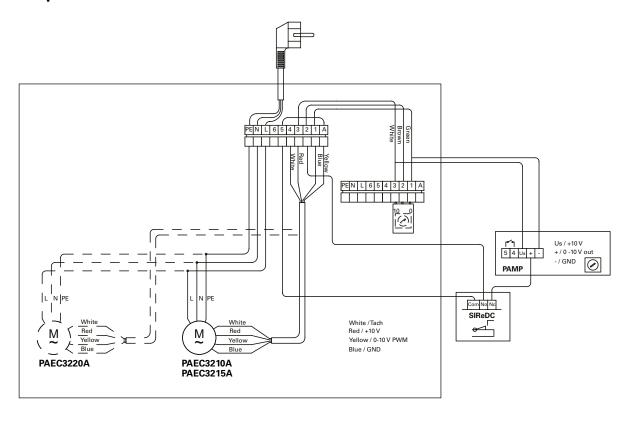
### Stepless airflow control



# Stepless airflow control with external potentiometer



# Stepless airflow control with door contact



#### ♣ Ambient, no heat - PAEC3200 A

Туре	Output	Airflow	Sound power*1	Sound pressure*2	Voltage motor	Amperage motor*3	Length	Weight
	[kW]	[m³/h]	[dB(A)]	[dB(A)]	[V]	[A]	[mm]	[kg]
PAEC3210A	0	1950	74	40/58	230V~	0,19/1,15	1068	22
PAEC3215A	0	2700	74	39/58	230V~	0,20/1,20	1578	32
PAEC3220A	0	3800	77	43/61	230V~	0,36/2,30	2068	42

Protection class: IP44.

CE compliant.

<sup>\*1)</sup> 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 50% and 100% airflow.

<sup>\*3)</sup> Applicable at 50% and 100% airflow.



### Assembly and operating instructions

#### **General Instructions**

Read these instructions carefully before installation and use. Keep this manual for future reference.

The product may only be used as set out in the assembly and operating instructions. The guarantee is only valid if the product is used in the manner intended and in accordance with the instructions.

#### **Application**

PAEC3200 is an air curtain for cold storage and freezer rooms and airconditioned premises. Its recommended installation height is 3.2 metres. The air curtain has stepless control using an internal or external potentiometer (accessory).

Protection class: IP44.

#### **Operation**

Air is drawn in at the top of the unit and blown out downwards so that it shields the door opening and minimizes heat loss. To achieve the optimum curtain effect the unit must extend the full width of the door opening.

The grille for directing exhaust air is adjustable and is normally angled outwards to achieve the best protection against incoming air.

The efficiency of the air curtain depends on the air temperature, pressure differences across the doorway and any wind pressure.

NOTE! Negative pressure in the building considerably reduces the efficiency of the air curtain. The ventilation should therefore be balanced.

#### Mounting

The air curtain unit is installed horizontally with the supply air grille facing downwards as close to the door as possible. When the unit is used to protect cold storage or freezer rooms, it must be mounted on the outside of the conditioned space.

Brackets and torx bit are enclosed in the gable end packaging upon delivery.

Mounting with wall brackets (fig. 4)

- 1. Mount the brackets on the wall, see fig.4A and dimension drawing fig.1. If the wall is uneven the brackets must be compensated for this.
- 2. Hook on the unit at the lower edge of the brackets. (Fig. 4B-C)
- 3. Bend the top of the console over the the unit and slide the units screws along the rail into the slots on the consoles. (Fig.4D) When the bracket is bent once, it must be replaced if bent back more than 45 °.
- 4. Lock the nuts against the brackets. (Fig.4E)

#### Horizontal mounting on the ceiling

Threaded rods, hanging brackets and ceiling mounting brackets for ceiling mounting are available as accessories, see accessories pages and separate manuals.

#### Connection

The unit is connected with a 1.5m cord and plug.

#### **Control options**

Stepless airflow control

The airflow is set manually on the internal potentiometer 0-10V, which is located inside the outlet grille.

Stepless airflow control with external potentiometer

The airflow is set manually on an external potentiometer 0-10V.

Stepless airflow control with door contact When the door is closed the fan runs at low speed, set on the internal potentiometer 0-10V, which is located inside the outlet grille. When the door opens, the fan runs at high speed, set on an external potentiometer. This control option gives low response time and the best protection.

#### BMS control

The air curtain can also be controlled via BMS (0-10V).

See Figure 5 and Accessories pages.



#### Adjustment of the air curtain and air flow

The direction and speed of the air flow should be adjusted considering the load on the opening. Pressure forces affect the air stream and make it bend inwards into the premises (when the premises are heated and the outdoor air is cold).

The air stream should therefore be directed outwards to withstand the load. Generally speaking, the higher the load, the greater the angle that is needed.

#### Basic setting fan speed

The fan speed when the door is open is set using the control. Note that the air flow direction and fan speed may need fine adjustment depending on the loading of the door.

#### Service, repairs and maintenance

For all service, repair and maintenance first carry out the following:

- 1. Disconnect the power supply.
- 2. The front hatch is removed by removing the screws on the top of the unit and then detach the bent edge at the bottom. (Fig.3)
- 3. After the service, repair and maintenance reattach the front hatch. Place the hatch at the lower edge with the bent edge and fasten on top with screws.

Note that when carrying out work where the end is removed, the outlet grille also detaches.

#### **Maintenance**

Since fan motors and other components are maintenance free, no maintenance other than cleaning is necessary. The level of cleaning can vary depending on local conditions. Undertake cleaning at least twice a year. Inlet and exhaust grilles, impeller and elements can be vacuum cleaned or wiped using a damp cloth. Use a brush when vacuuming to prevent damaging sensitive parts. Avoid the use of strong alkaline or acidic cleaning agents.

#### **Overheating**

The motors have built-in protection against overheating and will automatically regulate their speed at high temperatures.

#### Replacing motor or impeller

- 1. Remove the front.
- 2. Remove gable end.
- 3. Remove the screw between motor and fan.
- 4. Disconnect the cables to the motor.
- 5. Remove the screws securing the motor and lift it out together with the impeller.
- 6. Install the new motor and/or the new impeller as above in reverse order.

#### **Trouble shooting**

If the fans are not working or do not blow properly, check the following:

- The functions and settings of the built-in control system.
- That the intake grille/filter is not dirty.

If the fault cannot be rectified, please contact a qualified service technician.

#### Safety

- Keep the areas around the air intake and exhaust grilles free from possible obstructions!
- Lifting equipment must be used to lift the unit.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Frico AB Tel: +46 31 336 86 00

Box 102

SE-433 22 Partille mailbox@frico.se Sweden www.frico.se

For latest updated information and information about your local contact: www.frico.se

