TEDDINGTON
AIR CURTAIN SYSTEMS

Air curtain technology for industrial premises and warehouses

Industries

DOORS MADE OF AIR

TEDDINGTON
AIR CURTAIN SYSTEMS

Air doors.

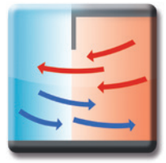
Doors and hall entrances are opened frequently at industrial premises and warehouses. An exchange takes place between the outdoor air and expensive air conditioned (heated or cooled) indoor air. This costs a great deal of energy and is accompanied by unpleasant draughts. Alternatively you may wish to prevent outdoor smells getting inside, which must therefore be reliably screened.

Teddington air curtain systems satisfy all of these requirements perfectly:

- They save energy.
- They reduce costs.
- They improve the indoor climate.
- They support sensitive production processes

Due to their high degree of efficiency, Teddington air curtain systems are amortised in a short period of time. Then they not only save you money, but actually earn money. Day after day.

We offer the right solution for every application.
For any door. For any size.



A great deal of energy gets lost at unprotected entrances. Enormous savings potential exists here.

Teddington air curtains counteract incoming cold air with a counter-current – an invisible air door.

Quality made in Germany

Systems to suit every application.

TEDDINGTON
AIR CURTAIN SYSTEMS

RATIOVENT

Highly efficient and flexible.

Screening | Screening and heating

CONVERGO® GREENtec®

The highly efficient and flexible air curtain for all applications in the industrial and logistics area.

Seite 10 - 17

ROBUVENT

The smart solution for industry.

Screening | Screening and heating

CORRIGO® SMARTtec®

The powerful air curtain device for tough day to day industrial environments.

Pages 18 - 21

INDUVENT

Compact and powerful.

Screening

CONVERGO® GREENtec®

The compact industrial air curtain for applications that require no heating.

Pages 22 - 27

FRIGUVENT

For extreme areas.

Screening

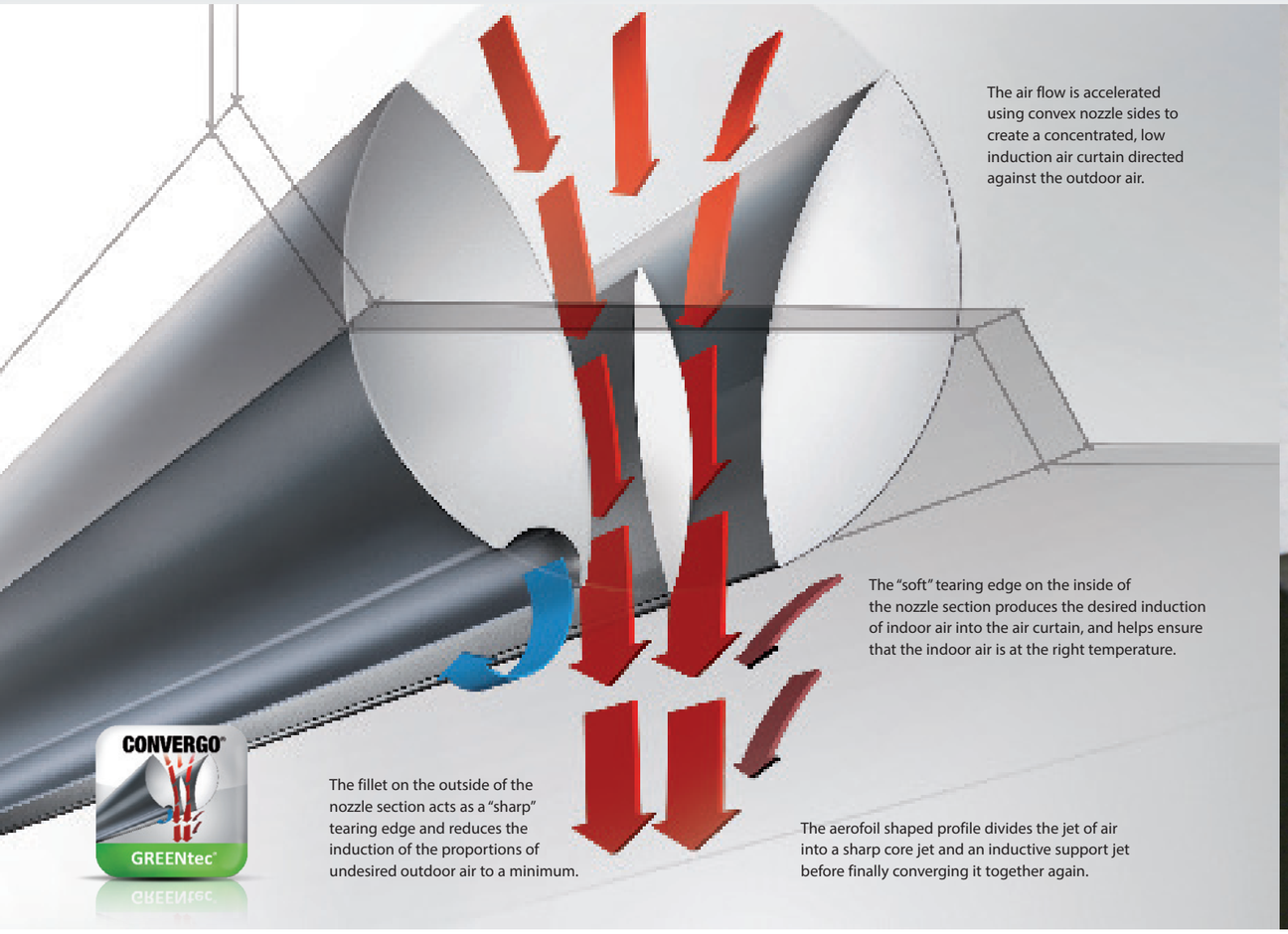
CONVERGO® GREENtec®

The efficient air curtain for demanding use in chiller and freezer areas.

Pages 28 - 33

Teddington air discharge systems for utmost efficiency.

TEDDINGTON
AIR CURTAIN SYSTEMS

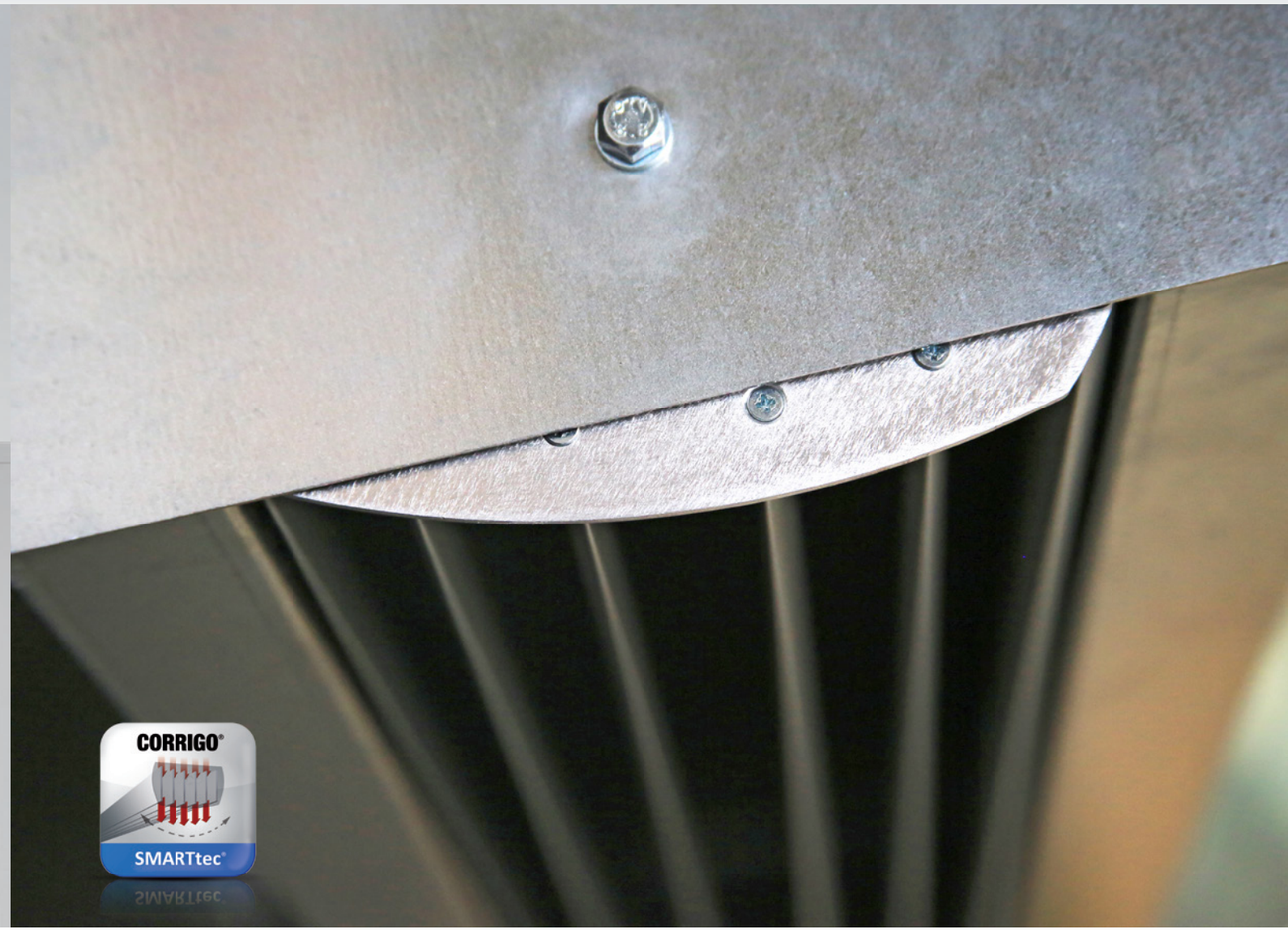


The air flow is accelerated using convex nozzle sides to create a concentrated, low induction air curtain directed against the outdoor air.

The "soft" tearing edge on the inside of the nozzle section produces the desired induction of indoor air into the air curtain, and helps ensure that the indoor air is at the right temperature.

The fillet on the outside of the nozzle section acts as a "sharp" tearing edge and reduces the induction of the proportions of undesired outdoor air to a minimum.

The aerofoil shaped profile divides the jet of air into a sharp core jet and an inductive support jet before finally converging it together again.

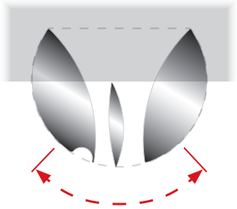


CONVERGO® The perfect nozzle.

Functional safety, reliability and efficiency are what count in the industrial area. The CONVERGO® pressure chamber nozzle system offers the best performance for all of these factors.

With our patented system, the air flow in the pressure chamber is compressed and distributed evenly across the entire air discharge width. An aerofoil shaped flow profile divides the homogeneous air flow into a primary and a secondary jet. As a result the front section of the air discharge area receives greater volume flow rate impact than the rear section. The primary jet thus accelerated is supported by the slowed down secondary jet. This creates an air curtain with very high penetration depth and stable flow direction.

Considerably less air and thus less energy is required for the same screening effect as a conventional system. The energy saving compared to conventional systems ensures fast amortisation.



The discharge angle of the nozzle can be finely adjusted, allowing the air curtain to be adapted to suit local circumstances.

CORRIGO® The flexible air discharge system.

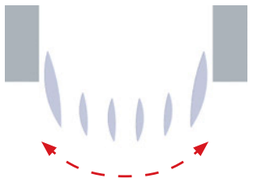
Sometimes you do not need maximum performance. We offer an effective air discharge system with CORRIGO® for entrances with moderate requirements in terms of screening and door heights.

This has also led to an extraordinary technological advance in rectifier engineering.

Previously the problem with air conveyance using lamella technology has been the limited scope for adjustment. This is because the desired effect can only be achieved when the air curtain is aligned specifically to the various operating conditions.

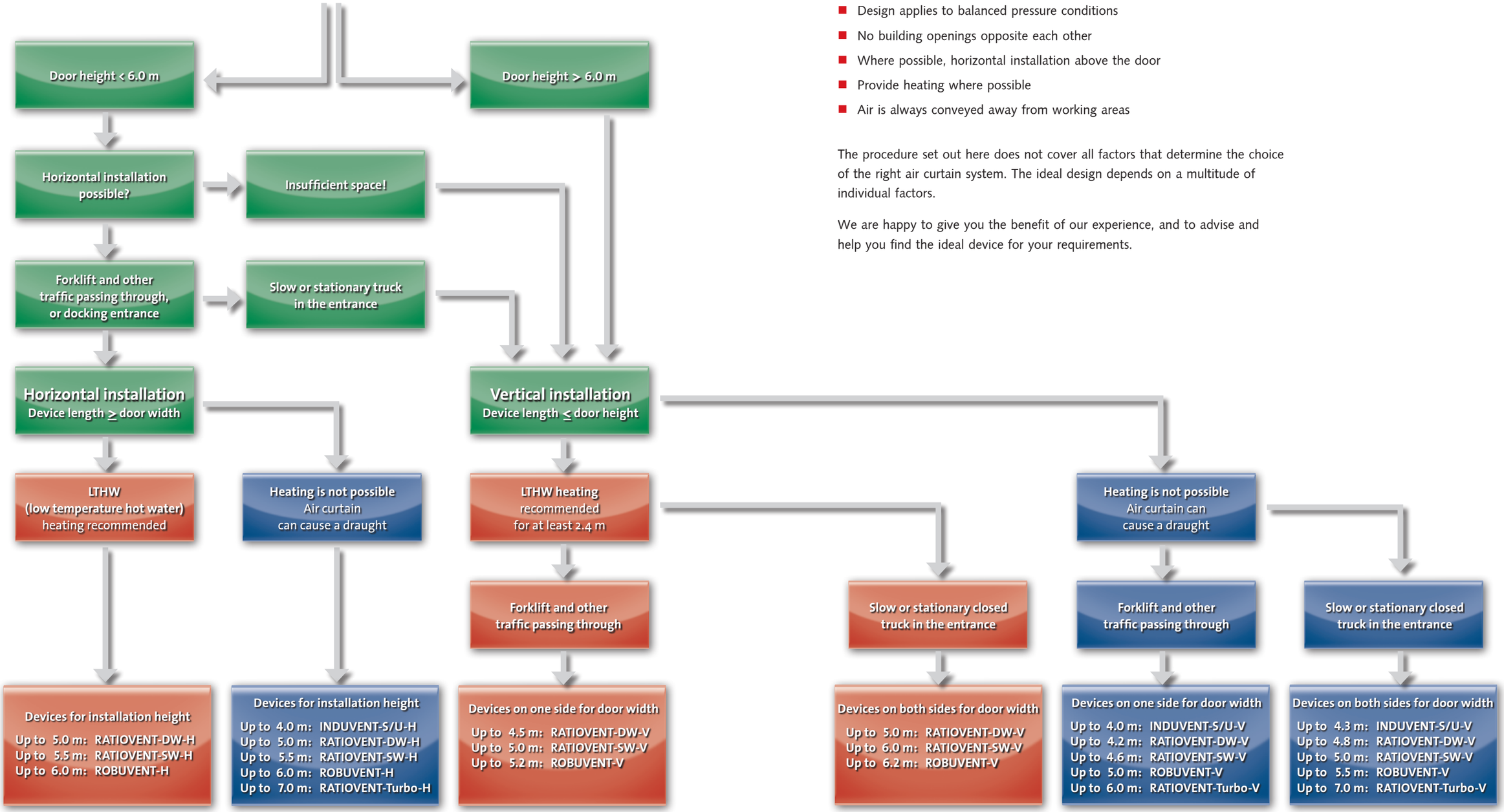
Compared to conventional lamella devices, the lamella in the CORRIGO® system are assembled in a special air discharge element which can be adjusted as a unit. This means the air curtain can be adapted flexibly to suit individual entrance situations.

Compared to conventional lamella devices, Teddington compact air curtains fitted with the CORRIGO® air discharge system achieve considerably greater energy efficiency and noticeably improved comfort in the room.



The air discharge element can be pivoted in both directions, and can therefore be adapted perfectly to suit local circumstances.

Choosing an air curtain for industrial doors



Design guidelines in principle for air curtain systems on industrial doors

- Design applies to balanced pressure conditions
- No building openings opposite each other
- Where possible, horizontal installation above the door
- Provide heating where possible
- Air is always conveyed away from working areas

The procedure set out here does not cover all factors that determine the choice of the right air curtain system. The ideal design depends on a multitude of individual factors.

We are happy to give you the benefit of our experience, and to advise and help you find the ideal device for your requirements.

GREENtec®

TEDDINGTON
AIR CURTAIN SYSTEMS

RATIOVENT

Highly efficient air curtain devices for all applications in the industrial and logistics area.

RATIOVENT air curtain systems from Teddington for vertical or horizontal installation, with and without heating, are perfectly suited to all applications in the industrial and logistics area. With the patented CONVERGO® nozzle technology, they are the effective solution. Reliable and energy-saving in everyday use.

Highly efficient and flexible in use.

- High energy savings due to the CONVERGO® pressure chamber nozzle system
- High discharge range of the air curtain
- Can be used horizontally and vertically
- With and without heating
- Fast amortisation

CONVERGO®
GREENtec®

LESS ENERGY
GREATER EFFICIENCY

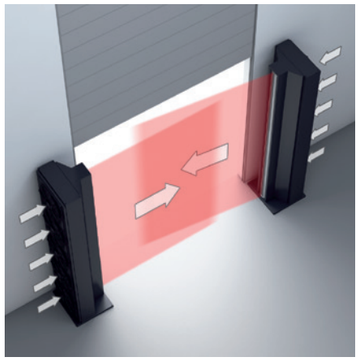
Screening

Screening and heating

You have the choice.

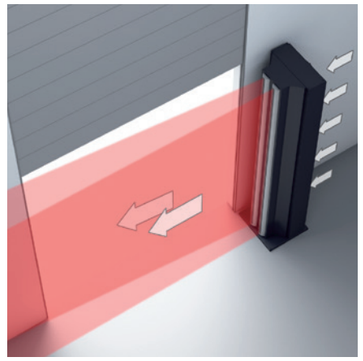
The RATIOVENT range offers the perfect device for every situation

- Devices with the CONVERGO® single nozzle offer high performance with low energy input.
- Devices are available with a double nozzle system to meet high demands of comfort with the best possible screening effect.
- And for extreme conditions, we offer the RATIOVENT Turbo range.

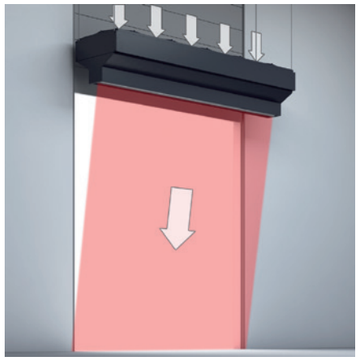


RATIOVENT-SW
Double unit with single nozzles in the air discharge area, vertical installation.

RATIOVENT-SW
Double unit with single nozzles in the air discharge area, vertical installation, with two devices one above the other.

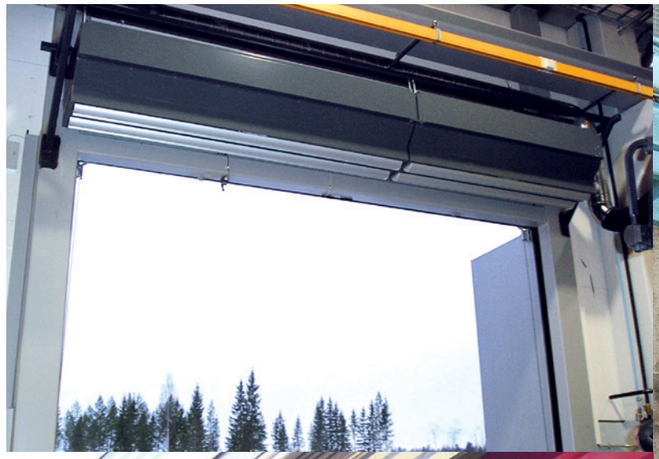


RATIOVENT-DW
Single unit with double nozzle in the air discharge area, vertical installation.



RATIOVENT-SW
Single unit with single nozzle in horizontal installation.

RATIOVENT-Turbo
Single unit with turbo double nozzle in horizontal installation.



TECHNICAL DATA

Series		Single unit				Multiple unit		
RATIOVENT-SW		**120**	**180**	**240**	**300**	**360**	**420**	**480**
Overall length/height "B"	[mm]	1.200	1.800	2.400	3.000	3.600	4.200	4.800
Rec. air discharge width up to	[m]			5,5			5,5	
Weight	[kg]	90	125	165	200	250	290	330
Air volume								
Nominal flow rate	[m³/h]	7.400	11.100	14.800	18.500	22.200	25.900	29.600
Actual flow rate	[m³/h]	4.500	6.700	9.000	11.300	13.400	15.700	18.000
Max. air discharge speed	[m/s]			17,5			17,5	
Max. noise level	[dB]	49-66	51-67	51-68	52-68	53-70	53-70	53-70
LTHW 70/50 at dt 15K								
Heat output	[kW]	24,2	36,0	48,4	60,7	72,0	84,4	96,8
Water resistance	[kPA]	10,1	6,1	6,0	5,1	6,1	6,1	6,0
Flow rate	[m³/h]	1,0	1,5	2,1	2,6	3,1	3,6	4,2
Connections flow/return flow	[inches]	¾ - ¾	¾ - ¾	1 - 1	1 - 1	¾ - ¾ ¾ - ¾	¾ - ¾ 1 - 1	1 - 1 1 - 1
Fans								
AC technology*								
Voltage / frequency	[V/Hz]			400 / 50			400 / 50	
Output	[kW]	1,57	2,36	3,14	3,93	4,71	5,50	6,28
Power consumption	[A]	2,90	4,35	5,80	7,25	8,70	10,15	11,60
EC technology*								
Voltage / frequency	[V/Hz]			230 / 50			230 / 50	
Output	[kW]	0,88	1,32	1,76	2,20	2,64	3,08	3,52
Power consumption	[A]	4,00	6,00	8,00	10,00	12,00	14,00	16,00

RATIOVENT-DW		**120**	**180**	**240**	**300**	**360**	**420**	**480**
Overall length/height "B"	[mm]	1.200	1.800	2.400	3.000	3.600	4.200	4.800
Rec. air discharge width up to	[m]			5,0			5,0	
Weight	[kg]	90	125	165	200	250	290	330
Air volume								
Nominal flow rate	[m³/h]	7.400	11.100	14.800	18.500	22.200	25.900	29.600
Actual flow rate	[m³/h]	5.700	8.700	11.500	14.500	17.400	20.200	23.000
Max. air discharge speed	[m/s]			13,5			13,5	
Max. noise level	[dB]	49-66	51-67	51-68	52-68	53-70	53-70	53-70
LTHW 70/50 at dt 15K								
Heat output	[kW]	30,6	46,8	61,8	77,9	93,5	108,6	123,6
Water resistance	[kPA]	13,0	8,0	7,8	6,7	8,0	8,0	7,8
Flow rate	[m³/h]	1,3	2,0	2,7	3,4	4,0	4,7	5,3
Connections flow/return flow	[inches]	¾ - ¾	¾ - ¾	1 - 1	1 - 1	¾ - ¾ ¾ - ¾	¾ - ¾ 1 - 1	1 - 1 1 - 1
Fans								
AC technology*								
Voltage / frequency	[V/Hz]			400 / 50			400 / 50	
Output	[kW]	1,57	2,36	3,14	3,93	4,71	5,50	6,28
Power consumption	[A]	2,90	4,35	5,80	7,25	8,70	10,15	11,60
EC technology*								
Voltage / frequency	[V/Hz]			230 / 50			230 / 50	
Output	[kW]	0,88	1,32	1,76	2,20	2,64	3,08	3,52
Power consumption	[A]	4,00	6,00	8,00	10,00	12,00	14,00	16,00

RATIOVENT-Turbo		**90**	**180**	**270**	**360**	**450**
Overall length/height "B"	[mm]	900	1.800	2.700	3.600	4.500
Rec. air discharge width up to	[m]		7,0		7,0	
Weight	[kg]	110	145	185	290	330
Air volume						
Nominal flow rate	[m³/h]	14.160	28.320	42.480	56.640	70.800
Actual flow rate	[m³/h]	8.400	17.000	29.000	34.000	46.000
Max. air discharge speed	[m/s]		18		18	
Max. noise level	[dB]	75	78	80	81	82
Fans						
AC technology*						
Voltage / frequency	[V/Hz]		400 / 50		400 / 50	
Output	[kW]	2,66	5,32	7,98	10,64	13,30
Power consumption	[A]	5,50	11,00	16,50	22,00	27,50

* Maximum output data for conductor dimensions. The electrical output data in device operation are lower. Subject to technical changes.

Design

Robust CNC-manufactured sheet steel housing made from galvanised sheet steel, powder coated in RAL tone 7011 (iron grey) or in a colour of the customer's choice*.

Manufactured in accordance with DIN EN ISO 9001:2008.

Effective air conveyance by means of CONVERGO® pressure chamber nozzle system, which generates a concentrated, low induction air flow across the entire air discharge width.

Because the nozzle and thus the air discharge direction can be adjusted, the screening efficiency is significantly increased.

Air intake is through a powder coated grid, designed with ideal cross-section.

Device version optionally with or without heat exchanger.

AC fans (400V/IP54)
EC fans (230V/IP54).

Installation

Device mounting using internal thread M 10 on the top of the housing and optionally available installation material.

Hot water version

Efficient heat exchanger in St-Al-Cu design. Test pressure 16 bar and connections with internal thread (imperial), according to size and output.

Controller / accessories

You can choose from a selection of electronic controllers and a wide range of accessories for individual control convenience.

Order key

RATIOVENT

SW = CONVERGO® single nozzle
DW = CONVERGO® double nozzle
T = Turbo

H = Horizontal installation
V = Vertical installation

120, 180, 240, 300, 360, 420, 480 = width
90, 180, 270, 360, 450 = width (turbo)

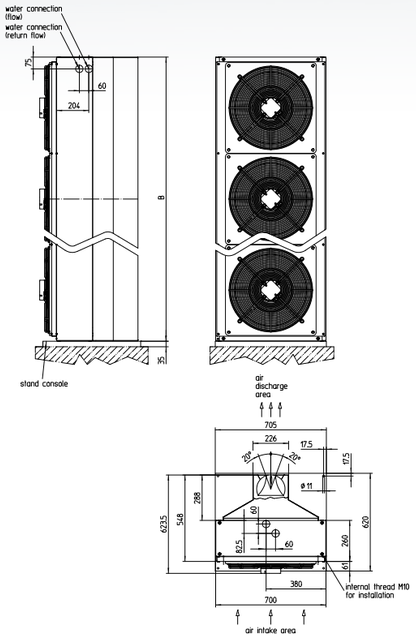
N = LTHW 60/40 °C - 90/70 °C
K = without heat exchanger

RAL 7011 (standard colour)*

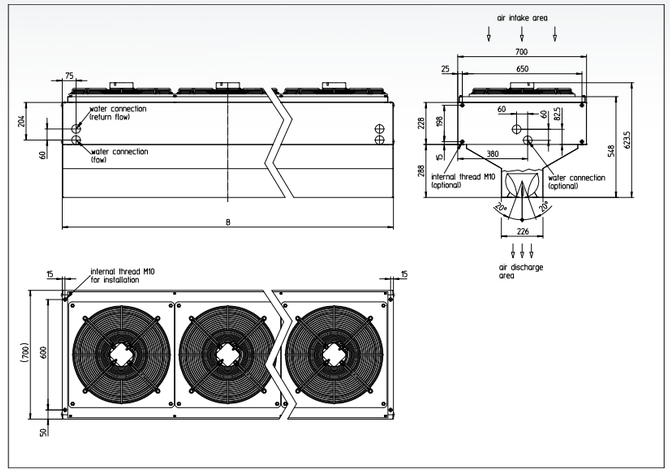
SW- H - 240 - N - 7011 **= example**

* RAL 7011 = iron grey.
Other colours are available on request.

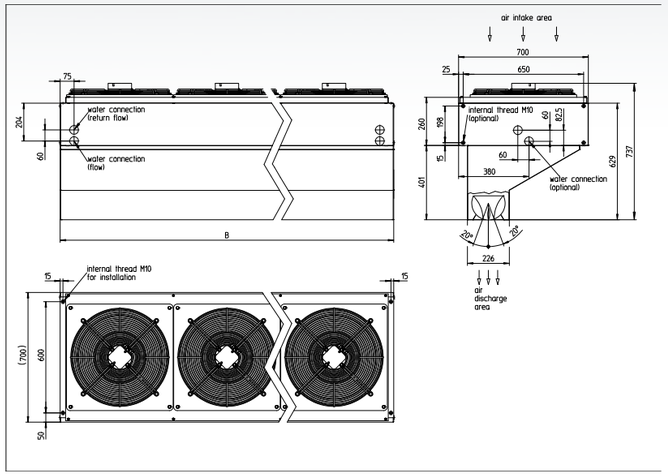
RATIOVENT-SW vertical



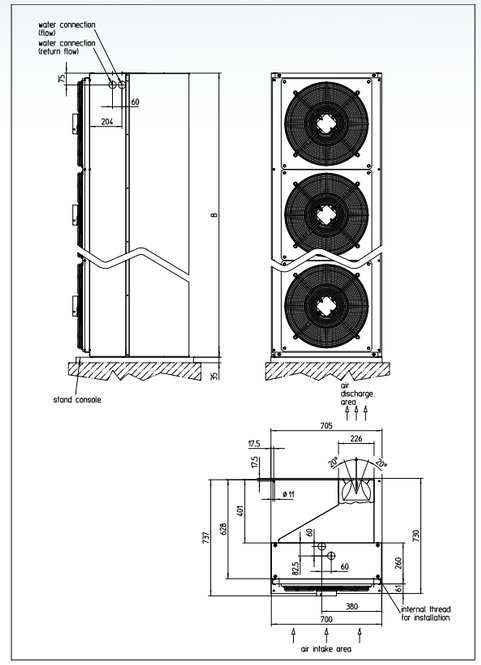
RATIOVENT-SW horizontal



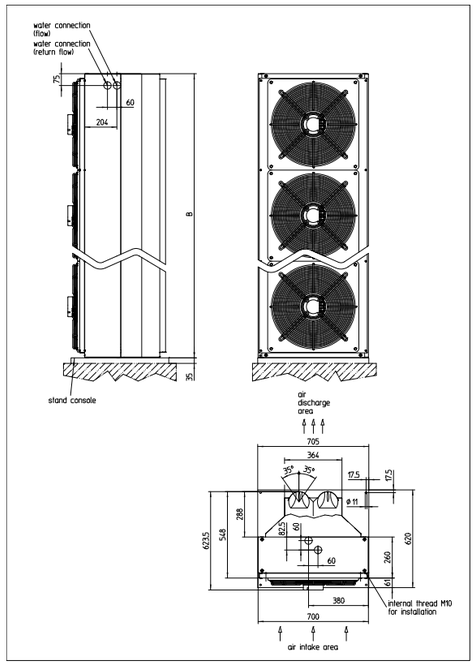
RATIOVENT-SW asym. horizontal



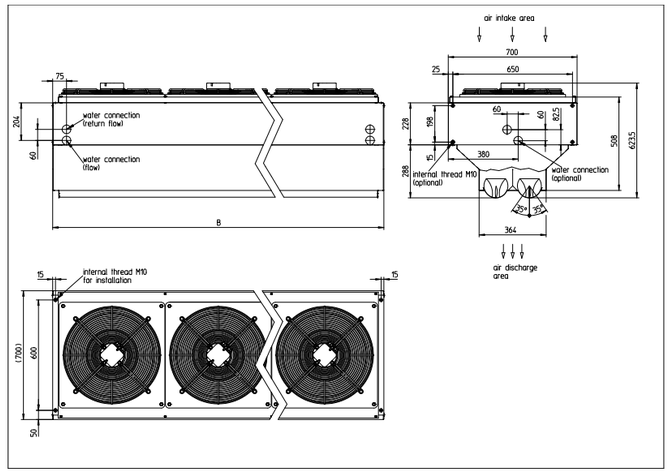
RATIOVENT-SW asym. vertical



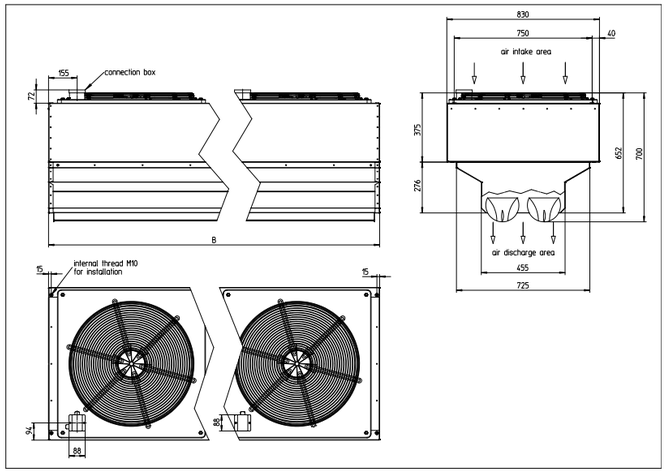
RATIOVENT-DW vertical



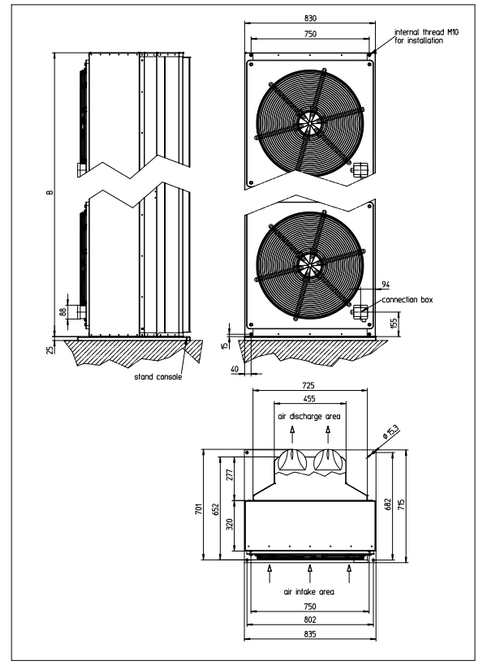
RATIOVENT-DW horizontal



RATIOVENT-DW Turbo horizontal



RATIOVENT-DW Turbo vertical



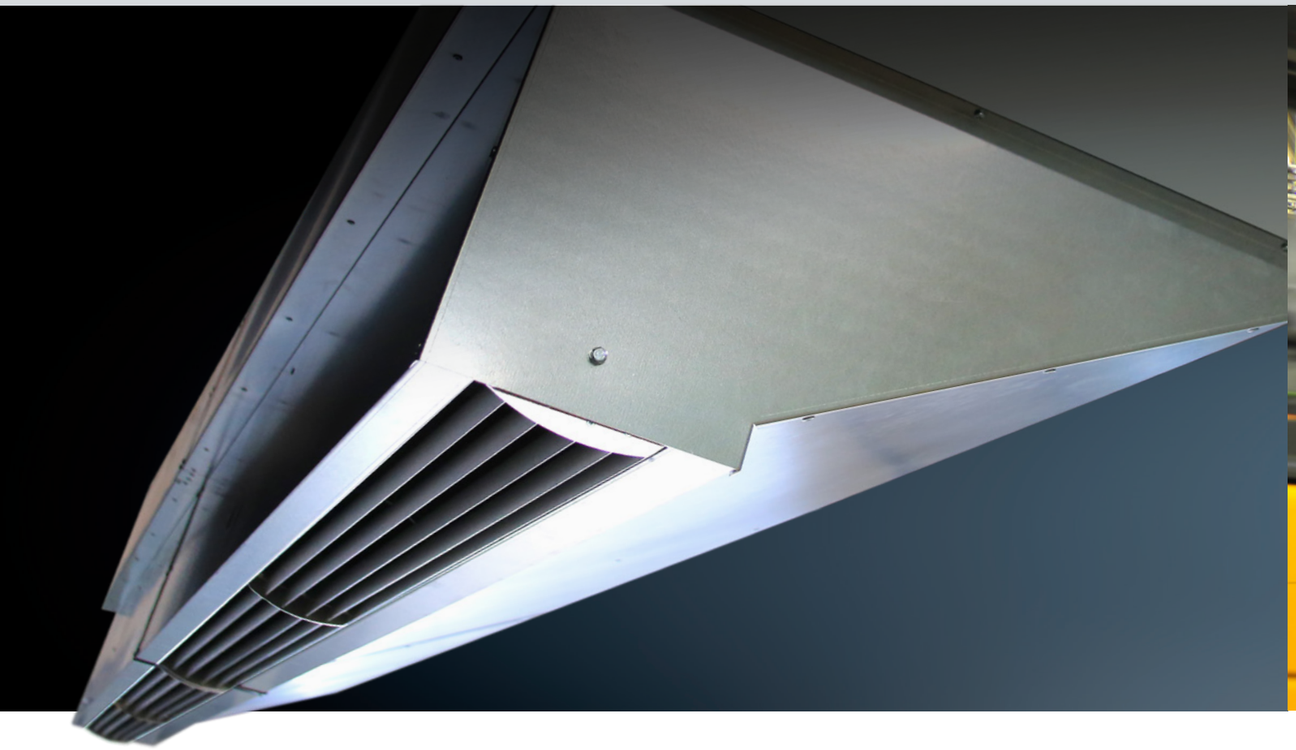
All measurements are in mm. Subject to technical changes.

All measurements are in mm. Subject to technical changes.

SMARTtec®

TEDDINGTON
AIR CURTAIN SYSTEMS

ROBUVENT
The smart solution for industry.



ROBUVENT devices are powerful and robust high performance air curtain systems for horizontal or vertical installation. Effective in terms of output, reliable and energy-saving in everyday use.

CORRIGO® raises lamella technology to a new level: compact, powerful and versatile.

The air discharge element can be pivoted in both directions, so that the air curtain can be individually adapted to suit local conditions.

Screening | Screening and heating

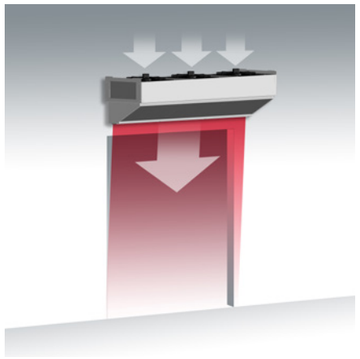
- Save energy
- Reduce costs
- Improve the environment

With the CORRIGO® air discharge system

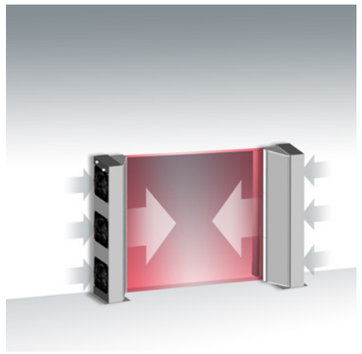
Benefits for every industrial application

You have the choice.

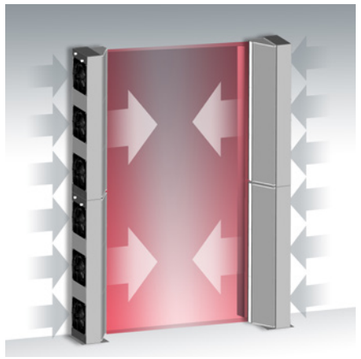
Future-oriented technology, functional flexibility, high quality and good workmanship make the Robuvent a reliable all-rounder to suit all requirements and situations. For horizontal and vertical installation as single, double or multiple units.



ROBUVENT single unit
with horizontal installation.



ROBUVENT double unit
with vertical installation.



ROBUVENT is ideal for
use in multiple units.

Design

Robust CNC-manufactured sheet steel housing made from galvanised sheet steel.

Manufactured in accordance with DIN EN ISO 9001:2008.

Effective air conveyance by means of the CORRIGO® air discharge system.

Device version optionally with or without heat exchanger (LTHW).

AC or EC fans (400 V/IP54).

Installation

Device mounting using internal thread M 10 on the top of the housing and optionally available installation material.

Controller / accessories

You can choose from a selection of electronic controllers and a wide range of accessories for individual control convenience.

Series		Single unit			Multiple unit	
ROBUVENT		**200**	**300**	**400**	**500**	**600**
Overall length/height "B"	[mm]	2.000	3.000	4.000	5.000	6.000
Rec. air discharge width up to	[m]		6,0		6,0	
Weight	[kg]	130	190	250	320	380
Air volume						
Nominal flow rate	[m³/h]	15.640	23.460	31.280	39.100	46.920
Actual flow rate	[m³/h]	14.250	21.375	28.500	35.625	42.750
Max. air discharge speed	[m/s]		14,5		14,5	
Max. noise level	[dB]	52-64	53-65	54-66	55-67	56-68
LTHW 70/50 at air intake temperature of 18 °C						
Heat output	[kW]	56,6	87,5	118,3	144,1	175,0
Max. air discharge temperature	[°C]	30,0	30,0	30,0	30,0	30,0
Water resistance	[kPA]	9,8	10,4	10,6	10,4	10,4
Flow rate	[m³/h]	2,5	3,8	5,2	6,3	7,6
Connections flow/return flow	[inches]	1¼	1¼	1¼	1¼"	1¼
Fans						
AC technology*						
Voltage / frequency	[V/Hz]		400 / 50		400 / 50	
Output	[kW]	1,44	2,16	2,88	3,60	4,32
Power consumption	[A]	2,82	4,23	5,64	7,05	8,46
EC technology*						
Voltage / frequency	[V/Hz]		400 / 50		400 / 50	
Output	[kW]	1,88	2,82	3,76	4,70	5,64
Power consumption	[A]	3,20	4,80	6,40	8,00	9,60

Subject to technical changes.

* Maximum output data for conductor dimensions. The electrical output data in device operation are lower.

Order key

ROBUVENT

H = Horizontal installation

V = Vertical installation

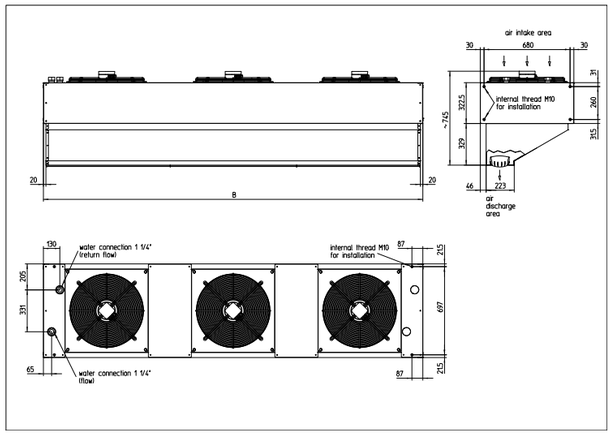
200, 300, 400, 500, 600
= Overall length in cm

N = LTHW 70/50 °C

K = without heat exchanger

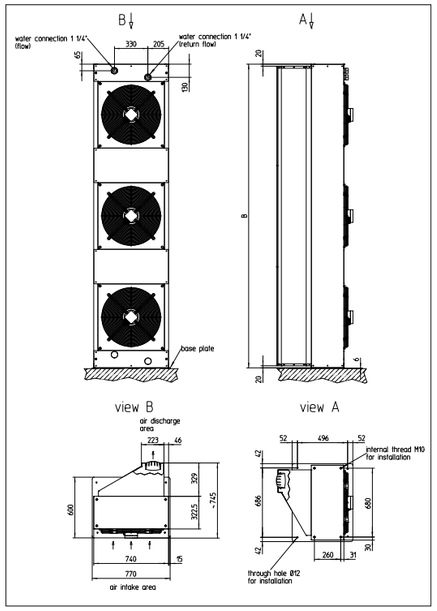
H - 400 - N = example

ROBUVENT horizontal



All measurements are in mm. Subject to technical changes.

ROBUVENT vertical



GREENtec®

TEDDINGTON
AIR CURTAIN SYSTEMS

INDUVENT

Compact industrial air curtains for applications that do not require any heating.

Busy workshops with high doors produce strong draughts with high energy losses. INDUVENT air curtain systems from Teddington can be a real help here. The patented CONVERGO® nozzle technology ensures a high discharge range with low energy consumption.

With a wide range of different designs, the compact INDUVENT devices are suitable for the most diverse room situations.

Compact, flexible, powerful.

The depositing of certain types of waste at landfill sites has been prohibited in Germany since 2005. Today waste of this kind is processed in mechanical incineration plants or mechanical biological waste treatment plants.
The large delivery doors are very important for compliance with the permissible emission of pollutants.

In addition to protective gate systems, the Federal Emission Control Ordinance (BImSchV) also permits the use of special air curtain systems for these doors. Teddington INDUVENT air curtain systems have proven to be outstanding in practice.

- **High energy saving due to the CONVERGO® pressure chamber nozzle system**
- **The air curtain has a high air discharge range**
- **Particularly compact design**
- **Horizontal and vertical use possible**
- **Fast amortisation**

CONVERGO®
GREENtec®

LESS ENERGY
GREATER EFFICIENCY

Screening

You have the choice.

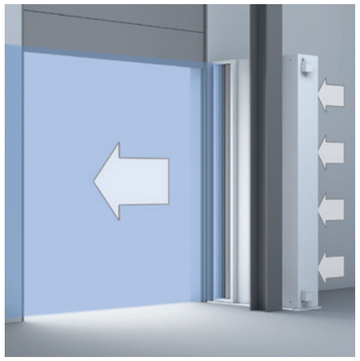
The INDUVENT range of devices is characterised by its compact design. Installation may be horizontal or vertical, depending on the situation.

The most space-saving and effective positioning is possible due to the S, U, Z, SU and SZ models. Very high doors can be screened using double units.

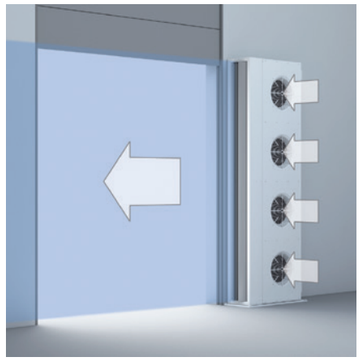
Series		Single unit				Multiple unit	
INDUVENT		**150**	**200**	**250**	**300**	**350**	**400**
Overall length/height "B"	[mm]	1.500	2.000	2.500	3.000	3.500	4.000
Rec. air discharge width up to	[m]	4,0				4,0	
Weight	[kg]	75	95	105	120	170	190
Air volume							
Nominal flow rate	[m^3/h]	6.900	9.200	11.600	13.800	16.100	18.400
Actual flow rate	[m^3/h]	4.400	5.900	7.350	8.850	10.300	11.800
Max. air discharge speed	[m/s]	16,5				16,5	
Max. noise level	[dB]	60	61	62	63	64	65
Fans							
AC technology (EC technology available as an option)*							
Voltage / frequency	[V/Hz]	230 / 50				230 / 50	
Output	[kW]	0,84	1,12	1,40	1,68	1,96	2,24
Power consumption	[A]	3,69	4,92	6,15	7,38	8,61	9,84

Subject to technical changes.

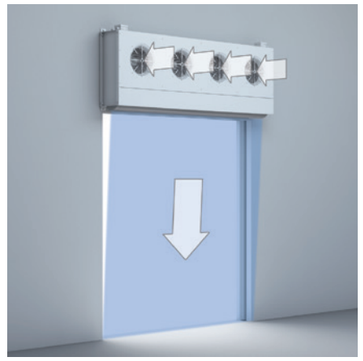
* Maximum output data for conductor dimensions. The electrical output data in device operation are lower.



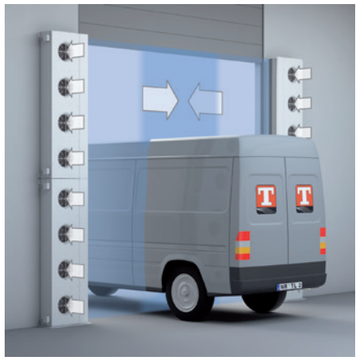
Z model
Air intake area at the back.
Single unit with vertical installation next to the door.



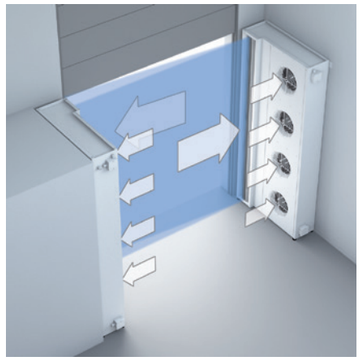
S model
Air intake area at the front.
Single unit with vertical installation next to the door.



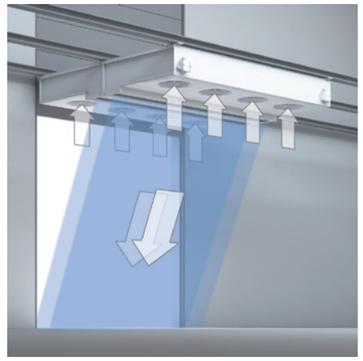
S model
Air intake area at the front.
Single unit with horizontal wall installation.



S model
Air intake area at the front.
Double unit with vertical installation next to the door.



U model
Air intake area at the side.
Double unit with vertical installation next to the door.



U model
Air intake area at the bottom.
Double unit with horizontal ceiling installation.

Order key

INDUVENT

S = air intake area at the front
U = air intake area at the bottom/side
Z = air intake area at the back
SU = air intake area at the front
SZ = air intake area at the back

H = Horizontal installation
V = Vertical installation

150, 200, 250, 300
= overall width in cm

RAL 9002 (standard colour)*

S - H - 150 - 9002 = example

* RAL 9002 = grey white.
Other RAL colours are available on request.

Design

CNC-manufactured, self-supporting housing made from coated sheet steel, powder coated in standard colour RAL 9002 (grey white) or optional RAL colour of the customer's choice*.

Effective air conveyance by means of the CONVERGO® pressure chamber nozzle system, which generates a concentrated, low induction air flow across the entire air discharge width.

Because the nozzle and thus the air discharge direction can be adjusted, the screening efficiency is significantly increased. Manufactured in accordance with DIN EN ISO 9001:2008. AC or EC fans (230V/IP54).

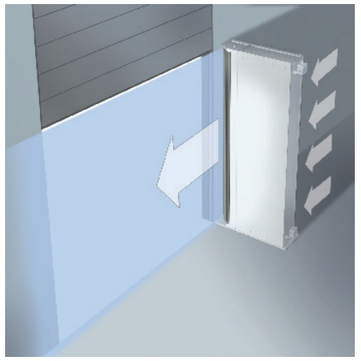
Installation

Device mounting using internal thread M 10 on the top of the housing and optionally available installation material.

Controller / accessories

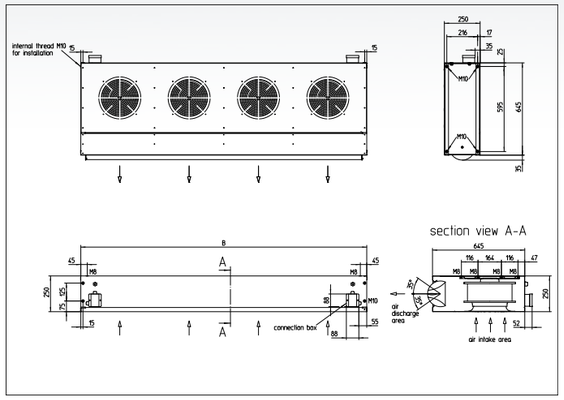
You can choose from a selection of electronic controllers and a wide range of accessories for individual control convenience.

SU model
Air intake area at the front.
Single unit with vertical installation next to the door.

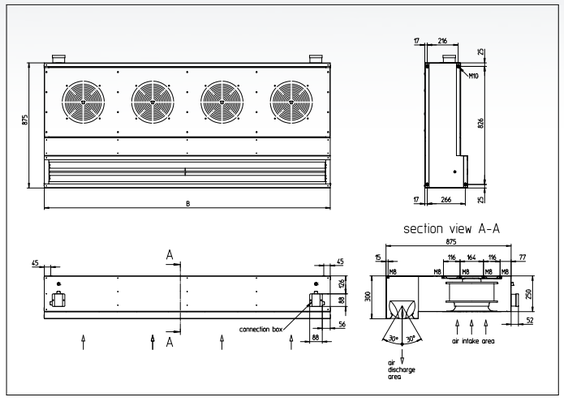


SZ model
Air intake area at the back.
Single unit with vertical installation next to the door.

INDUVENT-S horizontal

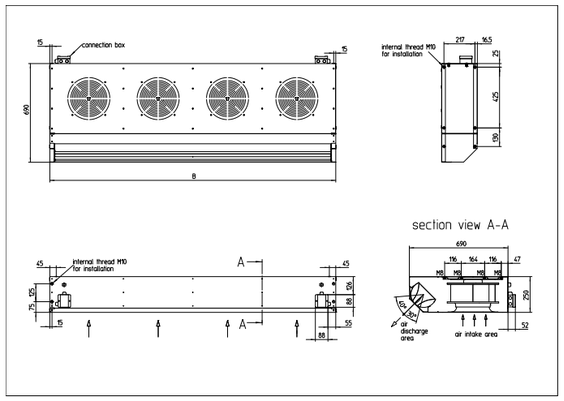


INDUVENT-U horizontal

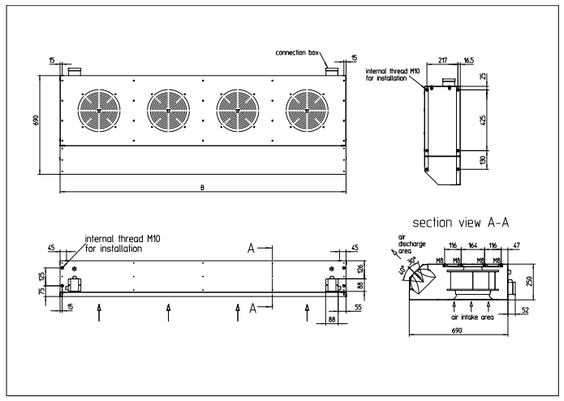


INDUVENT-Z horizontal

INDUVENT-SU horizontal

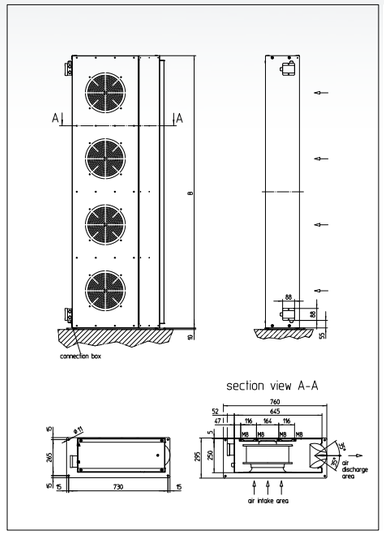


INDUVENT-SZ horizontal

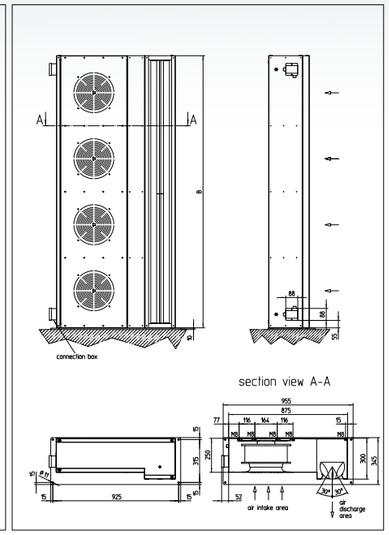


All measurements are in mm. Subject to technical changes.

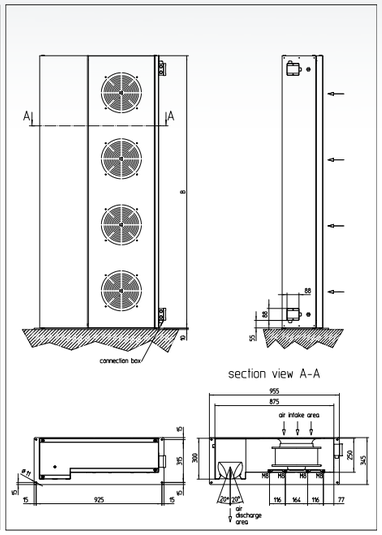
INDUVENT-S vertical



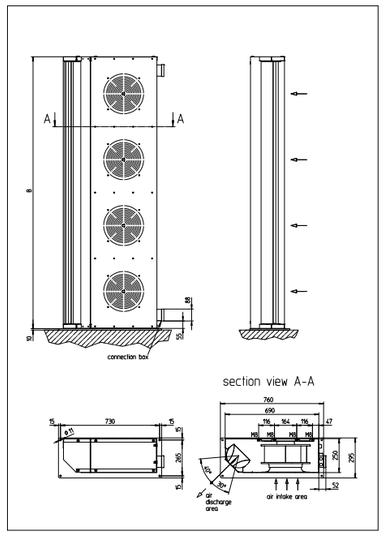
INDUVENT-U vertical



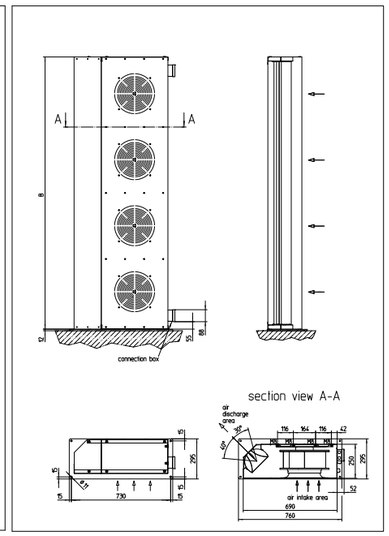
INDUVENT-Z vertical



INDUVENT-SU vertical



INDUVENT-SZ vertical



All measurements are in mm. Subject to technical changes.

GREENtec®

TEDDINGTON
AIR CURTAIN SYSTEMS

FRIGUVENT

Air curtain systems for freezer rooms.

The important thing for air curtain systems deployed in areas with extreme temperature differences, such as cold stores and their anterooms, is to work with the least possible volume of moving air. Despite this it is necessary for the air jet to have large discharge ranges in order to achieve the desired screening effect.

According to the principle of secondary air induction, the accelerated flows of air produced by the discharge systems "tear" neighbouring, calmed air masses along with them. This effect can be reinforced at the outlet of a door air curtain that is used to screen a cold storage area. However it needs to be prevented here.

The great differences in temperature that the air jet and the ambient air have in relation to each other may lead to the temperature falling below the dew point and to mist formation. This may subsequently have the undesirable effect of making the ground frosty and slippery.

FRIGUVENT cold air curtain systems are the contemporary entrance solution for chiller and freezer rooms. The devices prevent the exchange of air and thereby make a significant contribution to saving energy where doors are opened frequently.

Screening

The nozzle unit, which has been specially optimised for use with chiller rooms, reduces secondary air induction due to the incorporated tearing edges, and considerably improves the control of the air jet. Mist formation in the air current is minimised and the volume of air moved is considerably reduced.

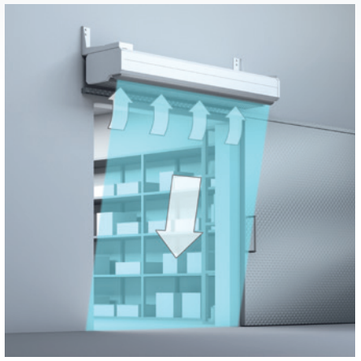
CONVERGO®
GREENtec®

LESS ENERGY
GREATER EFFICIENCY

- **High energy saving due to the CONVERGO® pressure chamber nozzle system**
- **The air curtain has a high air discharge range**
- **Prevention of ice formation**
- **Quiet operation**
- **Can be used horizontally and vertically**
- **Fast amortisation**

TEDDINGTON
AIR CURTAIN SYSTEMS

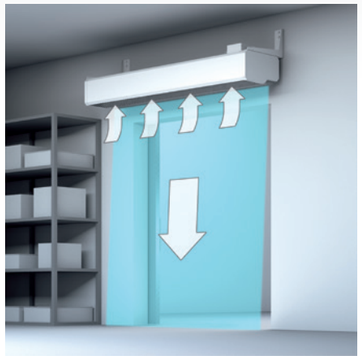
You have the choice.



FRIGUVENT installed with
the air roll rotating outwards (ADW)

Installation in front of the freezer room for high screening effect
(Temp. in freezer room < 0° C).

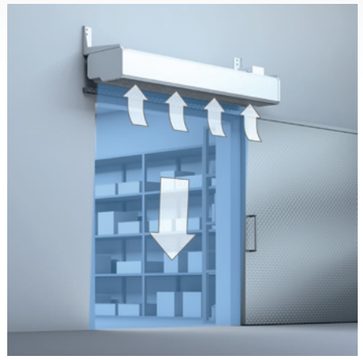
A mix of temperatures arises due to the intake of parts of cold air from the freezer room, and this reduces the risk of falling below the dew point.



FRIGUVENT installed with
the air roll rotating inwards (IDW)

Installation in the chiller room for high screening effect
(Temp. in chiller room > 0° C).

The air discharge is directed slightly against the cold air, which effectively prevents condensation on the ceiling as well as temperature loss.



FRIGUVENT installed with
the air roll rotating inwards (IDW)

Installation in front of the chiller room in the case of customer traffic
(Temp. in chiller room > 0° C)
or in front of the freezer room as protection against ice formation on the freezer room ceiling (temp. in freezer room considerably < 0° C).

This type of installation prevents temperature loss at the entrances to cooled sales areas and simultaneously represents a convenient solution for the customer traffic.

The penetration of warm air at freezer rooms can be prevented using extremely low energy consumption, and considerably reduces any icing over in the ceiling area.

It all depends on the situation.

Fruit/vegetable cooling		Fish/meat cooling		Deep freezing in production areas		Cold storage areas	
Anteroom 20 °C Chiller room approx. 5 °C		Anteroom 20 °C Chiller room 5 °C to - 5 °C		Anteroom 20 °C Freezer room - 5 °C to - 20 °C		Anteroom 10 °C Freezer room - 5 °C to - 20 °C	
No customer traffic	Customer traffic	No customer traffic	Customer traffic	Temperature separation	Minimisation of ice formation	Temperature separation	Minimisation of ice formation
IDW inside	IDW outside*	ADW outside*	IDW outside*	ADW outside*	IDW outside*	ADW outside*	IDW outside*
FRIGUVENT 1 up to an installation height of 2,8 m	FRIGUVENT 1 up to an installation height of 2,8 m	FRIGUVENT 1 up to an installation height of 2,6 m	FRIGUVENT 1 up to an installation height of 2,6 m	FRIGUVENT 1 up to an installation height of 2,3 m	FRIGUVENT 1 up to an installation height of 2,8 m	FRIGUVENT 1 up to an installation height of 2,5 m	FRIGUVENT 1 up to an installation height of 2,8 m
FRIGUVENT 2 up to an installation height of 3,2 m	FRIGUVENT 2 up to an installation height of 3,2 m	FRIGUVENT 2 up to an installation height of 3,0 m	FRIGUVENT 2 up to an installation height of 3,0 m	FRIGUVENT 2 up to an installation height of 2,5 m	FRIGUVENT 2 up to an installation height of 3,2 m	FRIGUVENT 2 up to an installation height of 2,7 m	FRIGUVENT 2 up to an installation height of 3,2 m
FRIGUVENT 3 up to an installation height of 4,0 m	FRIGUVENT 3 up to an installation height of 4,0 m	FRIGUVENT 3 up to an installation height of 3,5 m	FRIGUVENT 3 up to an installation height of 3,5 m	FRIGUVENT 3 up to an installation height of 3,0 m	FRIGUVENT 3 up to an installation height of 4,0 m	FRIGUVENT 3 up to an installation height of 3,2 m	FRIGUVENT 3 up to an installation height of 4,0 m
	Other devices possible ****		Other devices possible ****		Other devices possible ****		Other devices possible ****
		Air partition on the side recommended **		Air partition on the side required **		Air partition on the side recommended **	
		Underfloor heating recommended ***		Underfloor heating required ***		Underfloor heating required ***	

The selection guidelines for the FRIGUVENT devices presented are based on a door width of up to 3 m.

* Installation of the FRIGUVENT system in front of the chiller room (outside) requires an anteroom or roof cover.

** Air partitions on the side reduce the mixing of warm indoor air into the air flow and minimise leakages in the side area.

*** Large differences in temperature and humidity can result in condensation and frost formation on the ground. The underfloor heating reduces the risk of slipping.

**** In these situations, other Teddington air curtain systems can also be used where there is a dry environment.

Series						
Friguvent-1		**100**	**150**	**200**	**250**	**300**
Overall length/height "B"	[mm]	1.000	1.500	2.000	2.500	3.000
Weight	[kg]	25	35	45	55	70
Air volume						
Nominal flow rate	[m³/h]	2.100	3.150	4.200	5.250	6.300
Actual flow rate	[m³/h]	1.450	2.400	3.200	4.000	4.800
Max. air discharge speed	[m/s]			12,5		
Fans						
AC technology (EC technology available as an option)*						
Voltage / frequency	[V/Hz]			230 / 50		
Output	[kW]	0,46	0,69	0,92	1,15	1,38
Power consumption	[A]	2,10	3,15	4,20	5,25	6,30

Friguvent-2		**100**	**150**	**200**	**250**	**300**
Overall length/height "B"	[mm]	1.000	1.500	2.000	2.500	3.000
Weight	[kg]	30	40	50	60	75
Air volume						
Nominal flow rate	[m³/h]	2.100	4.200	5.250	6.300	7.450
Actual flow rate	[m³/h]	1.700	3.200	4.000	4.800	5.600
Max. air discharge speed	[m/s]			14,5		
Fans						
AC technology (EC technology available as an option)*						
Voltage / frequency	[V/Hz]			230 / 50		
Output	[kW]	0,46	0,92	1,15	1,38	1,61
Power consumption	[A]	2,10	4,20	5,25	6,30	7,35

Friguvent-3		**100**	**150**	**200**	**250**	**300**
Overall length/height "B"	[mm]	1.000	1.500	2.000	2.500	3.000
Weight	[kg]	40	65	85	105	125
Air volume						
Nominal flow rate	[m³/h]	3.800	5.800	8.500	11.600	14.500
Actual flow rate	[m³/h]	3.100	5.000	6.700	8.500	10.200
Max. air discharge speed	[m/s]			17,0		
Fans						
AC technology (EC technology available as an option)*						
Voltage / frequency	[V/Hz]			230 / 50		
Output	[kW]	0,90	1,81	2,71	3,62	4,52
Power consumption	[A]	4,27	8,54	12,81	17,08	21,35

Subject to technical changes.

* Maximum output data for conductor dimensions. The electrical output data in device operation are lower.

Design

Self-supporting housing, made from a bond of aluminium sections and sheet steel in the colour RAL 9010. The device is also available in a colour of the customer's choice or optionally in stainless steel.*

Air intake opening underneath by means of a perforated plate, coated in the same colour as the device, which simultaneously serves as an inspection opening and can be accessed easily for maintenance purposes.

The CONVERGO® pressure chamber nozzle system with a large air discharge angle adjustment range that is almost loss-free, requires only little energy and achieves optimum screening results.

AC or EC fans (230V/IP54).

The device is designed in accordance with protection class IP 54.

Mode of operation

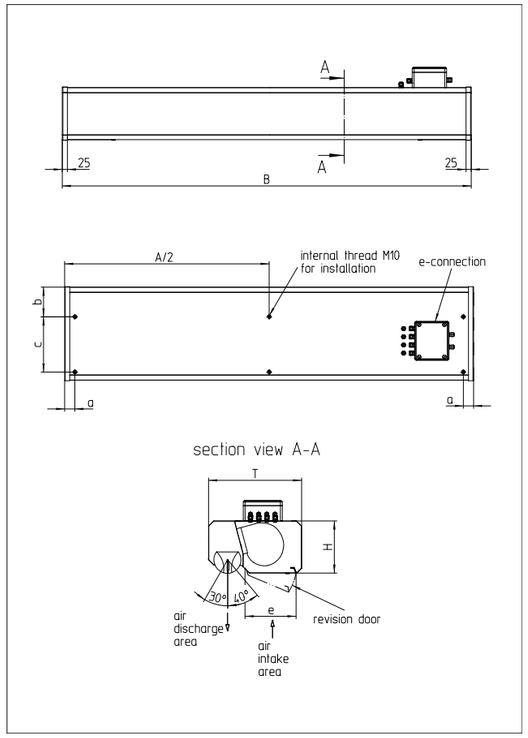
The air curtain system is switched on by an external contact when the chiller room door is opened. A sharp air current with high screening performance is placed in front of the entire door opening (air barrier) by one or more dual inlet radial fans and by the pressure chamber nozzle system.

The output and width of the device comply with the door measurements, the height of the chiller room and the temperature difference between anteroom and chiller room.

It is possible to adapt to the operating conditions by making manual adjustments to the air discharge angle and changes to the air volume. The width of the device should correspond to the clear width of the opening.

Controller / accessories

The sturdily built, reliable FST (5-stage) controller is located in a plastic housing (protection class IP 54), completely ready for connection, with transformer, main switch, step switch and motor protection using thermal contacts.



All measurements are in mm. Subject to technical changes.

	Dimensions			Mounting			Inspection cover
	Width B [mm]	Height H [mm]	Depth T [mm]	a [mm]	b [mm]	c [mm]	e [mm]
1	1000 to 3000	260	455	50	145	270	248
2							
3		435	725	50	165	515	471

Order key

FRIGUVENT

1 = Series (power setting)

2 = Series (power setting)

3 = Series (power setting)

100, 150, 200, 250, 300
= overall width in cm

RAL 9010 (standard colour)*

2 - 200 - 9010 = example

* RAL 9010 = pure white.
Optional: surface in stainless steel.

TEDDINGTON
AIR CURTAIN SYSTEMS

Devices
for all applications.

Always the right system.

You will always find the right solution in our range of devices – from the smart entry model through to the high-end model to satisfy the most demanding requirements.

If you need something that is specific to your particular needs, we can develop a customised solution with you – TEDDINGTON MANUFACTURING.

SHOP & BUSINESS

With a wide range of device models specially designed for operation in buildings with high demands on comfort.

DESIGN

For the greatest visual demands and precisely adapted to suit various door situations.

INDUSTRIES

With maximum output, fast reaction and adapted to suit specific requirements.

Shop & Business

Design

Industries

We have perfected the principle of "air doors and gates", and in the process have developed several applications

Energy-saving air curtain systems can be used in the following areas:

- **Shops & stores**
- **Public buildings**
- **Shopping malls**
- **Industrial buildings & logistics centres**
- **Banks & office buildings**

We are especially proud of having set new benchmarks through our innovations in air curtain technology. This enables us to offer our customers not only convenient solutions but also first and foremost the opportunity to save a great deal of energy and money.

Moreover Teddington air curtain systems make an important contri-bution to the protection of our valuable environment.

GREENtec® The green technology for energy efficiency with EC technology and the CONVERGO® pressure chamber nozzle technology CONVERGO® GREENtec®	**E-Series** **E-Series SILENT** **C-Series**	**ELLIPSE** **CHARISMA** **DELTA** **SAPHIR** **TOPAS** **SINTRA**	**RATIOVENT** **INDUVENT** **FRIGUVENT**
SMARTtec® The smart devices with the CORRIGO® air discharge system CORRIGO® SMARTtec®	**A-Series** **P-Series**	**RONDO** **TUBUS**	**ROBUVENT**
VRFtec® Variable Refrigerant Flow. The efficient devices for refrigerant operation.	**E-Series** **C-Series** **A-Series**		

TEDDINGTON
AIR CURTAIN SYSTEMS

Our innovations have set new benchmarks in air curtain technology and offer our customers not only convenient solutions but also first and foremost the opportunity to save a great deal of energy and money.

Moreover through their use we make an important contribution to environmental protection.

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info@teddington.de · www.teddington.de

Teddington. The reference for air curtain technology.