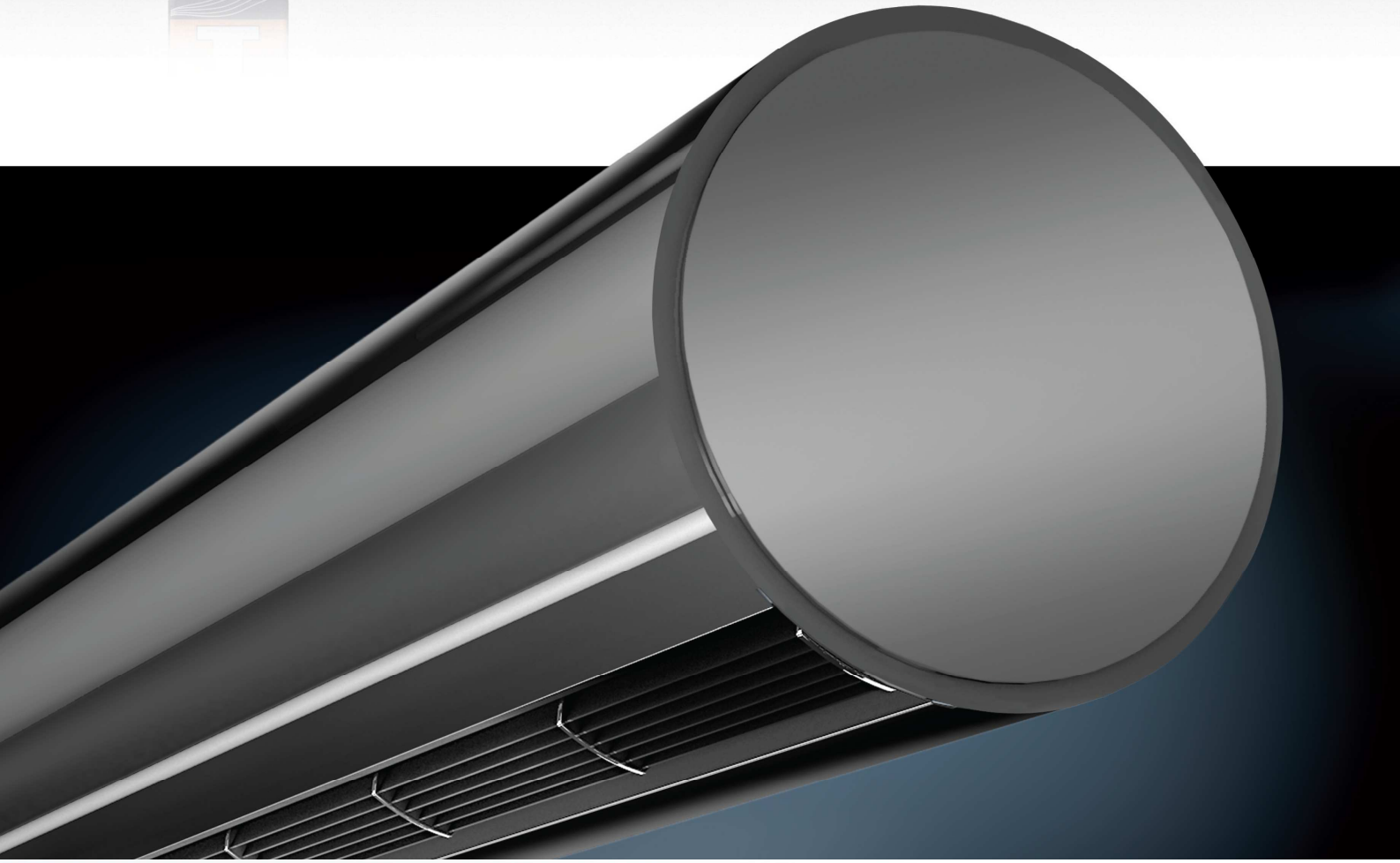
TEDDINGTON
AIR CURTAIN SYSTEMS



T U B U S

Design air curtain system
Operating Instructions
(translation of the original)

Serial number: CE

_____

Year: _____

Please specify this number when contacting customer service

DOORS MADE OF AIR

Table of contents

1 Essential things to know before we get started

1.1 Content of these operating instructions

For your air curtain device to operate without problems, all persons involved must have completely read and understood these operating instructions before putting into operation for the first time. The instructions contain:

- Important information on safe installation and start-up of the air curtain system;
- Important information on interruption-free operation and a long service life;
- Important information on correct and professional maintenance of the air curtain system.

Important: In addition to the information in these operating instructions, you are required to adhere to the rules and regulations on accident prevention, technical monitoring and environmental protection applicable at the operating site.

1.2 Copyright

1.3 Version and issue status of these operating instructions

The version and revision status of these operating instructions is December 2014. We expressly point out, that the descriptions, illustrations and performance information are not binding. Teddington GmbH reserves the right to implement technical modifications to the system at any time in order to improve safety, reliability, function and design.

1.4 Signs and symbols used in these operating instructions

We have used symbols and notes to highlight unavoidable residual risks and dangers and important information regarding use of the machine so as to bring these to your attention.
Here are the symbols we use in the following pages:

Warning of direct imminent danger to life and health of persons.
Failure to observe this warning may result in serious damage to health including life-threatening injuries.

Warning of potentially imminent danger to life and health of persons.
Failure to observe this warning may result in serious damage to health including life-threatening injuries.

Warning of danger of tipping over.
Failure to observe this warning may result in serious damage to health including life-threatening injuries.

Warning of dangers due to suspended loads.
Failure to observe this warning may result in serious damage to health including life-threatening injuries.

Warning of risk of burns due to hot surfaces.
Failure to observe this warning may result in serious damage to health including life-threatening injuries.

Warning of injury to hands.
Failure to observe this warning may result in serious damage to health.

Warning of electric shock due to high voltage.
Failure to observe this warning may result in serious damage to health.

Warning of potential damage to the environment.
Failure to observe this information may result in serious damage to the environment.

This symbol indicates practical hints and particularly useful information.

Please also note that a safety symbol can never replace written safety information about an item. It is therefore always essential to read the safety information through completely!

2 Warranty, guarantee and liability

Detailed information about warranty, guarantee and liability can be found in our Terms and Conditions of Sale, Delivery and Payment.

The prerequisite for our manufacturer's warranty is that you inform us in writing immediately when a defect is determined. Compliance with statutory deadlines is decisive here.

Warranty and liability claims are generally excluded if they are attributable to one or more of the following causes:

- Inappropriate or improper use of the air curtain system.
- Improper handling, commissioning, operation and maintenance of the air curtain system by users.
- Failure to observe the information in these operating instructions relating to transportation, assembly and installation, commissioning, operation and maintenance of the air curtain system.
- Incorrectly executed repair work and maintenance.
- Disasters, damage due to foreign objects or force majeure.
- Structural modifications to the device without the agreement or consent of Teddington Luftschleieranlagen GmbH.

These operating instructions have no legally binding character. All legally binding agreements are contained exclusively in our Terms and Conditions of Sale, Delivery and Payment. The original German manual has been translated into several languages by Teddington Luftschleieranlagen GmbH. In case of doubt, the German original operating manual or the English translation are decisive. Teddington is not liable for any translation errors.

2.1 Intended use of the air curtain system

The Tubus air curtain system is manufactured in accordance with valid standards and corresponds to Machinery Directive 2006/42/EC, provided it is used as specified in these operating instructions. As operating company you must take care that during installation the system fulfils the requirements of Machinery Directive 2006/42/EC. This means, for example:

- The system can only be set up, connected, put into operation and maintained by qualified persons (as specified in Chapter 2.3).
- The operating instructions must be available during installation, be read by technical staff; your own staff must be briefed and the instructions must be kept in the immediate vicinity of the system.

– For operation in a flammable environment, the operating company must take special safety and fire protection precautions according to local fire protection regulations.

If these guidelines are not fulfilled, the system may not be put into operation. The Tubus air curtain system is exclusively designed to create flows and/or curtains of air to separate different air masses in entrances of buildings protected from humidity. Incoming cold air is met with a reverse air flow which stops the room getting cold. Tubus has been designed for vertical and horizontal installation (depending on the model of device ordered) with air intake and air discharge on the long side.

Intended use also includes:

– Reading through these operating instructions and compliance with all information specified therein – in particular the safety instructions.

– Compliance with and execution of all inspection and servicing work within the prescribed time intervals.

– The exclusive use of original spare parts. These parts have been especially designed for this system. It is not possible to guarantee that parts produced elsewhere have been designed and manufactured appropriately for the necessary load and safety.

– That parts and special equipment not supplied (and/or approved) by Teddington Luftschleieranlagen GmbH are not approved for use with the system.

WARNING

The use and operating conditions specified in these operating instructions and the additional technical material must be adhered to without exception.

2.2 Improper use of the air curtain system

The Tubus air curtain system is not intended for any types of use other than those listed above and such types of use will be considered improper use.

The following in particular are not permitted:

– To install, operate, use and maintain the air curtain system other than as specified in these operating instructions;

– To carry out any kind of structural modifications on the air curtain system which can influence the function and machine safety without the explicit consent of Teddington Luftschleieranlagen GmbH;

– To use the air curtain system in an explosive environment because it has not been designed to comply with ATEX guidelines;

– To store fire accelerants within five metres of the system (danger of flying sparks, electrostatic charge and grounding).


WARNING

No safe operation of the machine is guaranteed when it is not used as intended!

The operating company, and not Teddington Luftschleieranlagen GmbH, shall be liable for all personal injury and damage to property incurred as the result of improper use.

2.3 Who is authorised to carry out what work on the device?

As company operating the air curtain system you must ensure that installation is only carried out by qualified specialist companies.

Regular standard maintenance (see “Maintenance” chapter) can only be performed by trained employees. Trained in this context means that the employee has read these operating instructions and is familiar with all safety information and danger points.


TIP

We recommend you have the trained employees sign to confirm that they have read and understood these operation instructions.

Trained employees can only correct those system malfunctions listed in the “Malfunctions” chapter. A specialist company must be called for all other malfunctions. Extensive safety inspections, repairs, decommissioning and disposal must likewise be performed by specialist companies.

Specialist companies in this context are understood as follows:

– With respect to electrical installations and repairs: electricians according to UVV Electrical Systems, EC Machinery Directive, Machine and Product Safety Law GPSG and DIN VDE 0100/DIN VDE 0113/EN 60204-1;

– With respect to structural installation, a specialist HVAC company must be called.

2.4 Duty of care of the operating company

Teddington Luftschleieranlagen GmbH's goal is to ensure the highest level of safety and quality. Special care has therefore been taken that construction and production of the Tubus air curtain system are strictly in accordance with applicable regulations and guidelines.

In order that the system can maintain the maximum safety standards during daily operation, the operating company must ensure:

- That the air curtain system is only used (i.e. transported, installed, commissioned, operated and maintained) according to its designated use with an awareness of safety and danger issues;
- That the device is operated only in perfect operating condition and that it is checked regularly for correct function;
- That the operating instructions are always available, are legible and complete at the operating site of the device;
- That all maintenance and safety-related inspections are performed in good time;
- That all malfunctions, in particular those that could impair safety, are repaired immediately (the system cannot be operated when a fault is present);
- That only qualified, authorised and instructed specialists work on the device.

3 Important safety information

In the chapter on safety we have assembled all possible hazards which can arise during the use, maintenance and repair of your air curtain system. Wherever possible the risks have been ruled out by the manufacturer, Teddington Luftschleieranlagen GmbH.

3.1 Hazards and danger areas on the air curtain system

It is essential that all persons working on the air curtain system pay attention to the following possible residual risks:

DANGER!

- Porous wires can result in electrical fires.
- Short circuit or electrocution due to porous wires
- Fire in heating coils or air vents
- Overheating of the motor
- Danger of burns from hot surfaces within the system! Allow the system to cool down before opening the cover.
- When the cover is open, do not reach into the running motor until the motor has been turned off and come to a halt.
- Items or tools left in the system can fall out when it is opened, and can lead to injuries.
- Danger of electrocution due to dampness or leaking fluids in the system
- Danger of injury due to parts falling down (grid, housing cover or other loose parts)
- Danger of burns from hot, pressurised water from the hot water pump
- Danger of injury due to stumbling or falling from ladders: Ensure a safe place to stand during all mounting, dismantling and maintenance work
- If the air curtain system is not sufficiently secured to the floor this may lead to damage to property and to personal injuries
- The entire system can fall from the ceiling if incorrectly installed or if the wall or ceiling bracket comes loose.
- During cleaning, neither water nor liquid detergents may get inside the system or come into contact with energised parts.
- Wear protective gloves and safety shoes during all cleaning and installation work!

In addition to these operating instructions all applicable laws and ordinances, the accident prevention regulations (UVV), as well as the guidelines of the Accident Prevention & Insurance Association and the laws on occupational health and safety must be followed.

The device was subjected to a function test before delivery. Nevertheless, incorrect installation, commissioning, servicing and maintenance and may result in personal injury or damage to property.

These operating instructions must be kept at the operating site of the air curtain system. It must be ensured that all persons working with the system can consult the operating instructions at any time. Any specialist company employee charged with commissioning, maintenance or repair must have read these operating instructions before starting work.

WARNING

All information about safety and danger on the air curtain system must be observed and be kept in a legible state. Damaged or illegible signs must be promptly replaced.

WARNING

Fan motors must be allowed approx. 3 minutes to come to a halt before the air curtain can be opened.

WARNING

If there is electric heating:
After a long operating break, the heater battery must be cleaned before being put into operation (risk of fire due to dirt deposits).

WARNING

Air curtain systems with electric heater batteries must never be operated at a low fan level and high heating level!

If air curtain systems with electric heater batteries are operated at low fan level and high heating level, there is a risk of the heating element overheating, combined with the triggering of the excess temperature thermostat. In this case the thermostat must be manually reset. Other causes of overheating may be dirt or motor failure. The cause of overheating must be rectified before the system is put back into operation.

3.2 Fire protection

WARNING

Your air curtain system is not equipped with a smoke detector!

DANGER

In case of fire, the air curtain system can become an accelerant. The circulation of large air masses means that sources of fire near the system are supplied with additional oxygen. We explicitly point out that the system must be incorporated into the building's fire safety concept, according to the applicable regulations at the operating site; this includes the installation of fire alarms, sprinklers, safety shutdown in case of fire etc. You should discuss this concept with your fire insurance. All persons working on the system or who constantly work near the system must be familiar with the locations and use of the fire extinguishing equipment.

TIP

In addition to the recommendations above, due to the electrical installation, we recommend that CO_2 fire-extinguishers are available at the operating site for use in the event of fire.

DANGER

Never extinguish a fire with water! This results in danger to life due to electrocution!

4 Transport of the Tubus air curtain system

- Carefully inspect transport packaging for damage.
- Carefully remove packaging.
- With the help of the packing slip, check the system and system components for completeness and damage.
- Document (photograph) any damage, note it on the haulier's paperwork and ask the driver to sign this. Report the damage to Teddington immediately.
- Reservations, such as "not inspected" or "accepted with reservations", will be equated with acceptance free from defects.

WARNING

Setting the system down too hard during transportation may damage the fans, which can lead to a louder noise level and to faster wear of fan motors / bearings.

WARNING

Be aware of the centres of gravity of the load!
Risk of tipping when loading pallets with a forklift or pallet truck!

5 Technical data of the Tubus range

5.1 The two performance categories of the Tubus system

The Tubus air curtain system is available in two performance categories (Tubus 1 and 2). The performance category depends firstly on the width of the entrance, and secondly on the intensity of the air flow. The wider the door and/or the stronger the flow of outdoor air, the higher the selected performance category must be.

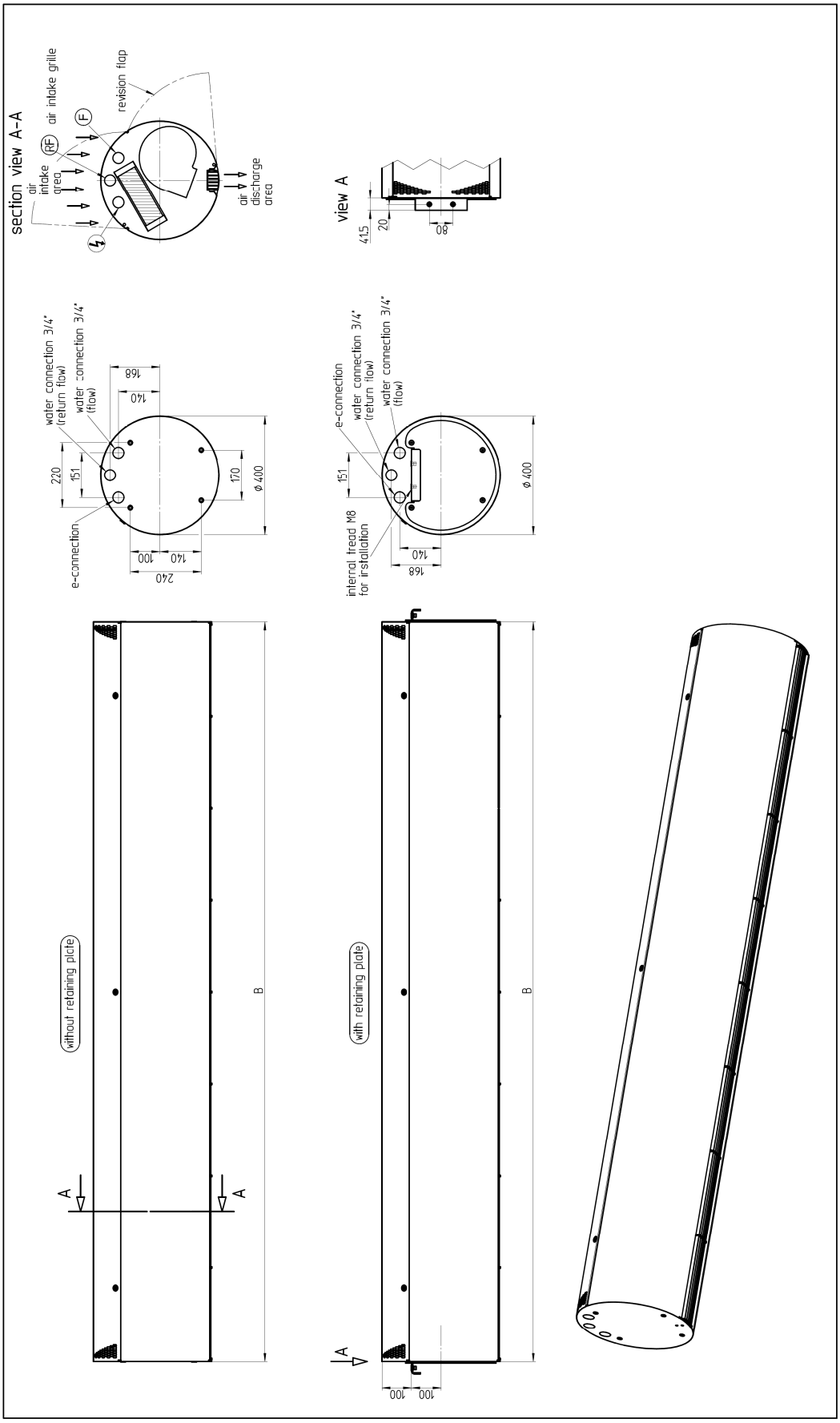
Technical data of the Tubus 1 with CORRIGO® air discharge system			
Installation length / height “B” [mm]	2000	2250	2500
Rec. max. door width for “vertical one-sided” [m]	1.6	1.6	1.6
Rec. max. door width for “vertical two-sided” [m]	2.4	2.4	2.4
Rec. max. air discharge height for "horizontal" [m]	2.4	2.4	2.4
Weight [kg]	80	90	100
Air volume			
Nominal flow rate [m³/h]	3,920	3,920	4,900
Actual flow rate [m³/h]	3,600	3,600	4,500
Max. air discharge speed [m/s]	6.8	6.8	6.8
Maximum noise level			
[dB(A)]	63	64	65
Electrical data fans – AC technology			
Voltage / frequency [V/Hz]	230/50	230/50	230/50
Output [kW]	0.92	0.92	1.15
Power consumption [A]	4.20	4.20	5.25
Electrical data fans – EC technology			
Voltage / frequency [V/Hz]	230/50	230/50	230/50
Output [kW]	0.66	0.66	0.83
Power consumption [A]	4.80	4.80	6.00
Technical data heater battery			
LTHW 80/60 at air intake temperature18°C			
Heat output [kW]	28.2	29.9	36.1
Water resistance [kPA]	9.5	11.9	18.6
Flow volume [m³/h]	1.2	1.3	1.6
Max. air discharge temperature [°C]	41.2	42.5	41.8
LTHW 70/50 at air intake temperature 18°C			
Heat output [kW]	22.3	23.7	28.8
Water resistance [kPA]	6.5	8.2	12.8
Flow volume [m³/h]	1.0	1.0	1.3
Max. air discharge temperature [°C]	36.3	37.5	36.9
LTHW 60/40 at air intake temperature 18°C			
Heat output [kW]	16.3	17.4	21.2
Water resistance [kPA]	3.9	4.9	7.8
Flow volume [m3/h]	0.7	0.8	0.9
Max. air discharge temperature [°C]	31.2	32.3	31.9
Pipe connections			
Flow / return flow [inches]	¾	¾	¾
Electrical heater battery (three-stage, 400 V, 3 Ph, 50 Hz)			
Stage 1 / 2 / 3 [kW]	6 / 12 / 18	6 / 12 / 18	8 / 16 / 24
dt max. [K]	14	14	14.9

Subject to technical changes

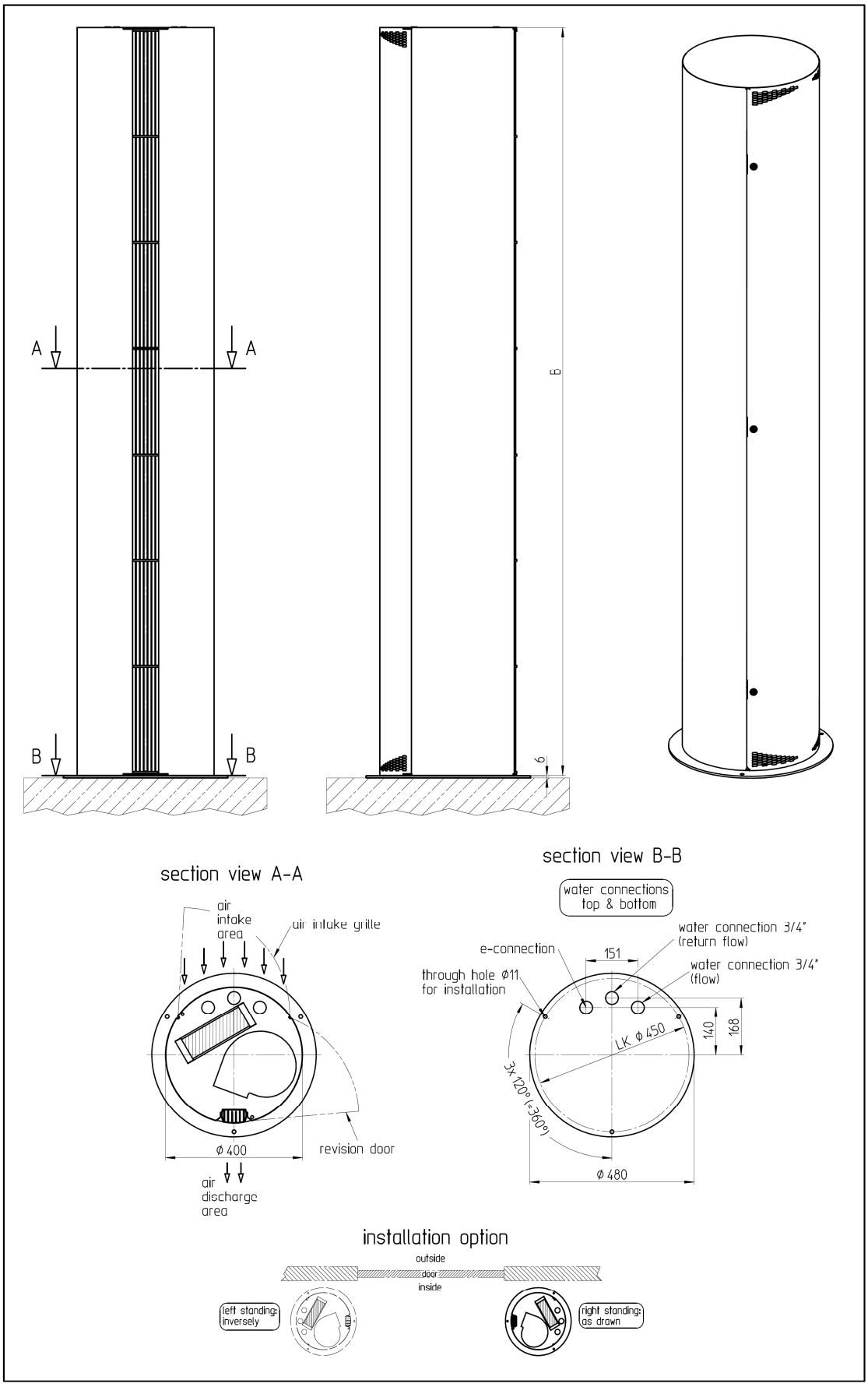
Technical data of the Tubus 2 with CORRIGO® air discharge system			
Installation length / height “B” [mm]	2000	2250	2500
Rec. max. door width for “vertical one-sided” [m]	1.8	1.8	1.8
Rec. max. door width for “vertical two-sided” [m]	2.8	2.8	2.8
Rec. max. air discharge height for "horizontal" [m]	2.7	2.7	2.7
Weight [kg]	85	95	105
Air volume			
Nominal flow rate [m³/h]	4,900	4,900	5,880
Actual flow rate [m³/h]	4,500	4,500	5,400
Max. air discharge speed [m/s]	8.2	8.2	8.2
Maximum noise level			
[dB(A)]	65	66	67
Electrical data fans – AC technology			
Voltage / frequency [V/Hz]	230/50	230/50	230/50
Output [kW]	1.15	1.15	1.38
Power consumption [A]	5.25	5.25	6.30
Electrical data fans – EC technology			
Voltage / frequency [V/Hz]	230/50	230/50	230/50
Output [kW]	0.83	0.83	0.99
Power consumption [A]	6.00	6.00	7.20
Technical data heater battery			
LTHW 80/60 at air intake temperature18°C			
Heat output [kW]	32.5	34.5	40.7
Water resistance [kPA]	12.4	15.3	22.8
Flow volume [m³/h]	1.4	1.5	1.8
Max. air discharge temperature [°C]	39.9	40.6	40.3
LTHW 70/50 at air intake temperature 18°C			
Heat output [kW]	25.7	27.3	32.3
Water resistance [kPA]	8.3	10.5	15.7
Flow volume [m³/h]	1.1	1.2	1.4
Max. air discharge temperature [°C]	34.9	35.9	35.7
LTHW 60/40 at air intake temperature 18°C			
Heat output [kW]	18.7	20.0	23.8
Water resistance [kPA]	4.9	6.3	9.5
Flow volume [m3/h]	0.8	0.9	1.0
Max. air discharge temperature [°C]	30.3	31.2	31.0
Pipe connections			
Flow / return flow [inches]	¾	¾	¾
Electrical heater battery (three-stage, 400 V, 3 Ph, 50 Hz)			
Stage 1 / 2 / 3 [kW]	6 / 12 / 18	8 / 16 / 24	8 / 16 / 24
dt max. [K]	11.2	14.9	12.4

Subject to technical changes

5.2 Dimensions of the horizontal model



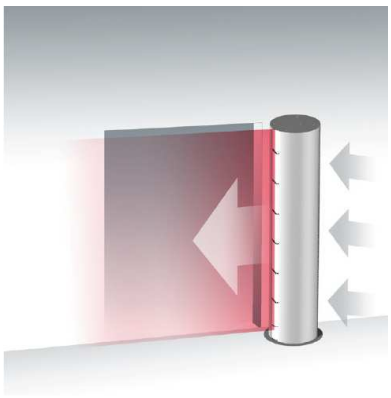
5.3 Dimensions of the vertical model



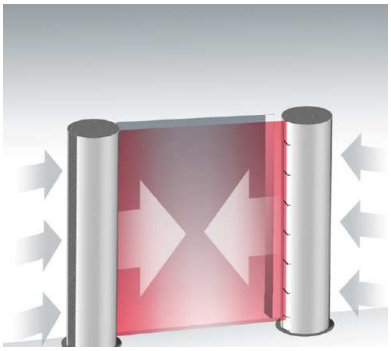
6 Design and installation of your air curtain system

6.1 The installation forms during vertical installation (Tubus-V)

TUBUS with vertical installation

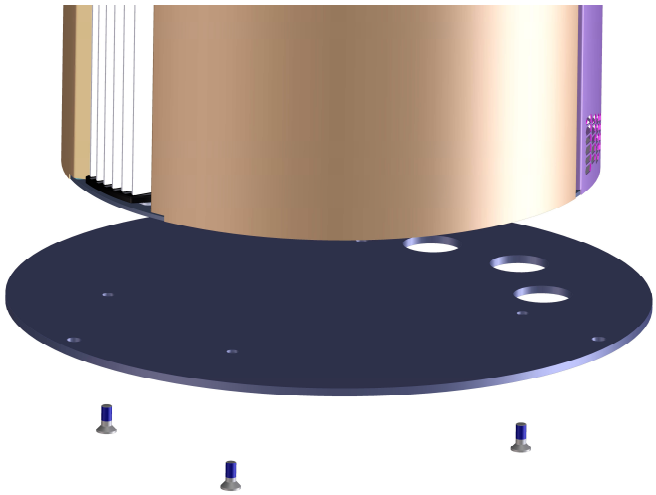


TUBUS as double unit with vertical installation



6.2 How to secure the Tubus-V device

Firstly you must decide the direction in which your new system is going to take air in, and the direction in which the air will be discharged. Then put the floor plate down at the place where the device is going to stand; this initially serves as a template. Mark the positions where holes need to be drilled in the floor. Remove the floor plate again and drill the holes. Then fix the floor plate back onto the air curtain system using 4 screws per device (included with delivery). The air curtain system can now be erected and fixed to the floor using heavy duty dowels. This completes mounting to the floor. The electrical and heating connections now need to be installed. You can choose whether the device is supplied with connections from the top or from the bottom.



If the heating connections and the electrical connection are designed at the bottom, tapping holes must be drilled in the necessary places. Here too the cut-outs in the installation plate should be used as template.

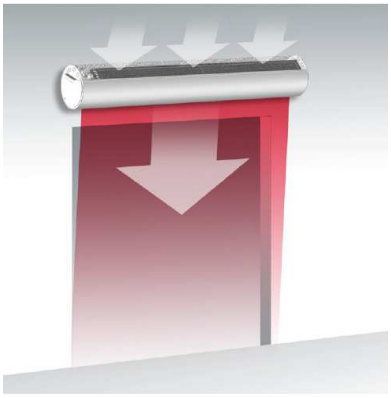
It is essential to use all specified anchor points on the air curtain system! The mounting materials must be adapted to the local situation, and structural stability must likewise be checked. The mounting material provided with delivery is standard material which may not be suitable for every situation. The mounting material must therefore be checked for suitability for the respective local situation. Where necessary the material supplied must be replaced. The specialist installation company has sole responsibility for safe installation.

All water and electrical installations must be executed exclusively by specialist companies (heating engineers, electricians). Teddington Luftschleieranlagen GmbH cannot otherwise assume any warranty (see “Safety” chapter).

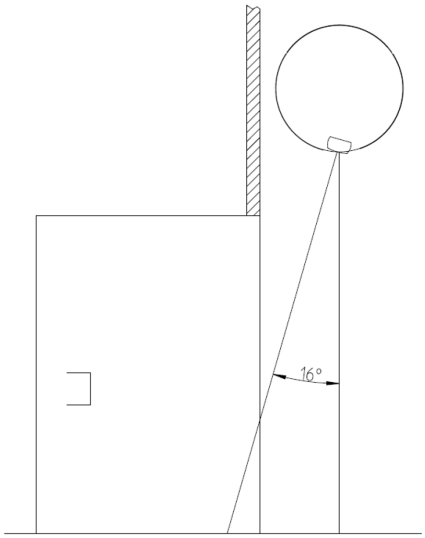
In case of vertical installation the device must be secured against tipping in the upper part.

6.3 The installation forms during horizontal installation (Tubus-H)

TUBUS with horizontal installation



6.4 How to secure the Tubus-H device

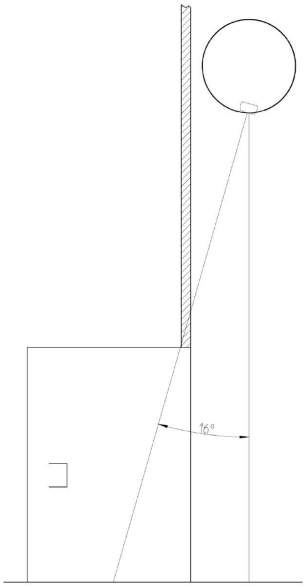


Right

Correct mounting!

Mounting for door air curtain

The air can flow without obstruction



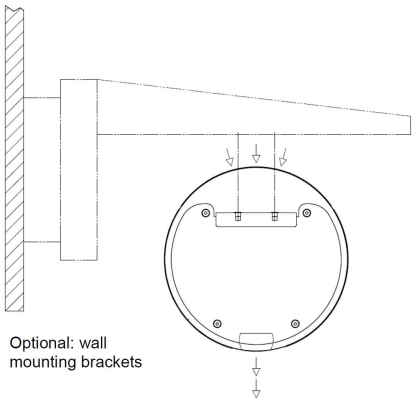
Wrong

Incorrect mounting!

The air stream is blocked or obstructed by the wall.

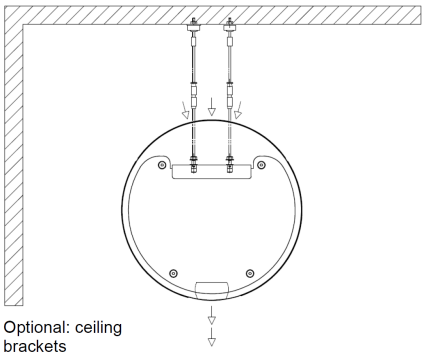
It should be moved away from the wall or mounted differently.

During installation, you can choose between mounting to the wall or ceiling:



Optional: wall mounting brackets

Special wall mounting brackets with heavy duty dowels are used for wall mounting. 2 wall mounting brackets are required. The air curtain system can then be secured to the wall mounting bracket using the blind rivet nuts in the side retaining plates and suitable screws or threaded bolts in conjunction with vibration dampers.



Optional: ceiling brackets

For ceiling mounting, 4 type DH/DHD special ceiling brackets are screwed into the blind rivet nuts on the side retaining plates and secured to the ceiling above the door using heavy duty dowels. The turnbuckles can be adjusted to ensure horizontal alignment at the correct height.

WARNING

We recommend installation of a repair switch and door contact

WARNING

Never walk underneath suspended parts or underneath the device during installation!

WARNING

Use sufficiently secured climbing aids for safe installation and to prevent the risk of falling.

WARNING

It is essential to use all specified anchor points on the air curtain system! Special mounting materials can be obtained from Teddington. The mounting materials must be adapted to the local situation and the structural stability checked where necessary. The supplied mounting material must be checked for suitability and replaced if necessary. The specialist installation company has sole responsibility for safe installation.

WARNING

Devices with integrated heating systems must be secured leaving a safety distance of at least 150mm to the ceiling.

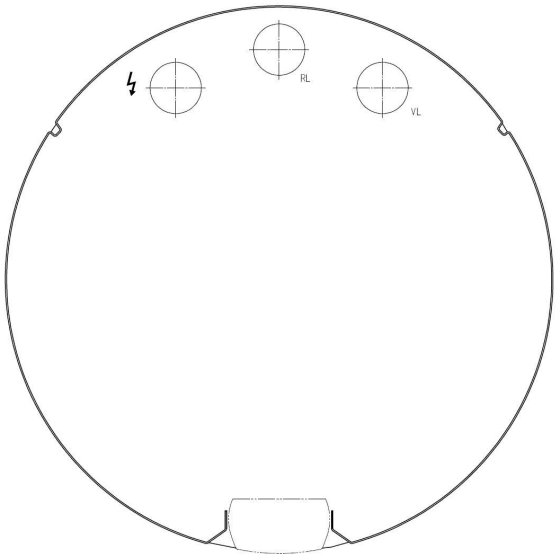
WARNING

All water and electrical installations must be executed exclusively by specialist companies (heating engineers, electricians). Teddington Luftschleieranlagen GmbH cannot otherwise assume any warranty (see “Safety” chapter).

7 Commissioning and adjustments: How to adjust your system perfectly to your needs

Before commissioning your air curtain system you must ensure that all water installations and electrical installations have been carried out correctly

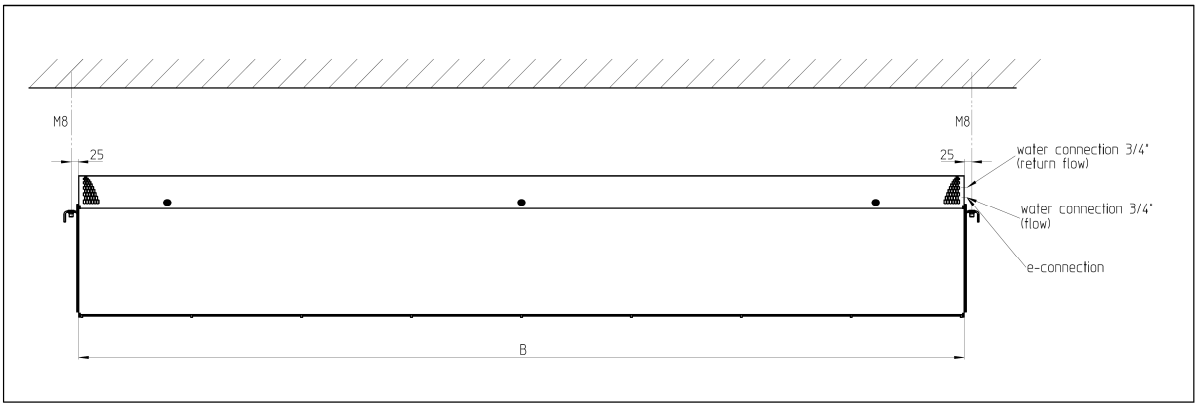
7.1 Water and electrical installations on the Tubus-V device



Connections for electricity and water
Tubus-V device

The heater battery connections for hot water operation are found on the top or bottom of the device. Flow and return flow are labelled. There is also a cable entry for the electrical connection of motors on the top or bottom of the device. Systems with an electrical heater battery have the cable entry on the top or bottom of the device.

7.2 Water and electrical installations on the Tubus-H device



Electrical and water connections
Tubus-H device

The heater battery connections for hot water operation are found on the side of the system. Flow and return flow are labelled. There are likewise cable entries on the side of the system for the electrical connection of motors. Systems with electrical heater battery have the cable entry for the electrical connection of the heater battery at the side of the device.

WARNING

The heating should always be connected before the electrical connection to rule out the risk of an electric shock. Check that the system is de-energised before connecting the heating.

WARNING

In the case of systems with an installed thermostatic control valve, the valve is NOT screwed so it is “sealed”. The connection is only sealed when screwed tight after pipe installation!

WARNING

All water and electrical installations must be executed exclusively by specialist companies (heating engineers, electricians). Teddington Luftschleieranlagen GmbH cannot otherwise assume any warranty (see “Safety” chapter).

WARNING

Only connect heating pipes using suitable tools so that the connections (pipes, heat exchanger connections) are secured to prevent twisting.

DANGER

Before commissioning, all pipes must undergo an expert pressure inspection. Similarly, all electrical cables must be inspected! Incorrect connection can lead to danger to life!

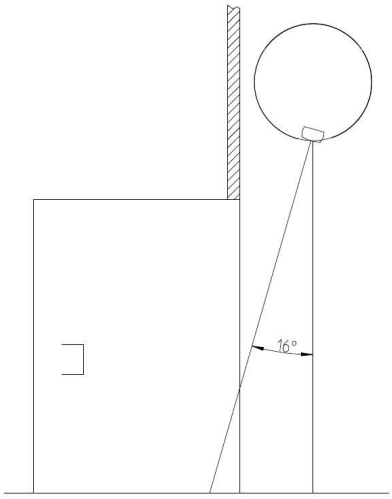
Important: no safety parts, covers and grounding conductor connections should be removed.

WARNING

Measure the fan motors' power consumption and compare it to the power input data on the type plate.

7.3 How to optimise your system's screening capacity

Your air curtain system can only achieve the maximum screening capacity if all functional components are set correctly. The air curtain system screens a room against cold air and draughts that impact on the door from outside. In the case of high outside pressure (wind pushes towards the inside) a higher volume of air (e.g. level 5) should be selected on the controller to counteract the pressure. To press against the outside air, the air discharge blades must be pivoted outwards. The best angle is reached when no more cold air flows inside in the lower area of the door and no warm room air escapes in an area of about 1m in front of the door.

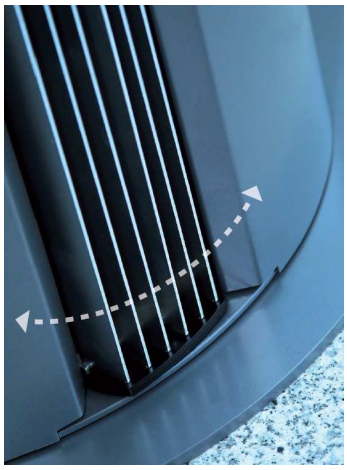


The setting requires a little patience and should be adjusted according to changing weather conditions.

If the air discharge temperature is too low, it must be adjusted on the thermostat.

The device can also be installed with a different type of mounting. The principle of aligning the air discharge blades against the outdoor air continues to apply, however. You can find more information on this in the chapter explaining the correct way to mount the system.

7.4 Adjusting the air discharge element



The air discharge element can be simply pivoted manually by up to 16 degrees outwards or inwards. In order for your system to achieve the best screening, the air discharge element must be pivoted wide enough outwards. You can find more information in the chapter “How to optimise your system’s screening capacity”.

8 Maintenance of your air curtain system

Your air curtain system has been designed to require little maintenance; however some maintenance work is necessary.

8.1 Annual servicing

The air curtain system should be completely serviced annually, if possible during the summer months. This way you ensure that your system is ready for operation when you need it.

8.2 Servicing schedule

Maintenance interval	Maintenance task:	Authorised person:
Monthly	– Check / clean / vacuum the heater battery	Anybody familiar with the operating instructions and the hazards of the system.
Monthly	– Clean device, remove dirt and dust	Anybody familiar with the operating instructions and the hazards of the system.
4 times a year	– Visual inspection for signs of damage, wear or soiling	Anybody familiar with the operating instructions and the hazards of the system.
4 times a year	– Check functions (all programs/settings)	Anybody familiar with the operating instructions and the hazards of the system.
4 times a year	– Check noise (does a component emit unusually loud noises, e.g. imbalance in the fan?)	Anybody familiar with the operating instructions and the hazards of the system.
Annually	– Inspect all of the electrical equipment	Specialist company / electrician
Annually	– Check the water pipes and mechanics	Specialist plumbing company


WARNING

The air curtain's electrical system can only be serviced by a qualified electrician or other qualified persons under the guidance and supervision of a qualified electrician, according to electrical regulations!


WARNING

Before maintenance work starts on the air curtain system, it must be checked that the system is turned off and is not receiving current from any source. Setting the selector switch to zero is not sufficient for this. The power supply must be completely disconnected and safety precautions must be taken so that restarting by third parties is impossible (repair switch and/or fuse box).

When electrical heating is present:
After a longer operating break, the heater battery must be cleaned before being put back into operation (risk of fire through dirt deposits).

8.3 Opening and closing the device

To open the air curtain, the selector switch on the controller must be set to “zero”.

Wear protective goggles when opening the system and when cleaning the heater battery to prevent dirt and dust particles from inside the system getting into your eyes.

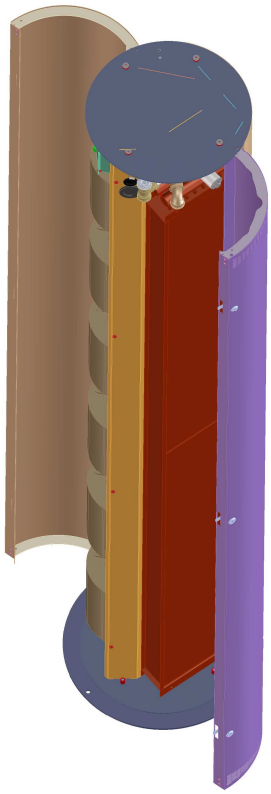
The fan motors must be given approx. 3 minutes to come to a halt before you open the air curtain. Otherwise there is a risk of getting caught in the running fans or the risk of hand injuries.

In the case of a horizontally mounted system, the inspection cover is not secured by a chain or similar. Please open carefully and slowly after unlocking.

Caution – risk of burns due to hot surfaces!

Caution – risk of hand injuries through crushing or cutting on sharp corners!

The heater battery might be very dirty. Please ensure that you do not inhale any dust particles.



To open the air curtain there are two flat locks on its air intake side. To open the air intake grid, these must be turned 90° using an Allen key. By removing the screws the inspection cover can then be opened easily either downwards or to the side (depending on whether the system is mounted horizontally or vertically). The controller, thermostat, heating medium and fans are now freely accessible for adjustment and for maintenance purposes.

To close the air curtain again, close the inspection cover and screw tight again. Now close the air intake grid, press on the locks and turn 90°.

The air curtain can then be put back into operation.

Option: The air curtain is fitted with a repair switch behind the inspection cover which should be actuated as protection during servicing or repair work etc.

8.4 Service hotline and serial number of your air curtain system

Call our service hotline on 02683 9694-0,
and our customer service will be happy to advise and assist you!

Please specify the serial number of your air curtain for all questions. This can be found on the inside of the system when the inspection cover is open or on the front page of these operating instructions.

9 Declaration of conformity

EC declaration of conformity

In accordance with the EC Machinery Directive (2006/42/EC)

We herewith declare that the TUBUS air curtain system listed below conforms with the essential safety and health requirements of EC Machinery Directive 2006/42/EC, based on its design and construction method, as well as the models placed on the market by us. In case of modifications to the TUBUS air curtain system that have not been agreed with Teddington Luftschleieranlagen GmbH, this declaration loses its validity.

Name of the manufacturer:	**TEDDINGTON Luftschleieranlagen GmbH**
Address of the manufacturer:	**Industriepark Nord 42** **D-53567 Buchholz**
Declares for the product:	**Luftschleier System TUBUS**
Type / serial number:	see cover sheet
Year of construction:	see cover sheet

Conformity to the following EC directives

2006/42/EC	EC Machinery Directive
2004/108/EC	Guidelines on Electromagnetic Compatibility
2006/95/EC	Low Voltage Directive

And the following harmonised standards:

DIN EN ISO 12100 (version 03/2011)	Safety of machinery – General principles for design – Risk assessment and risk reduction
DIN EN ISO 13857 (version 06/2008)	Safety of machinery; safety distances to prevent hazard zones being reached by the upper and lower limbs
DIN EN 349 (version 09/2008)	Safety of machinery; minimum gaps to avoid crushing of parts of the human body
DIN EN ISO 4413 (version 04/2011)	Hydraulic fluid power – General rules and safety requirements for systems and their components
DIN EN ISO 13732-1 (version 12/2008)	Ergonomics of the thermal environment - Methods for the assessment of human responses to contact with surfaces Part 1: Hot surfaces
DIN EN 60204-1 (version 06/2007)	Safety of machinery - Electrical equipment of machines - Part 1: General requirements

Authorised to compile the technical file:
Klaus Dürksen, TEDDINGTON Luftschleieranlagen GmbH (Address see above)

Buchholz- Mendt, 09.12.2014

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Frank Felmet

(Managing Director)

Notes:

www.teddington.de

Teddington Luftschleieranlagen GmbH

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