






VENESSE Comfort

VCV-B-25E, VCV-B-25F,
VCV-B-25W, VCV-B-25S

Full manual INSTALLATION

1. BEFORE YOU BEGIN

Symbol	Meaning
 ATTENTION!	Warning/caution
 DO NOT OVERLOOK!	Important instructions
 YOU WILL NEED	Practical tips and information
 TECHNICAL INFORMATION	More detailed technical information
	Refer to other parts/sections of the manual



Before installation, thoroughly read the section “**Safe use of air curtains**”. It contains all instructions on the safe and correct use of the product.

This manual contains important instructions to ensure correct installation of the air curtain. Before installation, read all of the following instructions thoroughly and then adhere to them! The manufacturer reserves the right to make changes, including to technical documentation without prior notice. Save this user manual for further use. The instructions in this manual are a part of the product.

Conformity disclosure

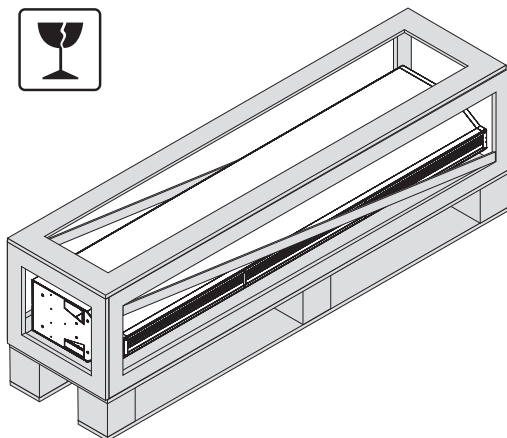
VCV air curtains adhere to the following European Norms (EN):

EN 55014-1
EN 55014-2
EN 60335-1
EN 60335-2-30
EN 61000-3-2
EN 61000-3-3
EN 61000-6-3

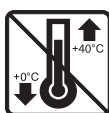
You will find the disclosure text on the CD supplied with the product.

2. UNPACKING

2.1 CHECK THE SHIPMENT



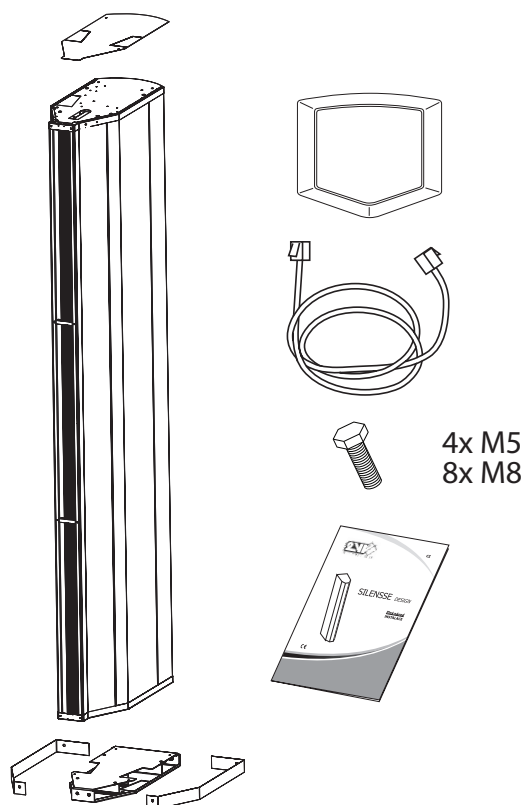
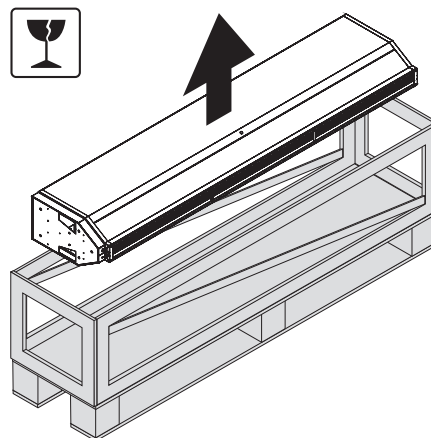
- After delivery, immediately check to see if the packaged product is damaged. If the packaging is damaged contact the delivery service. If the complaint is not filed in time, your claim may not be valid later.
- Check to see if it is the same product you ordered. If there are any discrepancies, do not unpack the air curtain, and immediately report the defect to the supplier.
- After unpacking, check to see if the air curtain and other parts are in order. If you have any doubts, contact the supplier.
- Never install a damaged air curtain!
- If you do not unpack the air curtain immediately after delivery, it must be stored in a dry indoor environment with an ambient temperature between +0 °C and +40 °C



	<p>All used packaging materials are environmentally friendly and may be re-used or recycled. Take an active part in environmental protection and see that packaging materials are correctly disposed of or repurposed.</p>	
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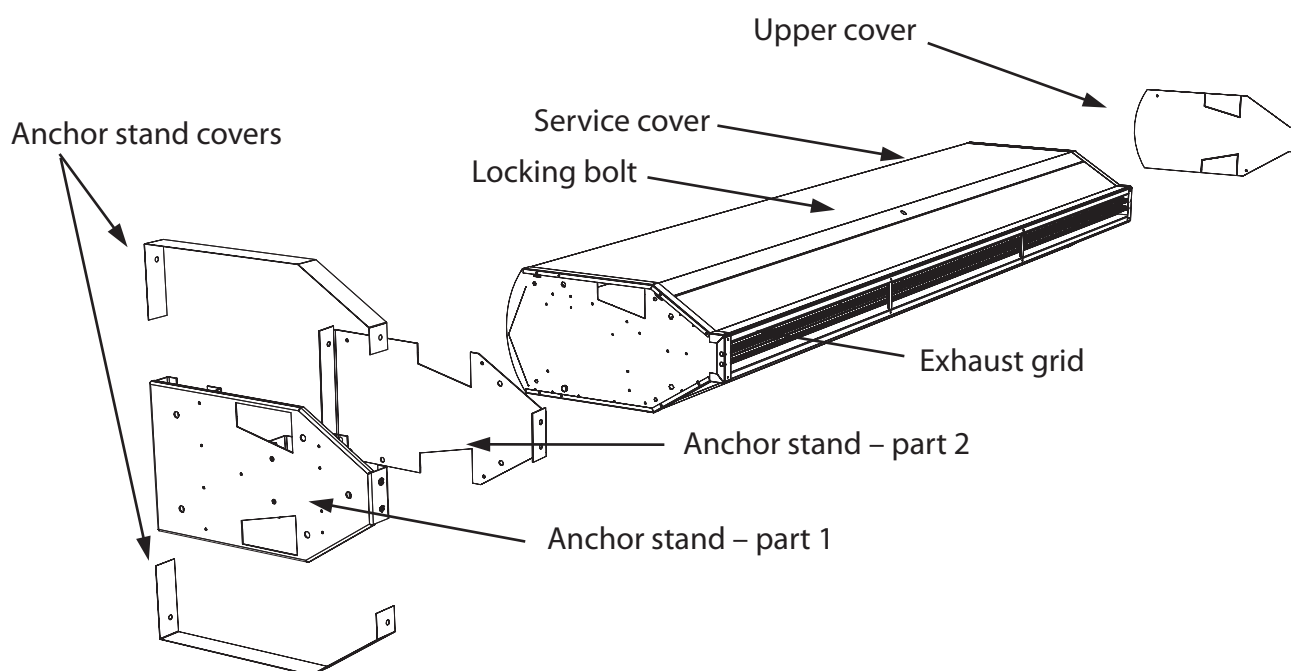
2. UNPACKING

2.2 UNPACK THE AIR CURTAIN



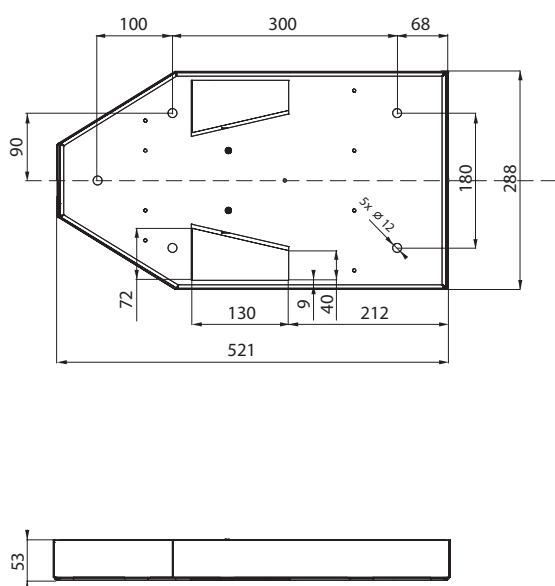
- If the air curtain has been transported at temperatures below 0° C, it will be necessary to let it sit for at least **2 hours** under normal operating conditions after unpacking, without turning it on. This will allow the air curtain's interior temperature to stabilise.

3. MAIN PARTS

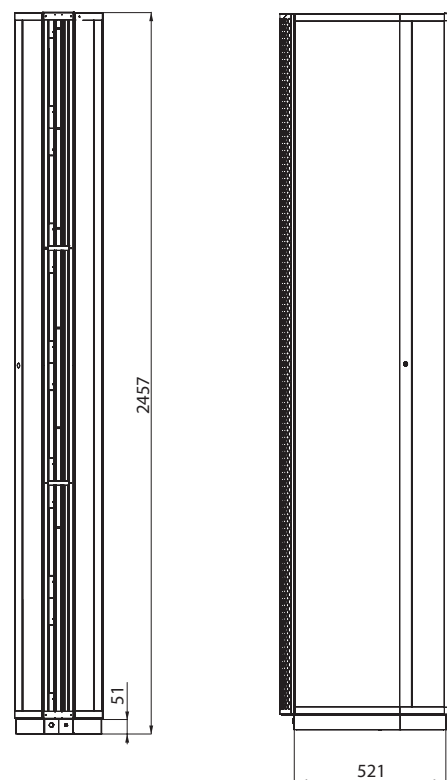
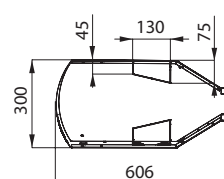


4. DIMENSIONS

Anchor stand dimensions (mm)



Air curtain dimensions (mm)



5. TECHNICAL PARAMETERS

Type	Max. width door*	Air output	Noise***	Heater output	Heater power supply	Fan output	Weight
	[m]	[m ³ /h]	[dB(A)]	[kW]	[V/A]	[V/A]	[kg]
VCV-B-25S	7.5 (11**)	5500	56	-	-	230/6.5	95
VCV-B-25E		5400	55.5	24	400/33.5	230/6.5	103
VCV-B-25F		5400	55.5	36	40/50	230/6.5	103
VCV-B-25W		5100	55	41.1****	-	230/6.5	104

* The distance at which the average velocity of the air current flow drops to 2m/s. For optimal conditions and maximum performance of the equipment. The value in parentheses is for two-sided installation of the air curtain.

** Two-sided installation

*** Acoustic pressure at a distance of 3 m from the air curtain.

**** With water temperature gradient of 90°/70° C and temperature of intake air at +18° C

Air curtains with electrical heater

Type	Air output	Heater output	Temperature increase Δt
	[m ³ /h]	[kW]	[°C]
VCV-B-25E	5400	24	13.33
VCV-B-25F	5400	36	20

Air curtains with a water coil for a water temperature gradient of 90°/70° C and at a suction air temperature of +18° C

Type	Air output	Heat output	Output temperature	Water flow	Pressure loss
	[m ³ /h]	[kW]	[°C]	[l/s]	[kPa]
VCV-B-25W	5100	41,1	41,9	0,50	8

5. TECHNICAL PARAMETERS

Air curtains with a water coil for a water temperature gradient of 80°/60° C and at an intake air temperature of +18° C

Type	Air output	Heat output	Output temperature	Water flow	Pressure loss
	[m ³ /h]	[kW]	[°C]	[l/s]	[kPa]
VCV-B-25W	5100	33,8	37,6	0,41	7

Air curtains with a water coil for a water temperature gradient of 70°/50° C and at an intake air temperature of +18° C

Type	Air output	Heat output	Output temperature	Water flow	Pressure loss
	[m ³ /h]	[kW]	[°C]	[l/s]	[kPa]
VCV-B-25W	5100	26,4	33,4	0,32	5

Air curtains with a water coil for a water temperature gradient of 60°/40° C and at an intake air temperature of +18° C

Type	Air output	Heat output	Output temperature	Water flow	Pressure loss
	[m ³ /h]	[kW]	[°C]	[l/s]	[kPa]
VCV-B-25W	5100	19	29	0,23	4

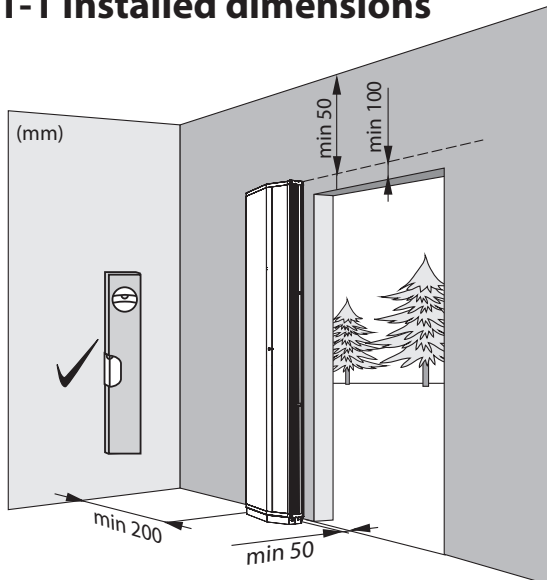


The warm-water temperature coil, made of copper-aluminium alloy, is designed for a maximum operational water temperature of +100° C and a maximum operating pressure of 1.6 MPa.

6. INSTALLATION

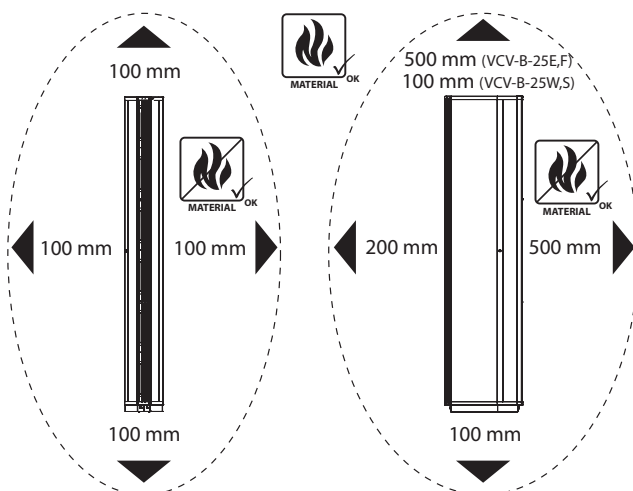
6.1 CHOOSE THE INSTALLATION SITE

6.1-1 Installed dimensions



- The air curtain must be installed only in a vertical position!
- The installed position of the air curtain can be chosen to accommodate the service cover. (Right-left orientation)
- It must be operated in dry, covered indoor spaces with an ambient temperature between +5° C and +35° C and relative humidity up to 80%
- The air curtain is not intended for moving air that contains combustible or explosive mixtures, chemical fumes, coarse dust, soot, grease, poisons, infectious germs, etc.

6.1-2 Clearance distance



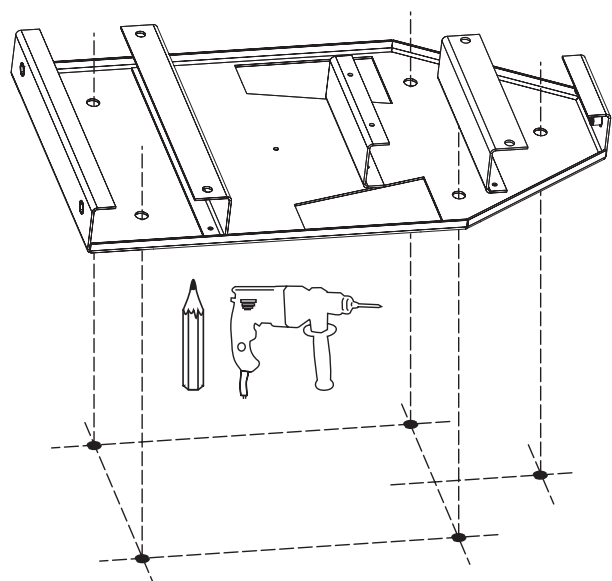
6. INSTALLATION

- **Only nonflammable materials** (those that do not burn, smoulder or carbonise) or fire-resistant materials (those that do not burn, but mainly smoulder, e.g., plaster board) **can be kept within 100 mm in any direction of the air curtain.** However, these materials **should not block the intake or outlet openings.**
- For air curtains with an electric heater, safe distances from building structural surfaces and flammable objects are as follows:
- the safe distance for flammable materials in the direction of the main air flow (i.e., behind the outlet louvers) is **500 mm**,
- the safe distance for flammable materials above the air curtain is **500 mm**,
- the safe distance for flammable materials in other directions is **100 mm**.

6.1-3 Measure the installation site

Measure the site for installing the air curtain. If the electrical cables are to run along the floor, it is necessary to mark off the installation area, including ports for electrical or heating fuel lines (air curtain VCV-B-25W).

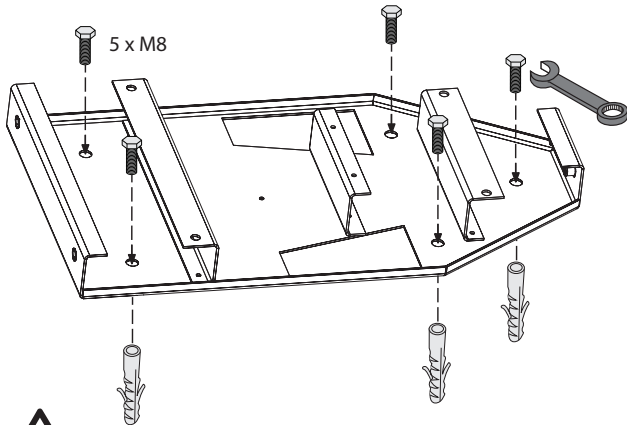
Measure and mark the holes for the anchor stand. The correct dimensions of the holes can be verified by placing the anchor stand on the place marked.



6. INSTALLATION

6.1 CHOOSE THE INSTALLATION SITE

6.1-4 Secure the anchor stand (part 1) to the floor.

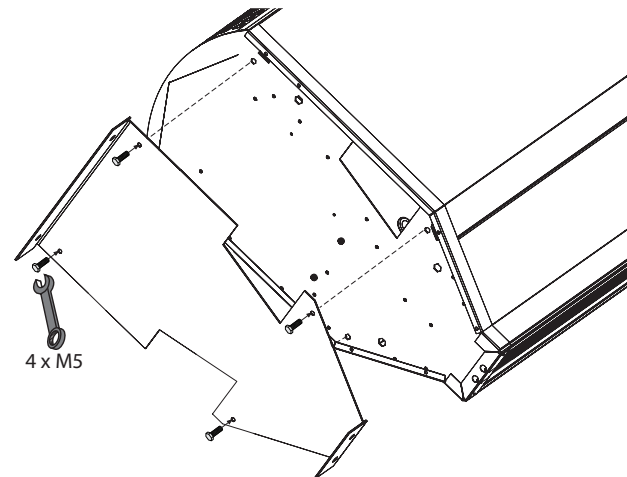


- The air curtain must be stably attached! Use only high-quality anchoring materials!



- At least **5** size **M8** screws (Not included in delivery). The type and size of the bolts depends on the flooring material.
- The same type, number and size of anchor sleeves, depending on the flooring material.
- A drill with bits of the corresponding size.

6.1-5 Bolt the anchor stand (part 2) to the air curtain



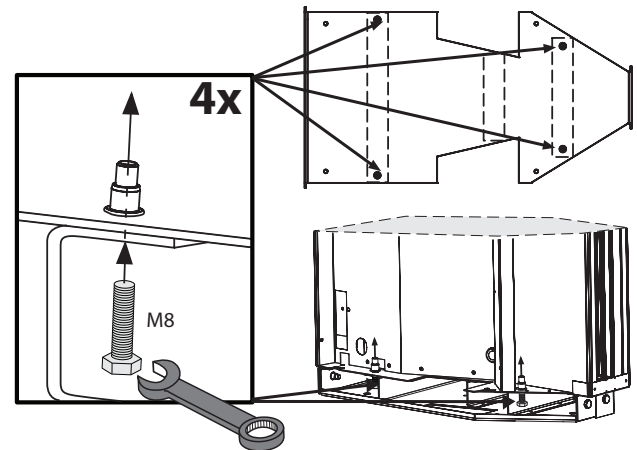
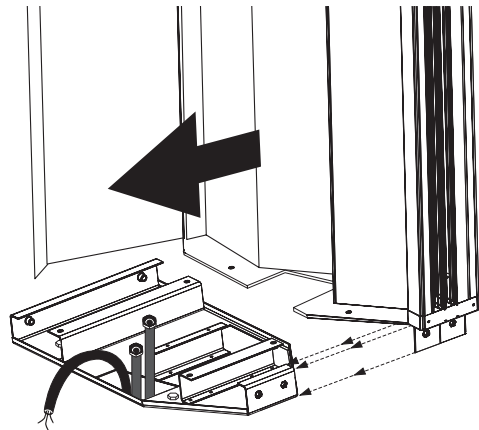
6. INSTALLATION



- At least **4** size **M5** bolts (included in delivery)
- A No. 10 wrench

6.1-6 Slide the air curtain onto its stand (part 1).

Slide the air curtain with one anchor stand (part 2) onto the fastened anchor stand (part 1), and immediately secure the air curtain in the anchor stand with 4 vertically placed size M8 bolts. (Included in delivery)

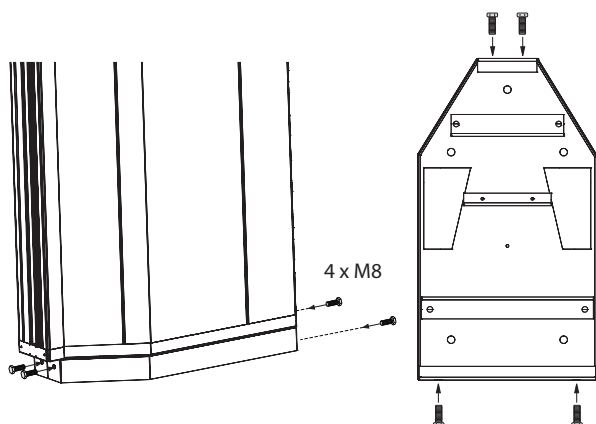


- Keep the air curtain stable while you slide it on!
- Immediately after sliding the air curtain into assembly position, secure anchor frame (part 1) to anchor frame (part 2) using 4 size M8 bolts. (Included in delivery)

6. INSTALLATION

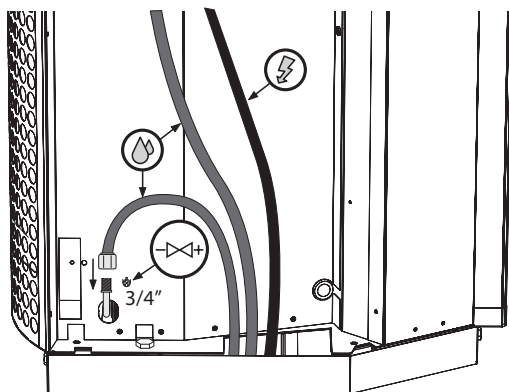
6.1-7 Cover the anchor stand

Put the anchor stand covers on and bolt them down horizontally with 4 anchor bolts.



6.2 CONNECT THE WATER INTAKE AND OUTLET HOSE

VCV-B-25W



- A flexible hose with a **G3/4"** connection



- Connection and pressure testing of the heater must be carried out by an individual with professional plumbing knowledge, who must observe current standards and regulations of the given country.



- The water intake and outlet positions can be chosen as you wish. (left-right orientation)
- **The maximum water temperature is +100° C. The maximum pressure is 1.6 MPa.** We recommend installing a stop valve on the intake and outlet of the heater to allow the water supply to be shut off.
- The water coil is equipped with two air release valves, which can also be used for bleeding, and are located at each end of the water coil.

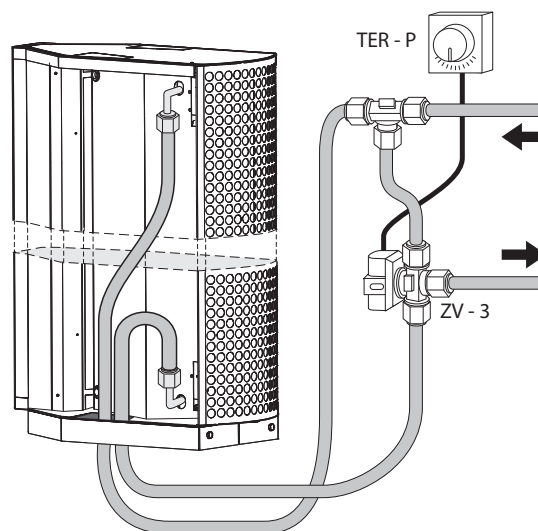
6.2-1 Regulating the water coil with a ZV-3 three-way valve



Regulation of the **VENESSE Comfort** air curtain's water coil must be handled separately.



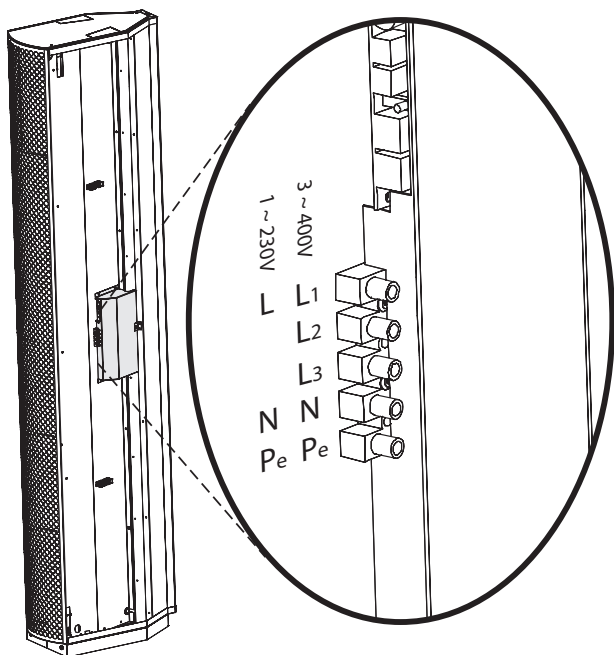
6.5-5 Diagram for the connection of the VCV-B-25W with accessories for the regulation of the water heater



- You will find a detailed explanation of regulating the water coil using the three-way valve (ZV-3), including its connections, in the manual for the ZV-3 three-way valve.

6. INSTALLATION

6.3 CONNECTING THE ELECTRICAL SUPPLY



- The air curtain's electrical connection must be based on a professional design by a qualified electrical systems engineer.
- Installation must be carried out by a professionally trained electrical worker. All applicable national regulations and directives must be observed.
- The electrical schematics on the product take priority over those presented in this manual!
- Prior to installation, check to see if the terminal markings correspond to the markings on the electrical connections diagram. When in doubt, contact your supplier and do not connect the air curtain under any circumstances.
- Never reach inside the air curtain unless the main electrical supply has been turned off!
- If the product is connected to any control system other than the original one, the regulation and measurement components must be connected by the company that supplied the system.

6. INSTALLATION

Minimal cable dimensions:

Type	Cable [ks x mm2]
VCV-B-25S	3 x 1.5
VCV-B-25E	5 x 6
VCV-B-25F	5 x 10
VCV-B-25W	3 x 1.5

6. INSTALLATION



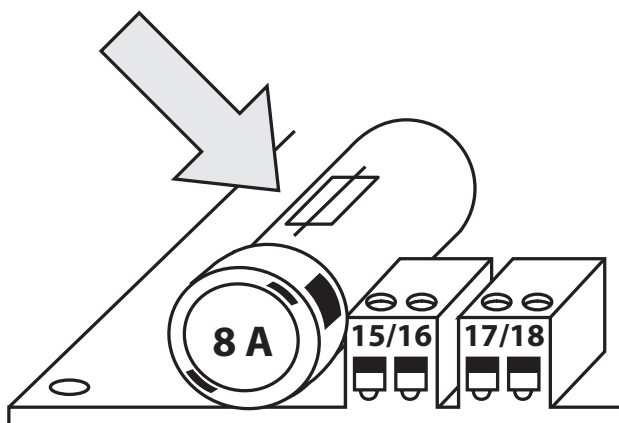
- The electrical parameters are shown on the manufacturer's label, which is located under the air curtain's service cover.

Air curtain Type	
U = Voltage	I = Net current
f = Frequency	P = Output
n = Speed	m = Weight
ph = Phase	IP = IP rating
av = Air output	ver =
Serial number	

- The air curtain must be protected by **an appropriate circuit breaker, in accordance with its electrical parameters**. For safety reasons, over-designed protection is not recommended.
- The air curtain must be connected using the TN-S system, which means that **the neutral conductor must always be connected**.
- A main cut-off switch must be placed in the electrical supply network, **disconnecting all poles of the network**.
- The electrical enclosure of the curtain is IP20.

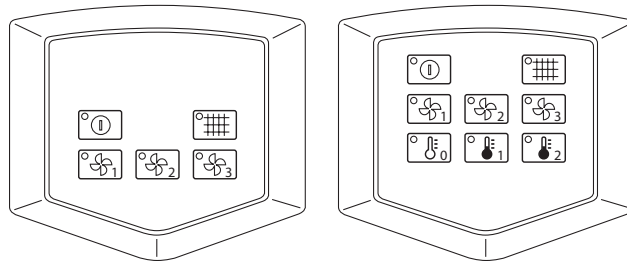


VENESSE Comfort air curtains are equipped with an 8A rated fuse. This safety fuse protects the electronic panel and fans. It is located on the electrical board next to the connectors for the door contact switches and other switches.



6. INSTALLATION

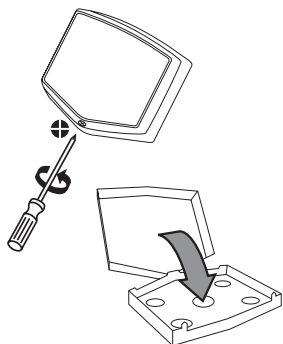
6.4 INSTALL THE CONTROL PANEL



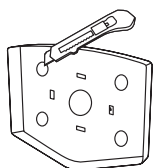
DM control for air curtain without heater

DM control for air curtain with electric heater or with water heater

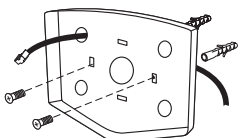
6. INSTALLATION



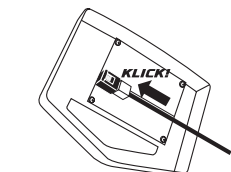
6.4-1 Loosen the bolt on the under side of the control panel.



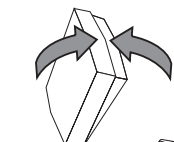
6.4-2 Open the box and remove the front cover from the upper latches. Retain the back part of the box..



6.4-3 Cut a passage for the communication cable. Use the areas moulded for this purpose.



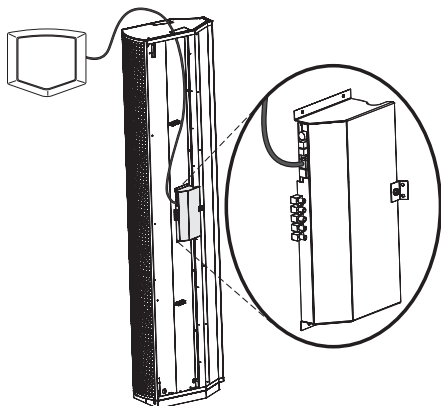
6.4-4 Pull the communication cable through the passage you have cut, and fasten the rear part of the panel to the wall.



6.4-5 Connect the communication cable to the electronics board located in the front cover of the panel.

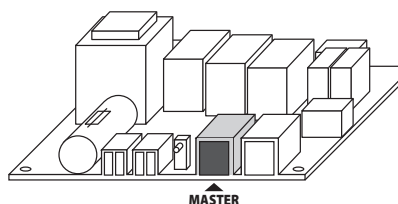


6.4-6 Place the front cover with the electronics to the upper latches of the control panel box and snap the cover into the lower latches.



6.4-7 Fasten the bolt on the under side of the control panel.

6.4-8 Connect the other end of the communication cable to the MASTER connector on the air curtain's electronic area.



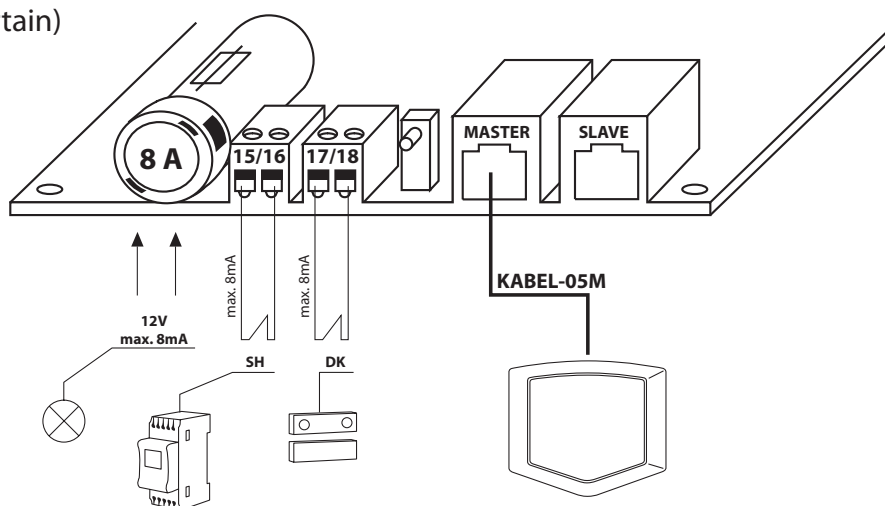
- The cable should not be routed with power cables and should be located a sufficient distance away from them.
- Take care that during connection the connector snaps into place.
 - when mounting the cable to the wall, make sure its insulation is not damaged
 - If you do not connect the cable immediately after mounting the control panel and curtain, cover the connector or cable ends with insulation tape, in order to prevent possible mechanical damage or short-circuiting.
- The cable connector must not come into contact with water or any other liquid.

6.5 CONNECT THE EXTERNAL COMPONENTS

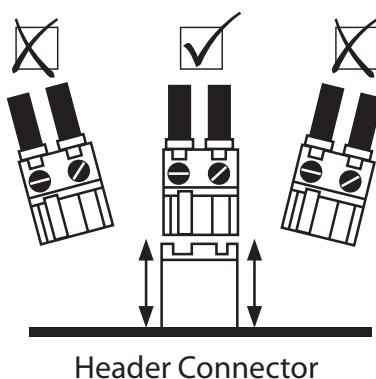
Optional accessories:

Wiring examples:

(all types of air curtain)



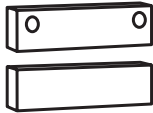

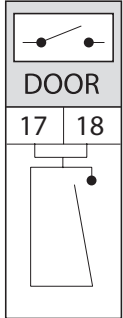

- When connecting external components, **the electricity to the air curtain must be turned off.**
- All external control components must be connected **according to the electrical schematic.**
- The connectors must be connected to the electrical board using **reasonable force and always vertically to the base.**



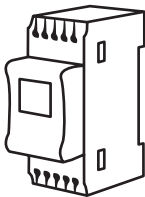

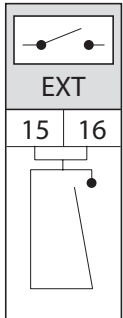


- For each component, the original cable or one conforming its individual specifications must be used.

6. INSTALLATION

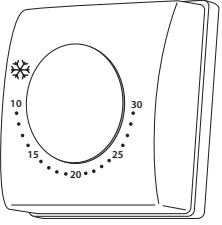

6.5-1 Door switch DK

	 <ul style="list-style-type: none">- Isolated switching contact with a maximum voltage of 12V.Cable - Dual-core cable with a diameter of 0.5 mm. - Maximum length: 50 m.
	<p>Connector on the air curtain: 17/18</p> <p> Not included in delivery.</p>

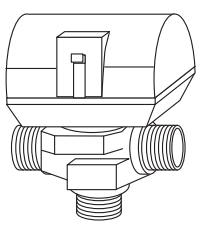

6.5-2 Timer Switch SH

	 <ul style="list-style-type: none">- Isolated switching contact with a maximum voltage of 230V.Cable - Dual-core cable with a diameter of 0.5 mm. - Maximum length: 50 m.- Three conductor power cable with a diameter of 1.5 mm.
	<p>Connector on the air curtain: 15/16</p> <p> Not included in delivery.</p> <p> The timer switch is modified for attachment on a DIN rack. Placement in the distribution box is recommended. The timer switch must be powered by its own supply.</p>

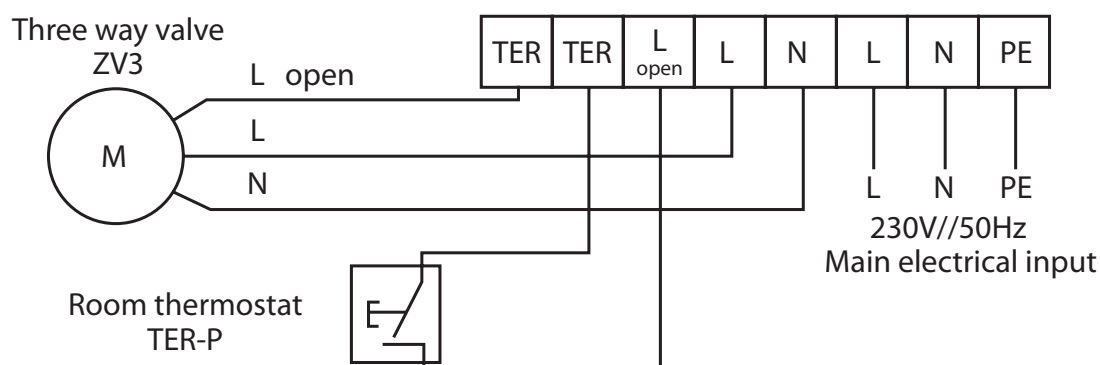
6.5.-3 Room thermostat

	<ul style="list-style-type: none"> • Room thermostat for the switching of the device depending on the temperature set in the measured location • Switching contact without potential with max. voltage 230 V. • CABLE: Twin core cable with a diameter of min. 0.5 mm. Maximum length 50 m.
	 <p>Air curtain clamps: TER / Lopen Not included.</p>

6.5.-4 Three way valve

	<ul style="list-style-type: none"> • Switching contact without potential with max. voltage 230 V • CABLE: Three core power cable with diameter of 1.5 mm, 230/ 50Hz
	 <p>Air curtain clamps: TER / L / N Not included.</p>

6.5-5 Diagram for the connection of curtain VCV-B-25W with accessories for the regulation of the water heater

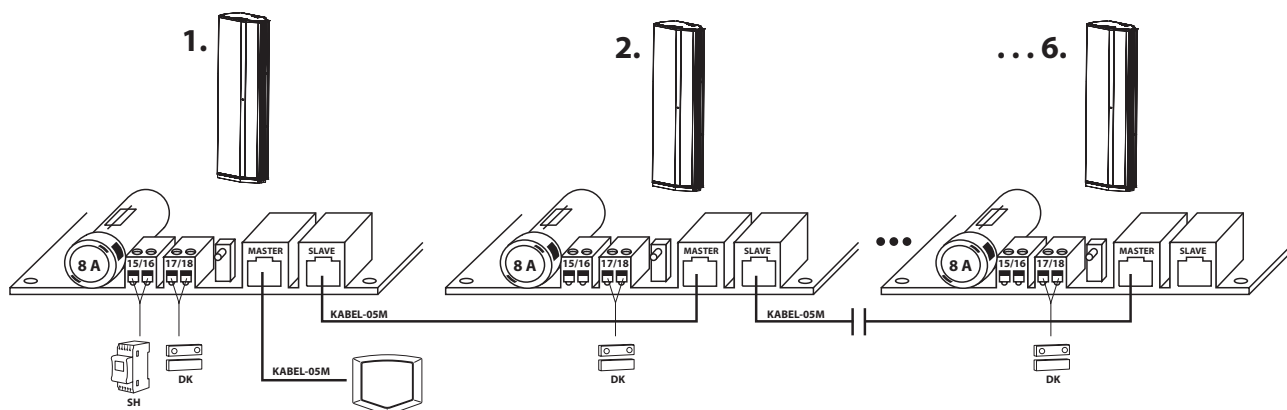


6. INSTALLATION

6.6 CONNECTING MULTIPLE AIR CURTAINS — CHAINING

The **VENESSE Comfort** air curtain is designed to allow up to six air curtains to be installed together as a chain and operated from one control panel.

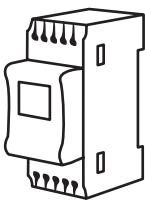

Select any air curtain as the controller (MASTER) and connect the control panel to it. Then connect to this air curtain the air curtains that will be controlled (SLAVE). The same type of communication cable works for connecting the air curtains to one another and to the control panel




DK=Door Switch; SH=Time switch.

Chained air curtains can be supplemented with these components:

Timer switch SH

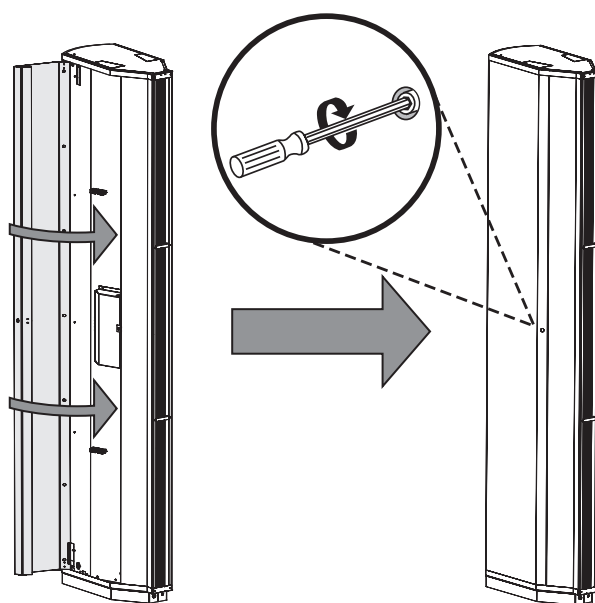
	<ul style="list-style-type: none"> - The timer switch is connected to the master air curtain - Just one timer switch can be used for the entire chain of air curtains. - The timer switch shuts off all air curtains in the chain <p> A room thermostat (TER-P) can be connected in place of the timer switch</p>
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Door switch DK

	<ul style="list-style-type: none"> - This can be connected individually to each air curtain. - When linked, each air curtain will respond to its own contact.
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6.7 COVERING THE AIR CURTAIN

After connecting the power supply, the water intake and outlet, and all external control elements, close and secure the air curtain's service cover.



7. INITIAL START-UP



Before putting the air curtain into operation, check the following:

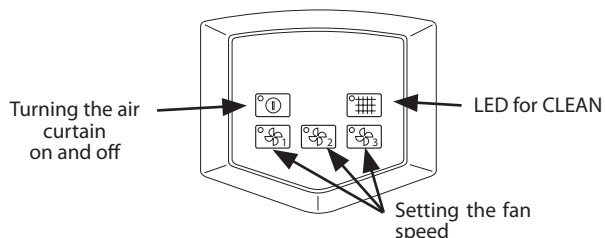
- Have any tools or other objects which could damage the air curtain been left inside it?
- Is there a proper supply of electricity and, if necessary, heating water?
- Has the air curtain been properly closed?
- Has the control panel been connected properly?

Use the initial start-up to check the basic equipment operation (fan movement, heat). Check any other set functions according to the **VENESSE Comfort Air curtain operation and maintenance guide**.

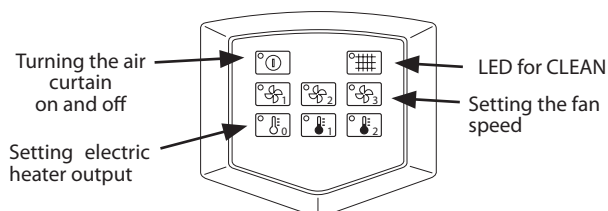
7.1 CONTROLS

7.1-1 Control panel


VCV-B-25S

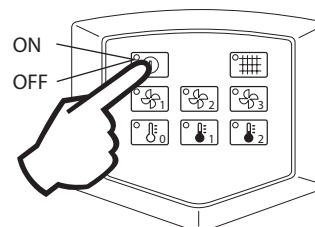
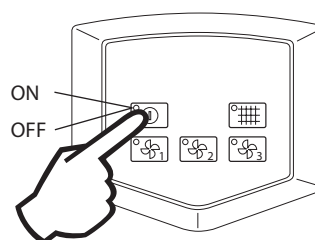


VCV-B-25E, VCV-B-25F, VCV-B-25W




7.1-2 Turning the air curtain on and off

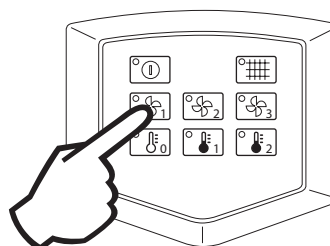
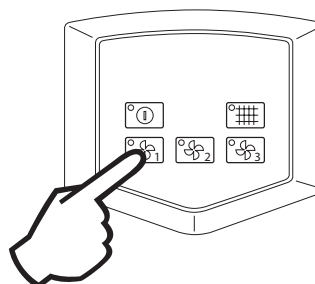
Press the  button to turn the air curtain on. Press the same button to turn the air curtain off.



Settings are indicated by an illuminated LED above the button.

7.1-3 Setting the fan speed


Press the  button to select one of three fan speeds or to turn the fan off.

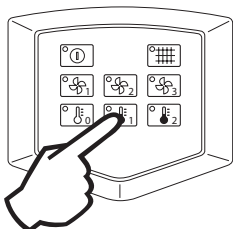


The setting is indicated by an illuminated LED above the button.

7. INITIAL START-UP


7.1-4 Setting the electric heater

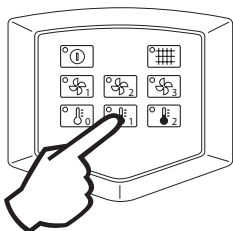
Press the  button to select one of two heat levels or to turn the heater off.



The setting is indicated by an illuminated LED above the button.

7.1-5 Setting the water heater

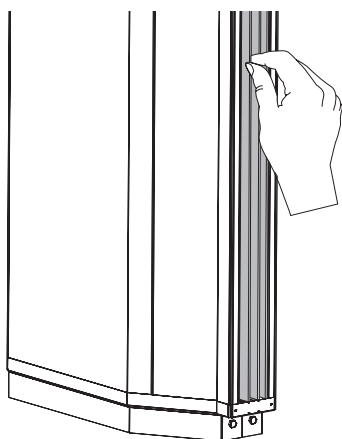
By pressing the buttons  it is possible to turn the water heater on or off - only with version VCV-B-25W



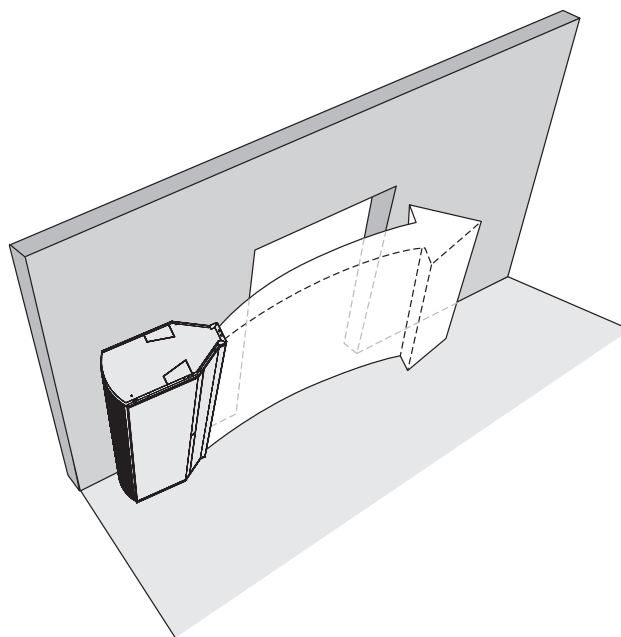
For information on regulating the water heater, read the manual for using the water regulator (e.g., ZV-3, TER-P, SMU+OSMU, etc.)!

7.2 SET AIR FLOW DIRECTION

This is set by tilting the air curtain's fan louvers in the desired direction.



8. CONCLUSION



8. CONCLUSION

After installing the air curtain, thoroughly read the **VENESSE Comfort Air curtain operation and maintenance guide**, as well as the **Guide to air curtain safety**.

If you have any doubts or questions, do not hesitate to contact our sales or technical support department.

CONTACT

Address

2VV, s.r.o.,
Poděbradská 289,
530 09 Pardubice,
Czech Republic

Internet:

<http://www.2vv.cz/contact.distribution.php>

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