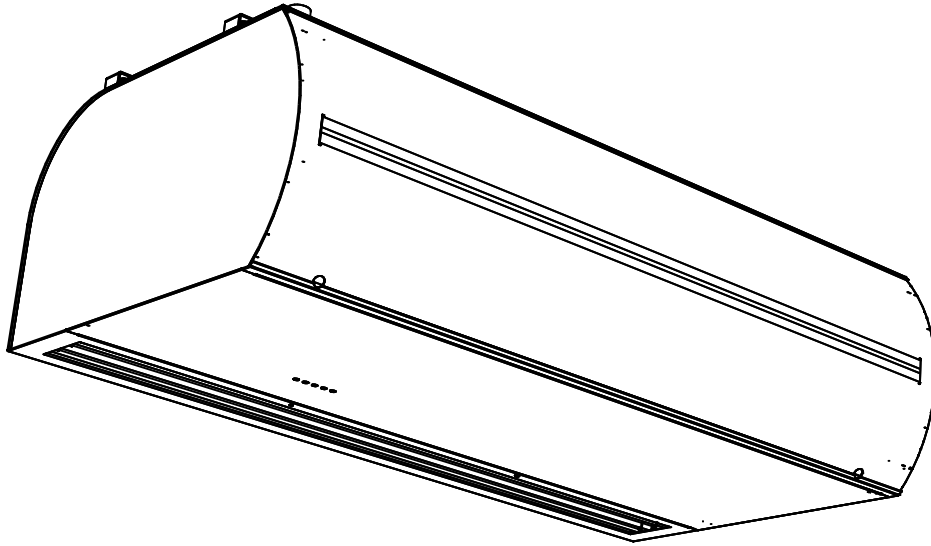




PARTNER IN VENTILATION

EN

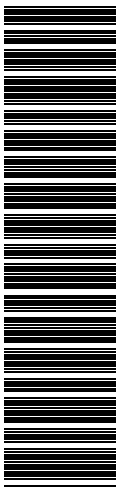


**STANDESSE** *comfort*

VCS4x-....

**Full manual**  
**INSTALLATION**

1/1








B01-0208-0511-15

2

# 1. BEFORE YOU BEGIN

Meaning of symbols in the manual:

SYMBOL	MEANING
 <b>ATTENTION!</b>	Warning/caution
 <b>DO NOT OVERLOOK!</b>	Important instructions
 <b>YOU WILL NEED NOTE</b>	Practical tips and information
 <b>TECHNICAL INFORMATION</b>	More detailed technical information
 <b>LINK</b>	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.

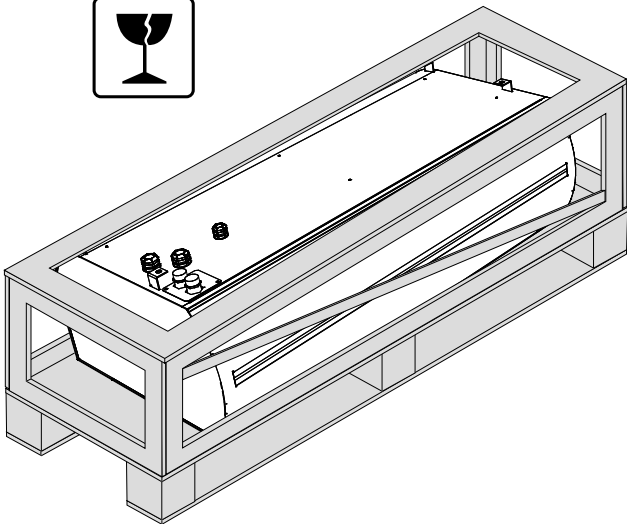
This manual contains important instructions to ensure correct installation of the air curtain. Before installation, read all of the following instructions thoroughly and then adhere to them! The manufacturer reserves the right to make changes, including to technical documentation without prior notice.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

## Declaration of conformity

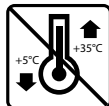
Declaration of conformity for air curtains STANDESSE Comfort is located at [www.2vv.cz](http://www.2vv.cz)

## 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 curtain, and immediately report the defect to the supplier.
- After unpacking, check to see if the 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 curtain immediately after delivery, it must be stored in a dry indoor environment with an ambient temperature between **+5 °C and +35 °C**

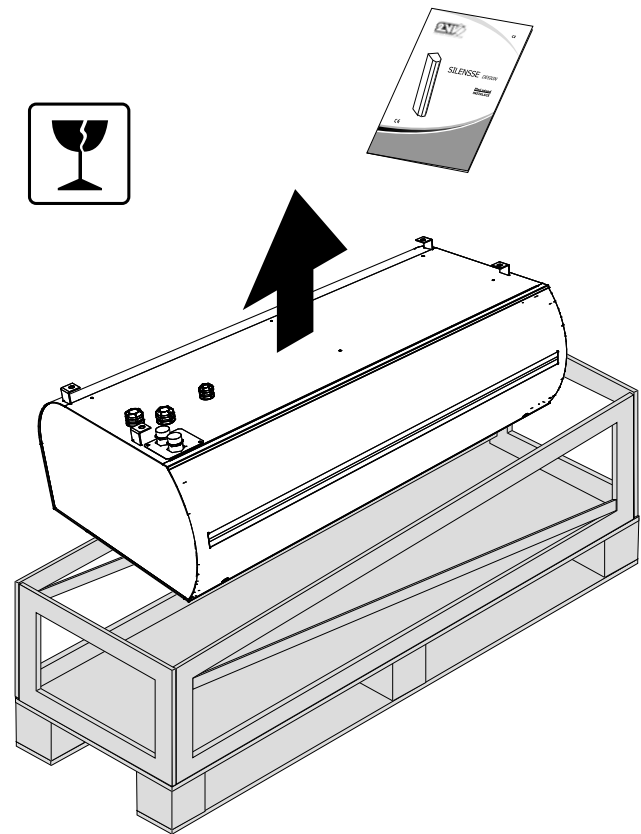


All used packaging materials are environmentally friendly and may be reused or recycled.



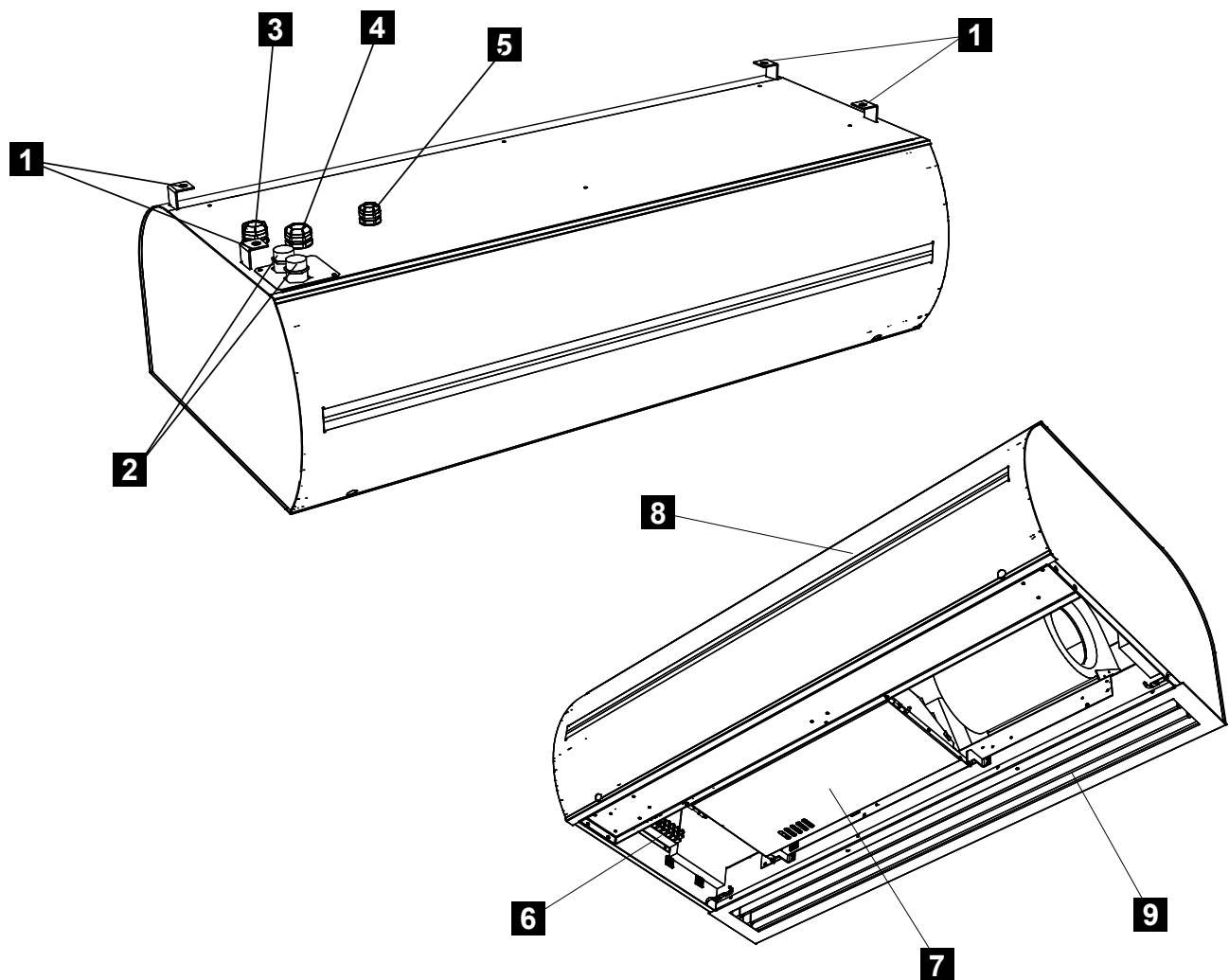
Take an active part in environmental protection and see that packaging materials are correctly disposed of or repurposed.

### 2.2 UNPACK THE AIR CURTAIN



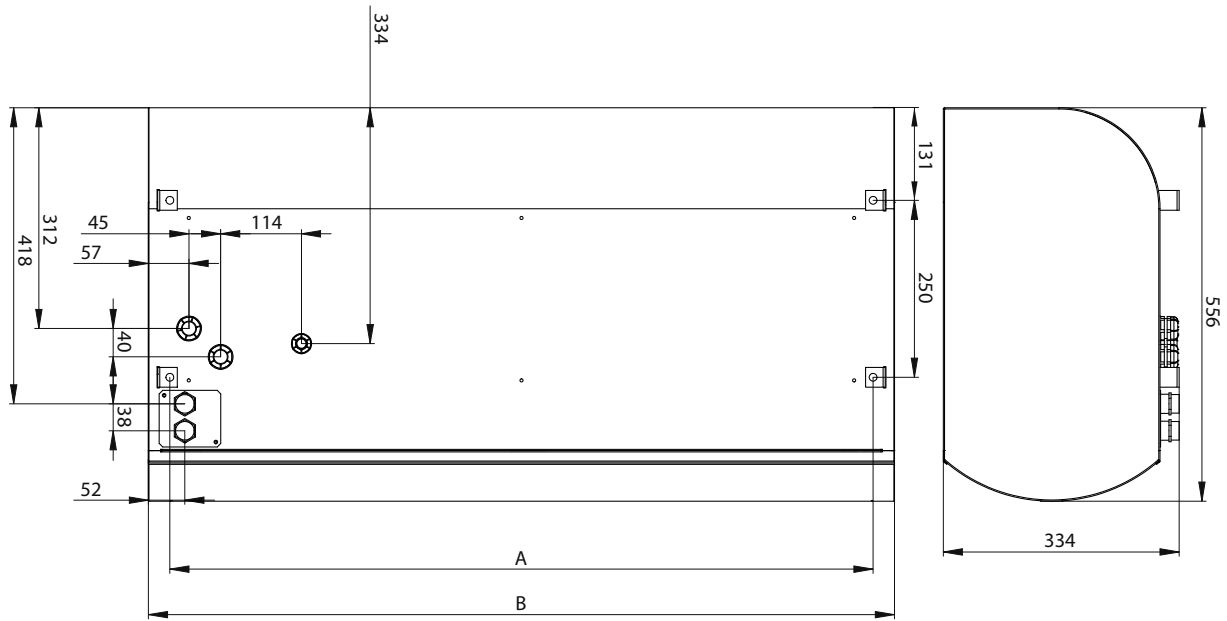
- If the curtain has been transported at temperatures below 0° C, it will be necessary to let it sit for at least 2 hours under normal operating conditions after unpacking, without turning it on. This will allow the air curtain's interior temperature to stabilise.

## 3. MAIN PARTS



1. Suspension holders
2. Water coil connection  $\frac{3}{4}$ "
3. Power supply cable plug
4. Control cable plug (SM control module) or cable plug for water coil regulator (DA,DM control modules)
5. Pit for capillary TV1/1 (SM control module only)
6. Power supply connectors and fusse location
7. Control modul socket
8. Inlet face cover
9. Outlet grid

## 4. DIMENSIONS



Type	Spacing of installation holes A [mm]	Width B [mm]
VCS4x-10x-x..	994	1054
VCS4x-15x-x..	1494	1554
VCS4x-20x-x..	1994	2054
VCS4x-25x-x..	2394	2454

## 5. TECHNICAL PARAMETERS

Type	Max. height doors	Air output	Noise**	Heater output	Heater power supply	Fan power supply	Weight
	[m]	[m <sup>3</sup> /h]	[dB(A)]	[kW]	[V/A]	[V/A]	[kg]
VCS4A-10E-1-0-0-2	5,0	1950	45,5	9,5	400/13,7	230/1,1	43
VCS4A-15E-1-0-0-2		2850	47,5	15	400/21,7	230/1,75	61
VCS4A-20E-1-0-0-2		3700	48,3	19	400/27,5	230/2,35	78
VCS4A-25E-1-0-0-2		4500	48,9	24,5	400/35,4	230/3,0	96
VCS4A-10V-1-0-0-2		1850	45,5	15,48	-	230/1,10	45
VCS4A-15V-1-0-0-2		2750	49,7	33,43	-	230/1,75	63
VCS4A-20V-1-0-0-2		3600	51,0	45,39	-	230/2,35	78
VCS4A-25V-1-0-0-2		4400	51,5	57,24	-	230/3,00	98

\*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.

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

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

## 5. TECHNICAL PARAMETERS

Type	Max. height doors	Air output	Noise**	Heater output	Heater power supply	Fan power supply	Weight
	[m]	[m <sup>3</sup> /h]	[dB(A)]	[kW]	[V/A]	[V/A]	[kg]
VCS4B-10S-1-0-0-2	6,5	2200	52,1	-	-	230/2,25	42
VCS4B-15S-1-0-0-2		3400	54,5	-	-	230/3,50	59
VCS4B-20S-1-0-0-2		4550	55,3	-	-	230/4,70	76
VCS4B-25S-1-0-0-2		5500	56,3	-	-	230/5,60	93
VCS4B-10E-1-0-0-2		2150	52,1	9,5	400/13,7	230/2,25	46
VCS4B-15E-1-0-0-2		3350	54,5	15	400/21,7	230/3,50	63
VCS4B-20E-1-0-0-2		4550	55,3	19	400/27,5	230/4,70	81
VCS4B-25E-1-0-0-2		5400	56,3	24,5	400/35,4	230/5,60	99
VCS4B-10V-1-0-0-2		2100	51,9	16,97	-	230/2,25	48
VCS4B-15V-1-0-0-2		3300	53,5	38,47	-	230/3,50	65
VCS4B-20V-1-0-0-2		4400	55,0	52,64	-	230/4,70	83
VCS4B-25V-1-0-0-2		5250	56,1	65,46	-	230/5,60	97
VCS4C-10S-1-0-0-2		8,0	2850	55,6	-	-	230/3,30
VCS4C-15S-1-0-0-2	4150		55,8	-	-	230/4,60	64
VCS4C-20S-1-0-0-2	5150		56,0	-	-	230/5,55	80
VCS4C-25S-1-0-0-2	6300		56,6	-	-	230/6,90	98
VCS4C-10E-1-0-0-2	2800		55,6	9,5	400/13,7	230/3,30	53
VCS4C-15E-1-0-0-2	4050		55,8	15	400/21,7	230/4,60	68
VCS4C-20E-1-0-0-2	5050		56,0	19	400/27,5	230/5,55	86
VCS4C-25E-1-0-0-2	6050		56,6	24,5	400/35,4	230/6,90	110
VCS4C-10V-1-0-0-2	2750		55,2	20,80	-	230/3,30	55
VCS4C-15V-1-0-0-2	3900		55,6	43,87	-	230/4,60	70
VCS4C-20V-1-0-0-2	4800		55,9	56,21	-	230/5,55	88
VCS4C-25V-1-0-0-2	5950		56,2	72,12	-	230/6,90	108

\*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.

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

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

### Air curtains with electrical heater

Type	Air flow [m <sup>3</sup> /h]	Heater output [kW]	Output temperature $\Delta t$ [°C]
VCS4A-10E	1950	9,5	14,54
VCS4A-15E	2850	15	15,71
VCS4A-20E	3700	19	15,32
VCS4A-25E	4500	24,5	16,25
VCS4B-10E	2150	9,5	13,19
VCS4B-15E	3350	15	13,36
VCS4B-20E	4550	19	12,46
VCS4B-25E	5400	24,5	13,54
VCS4C-10E	2800	9,5	10,12
VCS4C-15E	4050	15	11,05
VCS4C-20E	5050	19	11,23
VCS4C-25E	6050	24,5	12,08

## 5. TECHNICAL PARAMETERS

**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 flow [m <sup>3</sup> /h]	Heat output [kW]	Outlet temperature [°C]	Water flow [l/s]	Pressure loss [kPa]
VCS4A-10V-	1850	15,48	46	0,18	3,59
VCS4A-15V-	2750	33,43	58	0,40	4,87
VCS4A-20V-	3600	45,39	60	0,54	8,50
VCS4A-25V-	4400	57,24	61	0,68	14,26
VCS4B-10V-	2100	16,97	45	0,20	4,19
VCS4B-15V-	3300	38,47	56	0,46	5,72
VCS4B-20V-	4400	52,64	57	0,63	10,90
VCS4B-25V-	5250	65,46	59	0,78	17,98
VCS4C-10V-	2750	20,80	43	0,25	5,92
VCS4C-15V-	3900	43,87	55	0,52	6,66
VCS4C-20V-	4800	56,21	57	0,67	12,19
VCS4C-25V-	5950	72,12	58	0,86	21,29

**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 flow [m <sup>3</sup> /h]	Heat output [kW]	Outlet temperature [°C]	Water flow [l/s]	Pressure loss [kPa]
VCS4A-10V-	1850	12,75	40	0,15	2,62
VCS4A-15V-	2750	27,63	51	0,33	3,93
VCS4A-20V-	3600	37,63	52	0,45	6,26
VCS4A-25V-	4400	47,44	53	0,56	10,38
VCS4B-10V-	2100	13,97	40	0,17	3,04
VCS4B-15V-	3300	31,72	49	0,38	4,58
VCS4B-20V-	4400	43,52	50	0,52	7,93
VCS4B-25V-	5250	54,13	52	0,64	12,96
VCS4C-10V-	2750	17,09	38	0,20	4,24
VCS4C-15V-	3900	36,12	48	0,43	5,31
VCS4C-20V-	4800	46,42	49	0,55	8,82
VCS4C-25V-	5950	59,54	51	0,71	15,26

## 5. TECHNICAL PARAMETERS

### 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 flow [m <sup>3</sup> /h]	Heat output [kW]	Outlet temperature [°C]	Water flow [l/s]	Pressure loss [kPa]
VCS4A-10V-	1850	10,10	36	0,12	1,82
VCS4A-15V-	2750	21,96	44	0,26	3,05
VCS4A-20V-	3600	30,00	45	0,36	4,38
VCS4A-25V-	4400	37,82	46	0,45	7,13
VCS4B-10V-	2100	11,05	35	0,13	2,09
VCS4B-15V-	3300	25,15	43	0,30	3,54
VCS4B-20V-	4400	34,60	43	0,41	5,48
VCS4B-25V-	5250	43,03	44	0,51	8,82
VCS4C-10V-	2750	13,50	34	0,16	2,88
VCS4C-15V-	3900	28,58	42	0,34	4,08
VCS4C-20V-	4800	36,86	43	0,44	6,06
VCS4C-25V-	5950	47,25	44	0,56	10,30

### 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 flow [m <sup>3</sup> /h]	Heat output [kW]	Outlet temperature [°C]	Water flow [l/s]	Pressure loss [kPa]
VCS4A-10V-	1850	7,51	31	0,09	1,17
VCS4A-15V-	2750	16,39	37	0,19	2,23
VCS4A-20V-	3600	22,47	38	0,27	2,85
VCS4A-25V-	4400	28,33	38	0,34	4,48
VCS4B-10V-	2100	8,21	30	0,10	1,33
VCS4B-15V-	3300	18,72	36	0,22	2,57
VCS4B-20V-	4400	25,83	37	0,31	3,49
VCS4B-25V-	5250	32,13	37	0,38	5,47
VCS4C-10V-	2750	10,00	30	0,12	1,79
VCS4C-15V-	3900	21,23	35	0,25	2,94
VCS4C-20V-	4800	27,48	36	0,33	3,83
VCS4C-25V-	5950	35,22	37	0,42	6,34

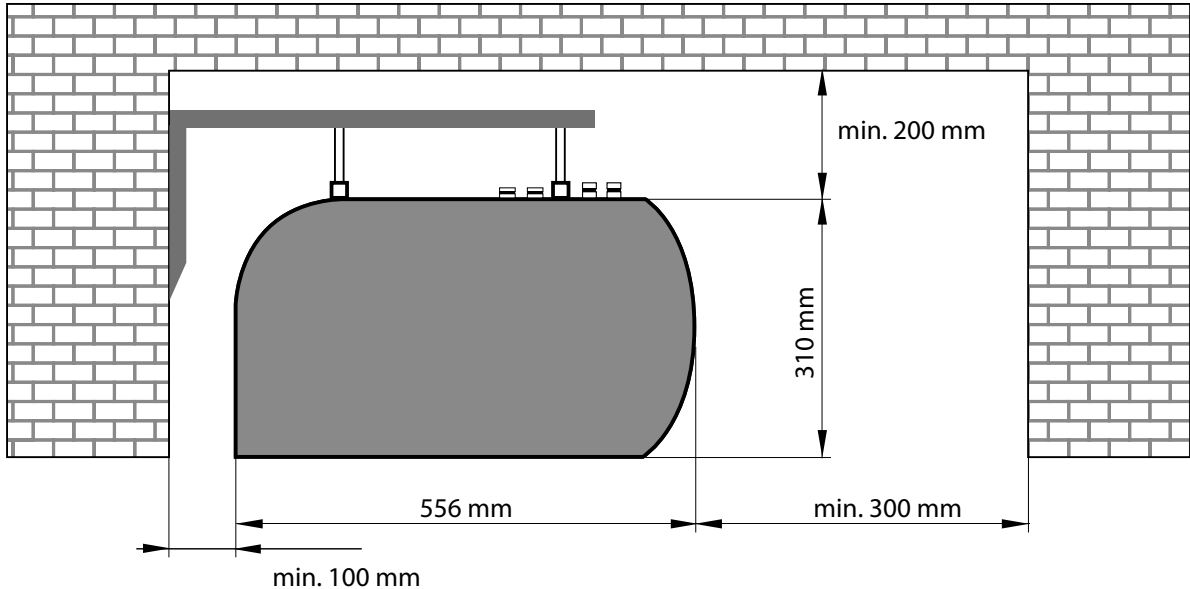


The warm-water temperature coil, made of copper-aluminium alloy, is designed for a maximum operational water temperature of +100° C and a maximum operating pressure of 1.6 MPa.



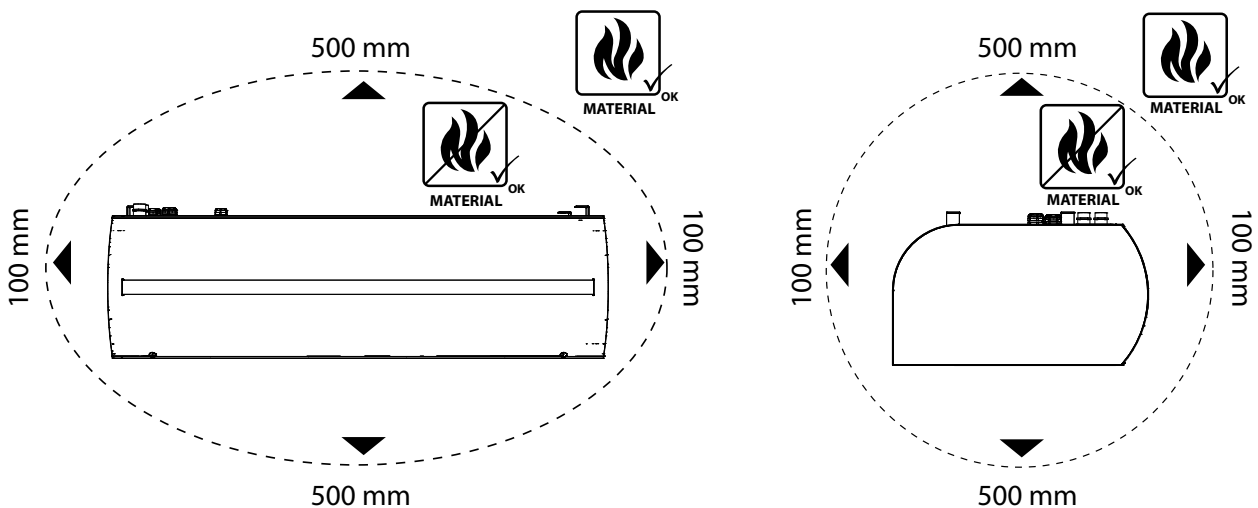
## 6.1 CHOOSE THE INSTALLATION SITE AND INSTALL THE AIR CURTAIN

### 6.1-1 Built up dimensions



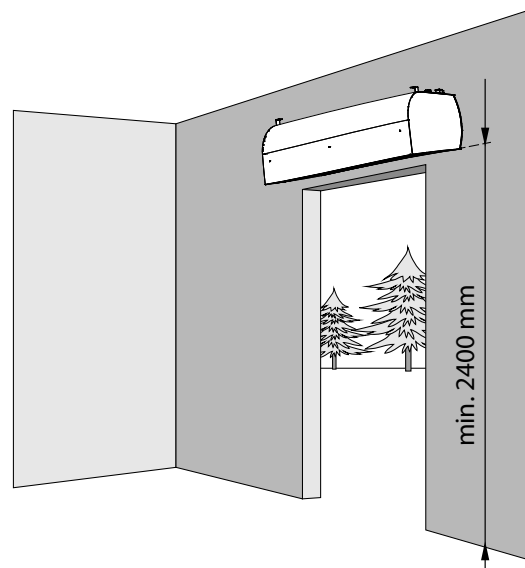
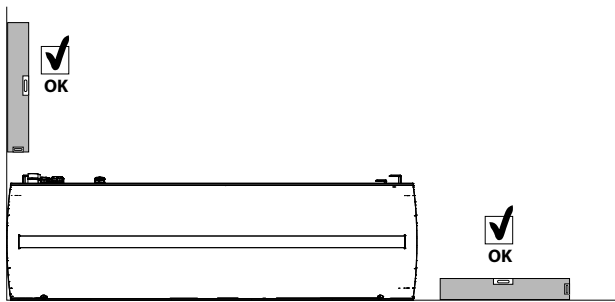
- The air curtain must be installed only in a horizontal position!
- The curtain can be installed over the door opening. All separation distances for flammable materials and safe use of air curtain has to be kept.
- The installed position of the air curtain can be chosen to accommodate the service hood.
- 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) 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.

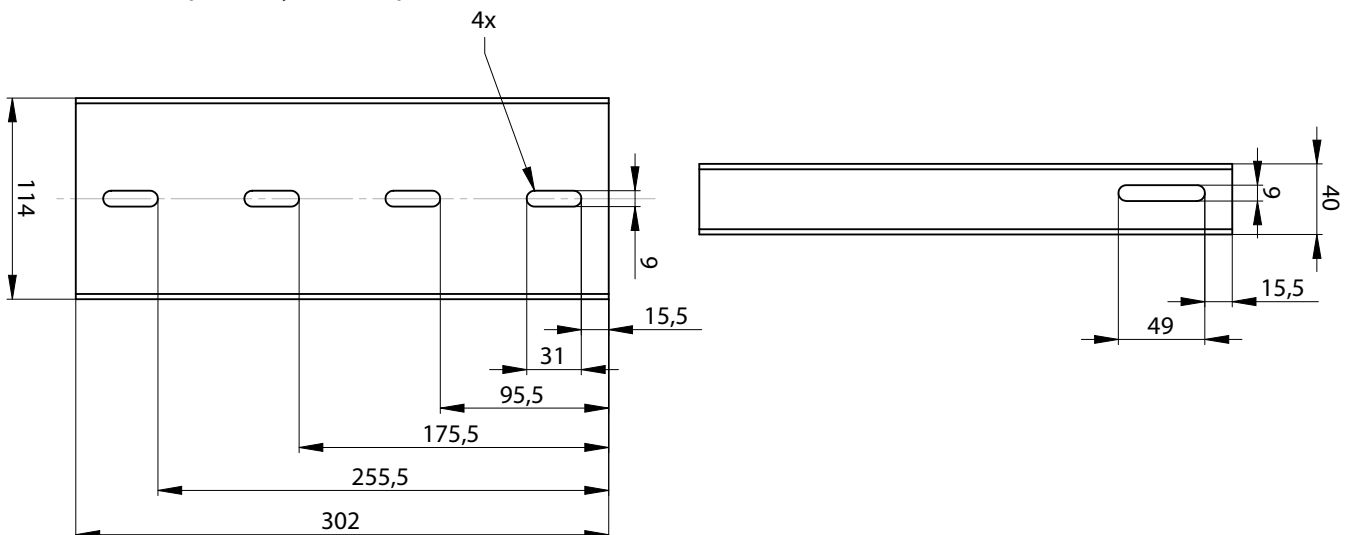


### 6.1-3 Measure the installation site

Choose the location for the installation and measure the installation site. Measure out the dimensions of ceiling installation or for wall mounted brackets.

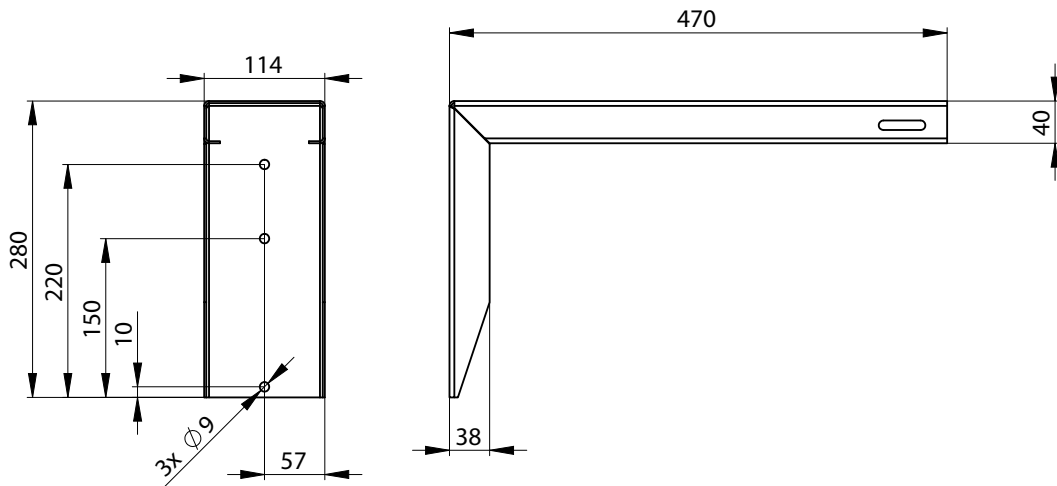


For ceiling installation use „Ceiling holder SET”: VCS4-KONZ-STR. „Ceiling holder SET” has to be ordered separately as an optional accessory.

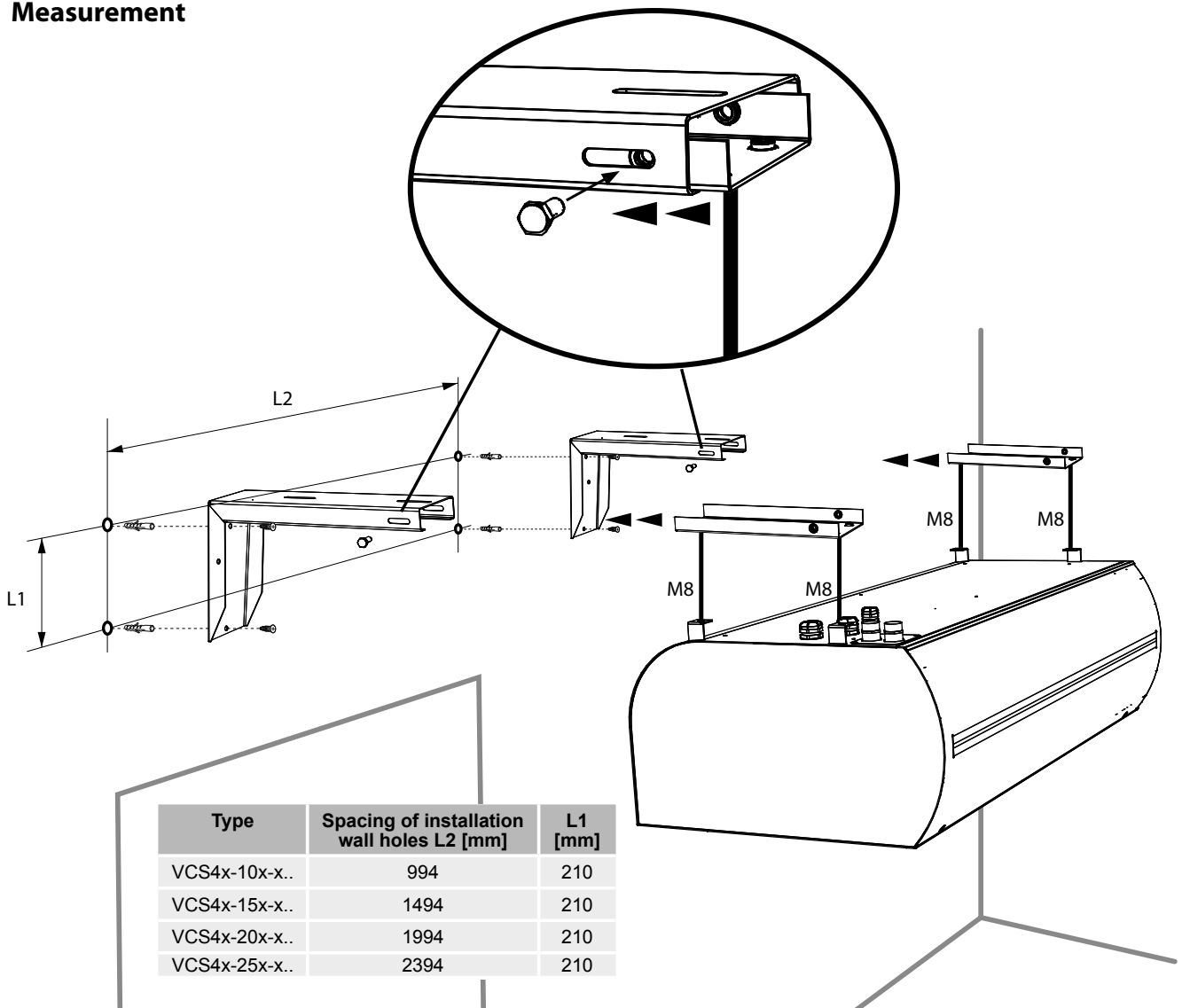


## 6. INSTALLATION

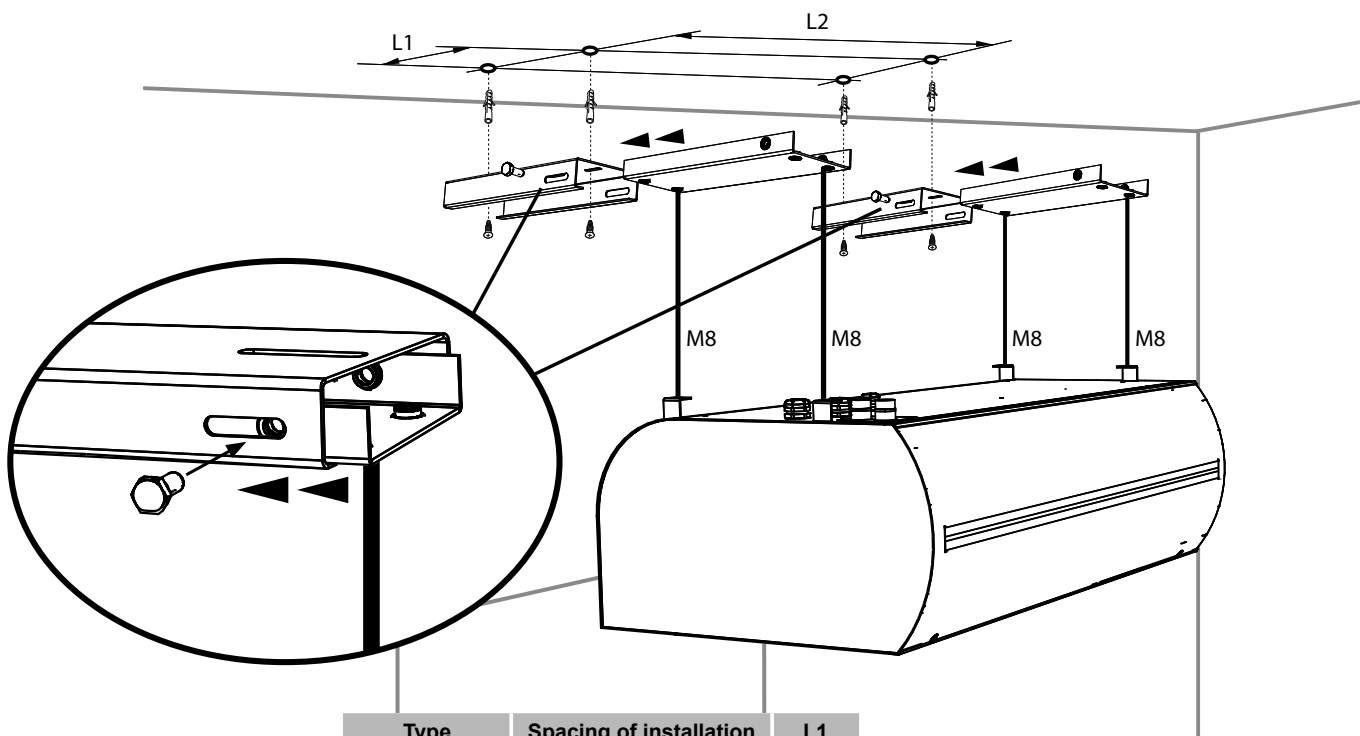
For wall installation use „Wall mounted bracket set“: VCS4-KONZ-STE. „Wall mounted bracket SET“ has to be ordered separately as an optional accessory.



### Measurement



## 6. INSTALLATION



Type	Spacing of installation cell holes L2 [mm]	L1 [mm]
VCS4x-10x-x..	994	240
VCS4x-15x-x..	1494	240
VCS4x-20x-x..	1994	240
VCS4x-25x-x..	2394	240

**6.1-4** Suspend the air curtain on the threaded bars or wall mounted brackets and ensure that the suspension will not come loose



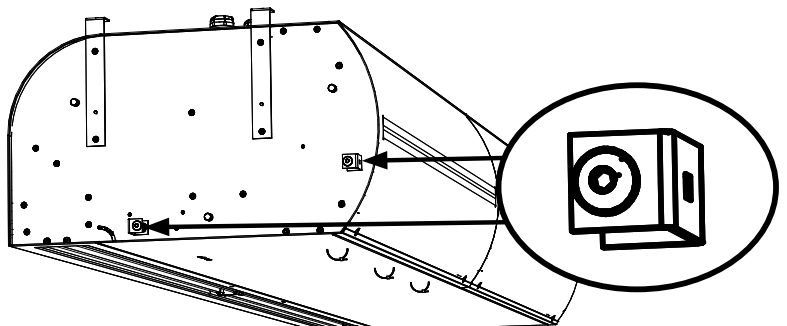
In consideration of the air curtain weight into account, it is necessary to use either a suitable lifting device (forklift, etc.) or use two additional individuals to support it, as long as it is not securely fastened.



Suspension has to carry the weight of the air curtain!

### 6.1-5 Mechanical chaining

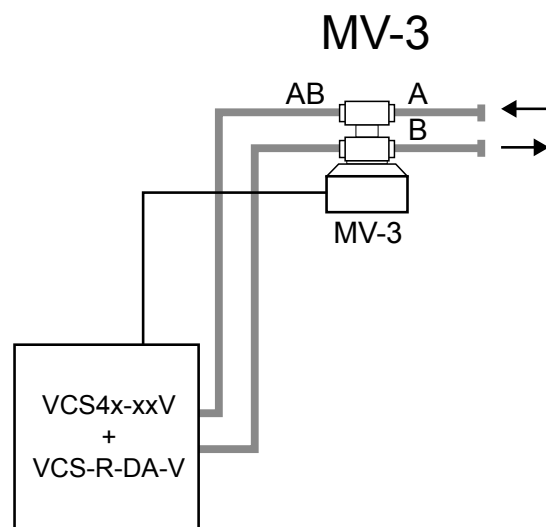
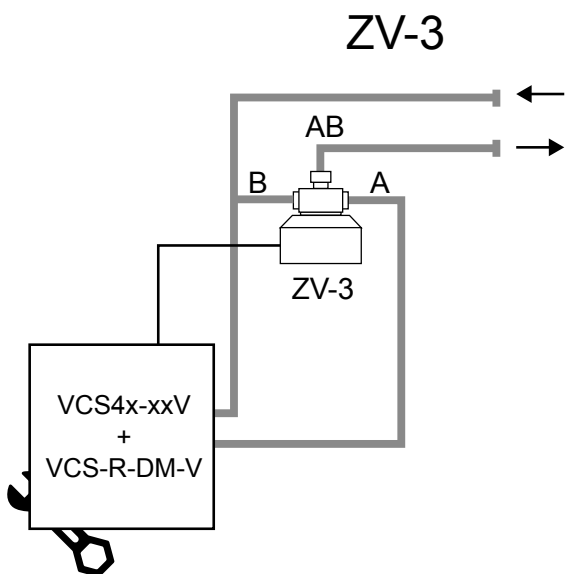
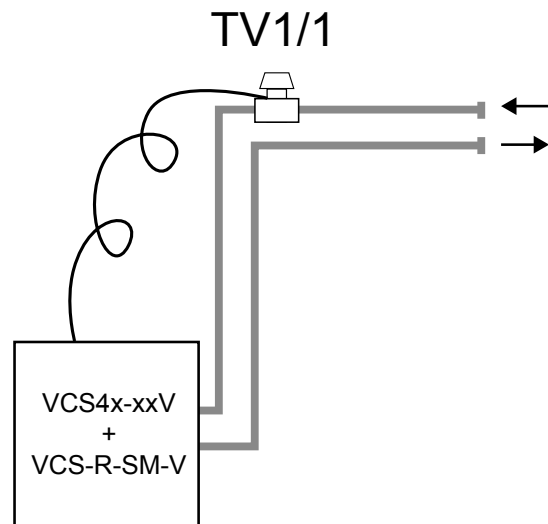
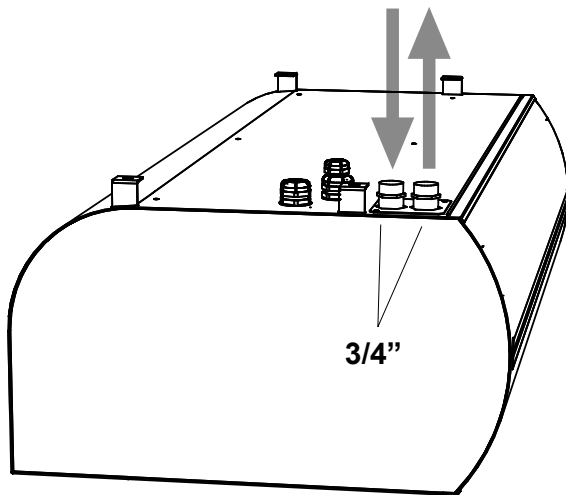
If the air curtains are installed side by side (mechanical chaining) it is necessary to connect them by connection couplers (delivered with each air curtain)



## 6. INSTALLATION

### 6.2 CONNECT THE WATER INTAKE AND OUTLET HOSES

VCS4-x-xxV-...



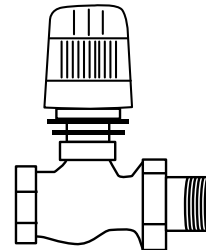
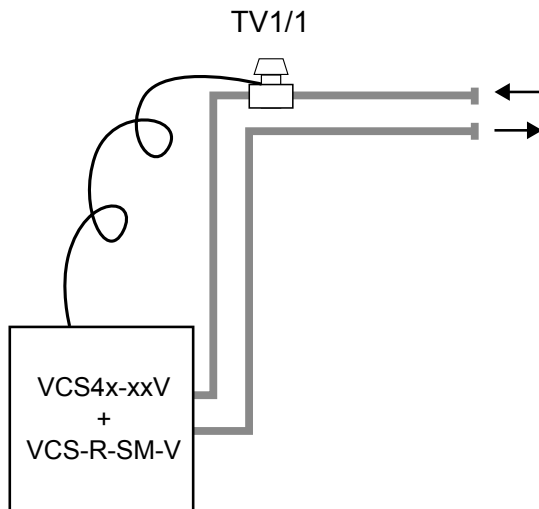
- A flexible hoses with a G3/4" connection



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

## 6. INSTALLATION

### 6.2-1 Regulating the water coil with a thermostatic valve TV1/1 (Air curtains with water coil and SM control module: VCS-R-SM-V-2)

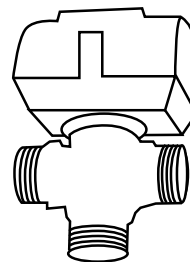
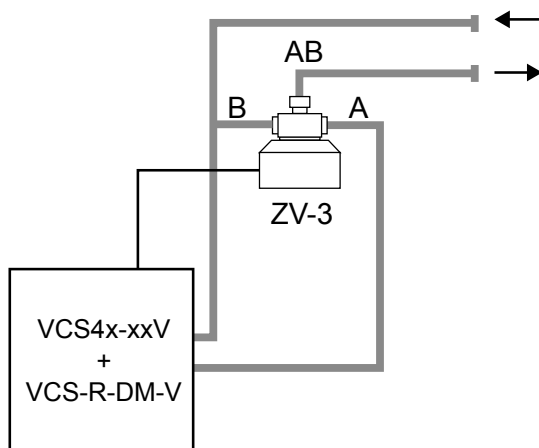


Thermostatic valve TV1/1 is an required accessorie for control module VCS-R-SM-V-2



- Detailed description of water coil regulation by thermostatic valve (TV1/1), including it's connexion, refer the instruction manual for thermostatic valve TV1/1.

### 6.2-2 Regulating the water coil with a ZV-3 zone valve (Air curtains with water coil and DM control module: VCS-R-DM-V-2)



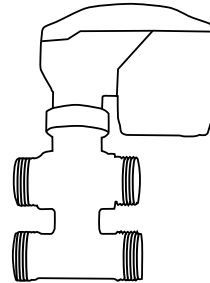
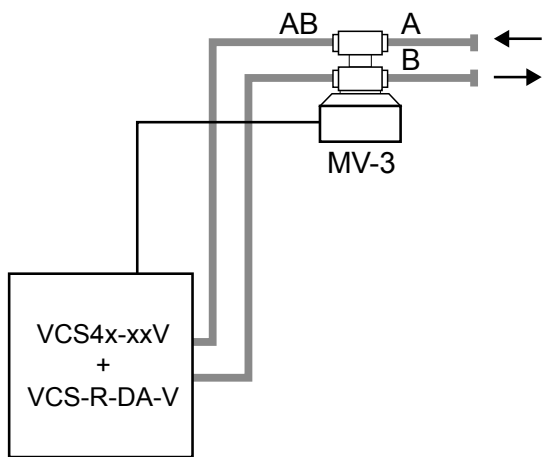
Zone valve ZV-3 is an required accessorie for control module VCS-R-DM-V-2



- Detailed description of water coil regulation by zone valve (ZV-3), including it's connection, refer the instruction manual for zone valve ZV-3.

## 6. INSTALLATION

### 6.2-3 Regulating the water coil with an mixing valve MV-3 (Air curtains with water coil and DA control module: VCS-R-DA-V-2)



Mixing valve MV-3 is an required accessorie for control module VCS-R-DA-V-2



- Detailed description of water coil regulation by mixing valve (MV-3), including it´s connection, refer the instruction manual for mixing valve MV-3.

# 6. INSTALLATION

## 6.3 ELEKTRO INSTALLATION



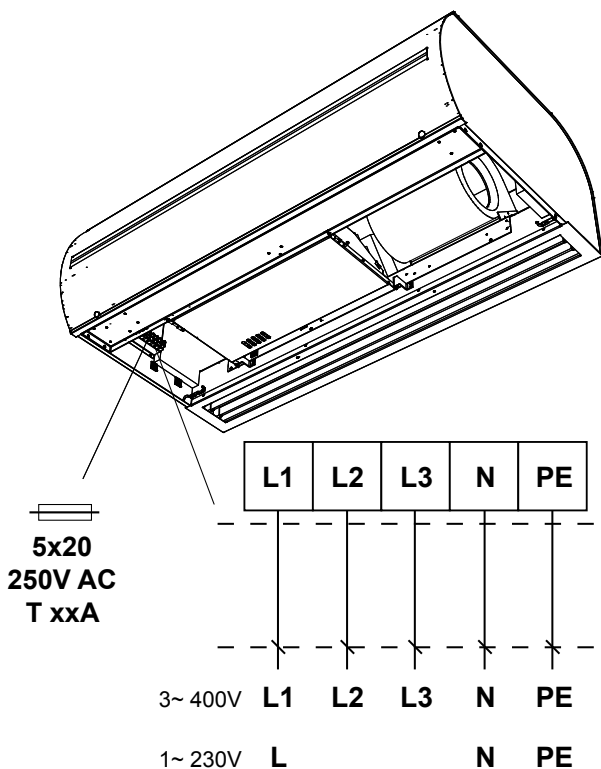
- The air curtain's electrical connection must be based on a professional design by a qualified electrical systems engineer.
- Installation must be carried out by a professionally trained electrical worker. All applicable national regulations and directives must be observed.
- The electrical schematics 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.

### Minimal cable dimensions:

TYPE	Cable dimention
VCS4x-xxS...	3Cx1,5
VCS4x-xxV...	3Cx1,5
VCS4x-10E...	5Cx2,5
VCS4x-15E...	5Cx4
VCS4x-20E...	5Cx4
VCS4x-25E...	5Cx6

### Fuse specification:

VCS4x-xx	x			
	A	B	C	
XX	10	3,15A	3,15A	4A
	15	3,15A	4A	6,3A
	20	3,15A	6,3A	8A
	25	4A	8A	8A



- 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  
f = Frequency  
n = Speed  
ph = Phase  
av = Air output

I = Net current  
P = Output  
m = Weight  
IP = IP rating  
ver =

Serial number



## 6. INSTALLATION

- 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 air curtain is IP20.

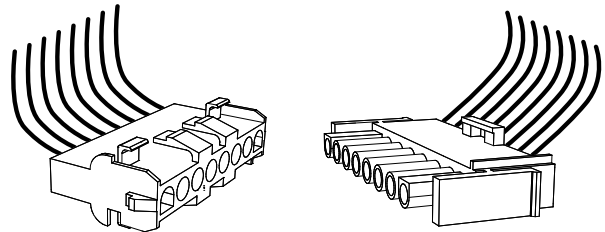


STANDESSE Comfort air curtains are equipped with a fuse (with T characteristic – slow-blow). This safety fuse protects the electronic panel and fans. It is located under the service cover next to the main power supply connectors.

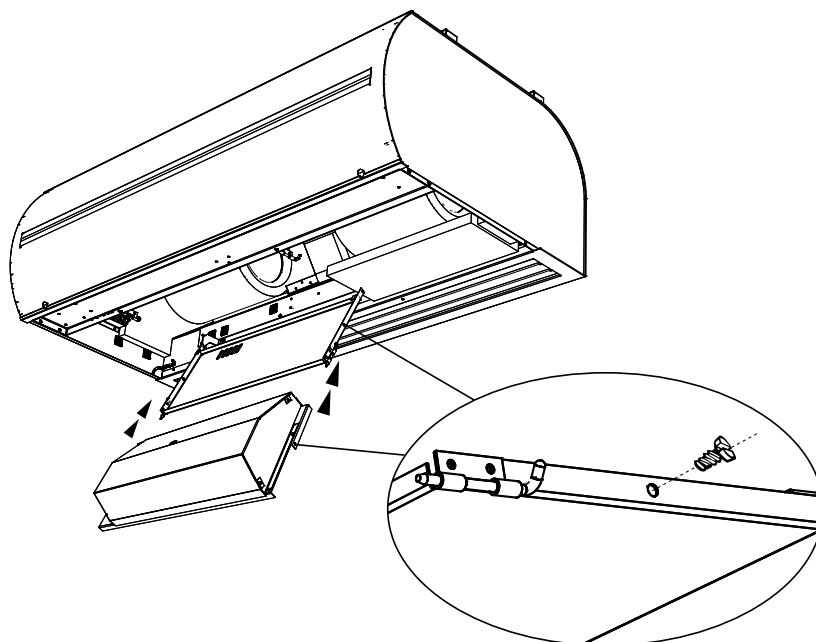
### 6.3 CONTROL MODULES



Air curtains STANDESSE Comfort are produced with universal connection interface. Air curtains STANDESSE Comfort can be controlled by one of following control modules. Control modules are required accessories and has to be ordered separately. Air curtain is connected with control module by „Quick connection sockets“



#### 6.3-1 Insert control module to the air curtain

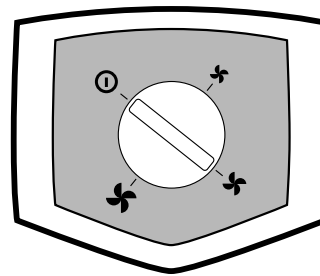
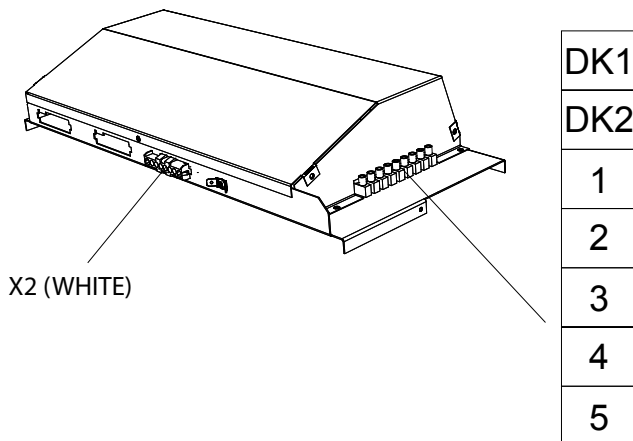


# 6. INSTALLATION

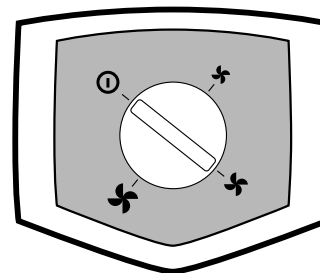
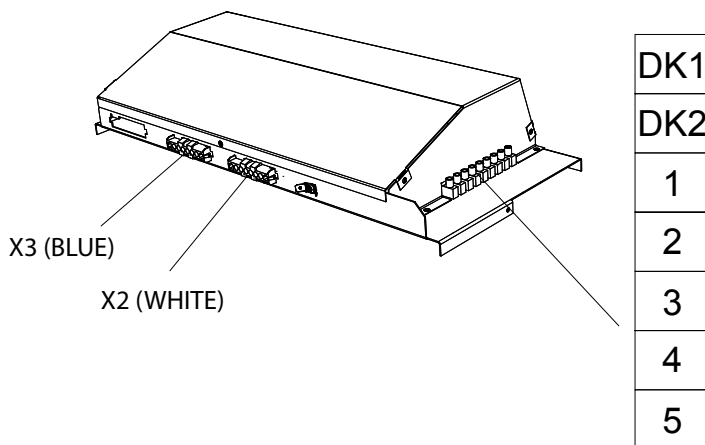
## 6.3-2 SM control module (suitable with all types of air curtains)

### Types of SM control modules:

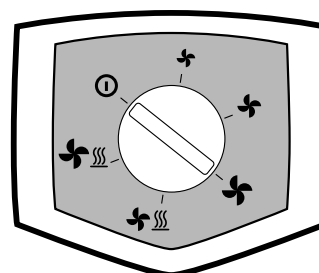
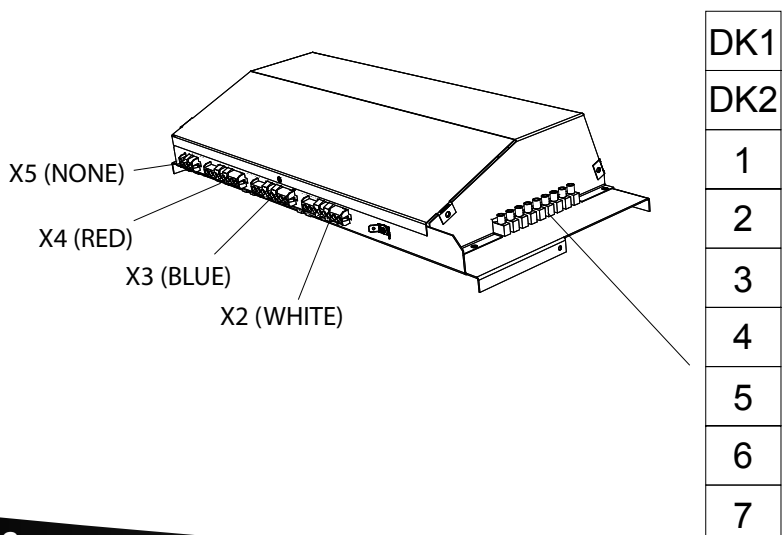
**VCS-R-SM-S** (Suitable with types without heating - VCS4x-xxS-...)



**VCS-R-SM-V** (Suitable with types with water coil VCS4x-xxV-...)



**VCS-R-SM-E** (Suitable with types with electric heater VCS4x-xxE-...)



## 6. INSTALLATION



For detailed information of SM control modules installation into STANDESSE Comfort air curtains read carefully: QUICK START manual for SM control modules installation (delivered with control module)



For detailed information of SM control modules operation with STANDESSE Comfort air curtains read carefully: Full manual: OPERATION AND MAINTANANCE of STANDESSE Comfort with SM control module

### 6.3-2.1 Function overview of SM control modules

Air curtains execution		Air only (VCS4x-xxS...)	With electric heater (VCS4x-xxE...)	With water coil (VCS4x-xxV...)
Required accessories	Control module	SM (VCS-R-SM-S)	SM (VCS-R-SM-E)	SM (VCS-R-SM-V)
	"External temperature sensor"	X	X	X
	Water coil regulator	X	X	"TV1/1 (Thermostatic valve)"
Optional accessories	Door switch	DS	DS	DS
	Door contact	X	X	X
	Room thermostat	X	X	X
	Ceiling mounted brackets	VCS4-KONZ-STR.	VCS4-KONZ-STR.	VCS4-KONZ-STR.
	Wall mounted brackets	VCS4-KONZ-STE.	VCS4-KONZ-STE.	VCS4-KONZ-STE.
	EXIT sign	VCS4-EXIT	VCS4-EXIT	VCS4-EXIT

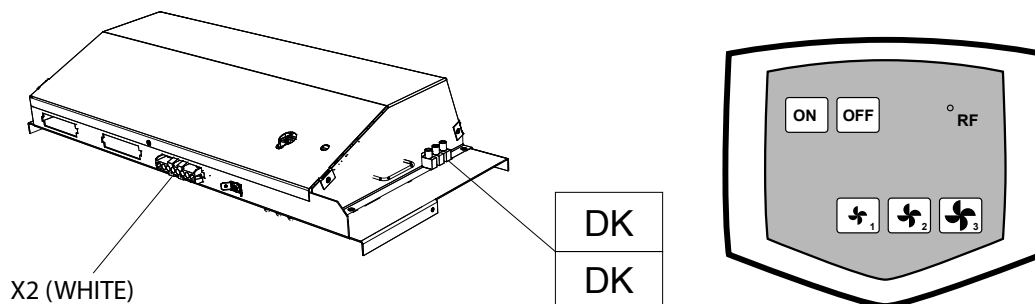
Air curtains execution	Air only (VCS4x-xxS...)	With electric heater (VCS4x-xxE...)	With water coil (VCS4x-xxV...)
Control module	SM (VCS-R-SM-S)	SM (VCS-R-SM-E)	SM (VCS-R-SM-V)
Type of control	Manual	Manual	Manual
Speed of the fan	***	***	***
Electric heater regulation	x	2 steps	x
Water heater regulation	x	x	Thermostatic valve
Control panel connection	"Power cable 230V"	"Power cable 230V"	"Power cable 230V"
Number of quick connection sockets	1	4	2
Door switch behavior	ON/OFF	ON/OFF	ON/OFF
Timer	x	x	x
Temperature measurement	x	x	x
Operation state indication	x	x	x
Radio signal indication	x	x	x
Cleaning interval indication	x	x	x
Water heater anti-freeze protection	x	x	x
Aftercooling of electric heater	x	x	x
Chaining of the air curtains	x	x	x

## 6. INSTALLATION

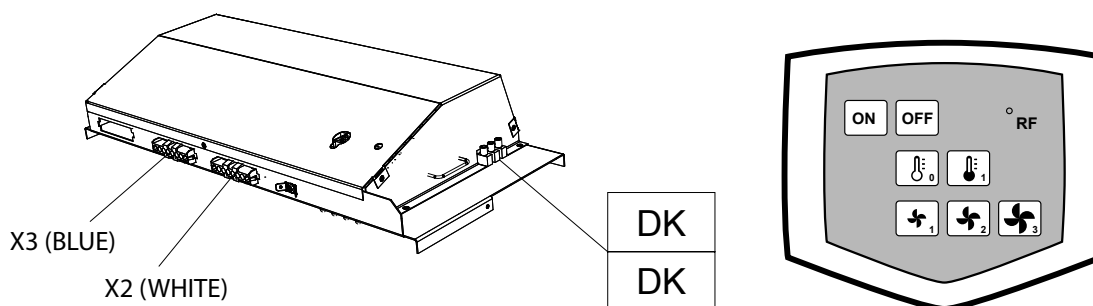
### 6.3-3 DM control module (suitable with all types of air curtains)

#### Types of DM control modules:

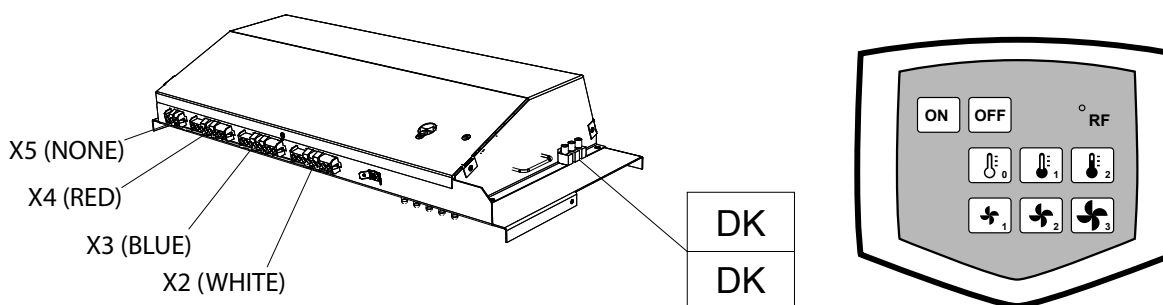
VCS-R-DM-S (Suitable with all types without heating - VCS4x-xxS-...)



VCS-R-DM-V (Suitable with all types with water coil VCS4x-xxV-...)



VCS-R-DM-E (Suitable with types with electric heater VCS4x-xxE-...)



For detailed information of DM control modules installation into STANDESSE Comfort air curtains read carefully: QUICK START manual for DM control modules installation (delivered with control module)



For detailed information of DM control modules operation with STANDESSE Comfort air curtains read carefully: Full manual: OPERATION AND MAINTANANCE of STANDESSE Comfort with DM control module

## 6. INSTALLATION

### 6.3-3.1 Function overview of DM control modules

Air curtains execution		Air only (VCS4x-xxS...)	With electric heater (VCS4x-xxE...)	With water coil (VCS4x-xxV...)
Required accessories	Control module	DM (VCS-R-DM-S)	DM (VCS-R-DM-E)	DM (VCS-R-DM-V)
	"External temperature sensor"	X	X	X
	Water coil regulator	X	X	"ZV-3 (Zone valve)"
Optional accessories	Door switch	X	X	X
	Door contact	DK-1	DK-1	DK-1
	Room thermostat	X	X	TER-P
	Ceiling mounted brackets	VCS4-KONZ-STR.	VCS4-KONZ-STR.	VCS4-KONZ-STR.
	Wall mounted brackets	VCS4-KONZ-STE.	VCS4-KONZ-STE.	VCS4-KONZ-STE.
	EXIT sign	VCS4-EXIT	VCS4-EXIT	VCS4-EXIT

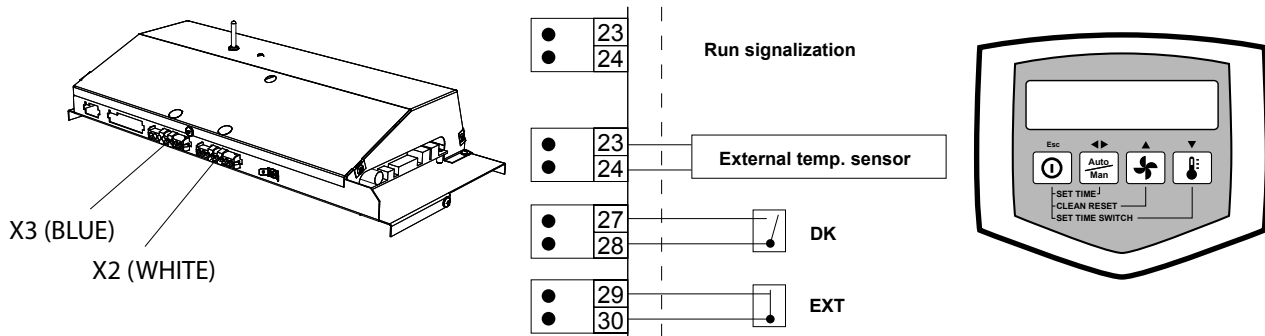
Air curtains execution	Air only (VCS4x-xxS...)	With electric heater (VCS4x-xxE...)	With water coil (VCS4x-xxV...)
Control module	DM (VCS-R-DM-S)	DM (VCS-R-DM-E)	DM (VCS-R-DM-V)
Type of control	Manual	Manual	Manual
Speed of the fan	***	***	***
Electric heater regulation	x	2 steps	x
Water heater regulation	x	x	Zone valve
Control panel connection	Radio signal	Radio signal	Radio signal
Number of quick connection sockets	1	4	2
Door switch behavior	ON/OFF	ON/OFF	ON/OFF
Timer	x	x	x
Temperature measurement	x	x	Room thermostat
Operation state indication	LED	LED	LED
Radio signal indication	LED/ BEEP sound	LED/ BEEP sound	LED/ BEEP sound
Cleaning interval indication	x	x	x
Water heater anti-freeze protection	x	x	x
Aftercooling of electric heater	x	30 seconds	x
Chaining of the air curtains	In radio signal range	In radio signal range	In radio signal range

# 6. INSTALLATION

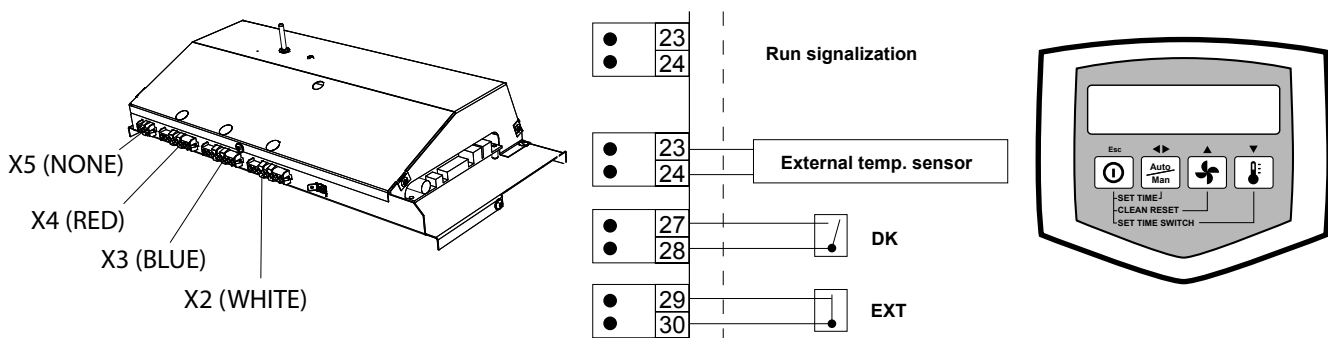
## 6.3-4 DA control module (suitable with air curtains with water or electric heater)

### Types of control modules:

VCS-R-DA-V (Suitable with all types with water coil VCS4x-xxV-...)



VCS-R-DA-E (Suitable with types with electric heater VCS4x-xxE-...)



For detailed information of DA control modules installation into STANDESSE Comfort air curtains read carefully: QUICK START manual for DA control modules installation (delivered with control module)



For detailed information of DA control modules operation with STANDESSE Comfort air curtains read carefully: Full manual: OPERATION AND MAINTANANCE of STANDESSE Comfort with DA control module

# 6. INSTALLATION

## 6.3-4.1 Function overview of DA control modules

Air curtains execution		With electric heater (VCS4x-xxE...)	With water coil (VCS4x-xxV...)
Required accessories	Control module	DA (VCS-R-DA-E)	DA (VCS-R-DA-V)
	"External temperature sensor"	"Included with control module"	"Included with control module"
	Water coil regulator	X	"MV-3 (Mixing valve)"
Optional accessories	Door switch	X	X
	Door contact	DK-1	DK-1
	Room thermostat	X	X
	Ceiling mounted brackets	VCS4-KONZ-STR.	VCS4-KONZ-STR.
	Wall mounted brackets	VCS4-KONZ-STE.	VCS4-KONZ-STE.
	EXIT sign	VCS4-EXIT	VCS4-EXIT

Air curtains execution	With electric heater (VCS4x-xxE...)	With water coil (VCS4x-xxV...)
Control module	DA (VCS-R-DA-E)	DA (VCS-R-DA-V)
Type of control	Manual/Automatic	Manual/Automatic
Speed of the fan	***	***
Electric heater regulation	3 steps / Fluently	x
Water heater regulation	x	Mixing valve
Control panel connection	Radio signal	Radio signal
Number of quick connection sockets	4	2
Door switch behavior	OFF/1st speed / 2nd speed	OFF/1st speed / 2nd speed
Timer	Day/ Week	Day/ Week
Temperature measurement	" 2 internal sensors 1 external sensor"	" 2 internal sensors 1 external sensor"
Operation state indication	LCD	LCD
Radio signal indication	BEEP sound	BEEP sound
Cleaning interval indication	Time interval	Time interval
Water heater anti-freeze protection	x	Automatic
Aftercooling of electric heater	30sec/1min	x
Chaining of the air curtains	In radio signal range	In radio signal range

# 6. INSTALLATION

## 6.4 CONNECT THE EXTERNAL ACCESSORIES

Accessories overview

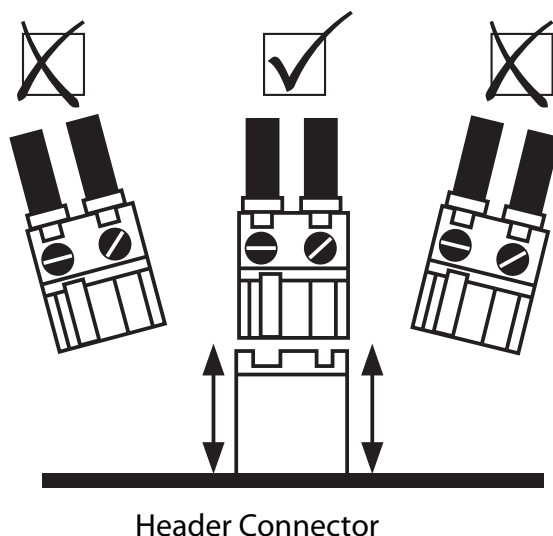
Air curtains execution		Air only (VCS4x-xxS...)		With electric heater (VCS4x-xxE...)			With water coil (VCS4x-xxV...)		
Required accessories	Control module	SM (VCS-R- SM-S)	DM (VCS-R-D- M-S)	SM (VCS-R- SM-E)	DM (VCS-R-D- M-E)	DA (VCS-R- DA-E)	SM (VCS-R-SM-V)	DM (VCS-R-D- M-V)	DA (VCS-R- DA-V)
	"External temperature sensor"	X	X	X	X	"Included with control module"	X	X	"Included with control module"
	Water coil regulator	X	X	X	X	X	"TV1/1 (Thermostatic valve)"	"ZV-3 (Zone valve)"	"MV-3 (Mixing valve)"
Optional accessories	Door switch	DS	X	DS	X	X	DS	X	X
	Door contact	X	DK-1	X	DK-1	DK-1	X	DK-1	DK-1
	Room thermostat	X	X	X	X	X	X	TER-P	X
	Ceiling mounted brackets	VCS4-KONZ-STR.		VCS4-KONZ-STR.			VCS4-KONZ-STR.		
	Wall mounted brackets	VCS4-KONZ-STE.		VCS4-KONZ-STE.			VCS4-KONZ-STE.		
EXIT sign	VCS4-EXIT		VCS4-EXIT			VCS4-EXIT			



## 6. INSTALLATION



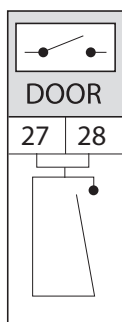
- When connecting external components, the electricity to the air curtain must be turned off.
  - All external control components must be connected according to the electrical schematic.
- The connectors must be connected to the electrical board using reasonable force and always vertically to the base.



### 6.4-1 Door contact DK



- Isolated switching contact with a maximum voltage of 12V.  
Cable - Dual-core cable with a diameter of 0.5 mm. - Maximum length: 50 m.



For DM and DA control modules only!

**Connectors on the DM control modules: DK/DK**

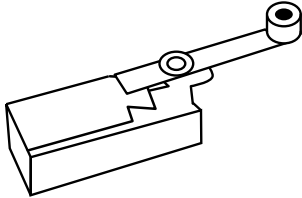
**Connectors on the DA control modules: 27/28**



**Not included in delivery.**

## 6. INSTALLATION

### 6.4-2 Door switch DS



- Isolated switching contact with a maximum voltage of 230V.  
Cable - Dual-core cable with a diameter of 1.5 mm. - Maximum length: 50 m.

**For SM control modules only!**

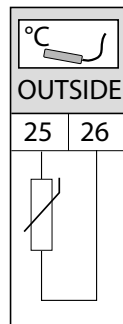
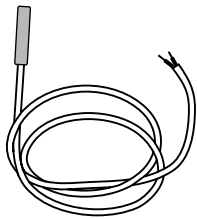
**Connectors on the SM control modules: DK1/DK2**



**Not included in delivery.**

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### 6.4-3 External temperature sensor



- Thermally-dependent resistive sensor

**For DA control modules only!**

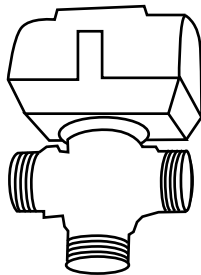
**Connectors on the DA control modules: 25/26**



**Included in delivery with VCS-R-DA-x**

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### 6.4-4 Zone valve ZV-3



- Zone valve for water heater regulation  
- Cable – Three core cable with diameter of 1,5 mm, 230 V/ 50 Hz.

**For VCS-R-DM-V control modules only!**

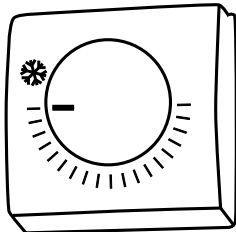
**Connectors on the DM control modules: 1 /4 /5**



**Not included in delivery.**

## 6. INSTALLATION

### 6.4-5 Room thermostat TER-P



- Room thermostat for water coil regulation
- Cable – Two core cable with diameter of 1,5 mm, 230 V/ 50 Hz.

**For VCS-R-DM-V control module only!**

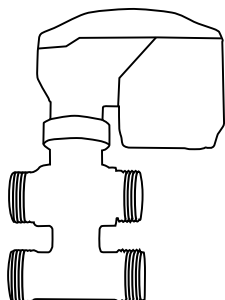
**Connectors on the DM control modules: 2 / 3**



**Not included in delivery.**

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### 6.4-6 Mixing valve MV-3



- Mixing valve for water heater regulation
- Cable – Three core cable with diameter of 1,5 mm, 230 V/ 50 Hz.

**For VCS-R-DA-V control modules only!**

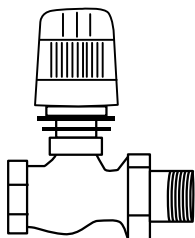
**Connectors on the DA control modules: 3 / 4 / 5**



**Not included in delivery.**

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### 6.4-6 Thermostatic valve TV1/1



- Thermostatic valve for water heater regulation

**For VCS-R-SM-V control modules only!**

**Connectors on the SM control module: NOT CONNECTED!**



**Not included in delivery.**

## 6. INSTALLATION

### 6.4-7 Exit sign



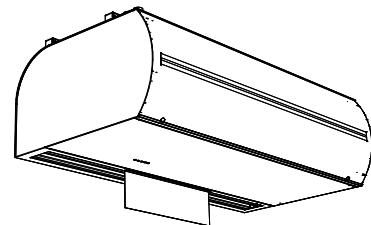
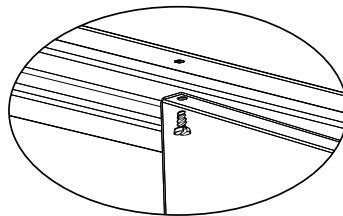
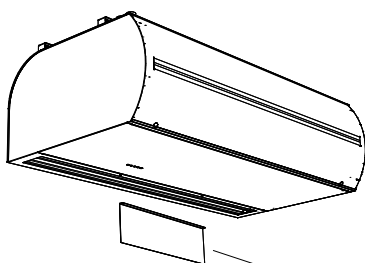
- Exit sign marking of emergency exit

**For all types of VCS4x- air curtains!**

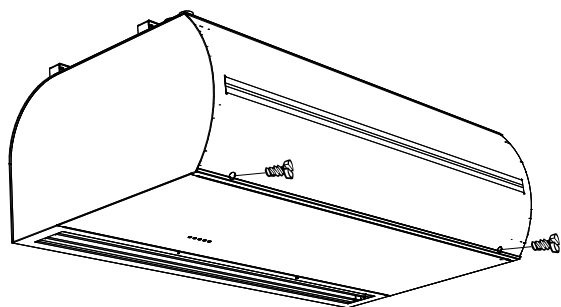
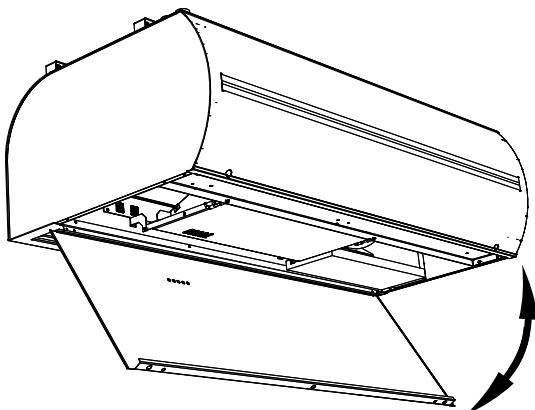
**Connectors on the control module: NOT CONNECTED!**



**Not included in delivery.**



### 6.5 COVERING THE AIR CURTAIN



## 7. INITIAL START-UP



Before putting the curtain into operation, check the following:

- Have any tools or other objects which could damage the 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 module been connected properly?

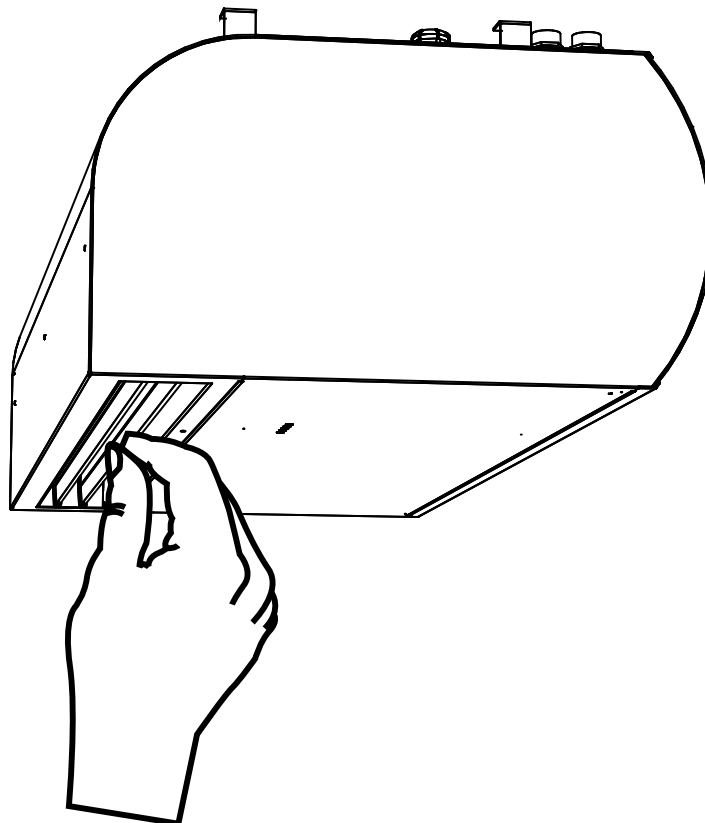


Before putting the curtain into operation, read carefully:

Full manual for OPERATION AND MAINTENANCE (delivered with control module)

### **7.1 SET AIR FLOW DIRECTION**

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



## 8. CONCLUSION

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



Before operation and maintenance, thoroughly read the section "Safe use of air curtains". It contains all instructions on the safe and correct use of the product.

## 9. CONTACT

### 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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