Tatra

FRICO

Powerful air curtain for large industrial doors

Tatra with a recommended installation height of 6 m or width of 8 m, is intended for large industrial doorways such as logistic centres, loading bays and warehouses. With its powerful fans and high performance it is especially suitable for industrial doors that remain open for extended periods. Tatra is equipped with energy-efficient EC motors which enable stepless control of the airflow. Tatras units are symmetrical and can be mounted horizontally or vertically.

Created for modern industrial facilities

Tatra is made to operate in the most challenging industrial environments. Its powerful fans and high performance combined with our intelligent control system FC is the solution to energy saving demands in modern industrial facilities.

Multiple options for large openings

Tatra is available in three different lengths of up to 2,75 metres. Several units can be mounted in series alongside each other or on top of each other, which makes it possible to create a continuous air curtain for large openings.

An energy saving investment

Air curtains are a profitable investment as open industrial doors can cause significant energy losses. Frico's high-performance air curtains prevent expensive heated or cooled air escaping the building. The larger the door, the greater the energy loss and the higher the financial saving from an air curtain.
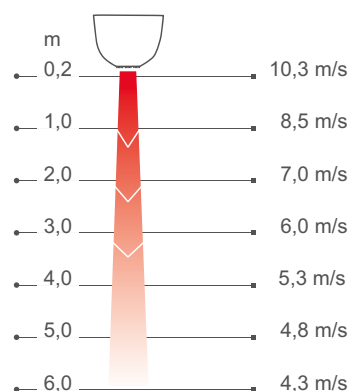
Tatra

Available in 2 versions:

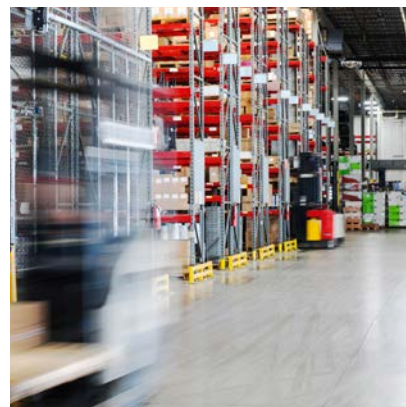- ❄ Ambient (without heat)
- 💧 Water heating

Air velocity profile
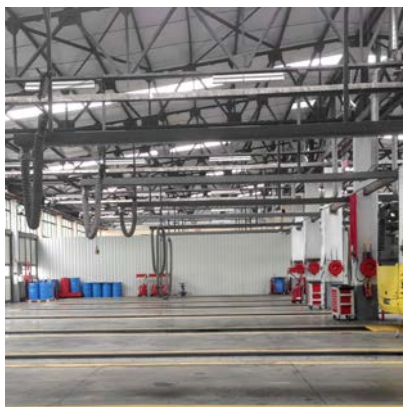

m		m/s
0,2		10,3 m/s
1,0		8,5 m/s
2,0		7,0 m/s
3,0		6,0 m/s
4,0		5,3 m/s
5,0		4,8 m/s
6,0		4,3 m/s

Design and specifications are subject to change without notice.

Frico's Thermozone technology optimizes the air curtain

THERMOZONE® TECHNOLOGY

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 or water heating) and length 1,65, 2,20 or 2,75 m you assemble your control and accessory options:

Select control system

Choose one of our FC Control systems.

Add valve system

Water heated units must be supplemented with a valve system.

Select mounting options

Add necessary and optional mounting accessories.

Technical specifications

❃ Ambient, no heat - TA6000 A (IP44)

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]
247348	**TA6017A**	0	3400/9900	87	44/71	4,0	1650	55
247349	**TA6022A**	0	5100/13400	87	45/71	5,5	2200	71
247350	**TA6028A**	0	6100/17500	93	53/71	6,7	2750	88

🌢 Water heat - TA6000 W (IP44)

Item number	Type	Output*[5] [kW]	Output*[6] [kW]	Airflow*[1] [m³/h]	Δt*[4,5] [°C]	Δt*[4,6] [°C]	Water volume [l]	Sound power*[2] [dB(A)]	Sound pressure*[3] [dB(A)]	Amperage motor [A]	Length [mm]	Weight [kg]
247351	**TA6017W**	31	55	3400/9300	10	17	3,4	84	43/68	4,0	1650	64
247352	**TA6022W**	41	75	4700/13300	9	17	4,5	86	45/70	5,6	2200	83
247353	**TA6028W**	54	97	6100/17000	9	17	5,5	86	45/70	6,9	2750	103

*[1]) Low/high airflow (2V/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 (2V/10V).
*[4]) Δt = temperature rise of passing air at maximum heat output and highest 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.

Corrosion proof housing made of hot zinc-plate and powder coated steel panels.
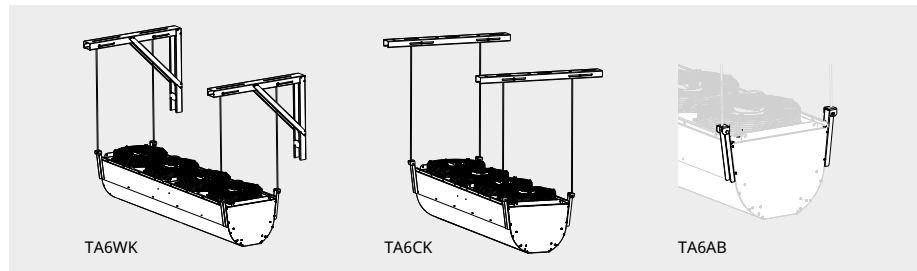Colour front: white, RAL 9016. Colour grille: grey, RAL 7046.

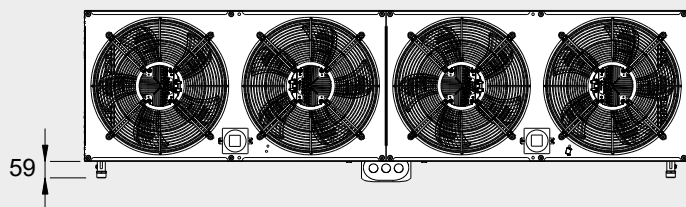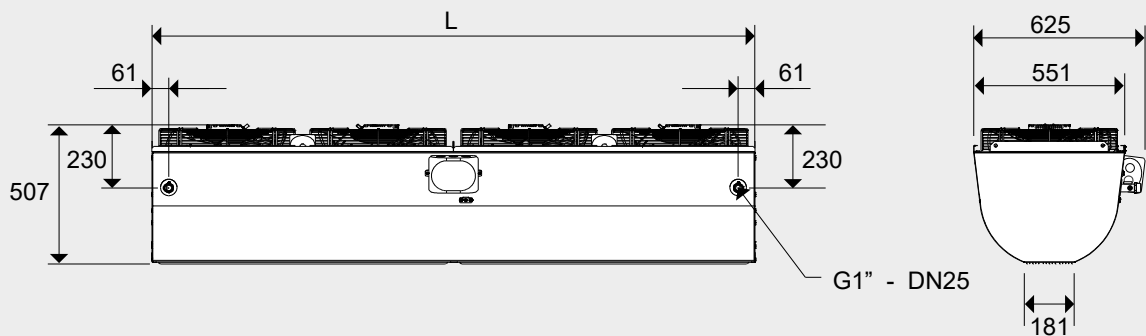CE UKCA EAC

Tatra

Mounting

The recommended installation height of Tatra is 6 m. When the air curtain is mounted horizontally the outlet air grille must be facing downwards as close to the door as possible. Tatra can be mounted on the wall or on the ceiling. Recommended mounting options are complete wall kit TA6WK or complete ceiling kit TA6CK, available as accessories. Other mounting solutions require appliance brackets TA6AB. For the protection of wider doorways, several units can be mounted in series alongside each other.
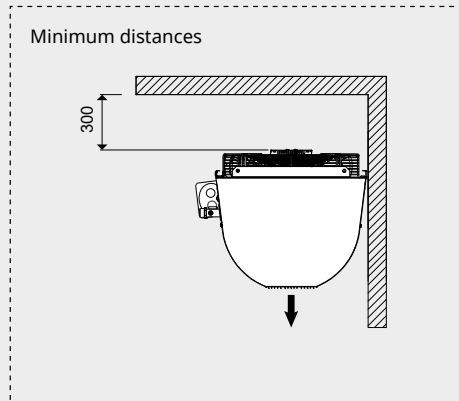
Connection

The air curtain has an integrated PC board which is connected to the selected external control system FC. The PC board is located in the terminal box on the unit's long side. Communication and sensor cables are connected to the PC board. The electrical connection is made on the top of the unit. The water coil is connected on the long side of the unit via connections DN25 (1''), external thread. Flexible hoses are available as accessories. Water heated units must always be supplemented with a valve kit, see Valves and Accessories. For an easy connection of valve systems, there are three different connection kits to choose from (accessories).

TA6WK   TA6CK   TA6AB

DN25 (1"), outside thread

L

61   61

230   230

507

G1" - DN25

625

551

181

Minimum distances

300

59

	L [mm]
TA6017	1650
TA6022	2200
TA6028	2750

For wiring diagrams and other technical information, please see the manual and www.frico.net.
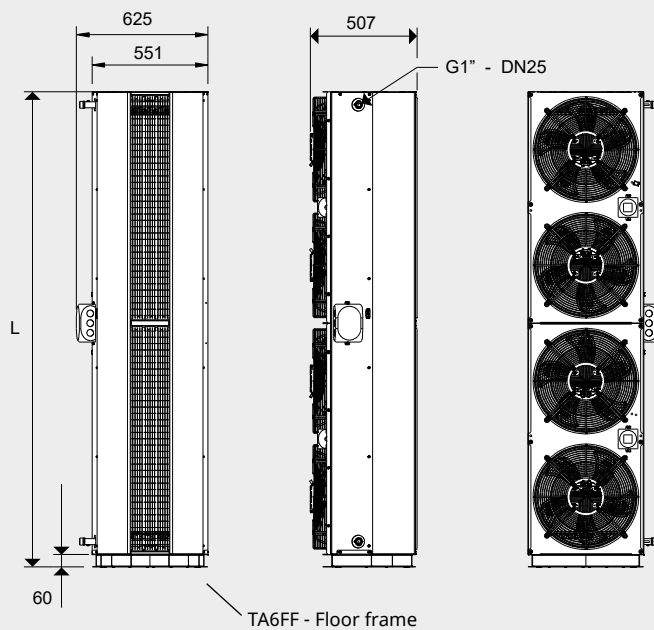
Tatra

Mounting

The recommended installation width of Tatra is 8 m with air curtains on both sides of the opening. 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 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. The air curtain must always be secured at the top.
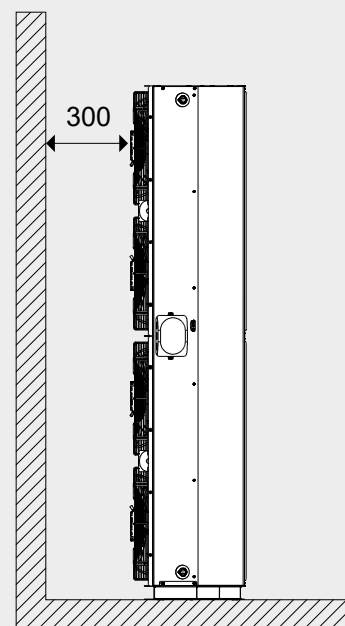
Connection

The air curtain has an integrated PC board which is connected to the selected external control system FC. The PC board is located in the terminal box on the unit's long side. Communication and sensor cables are connected to the PC board. The electrical connection is made on the back of the unit. The water coil is connected on the long side of the unit via connections DN25 (1''), external thread. Flexible hoses are available as accessories. Water heated units must always be supplemented with a valve kit, see Valves and Accessories. For an easy connection of valve systems, there are three different connection kits to choose from (accessories).

DN25 (1"), outside thread

Minimum distances

625
551
507
G1" - DN25

L

300

60

TA6FF - Floor frame

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

For wiring diagrams and other technical information, please see the manual and www.frico.net.

Recommended installation width varies depending on the relevant premises. See www.frico.net for further information.

FC Control system

Tatra

Frico air curtains come with an integrated PC-board and are supplemented with the intelligent control system FC of your choice, working together to create many smart and energy saving features. There are four different packages to choose from, depending on your requirements.

FC Direct

Entry level
- *Door contact*
- *Calendar function*
- *Filter timer*
- *Built-in temperature sensor*

FC Smart

FC Direct +
- *Control via app (Bluetooth)*
- *Wireless sensors possible*
- *Adjustable calendar function*
- *Away and Boost function*
- *Adjustable filter timer*
- *Vestibule function*
- *Zone possibility*
- *Enhanced water control possible*

FC Pro

FC Direct + FC Smart +
- *Automatic air flow control*
- *Automatic heat blocking*

FC Building - BMS

FC Direct +
- *0-10V, potential free contact or Modbus*
- *Automatic air flow control**
- *Automatic heat blocking**
- *Heat and fan settings*
- *Alarm indication*
- *Read values*
- *Enhanced water control possible*

* Requires outdoor temp signal

FC Direct

Entry level control system for a great start. The door contact provides an automatic energy-saving function, as the air curtain becomes active only when the door is open. When the door is closed, it remains on stand-by or runs on a lower fan speed if extra heat is needed. With the calender function, you can choose periods of comfort and reduced mode. The control panel has a built-in temperature sensor, which is used for control when external sensors are not used.

FC Smart

Second level control system for full freedom. FC Smart comes with all features from FC Direct plus additional energy saving features and the possibility of app control (Bluetooth). The app gives you access to all functions in the system, allowing you to set it up exactly the way you want it. It also enables you to create different zones with different settings in a larger system. The app FRICO CONTROL is available for both iOS and Android.

FC Pro

Third level control system for maximum savings. FC Pro comes with all features from FC Direct and FC Smart plus additional automatic energy saving features. By receiving and reacting to information about indoor and outdoor temperatures, the right amount of heat and air flow is added to avoid overshoots and thus reducing energy consumption.

FC Building - BMS system

Comprehensive control system for buildings, with the option to control via 0-10V, potential free contact (e.g. a relay) and/or Modbus RTU (RS485). FC Building enables you to receive product information status and alarms. Modbus allows for full use of all the energy saving features within the control system.

Item number	Type	Description
74684	**FCDA**	FC Direct, first level control system
74685	**FCSA**	FC Smart, second level control system
74686	**FCPA**	FC Pro, third level control system
74687	**FCBA**	FC Building, BMS system

Control system content and accessories

FC Control system helps to create many smart and energy saving features. In addition to our four packages, components can be added to expand and customize the system. With the app levels (FC Smart and FC Pro) it is also possible to create and control different zones. Each added zone needs to be equipped with one FC Direct and can be designed to fit its specific needs by adding different accessories.

FC Direct, control kit
Control panel for fan and heat, door contact and 5 m communication cable. Used for additional zones with FC Smart and FC Pro. IP44.

FCRTX, external room temperature sensor
For reading of the room temperature on another location than that of the control panel, incl. 10 m sensor cable. IP20.

FCOTX, outdoor temperature sensor
Reading the outdoor temperature, incl. 10 m sensor cable. Enables automatic air curtain control and heat blocking. IP44.

FCLAP, local access point
Local access point for extra wireless sensors (when operating more than 8 sensors) and extended range for wireless sensors or app control (Bluetooth), incl. 10 m communication cable. IP44.

FCSC/FCBC, cable
FCSC Sensor cable available in 10 or 25 m for extra length. FCBC Communication cable for additional products within the same zone, available in 5, 10 or 25 m.

FCDC, door contact
The door contact regulates the airflow on/off. Allows you to control air curtains at different doorways individually within the same zone.

FCTXRF, indoor/outdoor wireless sensor
Indoor/outdoor wireless sensor with same features as FCRTX and FCOTX. The set up as outdoor or indoor sensor is made by a switch inside the sensor. Range up to 50 m. Battery life: 3-5 years. IP44.

FC Direct
Content
- FCCF control panel
- FCBC05
- FCDC

FC Smart
Content
- FCCF control panel
- FCBC10
- FCDC
- FCLAP

FC Pro
Content
- FCCF control panel
- FCBC10
- FCDC
- FCLAP
- FCTXRF

FC Building - BMS
Content
- FCCF control panel
- FCBC10
- FCDC
- FCBAP building access point

Item number	Type	Description	Dimensions
74684	**FCDA**	FC Direct, first level control system	89x89x26 mm (FCCF)
74694	**FCRTX**	External room temperature sensor	39x39x23 mm
74695	**FCOTX**	Outdoor temperature sensor	39x39x23 mm
74699	**FCLAP**	Local access point for extra wireless sensors and extended range	89x89x26 mm
74718	**FCBC05**	Extra communication cable, 5 m	5 m
74719	**FCBC10**	Extra communication cable, 10 m	10 m
74720	**FCBC25**	Extra communication cable, 25 m	25 m
74721	**FCSC10**	Extra sensor cable, 10 m	10 m
74722	**FCSC25**	Extra sensor cable, 25 m	25 m
17495	**FCDC**	Door contact	
74703	**FCTXRF**	Indoor/outdoor wireless sensor (for FC Smart, FC Pro)	89x89x26 mm

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. The return water temperature sensor is making sure that as much energy as possible from the water in the coil is used, thus reducing energy consumption.

VPFC, pressure independent and modulating valve system
Two way pressure independent control and adjustment valve with modulating actuator and shut-off valve.

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 nippel set with male thread and press end.

FCWTA, return water temperature sensor
Enables control of return water temperature and automatic bypass function, which provides extended frost protection and reduced energy consumption.

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

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 nippel set R15	2
333350	**ANS2018**	Adapter nippel set R20	2
333351	**ANS2022**	Adapter nippel set R20	2
333352	**ANS2528**	Adapter nippel set R25	2
333353	**ANS3235**	Adapter nippel set R32	2
74702	**FCWTA**	Return water temperature sensor	1

Accessories - water heated units

FH1025, flexible hoses
Flexible hoses for easy and practical installation of water heated unit. Length 1 m. DN25, 1" inside/outside thread.

TA6EF, external filter
The external filter provides easier maintenance, since the unit does not need to be opened. The filter is easily fastened with the four supplied velcro stickers. The unit needs three filters for 6017W, four filters for 6022W and five filters for 6028W.

Item number	Type	Used for	Consists of
330955	**FH1025**	TA6017W/6022W/6028W	2
264883	**TA6EF**	TA6017W/6022W/6028W	1

Accessories - horizontal mounting

TA6WK

TA6CK

TA6AB

TA6WK, wall kit
Complete kit for installing one unit horizontally on a wall. Consist of two wall brackets, four appliance brackets, four threaded rods and nuts.

TA6WKE, extra wall kit
For each additional horizontal TA6000. Consist of one wall bracket, two appliance brackets, two threaded rods and nuts.

TA6CK, ceiling kit
Complete kit for installing one unit from the ceiling. Consist of two ceiling brackets, four appliance brackets, four threaded rods and nuts.

TA6CKE, extra ceiling kit
For each additional horizontal TA6000. Consist of one ceiling bracket, two appliance brackets, two threaded rods and nuts.

TA6AB, appliance brackets
Used for alternative horizontal mounting solutions of TA6000. Consists of four appliance brackets.

TA6ABE, extra appliance brackets
For each additional horizontal TA6000. Consists of two appliance brackets.

Item number	Type	Used for
397712	**TA6WK**	TA6017/6022/6028
382975	**TA6WKE**	TA6017/6022/6028
382976	**TA6CK**	TA6017/6022/6028
382977	**TA6CKE**	TA6017/6022/6028
397713	**TA6AB**	TA6017/6022/6028
382973	**TA6ABE**	TA6017/6022/6028

Accessories - vertical mounting

TA6FF, floor frame
The frame is attached horizontally to the floor. Several units can be mounted directly on top of each other, they are fastened together with the joining brackets supplied with the air curtain. One floor frame per vertical installation is needed.

TA6TB, top bracket
Used to secure vertical mounted TA6000 against the wall. One top bracket per vertical installation is needed.

Item number	Type	Used for	Consists of
280021	**TA6FF**	TA6017/6022/6028	1
382758	**TA6TB**	TA6017/6022/6028	1