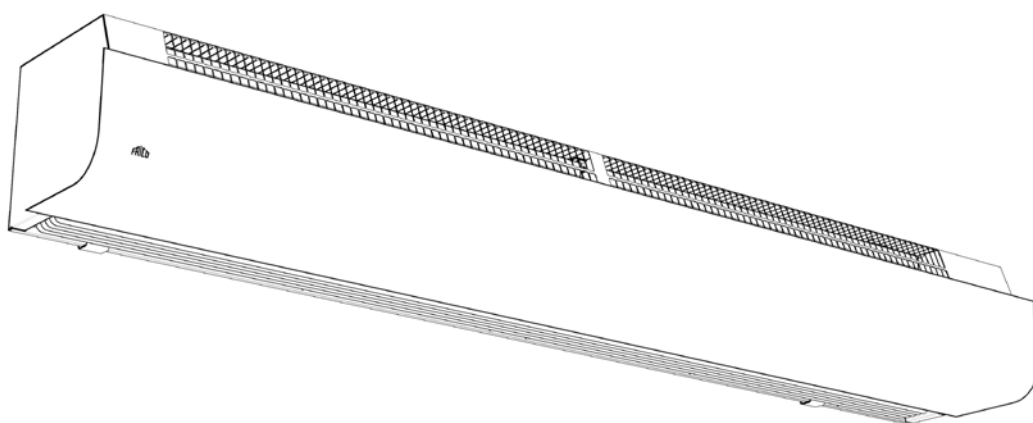


Original instructions

PAECS-NA



EN ... 9

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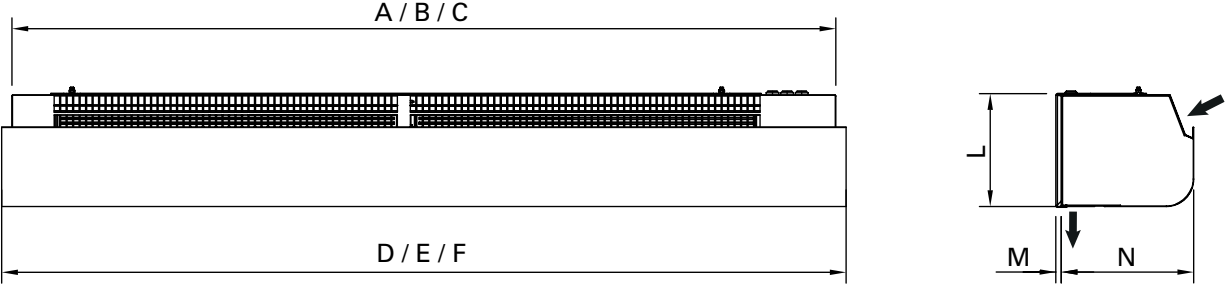
EN

The introduction pages consist mainly of pictures. For translation of the English texts used, see the respective language pages.

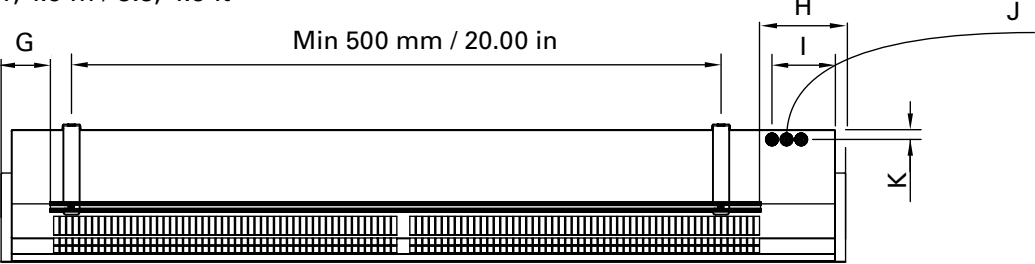
FR

Les pages de présentation contiennent principalement des images. Pour la traduction des textes en anglais, consultez la page correspondante à la langue souhaitée.

PAECS-NA



1; 1.5 m / 3.3; 4.9 ft



2 m / 6.6 ft

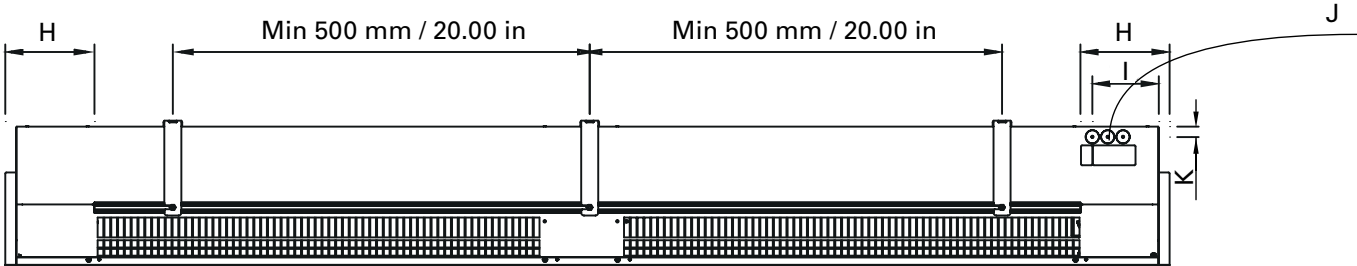


Fig. 1

Ref	Metric [mm]	Imperial [in]	Product type
A	1012	40.48	PAECS10-NA
B	1522	60.88	PAECS15-NA
C	2012	80.48	PAECS20-NA
D	1050	42.00	PAECS10-NA
E	1560	62.40	PAECS15-NA
F	2050	82.00	PAECS20-NA
G	90.5	3.62	
H	157	6.28	
I	117	4.68	
J	1800	72.00	
K	18	0.72	
L	209	8.36	
M	10	0.40	
N	245	9.80	

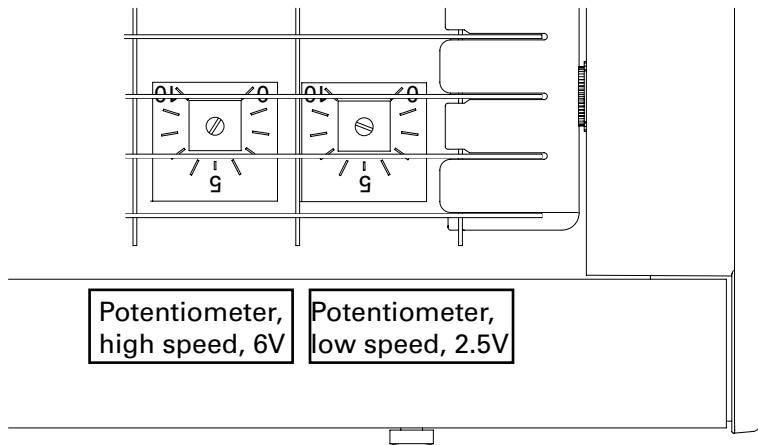


Fig. 2: Stepless airflow control. Internal potentiometer for low and high speed (accessible through the outlet grille).

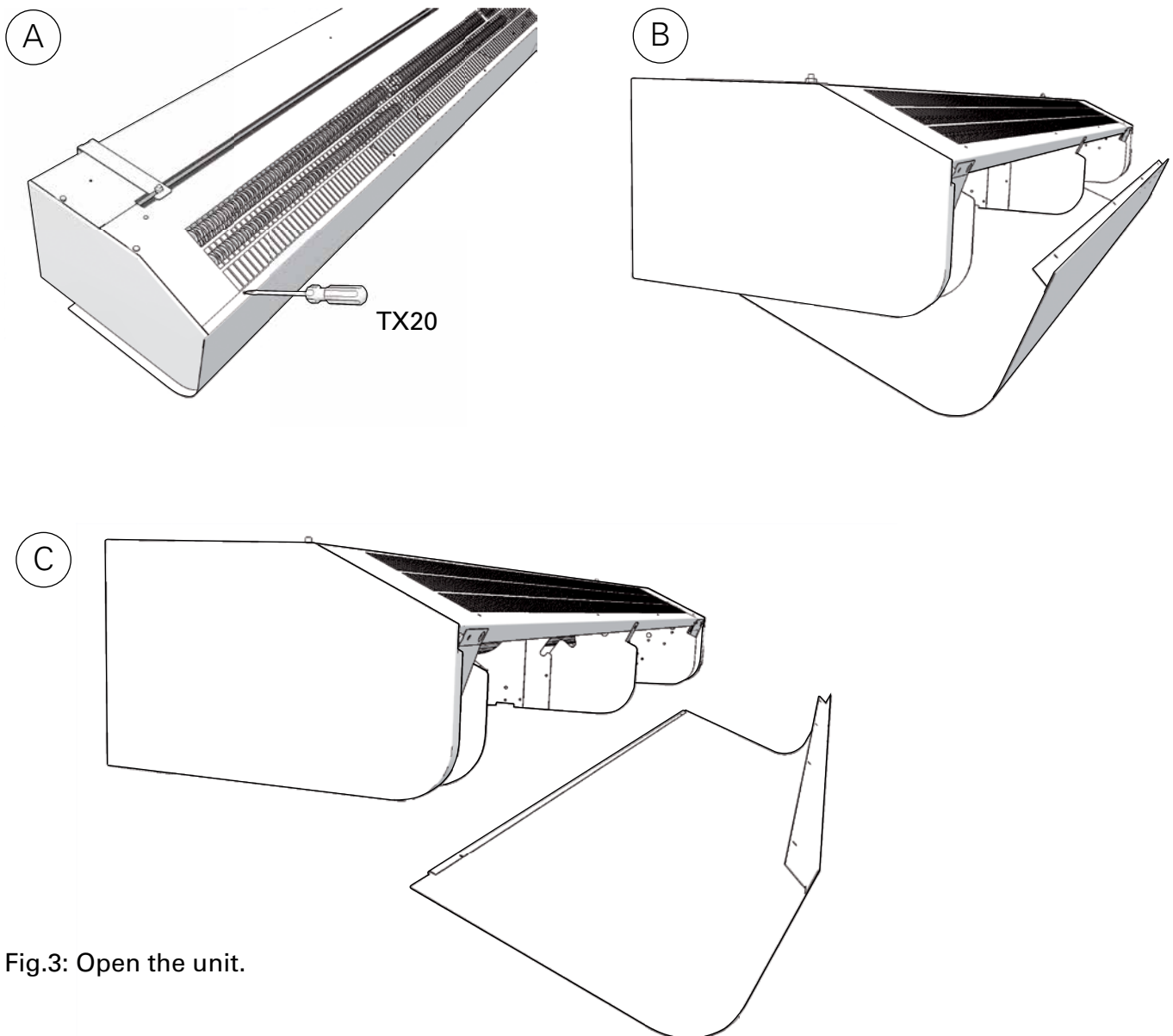


Fig.3: Open the unit.

Mounting with wall brackets

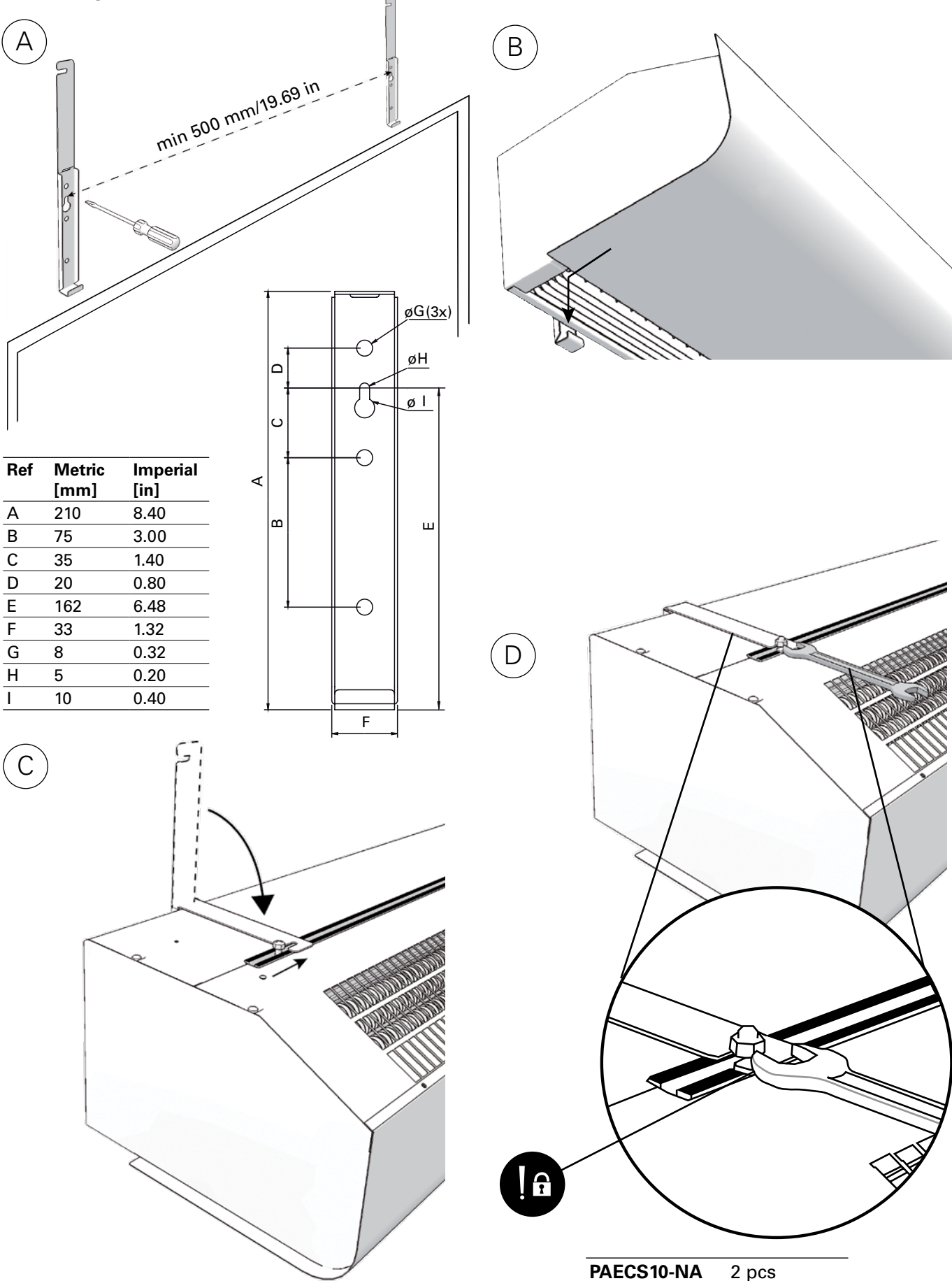


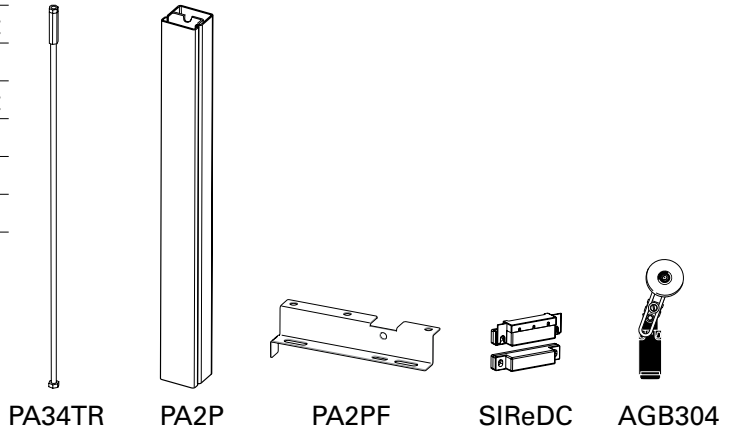
Fig. 4: Mounting with wall brackets

PAECS10-NA	2 pcs
PAECS15-NA	2 pcs
PAECS20-NA	3 pcs

Accessories

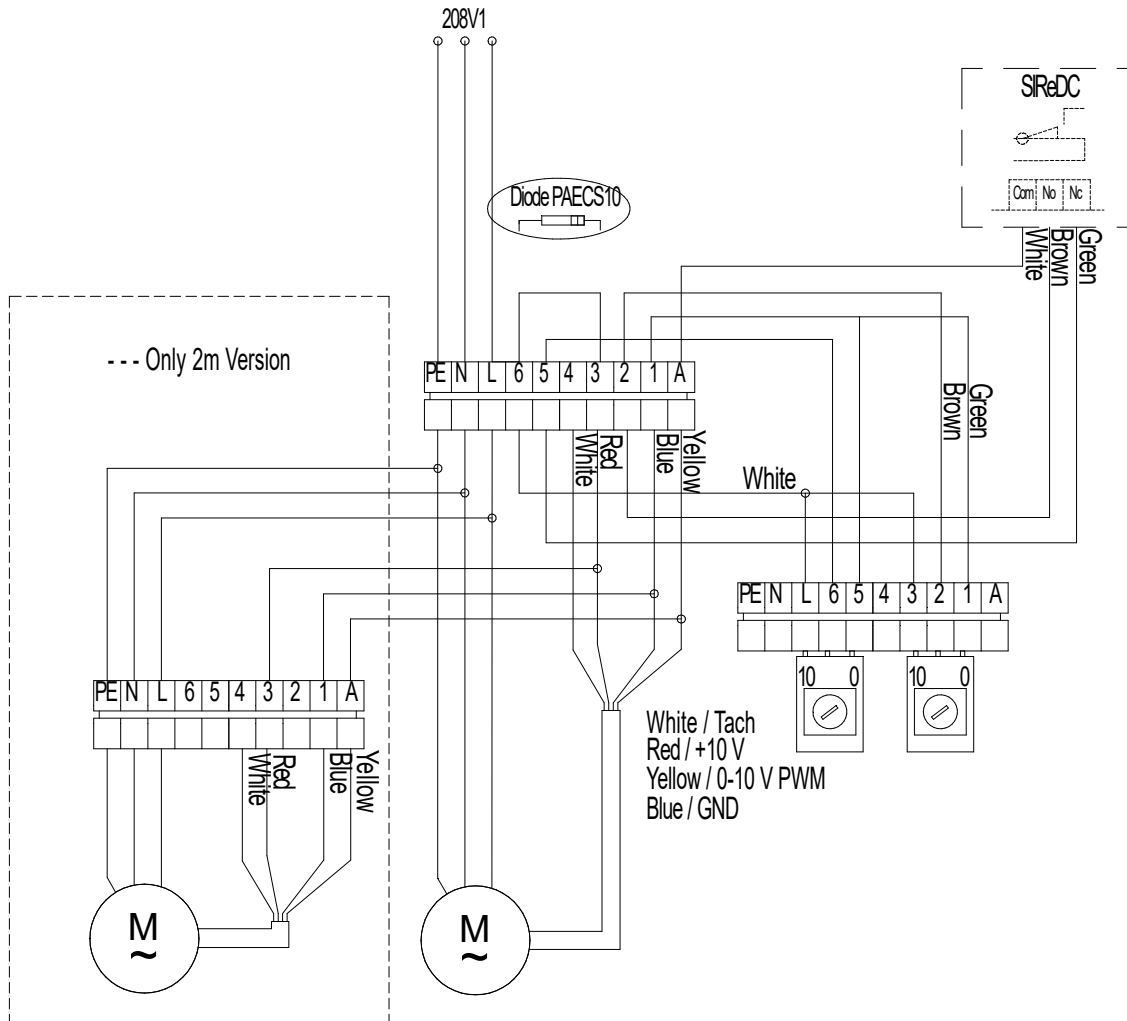
PA34TR15	PAECS10-NA, PAECS15-NA, 1 m/3.3 ft
PA34TR20	PAECS20-NA, 1 m/3.3 ft
PA2P15	PAECS10-NA, PAECS15-NA, 1 m/3.3 ft
PA2P20	PAECS20-NA, 1 m/3.3 ft
PA2PF15	PAECS10-NA, PAECS15-NA
PA2PF20	PAECS20-NA

SIReDC
AGB304



PAECS-NA

Stepless airflow control with door contact / position limit switch



Metric chart

✦ Ambient, no heat - PAECS-NA (IP44)

Type	Output [kW]	Airflow* ¹ [m ³ /h]	Sound pressure* ² [dB(A)]	Voltage motor [V]	Amperage motor* ³ [A]	Length [mm]	Weight [kg]
PAECS10-NA	0	1450	44/62	208V~	0.13/0.71	1050	15
PAECS15-NA	0	2200	45/62	208V~	0.18/1.06	1560	20
PAECS20-NA	0	3100	51/67	208V~	0.45/1.91	2050	30

*¹) Max. airflow, 10V.

*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) Applicable at 50% and 100% airflow.

Above table is valid for 208V/1ph/60Hz. Also approved for 230V/1ph/50Hz. Product performance for 230V/1ph/50Hz will differ from stated data.

Approved for 50/60Hz.

Protection class: IP44.

CE compliant.

Imperial chart

✦ Ambient, no heat - PAECS-NA (IP44)

Type	Output [kW]	Airflow* ¹ [cfm]	Sound pressure* ² [dB(A)]	Voltage motor [V]	Amperage motor* ³ [A]	Length [in]	Weight [lb]
PAECS10-NA	0	850	44/62	208V~	0.13/0.71	42	33
PAECS15-NA	0	1300	45/62	208V~	0.18/1.06	62	44
PAECS20-NA	0	1850	51/67	208V~	0.45/1.91	82	66

*¹) Max. airflow, 10V.

*²) Sound pressure (L_{pA}). Conditions: Distance to the unit 16 ft. Directional factor: 2. Equivalent absorption area: 2150 sqft. At lowest/highest airflow.

*³) Applicable at 50% and 100% airflow.

Above table is valid for 208V/1ph/60Hz. Also approved for 230V/1ph/50Hz. Product performance for 230V/1ph/50Hz will differ from stated data.

Approved for 50/60Hz.

Protection class: IP44.

CE compliant.

EN

- Read the safety instructions before performing installation and/or maintenance activities on the unit.
- Installation and/or maintenance activities on the unit may only be performed by qualified technical staff.
- The unit shall not be installed and used outdoors or in environments that are aggressive, or potentially explosive. At installation site make sure surrounding environment does not require higher IP classification of the equipment than what is stated on the data label of the unit.
- The unit must be connected in accordance with the applicable local requirements. Make sure that the unit's power supply voltage matches the local mains voltage. The unit's power supply voltage and maximum ratings are displayed on the data label placed on the unit.
- The unit shall be fused according to the table below.
- See also "Safety" on the English pages.

FR

- Veuillez lire les consignes de sécurité avant d'installer l'unité ou d'en effectuer l'entretien.
- L'installation ou l'entretien de l'unité doivent être effectués par un technicien qualifié seulement.
- L'unité ne doit pas être installée et utilisée à l'extérieur ou dans un environnement hostile ou potentiellement explosif. Au site d'installation, veuillez vous assurer que le milieu environnant n'exige pas une classification IP de l'équipement supérieure à ce qui est indiqué sur l'étiquette de données de l'unité.
- L'unité doit être branchée conformément aux exigences locales applicables. Veuillez vous assurer que la tension d'alimentation de l'unité correspond à la tension de secteur locale. La tension d'alimentation de l'unité et les calibres maximums sont indiqués sur l'étiquette de données placée sur l'unité.
- L'unité doit être protégée par un fusible conformément au tableau ci-dessous.
- Voir également la section « Sécurité » dans les pages en français.

EN: Maximum Amperage on L1, L2 or L3 [A]	EN: Maximum fuse value [A]
FR: Intensité de courant électrique maximale pour L1, L2 ou L3 [A]	FR: Calibre maximum du fusible [A]
≤ 10A	16A
≤ 15A	20A
≤ 20A	25A
≤ 25A	35A
≤ 35A	50A
≤ 50A	63A
≤ 65A	80A
≤ 80A	100A
≤ 102A	125A

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-NA is an air curtain for cold storage and freezer rooms as well as entrances. Installation height is up to 4 metres/13.1 feet (cold storage) and up to 2.5 metres/8.2 feet (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 installation, which should be preceded by an omnipolar switch with a contact separation of at least 3 mm/0.12 in, should only be wired by a competent electrician and in accordance with the latest edition of IEE wiring regulations. The electrical connection is made on the top of the unit. 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.

Packaging

Packaging materials are chosen with consideration to environment and are therefore recyclable.

Handling of product at end of working life

This product may contain substances necessary for functionality of product but potentially dangerous for the environment. The product should not be disposed mixed with general household waste but delivered to a designated collection point for environmental recycling. Please contact local authority for further details of your nearest designated collection point.

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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about your local contact: www.frico.net.**