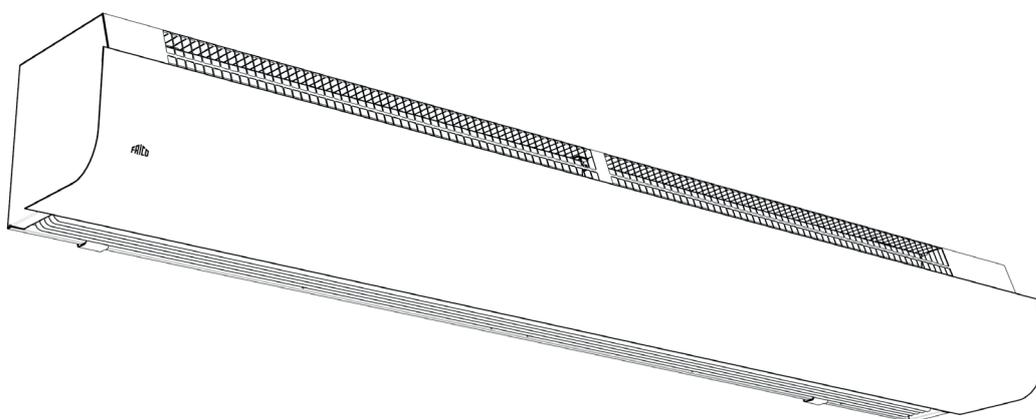


Original instructions

## PAECS



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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.**

# PAECS

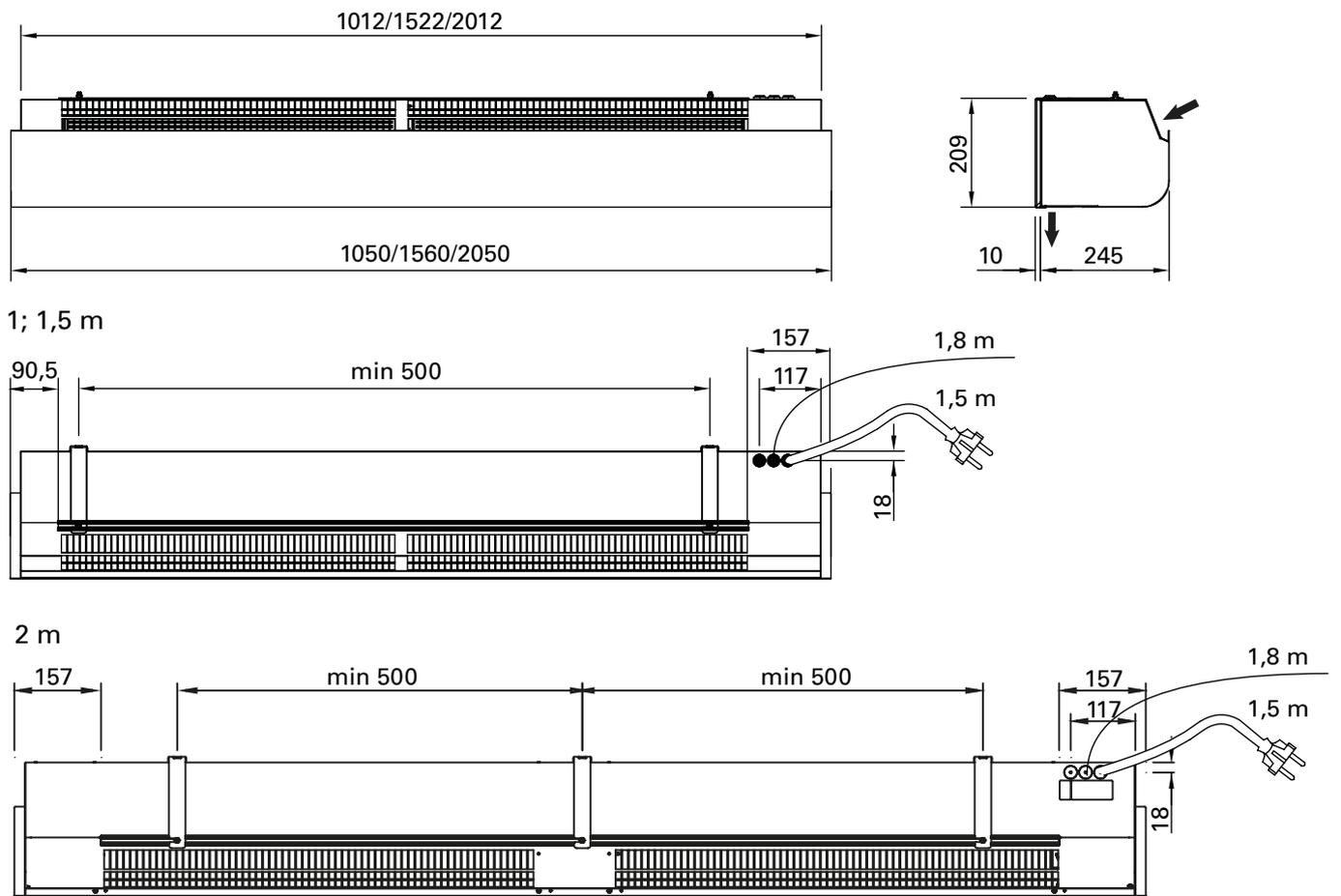


Fig. 1

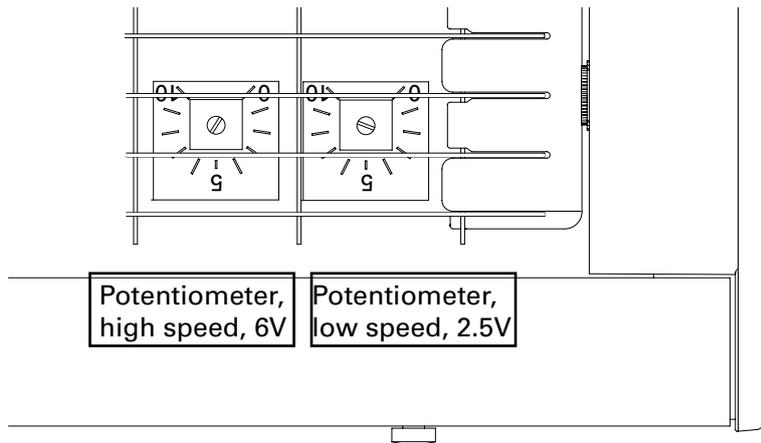


Fig. 2: Stepless airflow control. Internal potentiometer for low and high speed (accessible through the outlet grille).

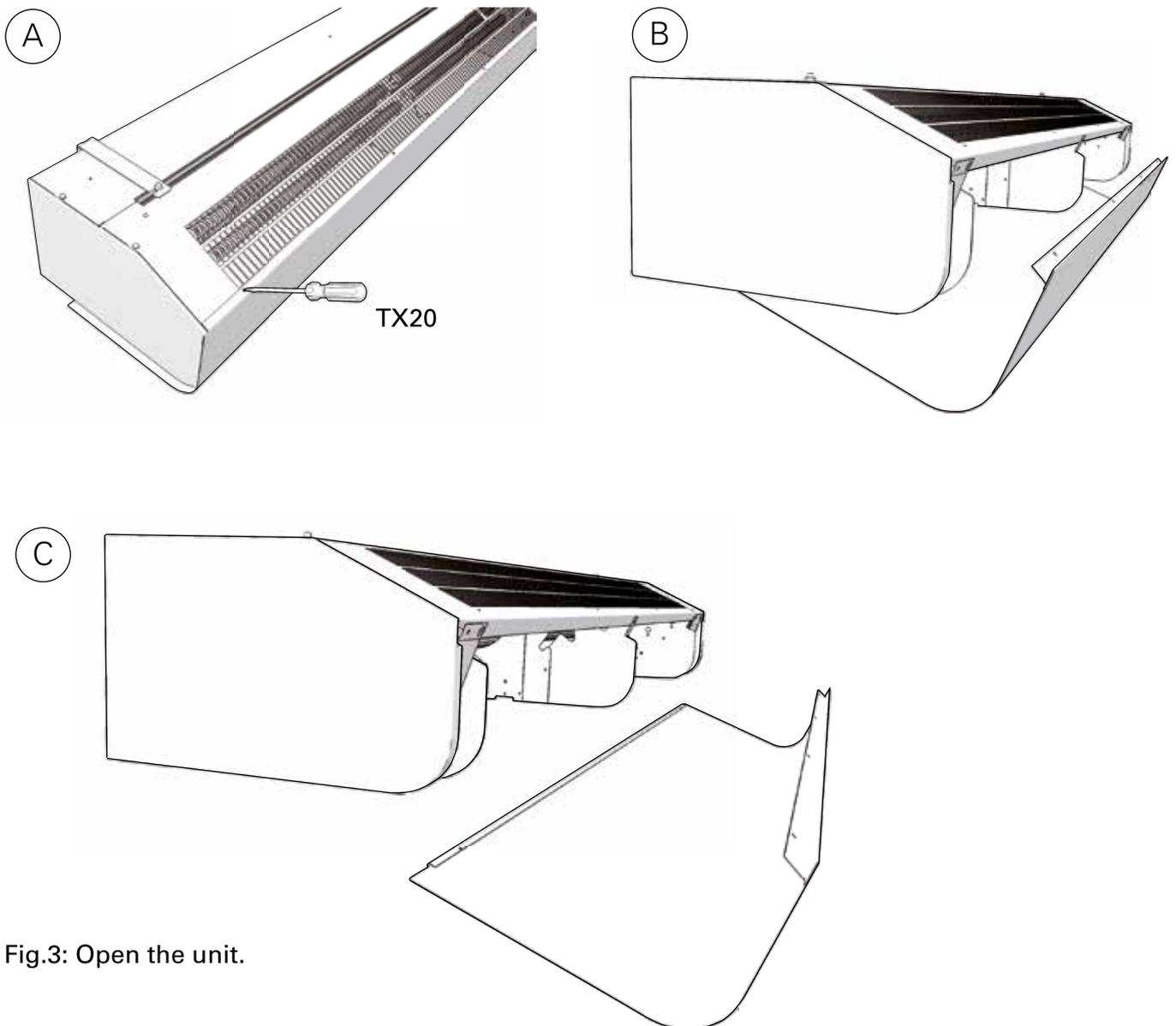


Fig.3: Open the unit.

Mounting with wall brackets

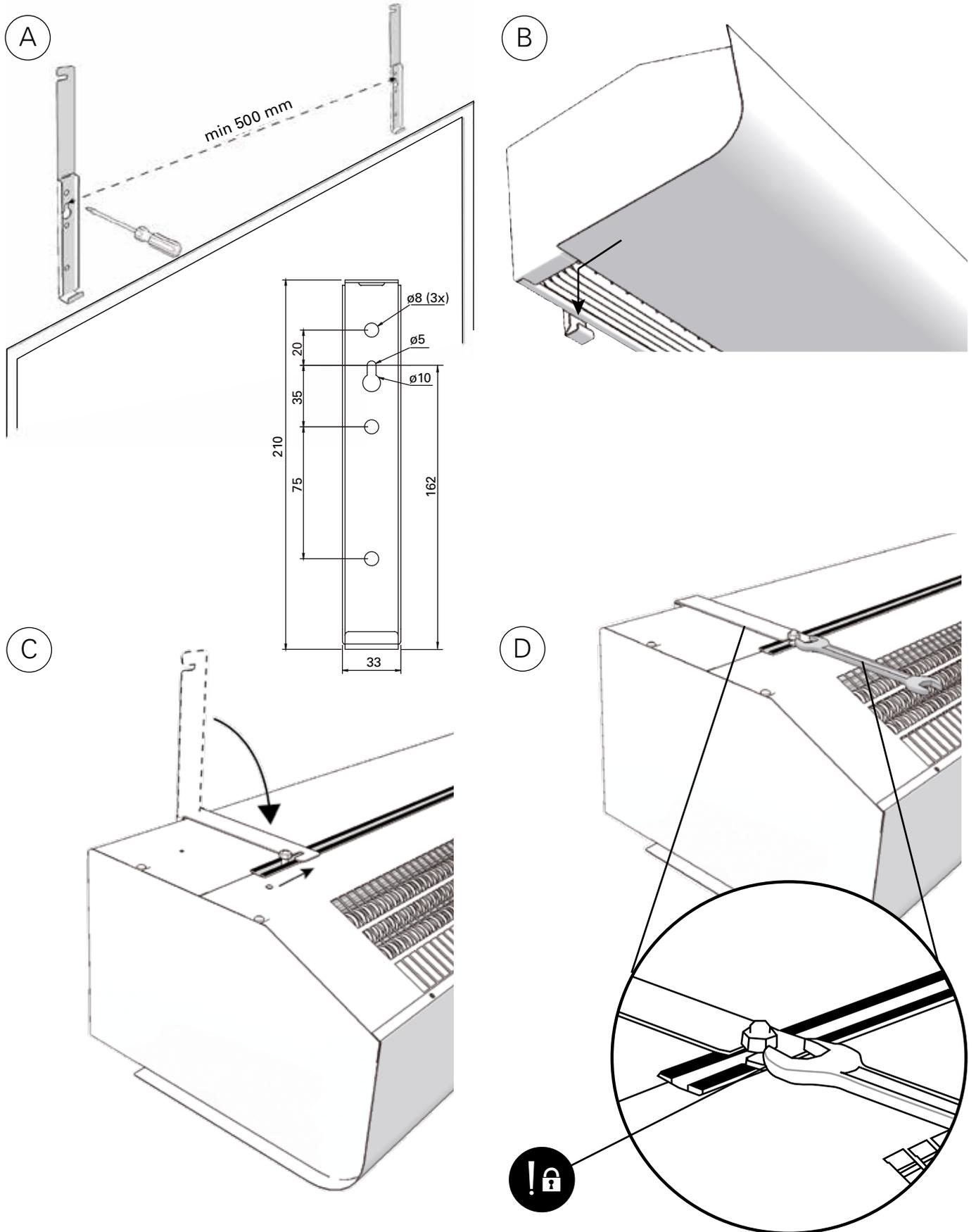


Fig. 4: Mounting with wall brackets

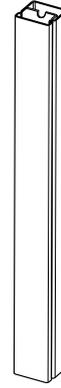
<b>PAECS10</b>	2 pcs
<b>PAECS15</b>	2 pcs
<b>PAECS20</b>	3 pcs

## Accessories

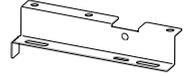
<b>PA34TR15</b>	PAECS10, PAECS15, 1 m
<b>PA34TR20</b>	PAECS20, 1 m
<b>PA2P15</b>	PAECS10, PAECS15, 1 m
<b>PA2P20</b>	PAECS20, 1 m
<b>PA2PF15</b>	PAECS10, PAECS15
<b>PA2PF20</b>	PAECS20



PA34TR



PA2P



PA2PF

<b>SIReDC</b>
<b>AGB304</b>



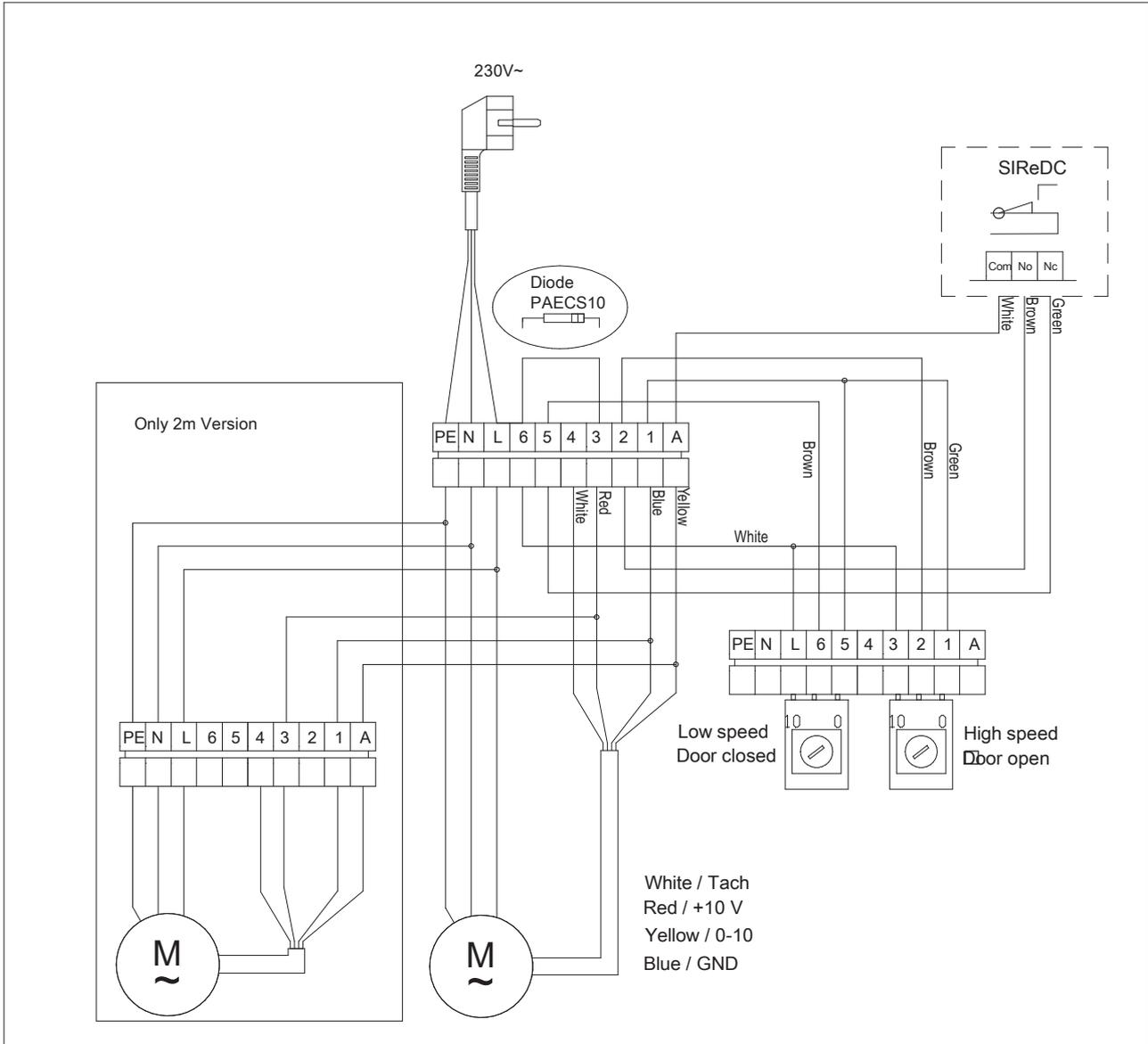
SIReDC



AGB304

PAECS

Stepless airflow control with door contact / position limit switch



## PAECS

### ✦ Ambient, no heat - PAECS

Type	Output [kW]	Airflow [m <sup>3</sup> /h]	Sound power* <sup>1</sup> [dB(A)]	Sound pressure* <sup>2</sup> [dB(A)]	Voltage motor [V]	Amperage motor* <sup>3</sup> [A]	Length [mm]	Weight [kg]
<b>PAECS10</b>	0	1450* <sup>4</sup>	77	44/62	230V~	0,14/0,79	1050	15
<b>PAECS15</b>	0	2200* <sup>4</sup>	78	45/62	230V~	0,20/1,17	1560	20
<b>PAECS20</b>	0	3100* <sup>4</sup>	83	51/67	230V~	0,50/2,12	2050	30

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

\*<sup>2</sup>) Sound pressure ( $L_{pA}$ ). Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m<sup>2</sup>. At 50% and 100% airflow.

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

\*<sup>4</sup>) Max. airflow, 10V.

Protection class: IP44.

CE compliant.

## Installation 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

PAECS is an air curtain for cold storage and freezer rooms as well as entrances. Installation height is up to 4 metres (cold storage) and up to 2,5 metres (entrances). The air curtain is prepared for stepless control.

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)
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.4C) When the bracket is bent once, it must be replaced if bent back more than 45 °.
4. Lock the nuts against the brackets. (Fig.4D)

### *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. Prepared with extracted control wiring so that external control can be connected easily. NB! A door contact must be connected before connecting the unit to the power supply.

### Control options

#### *Stepless airflow control with door contact/position limit switch*

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 the second internal 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 2 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 for open respectively closed door is pre-set on the internal potentiometers (6V open/high speed, 2,5V closed/low speed). 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.*
- *Children of less than 3 years should be kept away unless continuously supervised.*
- *Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.*
- *Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.*

**CAUTION** — Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.



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