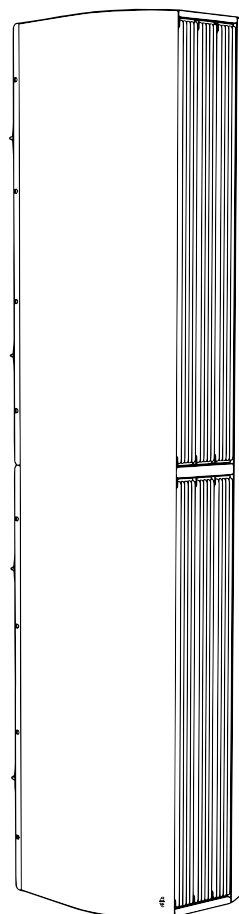
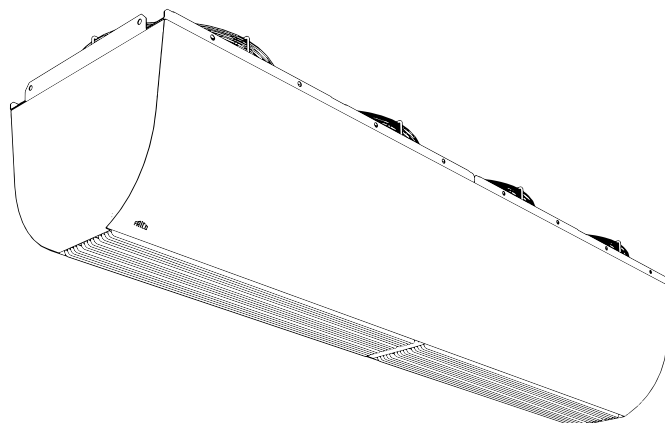


Original instructions

Tatra



EN ... 14

SE ... 18

NO ... 22

FR ... 26

DE ... 31

NL ... 36

ES ... 41

IT ... 46

PL ... 51

RU ... 56

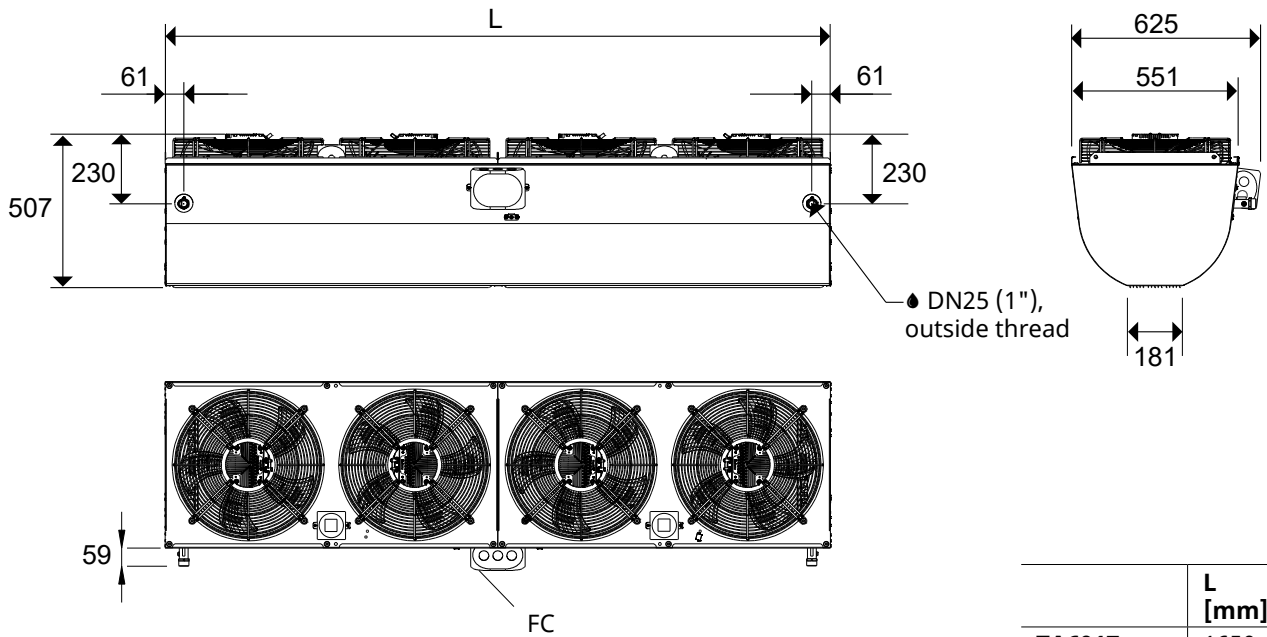
FI ... 61

DK ... 66

- EN** The introduction pages consist mainly of pictures. For translation of the English texts used, see the respective language pages.
- SE** Introduktionssidorna består huvudsakligen av bilder. För översättning av de engelska texter som används, se respektive språksidor.
- 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. Consulter la page correspondant à la langue souhaitée.
- DE** Die Einleitungsseiten bestehen hauptsächlich aus Bildern. Für die Übersetzung der verwendeten Texte in englischer Sprache, siehe die entsprechenden Sprachseiten.
- NL** De inleidende pagina's bevatten hoofdzakelijk afbeeldingen. Voor een vertaling van de gebruikte Engelse teksten, zie de pagina's van de resp. taal.
- ES** Las páginas introductorias contienen básicamente imágenes. Consulte la traducción de los textos en inglés que las acompañan en las páginas del idioma correspondiente.
- 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.
- FI** Esittelysivut koostuvat lähinnä kuvista. Suvuilla olevien enlanninkielisten sanojen käännökset löytyvät ko. kielisivuilta.
- DK** Introduktionssiderne består hovedsageligt af billeder. For oversættelse af de engelske tekster, se siderne for de respektive sprog.

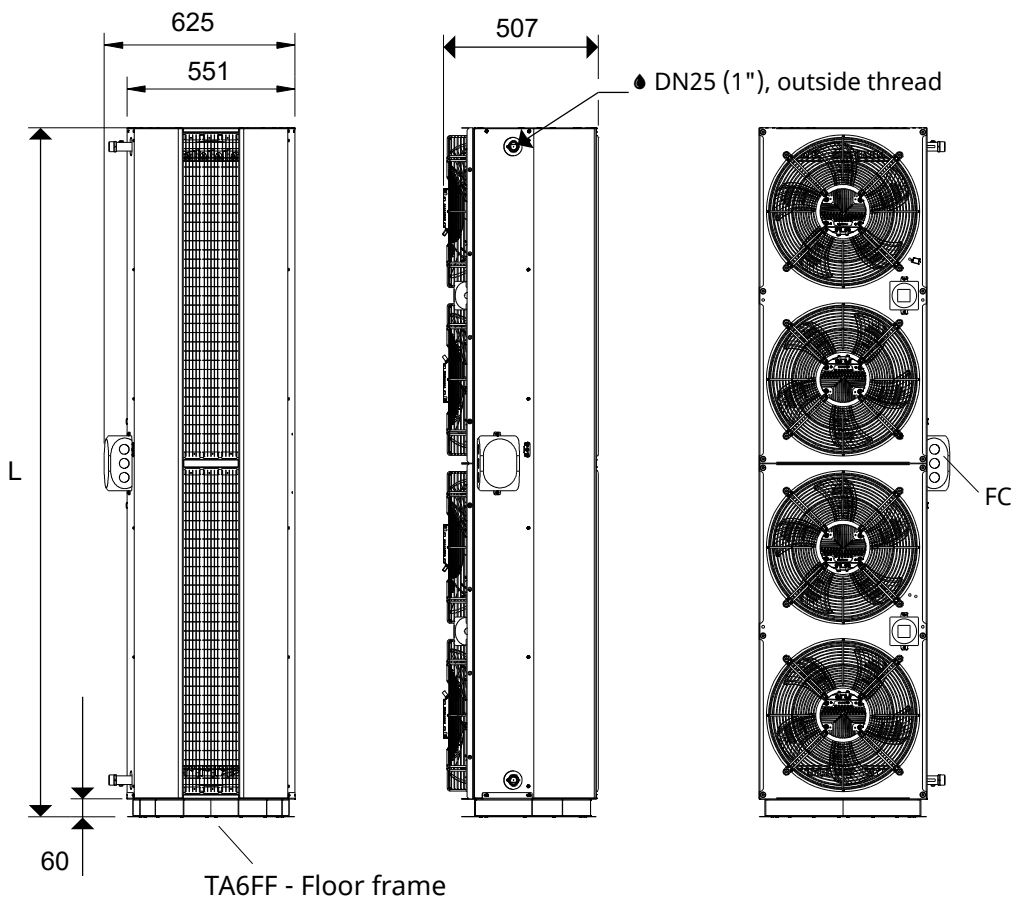
Tatra

Tatra Horizontal mounting



	L [mm]
TA6017	1650
TA6022	2200
TA6028	2750

Vertical mounting

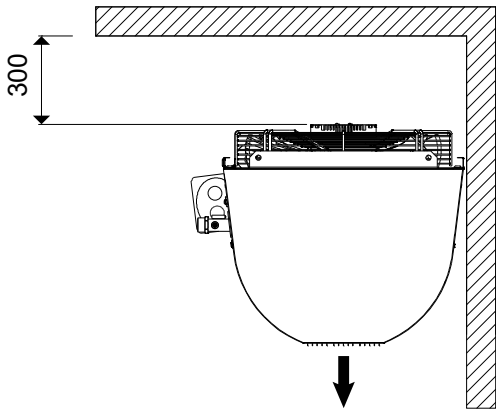


	L [mm]
TA6017+TA6FF	1710
TA6022+TA6FF	2260
TA6028+TA6FF	2810

Tatra

Horizontal mounting

Minimum distance.

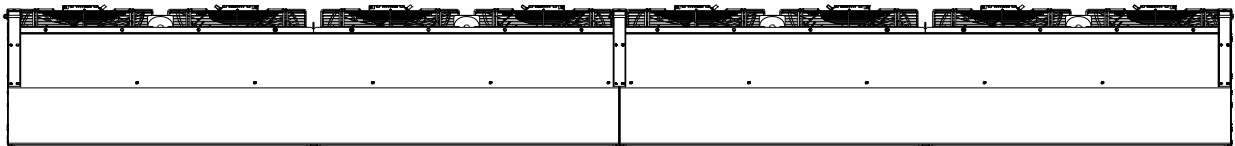


Distance appliance brackets



	L [mm]
TA6017	1600
TA6022	2150
TA6028	2700

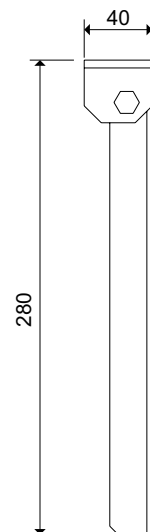
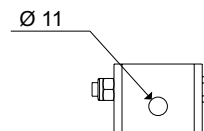
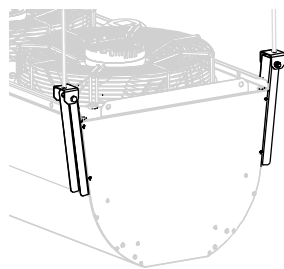
2 x Tatra



TA6AB - Appliance brackets



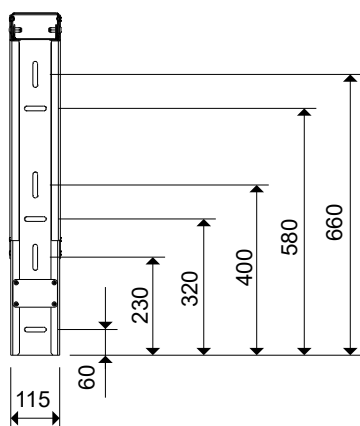
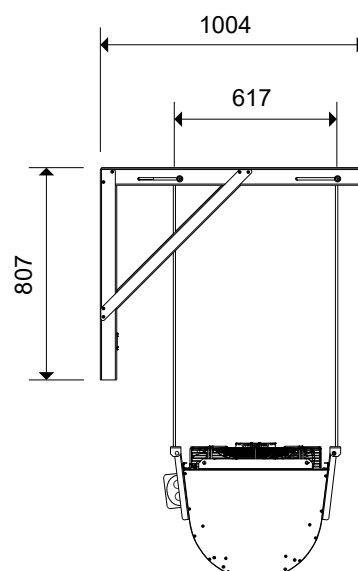
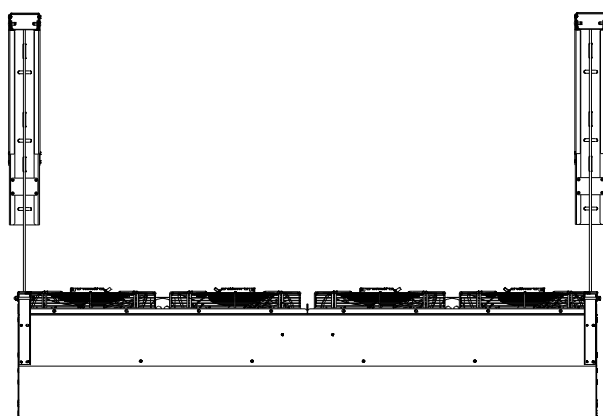
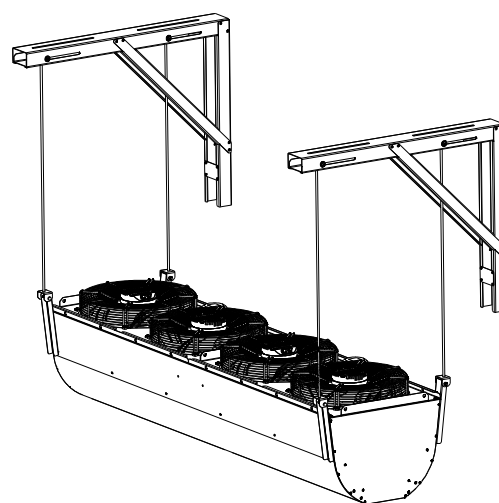
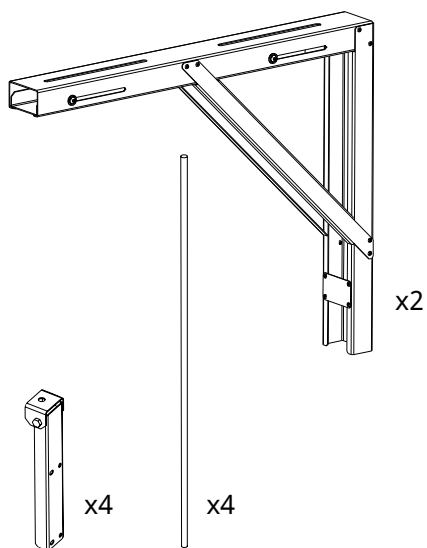
x4



Item number	Type	Consists of
397713	TA6AB	4 x appliance brackets
382973	TA6ABE	2 x appliance brackets

Horizontal mounting

TA6WK - Wall kit



Item number	Type	Consists of
397712	TA6WK	2 x wall brackets + 4 x appliance brackets + 4 x threaded rods (M10, 1000 mm) + nuts
382975	TA6WKE	1 x wall bracket + 2 x appliance brackets + 2 x threaded rods (M10, 1000 mm) + nuts

Horizontal mounting

TA6CK - Ceiling kit



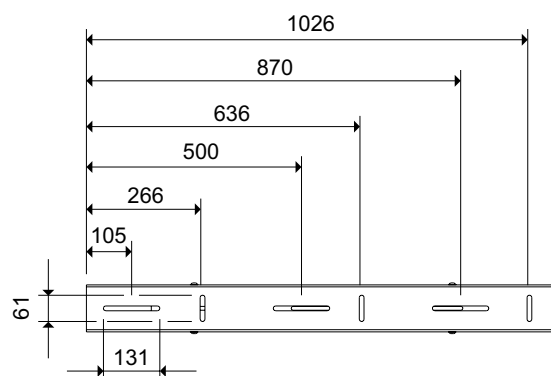
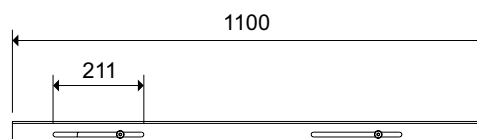
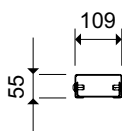
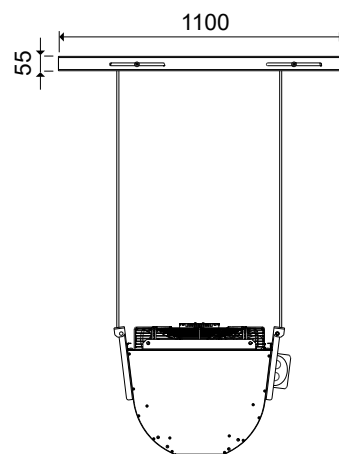
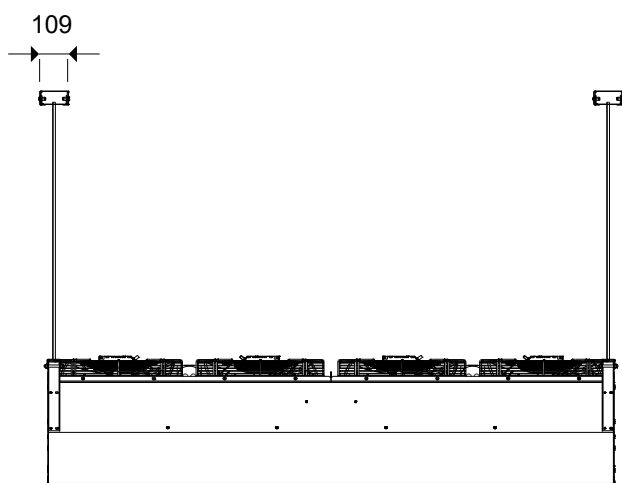
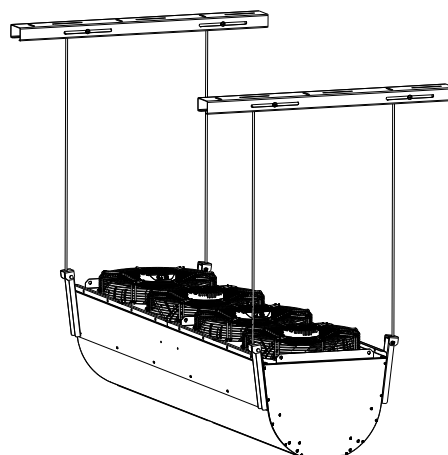
x2



x4



x4

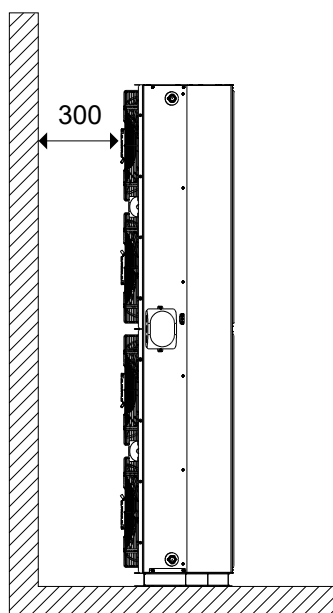


Item number	Type	Consists of
382976	TA6CK	2 x ceiling brackets + 4 x appliance brackets + 4 x threaded rods (M10, 1000 mm) + nuts
382977	TA6CKE	1 x ceiling bracket + 2 x appliance brackets + 2 x threaded rods (M10, 1000 mm) + nuts

Tatra

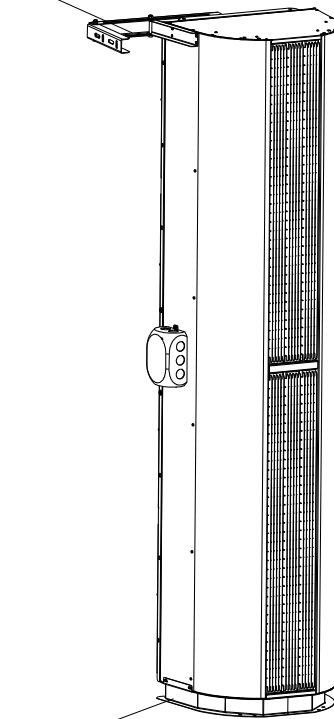
Vertical mounting

Minimum distance



TA6TB - Top bracket

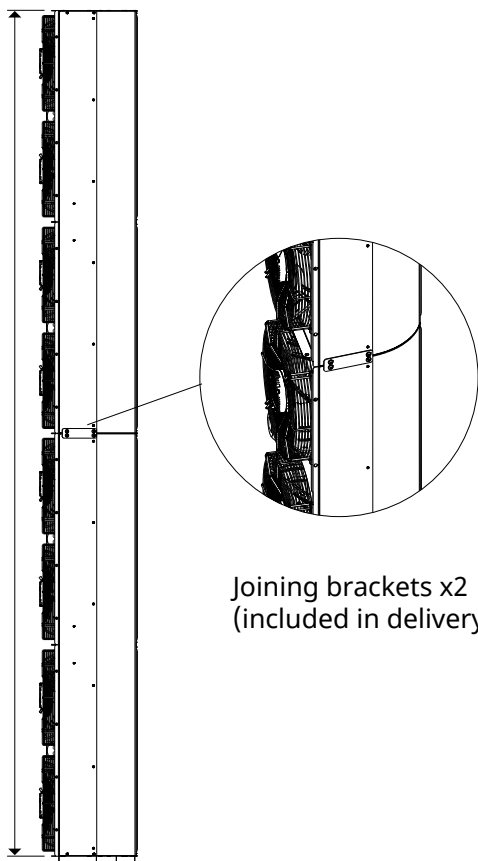
TA6FF - Floor frame



Note! The air curtain must be secured in the wall or ceiling.

Mounting on top of each other

Max 6,6 m

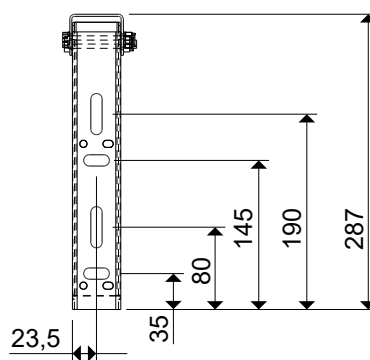
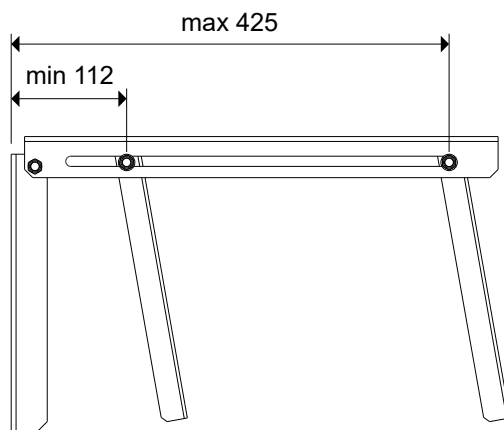
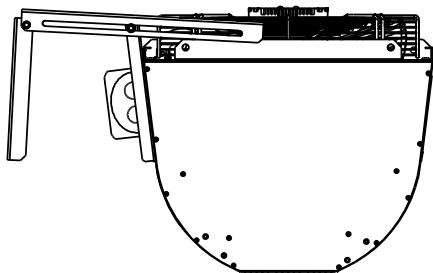


Joining brackets x2
(included in delivery)

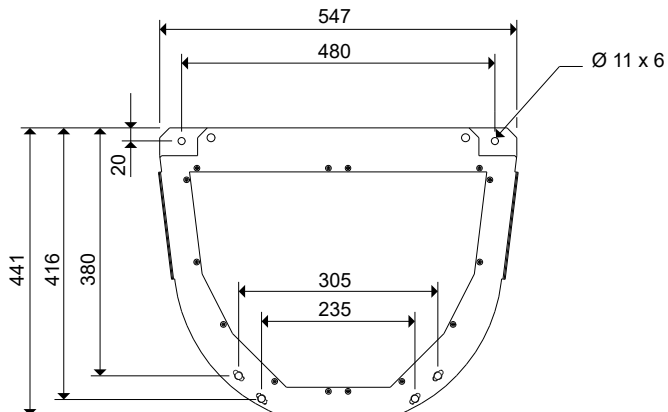
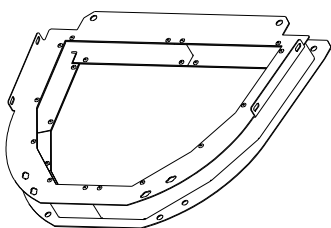
Tatra

Vertical mounting

TA6TB - Top bracket

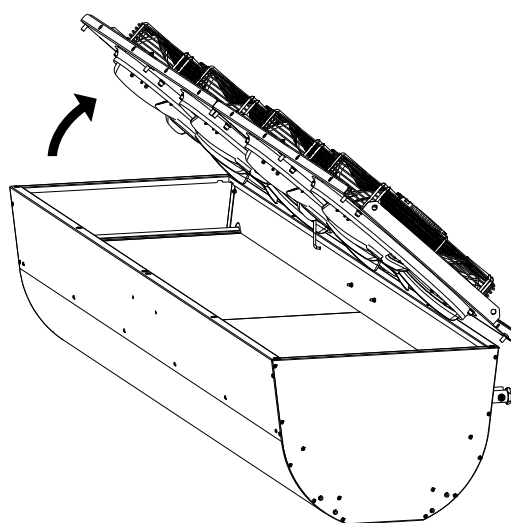
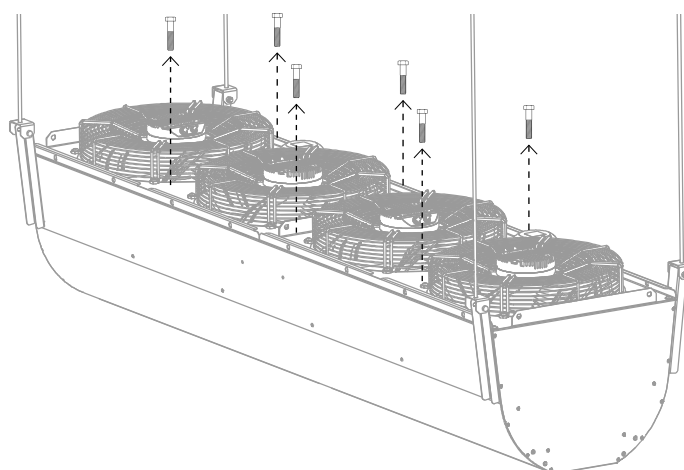


TA6FF - Floor frame



Item number	Type
280021	TA6FF
382758	TA6TB

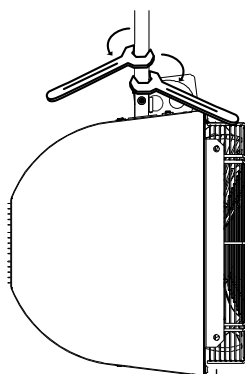
Open the unit.



Water connection



NOTE! Use a pipe wrench or a similar tool to grip the air curtain connections to prevent straining of the pipes.



Accessories

Item number	Type	Consist of	Dimension
264883	TA6EF	1 pcs	Ø480 x 100 mm
330955	FH1025	2 pcs	DN25, 1000 mm



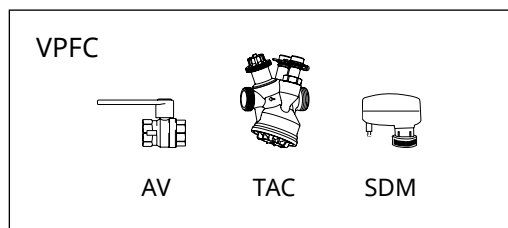
TA6EF



FH1025

Valve systems

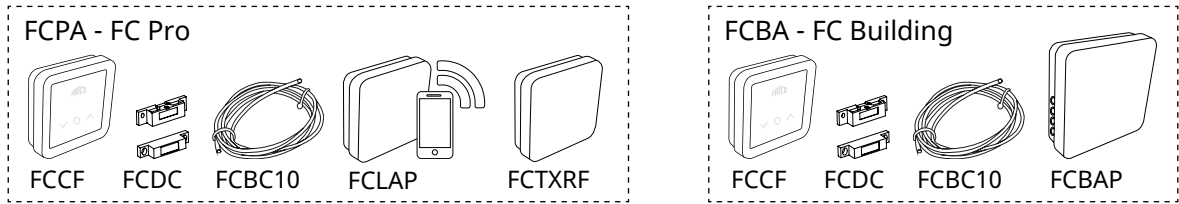
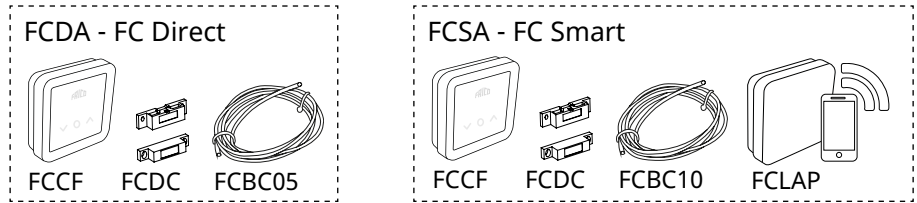
Item number	Type	DN	Flow range [l/s]
238293	VPFC15LF	DN15	0,012-0,068
238294	VPFC15NF	DN15	0,024-0,13
238295	VPFC20	DN20	0,058-0,32
238296	VPFC25	DN25	0,10-0,60
238297	VPFC32	DN32	0,22-1,03



See separate manual.

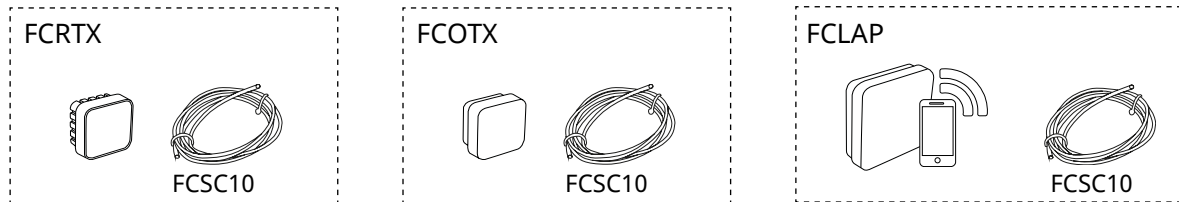
Control systems

The air curtain must be supplemented with a control system.

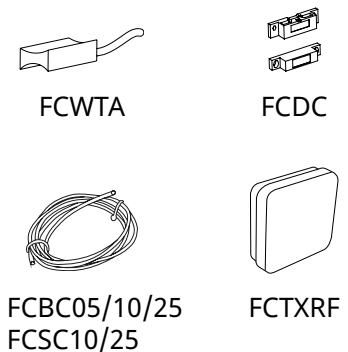


Item number	Type	Name	Dimensions
74684	FCDA	FC Direct	89x89x26 mm (FCCF)
74685	FCSA	FC Smart	89x89x26 mm (FCCF)
74686	FCPA	FC Pro	89x89x26 mm (FCCF)
74687	FCBA	FC Building	89x89x26 mm (FCCF)

Accessories



Item number	Type	Dimensions
74694	FCRTX	39x39x23 mm
74695	FCOTX	39x39x23 mm
74699	FCLAP	89x89x26 mm
74702	FCWTA	for water heated units
17495	FCDC	
74718	FCBC05	5 m
74719	FCBC10	10 m
74720	FCBC25	25 m
74721	FCSC10	10 m
74722	FCSC25	25 m
74703	FCTXRF	for FC Smart, FC Pro 89x89x26 mm



See separate manual for FC.

Technical specifications Tatra

Voltage motor: 220-240V~

 Ambient, no heat - TA6000 A (IP44)

Item number	Type	Output [kW]	Airflow*1 [m ³ /h]	Sound power*2 [dB(A)]	Sound pressure*3 [dB(A)]	Motor [W]	Amperage motor [A]	Weight [kg]
247348	TA6017A	0	3400/9900	87	4471	920	4,0	55
247349	TA6022A	0	5100/13400	87	45/71	1230	5,5	71
247350	TA6028A	0	6100/17500	93	53/77	1540	6,7	88

 Water heat - TA6000 W (IP44)

Item number	Type	Output*5 [kW]	Output*6 [kW]	Airflow*1 [m ³ /h]	$\Delta t^{*4,5}$ [°C]	$\Delta t^{*4,6}$ [°C]	Water volume [l]	Sound power*2 [dB(A)]	Sound pressure*3 [dB(A)]	Motor [W]	Amp. motor [A]	Weight [kg]
247351	TA6017W	31	55	3400/9300	10	17	3,4	84	43/68	920	4,0	64
247352	TA6022W	41	75	4700/13300	9	17	4,5	86	45/70	1230	5,6	83
247353	TA6028W	54	97	6100/17000	9	17	5,5	86	45/70	1540	6,9	103

*1) Low/high airflow (2/10V).

*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 low/high airflow (2/10V).

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

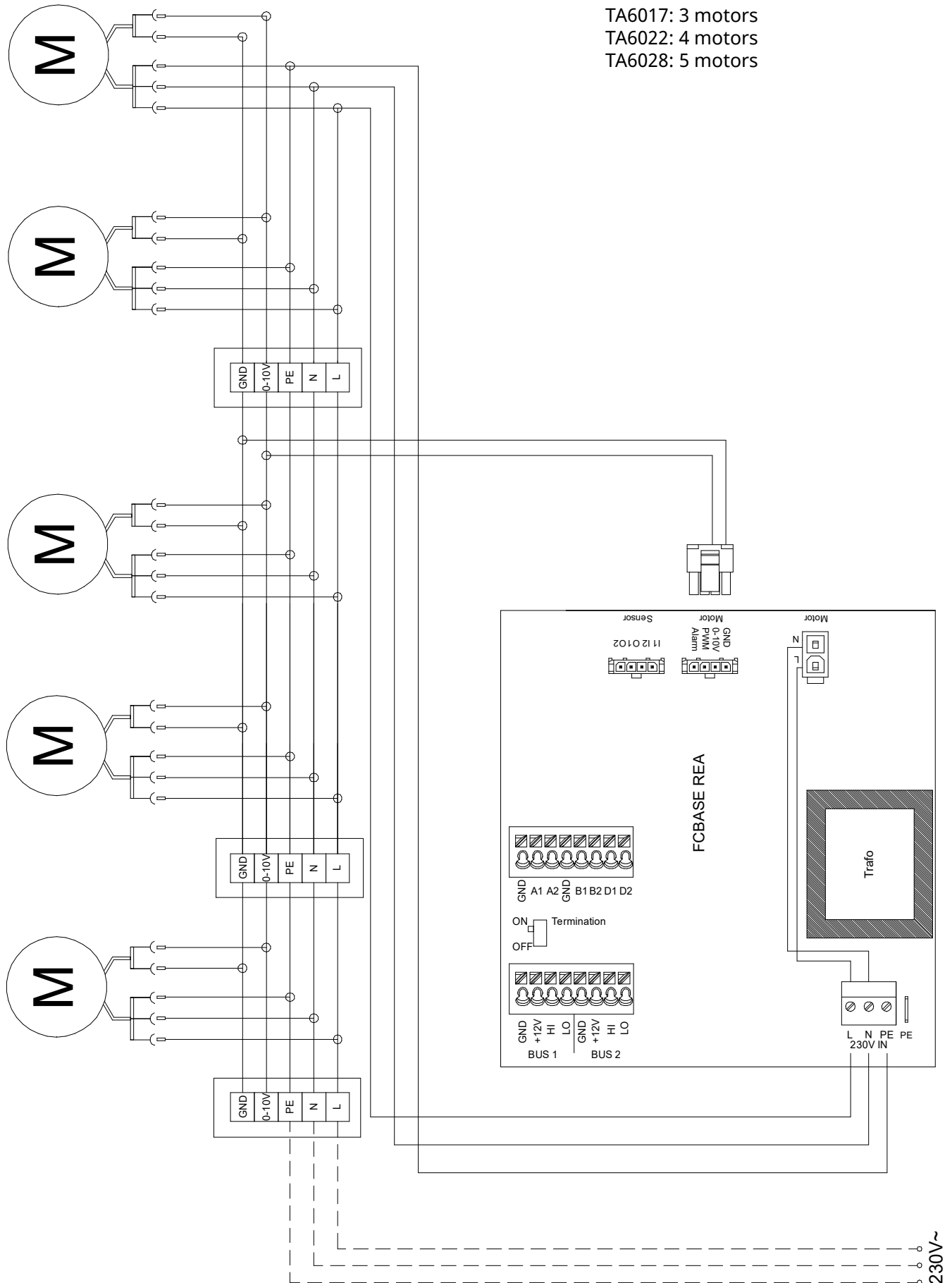
*5) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

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



TA6000 A

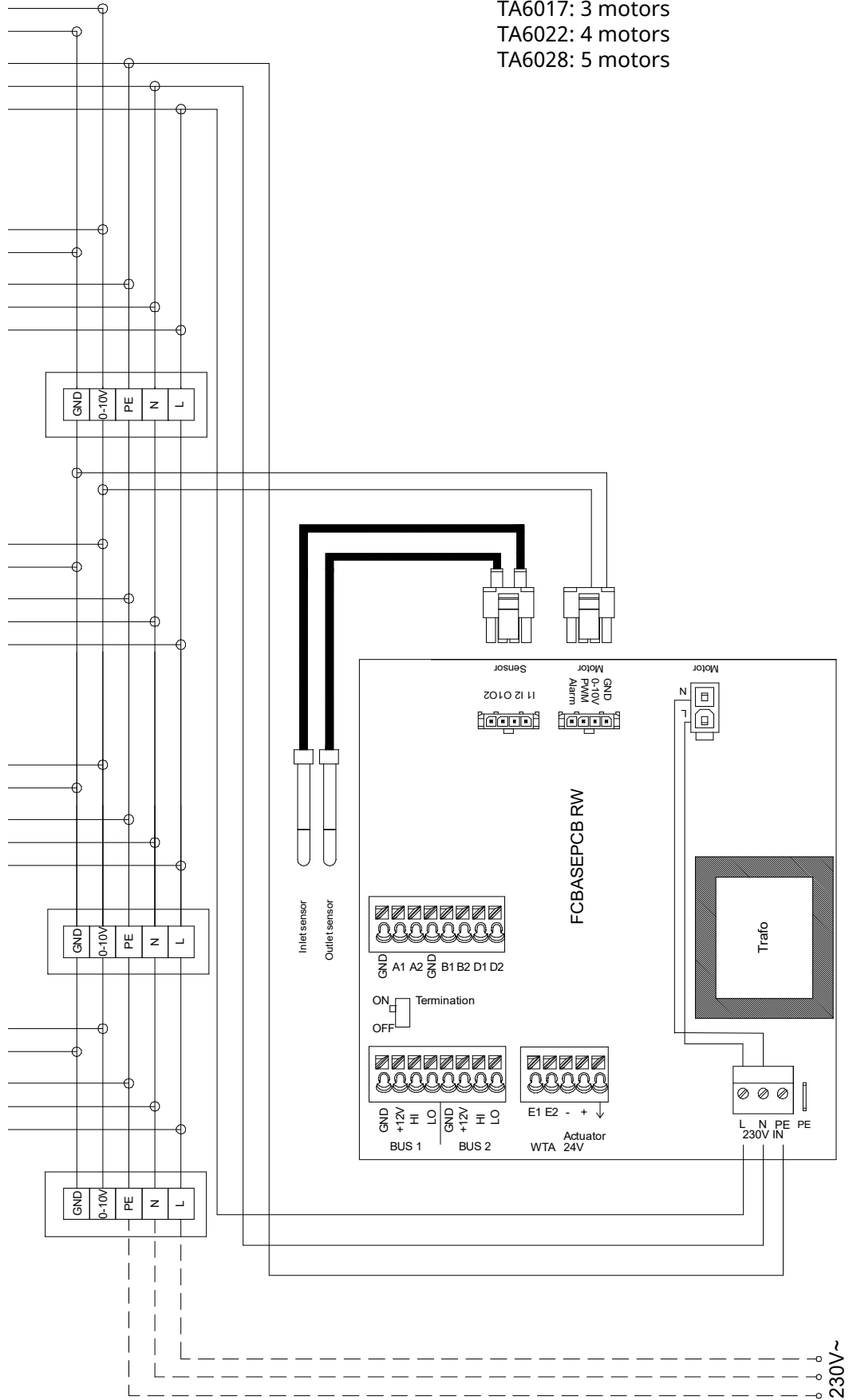
TA6017: 3 motors
 TA6022: 4 motors
 TA6028: 5 motors



Wiring diagrams for control system in the FC manual.

TA6000 W

TA6017: 3 motors
 TA6022: 4 motors
 TA6028: 5 motors



Wiring diagrams for control system in the FC manual.

Installation and operating instructions

General Instructions

Read these instructions carefully prior to 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 should the product be used in the manner intended and in accordance with the instructions.

Application

Tatra is a robust air curtain intended for vertical or horizontal installation in large doorways such as logistic centres, loading bays and warehouses. Its recommended installation height is 6 m. The air curtain is available without heat and with water heating. Protection class: IP44.

Operation

Air is drawn in at the top/rear of the unit and blown downwards/outwards shielding the door opening and minimizing heat loss. To achieve the optimum air curtain effect the unit must extend the full height/width of the door opening.

The grille for directing the outlet 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, the pressure differential across the doorway and any wind load.

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

Mounting

The Tatra unit is delivered secured by brackets in a wooden crate. Due to its heavy weight, the handling of the air curtain must be made with a forklift or other lifting equipment. The unit must be lifted in its wooden crate or by the holes in the motor section. NOTE: The unit can not be lifted by its mid section as the outlet grille might be damaged. The delivery brackets must be removed before use.

The Tatra units are symmetrical and can be mounted horizontally or vertically. The product must be mounted in such a way to allow future service and maintenance. The FC terminal box is placed on the unit's long side and must be fully accessible after installation.

Horizontal mounting

The air curtain is installed horizontally with the outlet air grille facing downwards as close to the door as possible. Tatra can be mounted on the wall or on the ceiling.

Mounting with wall brackets

A complete kit for wall mounting is available containing wall brackets, appliance brackets and threaded rods (TA6WK).

1. Mount the wall brackets on the wall. Fasteners are not included.
2. Mount the appliance brackets on the unit with supplied screws.
3. Use the threaded rods to hang the unit on the wall brackets. Secure with supplied nuts.

Horizontal mounting on the ceiling

For ceiling mounting, a complete kit is available containing a ceiling bracket, appliance brackets and threaded rods (TA6CK).

1. Mount the ceiling bracket on the ceiling. Fasteners are not included.
2. Mount the appliance brackets on the unit with supplied screws.
3. Use the threaded rods to hang the unit on the ceiling bracket. Secure with supplied nuts.

If another mounting solution is preferred, the appliance brackets are also available as a separate accessory (TA6AB). For the protection of wider doorways, several units can be mounted in series alongside each other. Additional mounting kits must then be used. See pictures in introduction pages.

Vertical mounting

The air curtain is mounted vertically as close as possible to the door. For the best effect air curtains should be placed on both sides of the opening.

The air curtain must be mounted on the floor frame TA6FF, available as accessory. The frame is attached horizontally to the floor using fasteners appropriate for the surface. The unit can be turned and positioned on either side of the door.

Several units can be mounted directly on top of each other, they are fastened together with the joining brackets supplied with the air curtain. Maximum total height is 6,6 m. Note! The air curtain must be secured in the wall or ceiling. A top bracket for this purpose is available as accessory.

See pictures in introduction pages.

Electrical installation

The installation, which should be preceded by an isolator switch with a contact separation of at least 3 mm, should only be wired by a competent electrician and in accordance with the latest edition of IEE wiring regulations.

The air curtain has an integrated PC board which is connected to the selected external control system FC. FC must be ordered separately. The PC board is located in the terminal box on the unit's long side. FC is supplied pre-programmed. Communication and sensor cables are connected to the PC board.

Should more than one air curtain be controlled by a single FC, an additional communication cable FCBC per unit will be required. See manual for FC.

The electrical connection is made on the top of the unit (horizontal) or on the back (vertical). Tarta is equipped with a 1,8 m cable without plug.

Connecting the water coil (W)

The installation must be carried out by an authorised installer.

The water coil has copper tubes with aluminium fins and is suitable for connection to a closed water heating system. The heating coil must not be connected to a mains pressure water system or an open water system.

Note that the unit shall be preceded by a regulating valve, see Frico valve kit.

The water coil is connected on the long side of the unit via connections DN25 (1"), external thread. Flexible hoses are available as accessories.



NOTE: Care must be taken when connecting the pipes. Use a pipe wrench or a similar tool to grip the air curtain connections to prevent straining of the pipes and subsequent water leakage during connection to the water supply pipe-work.

The connections to the heating coil must be equipped with shut off valves to allow trouble-free removal.

The water coil is equipped with vent valves.

Adjustment of the air curtain and airflow

The direction and speed of the airflow should be adjusted considering the load on the opening. Pressure forces affect the airstream and force it inwards towards the premises (when the premises are heated and the outdoor air is cold).

The airstream should, therefore, be directed

outwards to withstand the load. Generally speaking, the higher the load, the greater the angle required.

Basic setting fan speed

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

Filter (W)

The unit is not equipped with an internal filter. The water coil can be cleaned by loosening the motor section (see Opening the unit). An external filter is available as accessory which provides an easier maintenance, since the unit does not need to be opened. The external filter is easily fastened with the four supplied velcro stickers. If the filter is clogged or damaged, it may need to be changed.

Opening the unit / Service, repairs and maintenance

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

1. Disconnect the power supply.
2. Loosen the motor section on the unit's top (horizontal), back (vertical) by removing its screws.
3. Fold the section towards the cable side.
NOTE: Be careful to prevent the section from falling.
4. After service, repairs and maintenance, put the section back in reverse order.

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.

Temperature control

Temperature control of FC maintains the exhaust temperature. Should the temperature exceed the preset value, the overheating alarm will activate. For more information see the FC manual.

Replacing the water coil (W)

A horizontally mounted unit must be demounted and placed on a suitable working level before accessing the water coil. The unit must be lifted by the holes in the motor section.

NOTE: The unit can not be lifted by its mid section as the outlet grille might be damaged.

1. Disconnect the power supply.
2. Shut off the water supply to the unit.
3. Disconnect the connections to the water coil.
4. If horizontally mounted, demount the unit.
5. Loosen the motor section on the unit's top (horizontal), back (vertical) by removing its screws.
6. Fold the section towards the cable side.
NOTE: Be careful to prevent the section from falling.
7. Remove the mounting screws securing the coil in the unit and lift out.
8. Install the new coil in reverse order to the above.

Safety cut-out

All motors are equipped with an integrated safety cut-out. This will operate, stopping the air curtain should the motor temperature rise excessively or the electronics fail or overheat. The cut-out will automatically reset when the motor temperature has returned to within the motor's operating limits. Failure or damage to electronics components may require repair or replacement of such components or the entire product.

Fan replacement

1. Determine which of the fans is not functioning.
2. Disconnect the cables from the relevant fan.
3. Remove the screws securing the fan and lift the fan out.
4. Install the new fan as above in reverse order.

Replacing the PC board

1. The PC board is located in the terminal box on the unit's long side.
2. Mark and disconnect the cables to the PC board.
3. Unhatch the board from its PCB snap-in spacers and lift out.
4. Install the new PC board as above in reverse order.

Troubleshooting

If the fans are not running or do not perform properly, check the following:

- The power supply.
- That the intake grille/filter is not dirty.
- That the motor's safety cut-out has not been deployed.
- Functions and settings of the FC control system, see the FC manual.

If there is no heat, check the following:

- Functions and settings of the FC control system, see the FC manual.

For units with a water coil, also check the following:

- That the water coil is air free.
- That there is sufficient water flow and pressure.
- That incoming water is heated adequately.

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

Packaging

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

Handling of product at end of working life

This product may contain substances necessary for the functionality of the product but potentially dangerous for the environment. The product should not be disposed of mixed with general household waste but delivered to a designated collection point for environmental recycling. Please contact the 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!*
- *The unit must not be fully or partially covered as overheating can result in a fire risk!*
- *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.



Main office

Frico AB
Industrivägen 41
SE-433 61 Sävedalen
Sweden

Tel: +46 31 336 86 00

mailbox@frico.se

www.frico.net

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