



PRODUCT RANGE

# AIR CURTAINS



## Frico's Thermozone technology optimizes the air curtain

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. 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.

Frico air curtains are developed and manufactured in Sweden. The air curtains are tested in one of the most modern and advanced air and sound laboratories in Europe which means that we can guarantee a high performance product.

### Controls

How efficient an air curtain is and how much energy can be saved depends to a large part on the control system. Many factors that affect the air curtain vary over time. The variations can be long term, for example seasonal, or more temporary, for example when the sun goes behind clouds, the premises fills with people or when a door is opened.

#### **FC Control system**

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.

#### **Remote control**



















































































The air curtain has a control panel discretely integrated in the gable end and can be controlled by a separate remote control.

#### **Integrated control**


Some of our air curtains have integrated controls. See [www.frico.net](http://www.frico.net) for further information.

#### **Other controls**


Control options are available for all different needs. See [www.frico.net](http://www.frico.net) for further information.

Type	Heating	EC motor	Control	Mounting	Recommended installation height
<b>Entrances</b>					
PA2200C	  		 Remote control	Horizontal	2,2 m
Pamir 2500	  		 FC Control system	Horizontal	2,5 m
AR200	  		 Other controls	Horizontal	2,5 m
Portier	 		 Other controls	Horizontal	2,5 m
ADA			 Other controls	Horizontal	2,5 m
<b>Small openings</b>					
PA1508			 Integrated control	Horizontal	Small openings
<b>Revolving doors</b>					
Scand	  		 FC Control system	Vertical	-
Ruwen	   		 FC Control system	Horizontal	-
<b>Commercial</b>					
Sierra	   		 FC Control system	Horizontal / Vertical	3,5 m
PA3200C	  		 Remote control	Horizontal	3,2 m
Pamir 3500	   		 FC Control system	Horizontal / Vertical	3,5 m
Pamir 4200	   		 FC Control system	Horizontal / Vertical	4,2 m
AR3200C	  		 Remote control	Horizontal	3,2/2,8 m
Arden 3500	   		 FC Control system	Horizontal	3,5 m
Arden 4200	   		 FC Control system	Horizontal	4,2 m
<b>Industry</b>					
Pamir 5000	   		 FC Control system	Horizontal / Vertical	5 m
AGI6000	 		 Other controls	Horizontal / Vertical	6 m
UF600			 Other controls	Vertical	6 m
<b>Cold rooms</b>					
PAECS			 Integrated control	Horizontal	2,5 m
PAEC2500			 Integrated control	Horizontal	2,5 m
PAEC3200			 Integrated control	Horizontal	3,2 m
ADA Cool			 Other controls	Horizontal	3 m

Recommended installation height varies depending on the relevant premises. See [www.frico.net](http://www.frico.net) for further information.

 Ambient, no heat

 Electrical heat

 Water heat





## Entrances

2,2 m

PA2200C

2,5 m

Pamir 2500



**Stylish air curtain for entrances, with remote and integrated control**

PA2200C is a compact air curtain, suitable for most small entrances. The air curtain has an integrated control system and can also be remote controlled which makes it very easy to install and use.



**Slim air curtain for entrances, with energy-efficient control**

Pamir 2500 has a recommended installation height of 2,5 m and is designed for horizontal mounting in shops, offices and public premises. The air curtain together with the intelligent FC control system allows you to easily optimize your comfort and save energy.

2,5 m

AR200

2,5 m

Portier



**Recessed air curtain for smaller entrances**

AR200 is a compact air curtain, suitable for most small entrances. A low height makes it possible to install AR200 where ceiling space is limited. The recessed installation and low sound level makes AR200 very discreet. This air curtain is regulated by the SIRE control system via an external PC board.



**Design air curtain for entrances**

Portier is an exclusive air curtain in brushed stainless steel intended for entrance doors in e.g. shops, banks, hotels and restaurants. The elegant design of the air curtain makes it particularly suitable for environments where demands are made on a high standard of design.



## Entrances

2,5 m



**Air curtain for air conditioned premises**

ADA is suitable to use, for example, to keep the cold air inside air conditioned premises. The air curtain creates an air barrier that prevents the intrusion of warm air and also insects, exhaust fumes, smoke, dust, etc.

## Small openings

ADA

PA1508



**Air curtain for small openings**

PA1508 is primarily intended for small openings such as kiosk and service hatches and cashier benches where a long, narrow air flow is required. This creates a temperature separating air barrier that prevents cold air from pushing in and hot air from flowing out. PA1508 also gives additional heat and in this way also improves the working environment.

## Revolving doors



**Curved and energy-efficient air curtain for revolving doors**

Scand is a vertical air curtain specially designed for revolving doors, with a curved design that integrates neatly with the door. The air curtain is adapted to customer needs and equipped with energy-efficient EC motors which enable stepless control of the airflow. The air curtain together with the intelligent FC control system allows you to easily optimize your comfort and save energy.

Scand



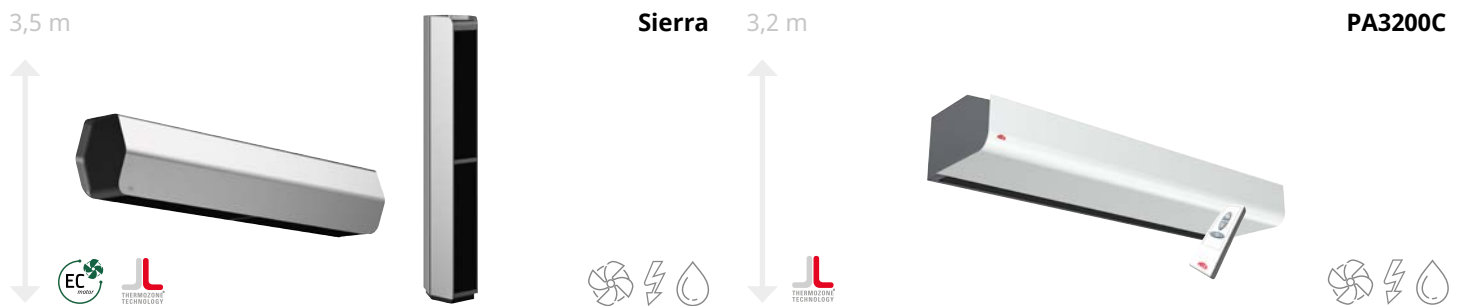
**Discreet and energy-efficient air curtain for revolving doors**

Ruwen is a customized air curtain installed above your revolving door, with the exhaust duct adapted to the diameter of the door. The air curtain is equipped with energy-efficient EC motors which enable stepless control of the airflow. The air curtain together with the intelligent FC control system allows you to easily optimize your comfort and save energy.

Ruwen



## Commercial



### Unique energy-efficient air curtain for exclusive establishments

Sierra has a striking design suitable for exclusive establishments. In stainless steel with the finish or the colour of your choice, Sierra is customized to perfectly fit your entrance and make it unique. The air curtain together with the intelligent FC control system allows you to easily optimize your comfort and save energy.

### Stylish air curtain for commercial premises, with remote and integrated control

PA3200C is a compact air curtain for commercial buildings and small industrial entrances. The air curtain has an integrated control system and can also be remote controlled which makes it very easy to install and use.



### Sleek and energy-efficient air curtain for commercial premises

Pamir 3500 has a recommended installation height of 3,5 m and is equipped with energy-efficient EC motors which enable stepless control of the airflow. The air curtain together with the intelligent FC control system allows you to easily optimize your comfort and save energy.

### Stylish and energy-efficient air curtain for large commercial premises

Pamir 4200 has a recommended installation height of 4,2 m and is equipped with energy-efficient EC motors which enable stepless control of the airflow. The air curtain together with the intelligent FC control system allows you to easily optimize your comfort and save energy.





3,2 m   2,8 m 



**AR3200C**



**Recessed air curtain for commercial premises, with remote and integrated control**

AR3200C is a compact air curtain intended for recessed mounting in commercial buildings and small industrial entrances. The air curtain has an integrated control system and can also be remote controlled which makes it very easy to install and use.

3,5 m



**Arden 3500**

**Recessed energy-efficient air curtain for commercial premises**

Arden 3500 is designed for recessed installation with a recommended installation height of 3,5 m and is equipped with energy-efficient EC motors which enable stepless control of the airflow. The air curtain together with the intelligent FC control system allows you to easily optimize your comfort and save energy.

4,2 m



**Arden 4200**



**Recessed energy-efficient air curtain for large commercial premises**

Arden 4200 is designed for recessed installation with a recommended installation height of 4,2 m and is equipped with energy-efficient EC motors which enable stepless control of the airflow. The air curtain together with the intelligent FC control system allows you to easily optimize your comfort and save energy.



## Industry

5 m



**Pamir 5000**



### Stylish and energy-efficient air curtain for industrial premises

Pamir 5000 has a recommended installation height of 5 m and is equipped with energy-efficient EC motors which enable stepless control of the airflow. The air curtain together with the intelligent FC control system allows you to easily optimize your comfort and save energy.

6 m



**Tatra**



### Powerful air curtain for large industrial doors

Tatra is a robust air curtain intended for vertical or horizontal installation in large doorways such as logistic centres, loading bays and warehouses. 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. The air curtain is equipped with energy-efficient EC motors which enable stepless control of the airflow.

6 m



**AGI6000**



### Robust air curtain for large industrial doors

AGI is a robust air curtain intended for vertical or horizontal installation in large doorways such as logistic centres, loading bays and warehouses. With its powerful fans and high enclosure classification it is specially suitable for industrial environments.

6 m



**UF600**



### Air curtain with floor outlet for large industrial doorways

UF600 creates a very effective air barrier when air at high speed is pushed out through a narrow channel situated in the floor inside the door opening. An air barrier directed upwards from the floor gives the best possible protection against cold air flowing into the premises.





## Cold rooms

4 m

PAECS

2,5 m

PAEC2500



**Slim and cost effective air curtain with EC motor and integrated controls for cold rooms**

PAECS creates an effective barrier between temperature zones. Stepless control that can be set for open and closed door allows precise adjustment for every installation, with optimised protection at the lowest possible energy consumption. PAECS is the perfect choice for cold room and freezer applications.



**Stylish air curtain with EC motor and integrated controls, for cold rooms**

PAEC2500 protects cold and freezer rooms efficiently at very low operating costs and can give energy savings of up to 85%. The stepless control allows precise adjustment, which means that PAEC is the perfect choice for cold and freezer room applications and also for use in air conditioned premises, for example, to separate the outside from the inside.



3,2 m

PAEC3200

3 m

ADA Cool



**Stylish air curtain with EC motor and integrated controls, for cold rooms**

PAEC3200 protects cold and freezer rooms efficiently at very low operating costs and can give energy savings of up to 85%. The stepless control allows precise adjustment, which means that PAEC is the perfect choice for cold and freezer room applications and also for use in air conditioned premises, for example, to separate the outside from the inside.



**Air curtain for cold stores**

ADA Cool keeps the cold air in cold stores and also makes it possible to have an open cold store area without doors. The cost of cooling is significantly reduced and the cold air stays where it is needed.



# One system, numerous possibilities

FC Control allows you to optimize your comfort with minimum effort, customized to your specific needs. Read more about some of its many smart and automatic features below.



## Easy set-up and operation

The system automatically detects any products or sensors that are connected to it and immediately becomes functional. If anything is removed, a notification is sent out, and the system remains operational according to the new conditions.

*Included in all levels.*



## Optimized energy consumption with door contact

An easily installed door contact is included in all control levels. This enables the air curtain to become active only when needed and remain on stand-by when the door is closed, thus saving energy.

*Included in all levels.*



## Wireless sensors offer easier installations

Indoor and outdoor temperatures can be measured by wireless sensors, which allows for quicker and easier installations as no preparatory work is needed to connect cables through walls.

*Applies to FCTXRF. Indoor/outdoor wireless sensor (for FC Smart, FC Pro)*



## Control with app

The Frico app with its user-friendly interface makes it easy to set up and control products directly from your smartphone or tablet, allowing you to control your comfort with ease. The app FRICO CONTROL is available for both iOS and Android.

*Included in FC Smart and FC Pro.*



## Create zones

The zone feature allows you to create different zones for different conditions in a larger system, to create maximum comfort and energy savings in all areas. All zones can be controlled from the same app.

*Available with FC Smart or FC Pro.*



## Automatic airflow control

In order to generate the best possible door protection in any given condition, the system automatically adjusts the airflow steplessly between 0–100% based on the indoor and outdoor temperature.

*Included in FC Pro.*



## Energy savings with precise control

By receiving and reacting to information about the current room temperature in addition to the air curtain's inlet and outlet temperatures, the right amount of heat is added to avoid overshoots and thus reducing energy consumption.

*Included in FC Pro.*



## Automatic heat blocking

To avoid unnecessary heating, the system automatically blocks any additional heat when the outdoor temperature reaches a given value (15°C by default).

*Included in FC Pro.*



## Vestibule function

By installing two air curtains with a setting for vestibules, a dual function can be obtained. The outer air curtain operates with a higher airflow with less heat, providing a stronger outer shield. The inner air curtain operates with a lower airflow with more heat, providing more comfort and lower sound level.

*Included in FC Smart and FC Pro.*



## Enhanced water control

Water heat is more accurately controlled with improved water functions and modulating actuators. Automatic functions such as bypass, frost protection and return water temperature control (with sensor FCWTA) improve product functionality without any additional effort.

*Available with FC Smart, FC Pro or FC Building.*



#### **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 calendar 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.



