



air-only



water heater

**BASIC FEATURES**

- Supreme airflow – up to **12.000m³/h** (ISO 27 327-1)
- Highly energy-efficient EC fans
- Excellent low sound parameters
- Adjustable outlet with STRAW-SYSTEM Technology
- Smart control system **AirGENIO SUPERIOR** integrated
- Lengths: 1,5; 2,0; 2,5 and 3,0m

STANDESSE XP is an air curtain of supreme power and excellent efficiency crafted into a timeless design casing. This superb performance is accompanied by outstandingly low sound parameters and exceptionally low energy consumption. The integrated AirGENIO control system allows the air curtain to be automated for advanced and sophisticated installations, and is perfect for **airports, shopping malls, office buildings or other public places**, with a recommended installation height up to 6m. Maximum recommended installation height – may vary according the particular conditions at the installation site.

The air curtain shall be installed indoor in a dry area with ambient temperatures ranging from 0 °C up to +40 °C and relative humidity of up to 80 %. It is designed for conveying air free of coarse dust, grease, chemical fumes, and other impurities. IP rating of the air curtain is IP 20. 2VW recommends that all air curtain projects be designed by an HVAC designer or Engineer.



PRIMARY PARAMETERS

Air curtains with LPHW coil are designed for the maximum operating water temperature of +100 °C and maximum operating pressure of 1.6 MPa.

Type	Recommended installation height [m]	Airflow volume [m ³ /h] ^{*1}	Acoustic pressure at 3m [dB(A)] ^{*2}	Acoustic pressure at 5m [dB(A)] ^{*2}	Sound power [dB(A)] ^{*3}
		Maximum speed	Maximum speed	Maximum speed	
VCST5D150-V3EC	6	6000	62	58	83,9
VCST5D150-V5EC		6000	61	58	83,3
VCST5D150-S0EC		6000	61	57	83,0
VCST5D200-V3EC		8000	64	60	86,0
VCST5D200-V5EC		8000	64	60	85,8
VCST5D200-S0EC		8000	62	59	84,5
VCST5D250-V3EC		10000	64	61	86,5
VCST5D250-V5EC		10000	64	60	86,4
VCST5D250-S0EC		10000	64	60	86,0
VCST5D300-V3EC		12000	65	61	87,4
VCST5D300-V5EC		12000	64	61	86,8
VCST5D300-S0EC		12000	64	60	86,5

*1 Airflow volume according ISO27327-1

*2 Acoustic pressure values at 3 m / 5 m distance for maximum speed. Directional factor: Q=2.

*3 Sound power (LWA) measurements according to ISO 27327-2.

Type	Heater power output [kW] ^{*1}	Total power input [kW]	Total voltage/ current [V/A]	Motor voltage/ current [V/A]	Temperature increase Δt [°C] ^{*3}	Frequency [Hz]	Weight [kg]
VCST5D150-V3EC	36	0,9	230/4,2	230/4,2	35,7	50/60	126
VCST5D150-V5EC	48	1,1	230/4,7	230/4,7	41,4		132
VCST5D150-S0EC	-	0,8	230/3,5	230/3,5	-		116
VCST5D200-V3EC	45	1,2	230/5,6	230/5,6	34,6		160
VCST5D200-V5EC	66	1,4	230/6,0	230/6,0	24,1		168
VCST5D200-S0EC	-	1,0	230/4,5	230/4,5	-		147
VCST5D250-V3EC	60	1,6	230/7,0	230/7,0	35,6		195
VCST5D250-V5EC	85	1,8	230/7,7	230/7,7	42,9		204
VCST5D250-S0EC	-	1,3	230/5,7	230/5,7	-		179
VCST5D300-V3EC	72	1,9	230/8,4	230/8,4	35,7* ²		2x126
VCST5D300-V5EC	96	2,2	230/9,4	230/9,4	41,4* ²		2x132
VCST5D300-S0EC	-	1,6	230/7,0	230/7,0	-		2x116

*1 Inlet air temp. 18°C, water temp.gradient 60/40°C

*2 VCST5D300 consists of two pieces of VCST5D150

*3 At the maximum air flow and maximum heater power

LPHW 3-row coil parameters for water temperature gradient of 90/70 °C

Type	Air output	Heating output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCST5D150-V3EC	6000	79,1	56,8	17,2	0,97
VCST5D200-V3EC	8000	103,8	56,2	13,1	1,27
VCST5D250-V3EC	10000	132,8	57,1	22,2	1,63
VCST5D300-V3EC	12000	158,1	56,8	17,2	1,94

* Temperature of intake air: +18 °C

LPHW 3-row coil parameters for water temperature gradient of 80/60 °C

Type	Air output	Heating output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCST5D150-V3EC	6000	64,8	49,8	12,2	0,79
VCST5D200-V3EC	8000	84,6	49,1	9,0	1,03
VCST5D250-V3EC	10000	108,7	50,0	15,4	1,33
VCST5D300-V3EC	12000	129,6	49,8	12,2	1,58

* Temperature of intake air: +18 °C

LPHW 3-row coil parameters for water temperature gradient of 70/50 °C

Type	Air output	Heating output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCST5D150-V3EC	6000	50,5	42,8	7,9	0,73
VCST5D200-V3EC	8000	65,1	42,0	5,6	0,79
VCST5D250-V3EC	10000	84,5	42,9	9,8	1,03
VCST5D300-V3EC	12000	101,0	42,8	7,9	1,46

* Temperature of intake air: +18 °C

LPHW 3-row coil parameters for water temperature gradient of 60/40 °C

Type	Air output	Heating output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCST5D150-V3EC	6000	36	35,7	4,4	0,44
VCST5D200-V3EC	8000	45	34,6	2,9	0,55
VCST5D250-V3EC	10000	59,8	35,6	5,2	0,72
VCST5D300-V3EC	12000	71,9	35,7	4,4	0,88

* Temperature of intake air: +18 °C

LPHW 5-row coil parameters for water temperature gradient of 60/40 °C

Type	Air output	Heating output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCST5D150-V5EC	6000	47,8	41,4	4,2	0,58
VCST5D200-V5EC	8000	65,5	42,1	6,6	0,79
VCST5D250-V5EC	10000	84,7	42,9	11,7	1,03
VCST5D300-V5EC	12000	95,5	41,4	4,2	1,16

* Temperature of intake air: +18 °C

LPHW 5-row coil parameters for water temperature gradient of 50/30 °C

Type	Air output	Heating output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCST5D150-V5EC	6000	27,90	31,7	1,6	0,34
VCST5D200-V5EC	8000	39,60	32,5	2,7	0,48
VCST5D250-V5EC	10000	53,10	33,6	5,1	0,64
VCST5D300-V5EC	12000	55,80	31,7	1,6	0,68

* Temperature of intake air: +18 °C

LPHW 5-row coil parameters for water temperature gradient of 40/30 °C

Type	Air output	Heating output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCST5D150-V5EC	6000	24,7	30,1	4,6	0,59
VCST5D200-V5EC	8000	34,1	30,5	7,4	0,82
VCST5D250-V5EC	10000	44,3	31,0	13,2	1,07
VCST5D300-V5EC	12000	49,4	30,1	4,6	1,18

* Temperature of intake air: +18 °C

LPHW 5-row coil parameters for water temperature gradient of 35/25 °C

Type	Air output	Heating output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCST5D150-V5EC	6000	14,8	25,3	1,9	0,36
VCST5D200-V5EC	8000	21,2	25,8	3,2	0,51
VCST5D250-V5EC	10000	28,8	26,5	6,1	0,69
VCST5D300-V5EC	12000	29,6	25,3	1,9	0,72

* Temperature of intake air: +18 °C

Recommended mixing points for LPHW coil

2-way valve (3-row)

Type	90/70 °C	80/60 °C	70/50 °C	60/40 °C
	2-way valve			
VCST5D150-V3...	ZV2-024-10,0-25	ZV2-024-10,0-25	ZV2-024-10,0-25	ZV2-024-06,3-25
VCST5D200-V3...	ZV2-024-16,0-25	ZV2-024-10,0-25	ZV2-024-10,0-25	ZV2-024-06,3-25
VCST5D250-V3...	ZV2-024-16,0-25	ZV2-024-10,0-25	ZV2-024-10,0-25	ZV2-024-06,3-25
VCST5D300-V3...	2x ZV2-024-10,0-25	2x ZV2-024-10,0-25	2x ZV2-024-10,0-25	2x ZV2-024-06,3-25

Recommended mixing points for LPHW coil

2-way valve (5-row)

Type	60/40 °C	50/30 °C	40/30°C	35/25 °C
	2-way valve			
VCST5D150-V5...	ZV2-024-06,3-25	ZV2-024-10,0-25	ZV2-024-10,0-25	ZV2-024-06,3-25
VCST5D200-V5...	ZV2-024-10,0-25	ZV2-024-10,0-25	ZV2-024-10,0-25	ZV2-024-06,3-25
VCST5D250-V5...	ZV2-024-10,0-25	ZV2-024-10,0-25	ZV2-024-10,0-25	ZV2-024-10,0-25
VCST5D300-V5...	2 x ZV2-024-06,3-25	2 x ZV2-024-10,0-25	2 x ZV2-024-10,0-25	2 x ZV2-024-06,3-25

Recommended mixing points for LPHW coil

3-way valve (3-row)

Type	90/70 °C	80/60 °C	70/50 °C	60/40 °C
	3-way valve			
VCST5D150-V3...	ZV3-024-10,0-25	ZV3-024-10,0-25	ZV3-024-06,3-20	ZV3-024-04,0-20
VCST5D200-V3...	ZV3-024-16,0-32	ZV3-024-10,0-25	ZV3-024-10,0-25	ZV3-024-06,3-20
VCST5D250-V3...	ZV3-024-16,0-32	ZV3-024-16,0-32	ZV3-024-10,0-25	ZV3-024-06,3-20
VCST5D300-V3...	2 x ZV3-024-10,0-25	2 x ZV3-024-10,0-25	2 x ZV3-024-06,3-20	2 x ZV3-024-04,0-20

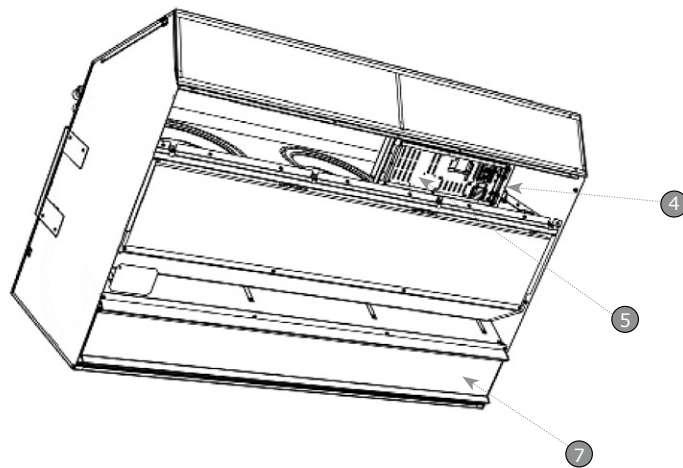
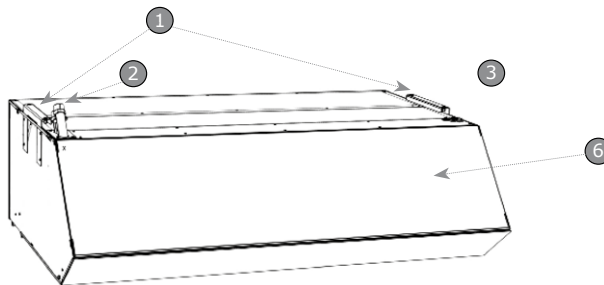
Recommended mixing points for LPHW coil

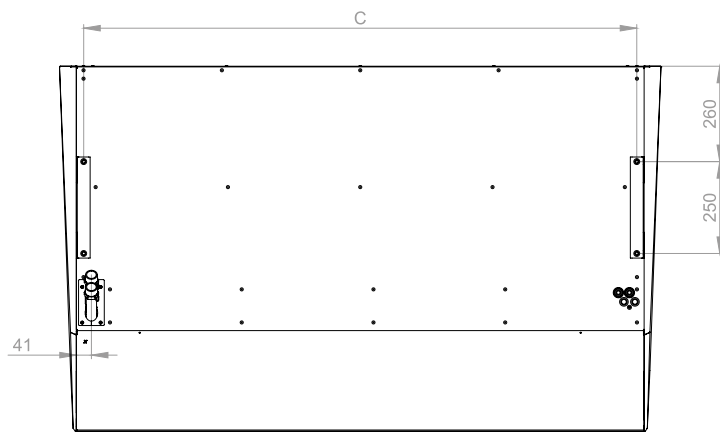
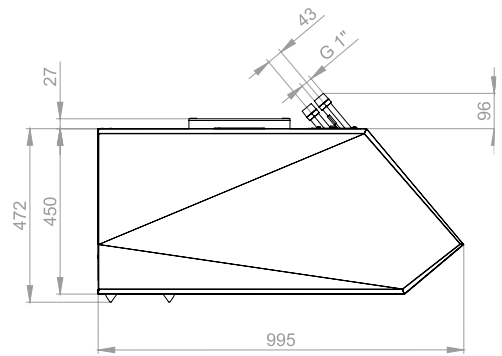
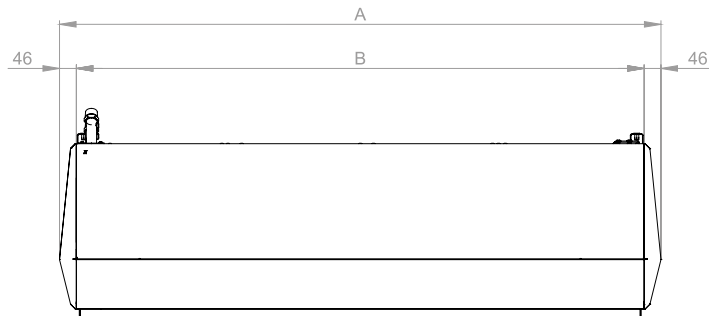
3-way valve (5-row)

Type	60/40 °C	50/30 °C	40/30 °C	35/25 °C
	3-way valve			
VCST5D150-V5...	ZV3-024-10,0-25	ZV3-024-10,0-25	ZV3-024-10,0-25	ZV3-024-06,3-25
VCST5D200-V5...	ZV3-024-16,0-25	ZV3-024-10,0-25	ZV3-024-10,0-25	ZV3-024-06,3-25
VCST5D250-V5...	ZV3-024-16,0-25	ZV3-024-10,0-25	ZV3-024-10,0-25	ZV3-024-10,0-25
VCST5D300-V5...	2 x ZV3-024-10,0-25	2 x ZV3-024-10,0-25	2 x ZV3-024-10,0-25	2 x ZV3-024-06,3-25

MAIN PARTS

- ① Suspension holders
- ② LPHW coil connection 1"
- ③ Power supply cable plug
- ④ Power supply connectors and fuse location
- ⑤ Control module socket
- ⑥ Inlet face cover
- ⑦ Outlet grid



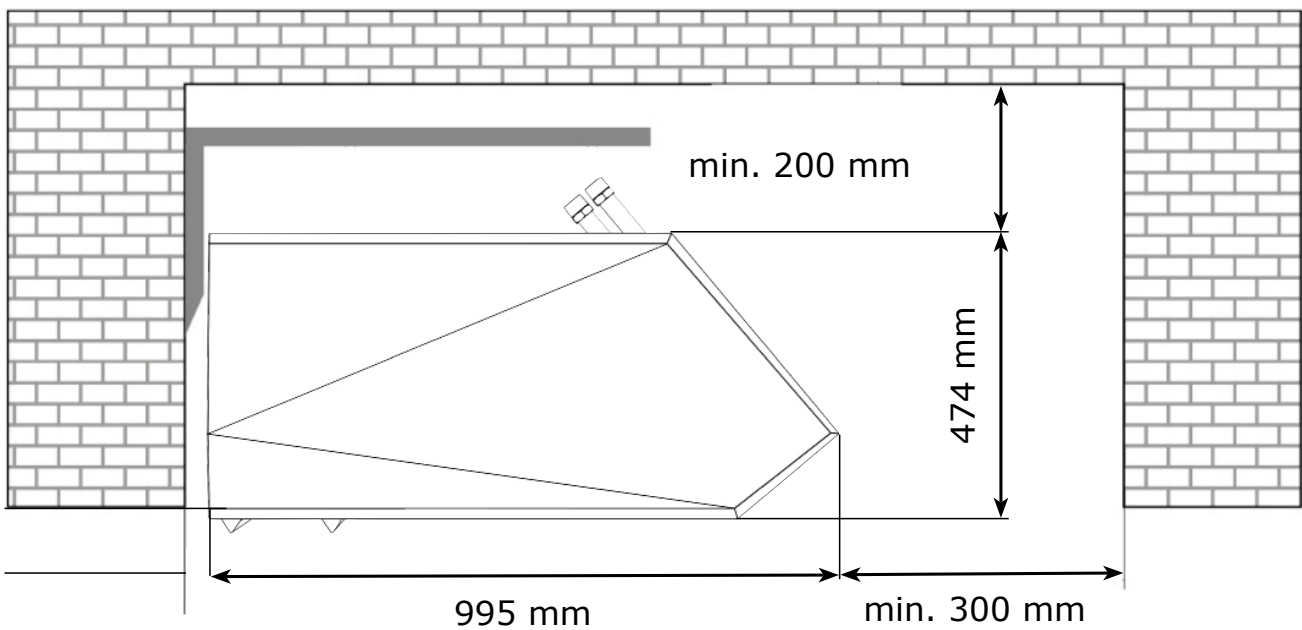


Type Typ	A	B	C
VCST5D150-V...	1637mm	1545mm	1505mm
VCST5D200-V...	2147mm	2055mm	2015mm
VCST5D250-V...	2657mm	2565mm	2525mm
VCST5D300-V... *1	3182mm	1545+1545mm	1505+1505mm

*1 The 3-meter long air curtain requires two separate inlets to connect the LPHW coils.

**INSTALLATION AND ASSEMBLY**

- The air curtain shall be installed in a horizontal position only.
- The air curtain shall be located as close to the top edge of the doorway as possible, see figure.
- To ensure a correct function it is recommended that the air curtain overlaps the doorway by 100 mm on both sides.
- Correct operation of the air curtain requires that specified distances from the surrounding objects are observed, see figure.
- Position of the heating water and power supply connections shall be taken into consideration during installation.
- Suspension holders are used for installing the air curtains see ACCESSORIES.





CONTROL

Overview of AirGENIO functions and sensor connections



Touch screen display



Integrated timer



Manual / Auto control mode



Temperature measurement (All temperature NTC sensors included, temperature shown on display)



Control of airflow in 5 steps



Chaining air curtains 1+10 (Master-Slave air curtains)



0-10V control of valve actuator for LPHW coil



Self learning mode



Integrated antifreeze protection of LPHW



BMS connection - Modbus RTU,TCP, BACnet



Possibility of connecting a door contact and external control switch



Error contact



2nd control panel ready

Overview of the AirGENIO smart functions

Regimes

Heating boost

- instant start of heating at max output when doors are open to keep comfortable heat inside



Self-Learning function

- self learning regime ensuring smooth air curtain running without useless start-ups at frequent door openings.Saves energy and prolongs the air curtain 's working life.



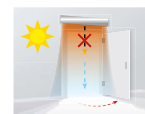
Night mode

- during the pre-set night period air curtain can be switched off completely, or used to heat up the room. Possibility to set lower requested temperature for the night regime.



Summer mode

- to avoid waste of energy for heating, within a pre-set „summer season“, the heating is allowed only if the difference between the outside and inner temperature is higher than pre-set scale.



Auto-Stop control

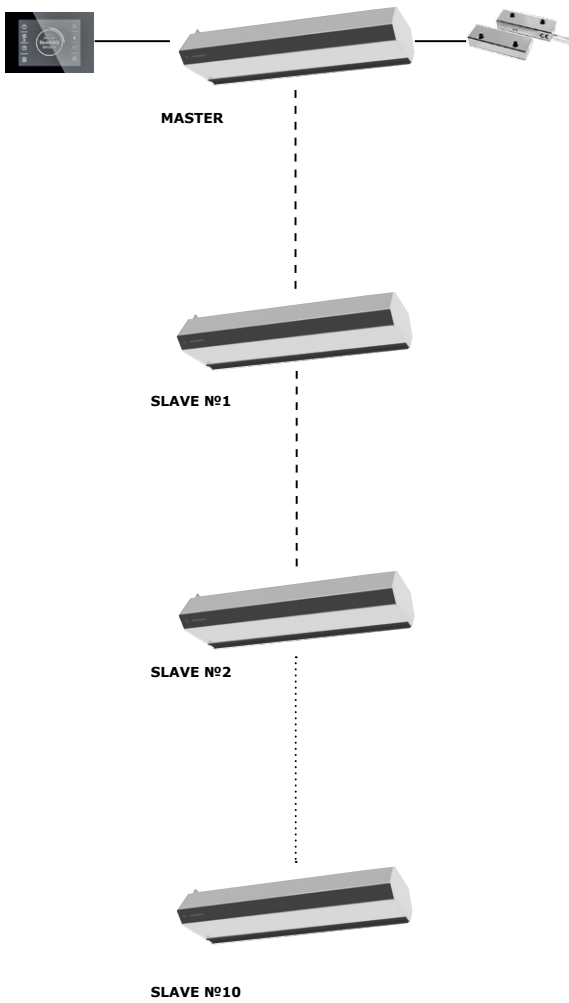
- air curtain evaluates its own temperature on outlet and the temperature outside and inside the room. The air speed and heating output is modified according to the required temperature, time programme and open/closed door. All parameters are evaluated in order to get the maximal output at the lowest possible operating costs.



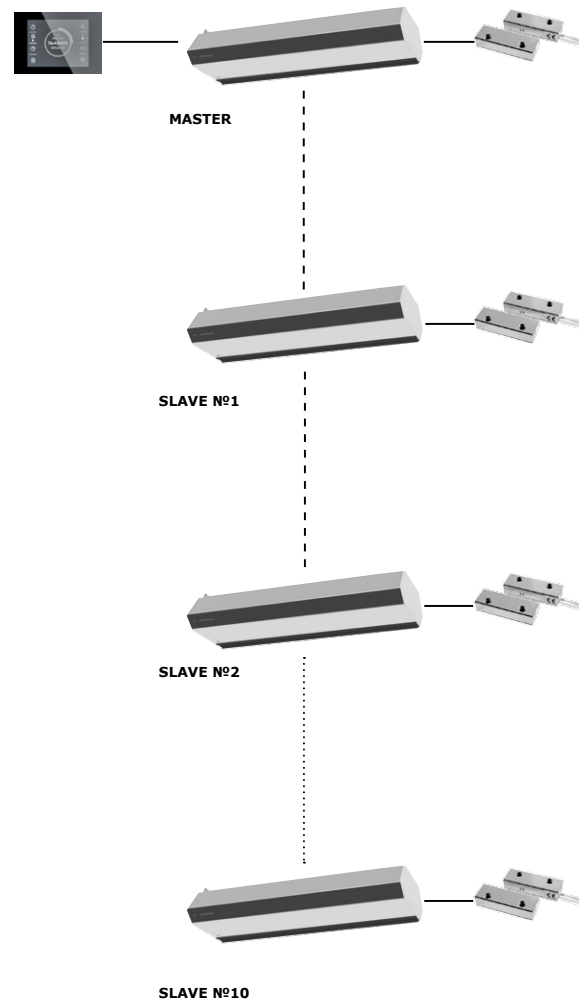


CHAINING EXAMPLE

Global Door contact function active



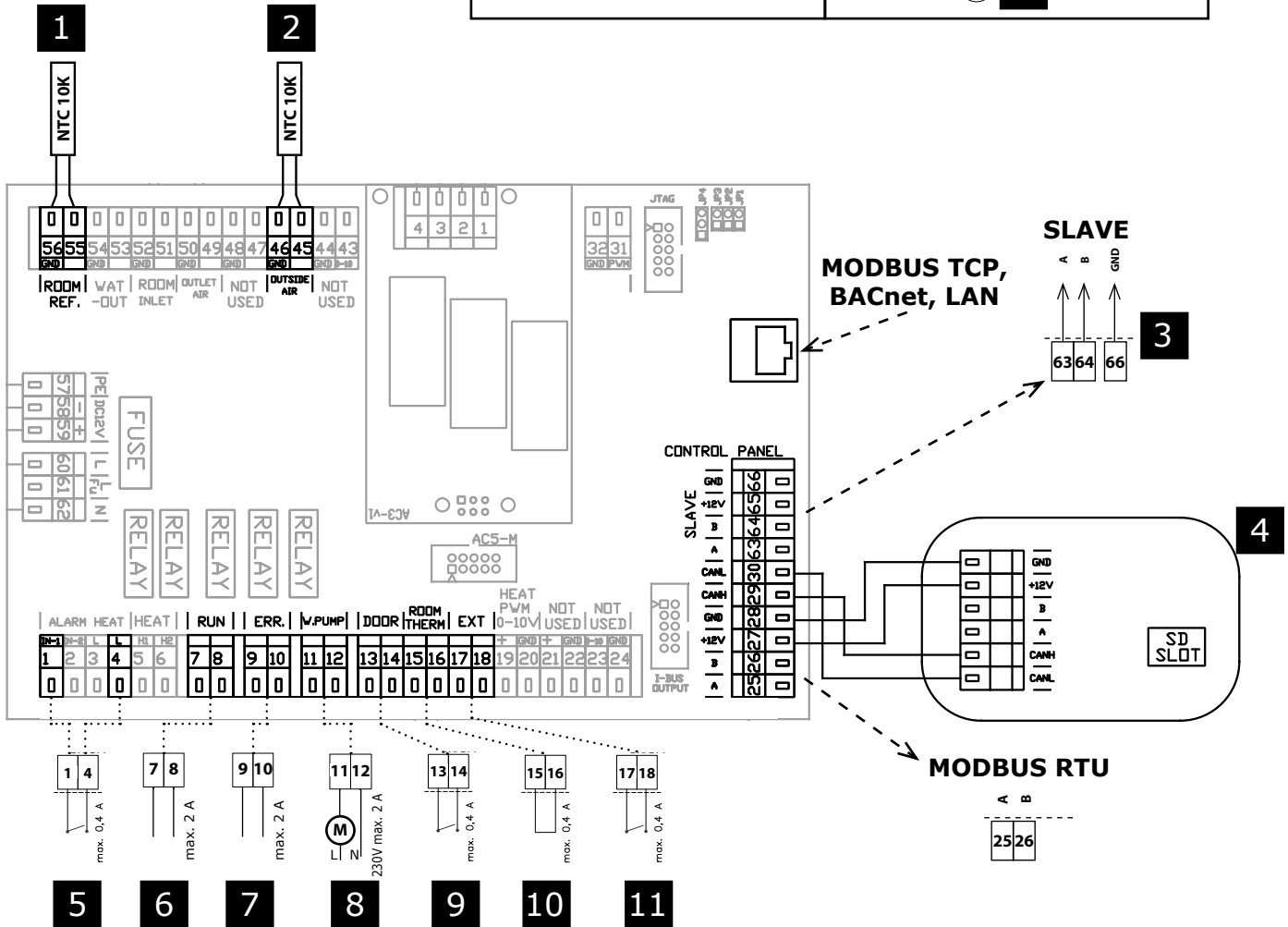
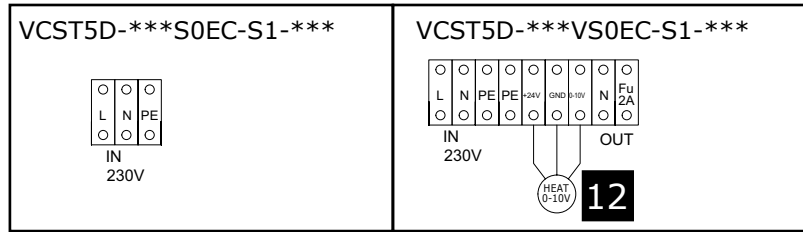
Global Door contact function not active



WIRING DIAGRAMS



AirGENIO SUPERIOR MASTER

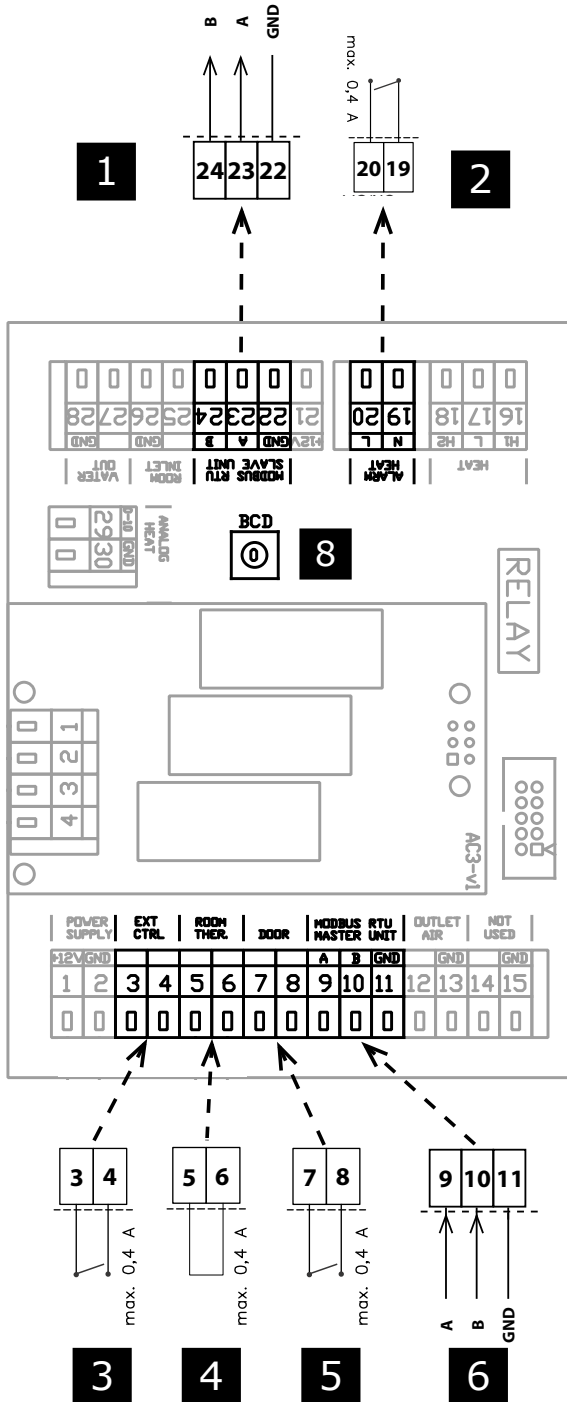
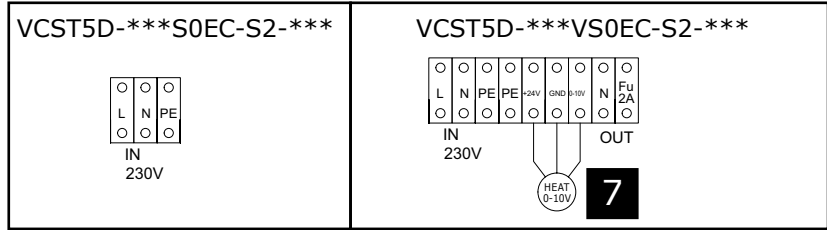


EN	
1	Room sensor (accessories)
2	Outside air sensor (included in delivery)
3	Signal to SLAVE unit
4	Control panel
5	Antifreeze thermostat (NC)
6	RUN contact (relay contact, NO/NC)
7	ERROR contact (relay contact, NO/NC)
8	Water pump (relay contact)
9	DOOR contact (input, NO/NC)
10	Room thermostat (input, NO/NC)
11	External control (input, NO/NC)
12	Water valve control (0-10V)



WIRING DIAGRAMS

AirGENIO SUPERIOR SLAVE



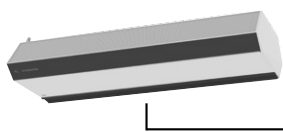
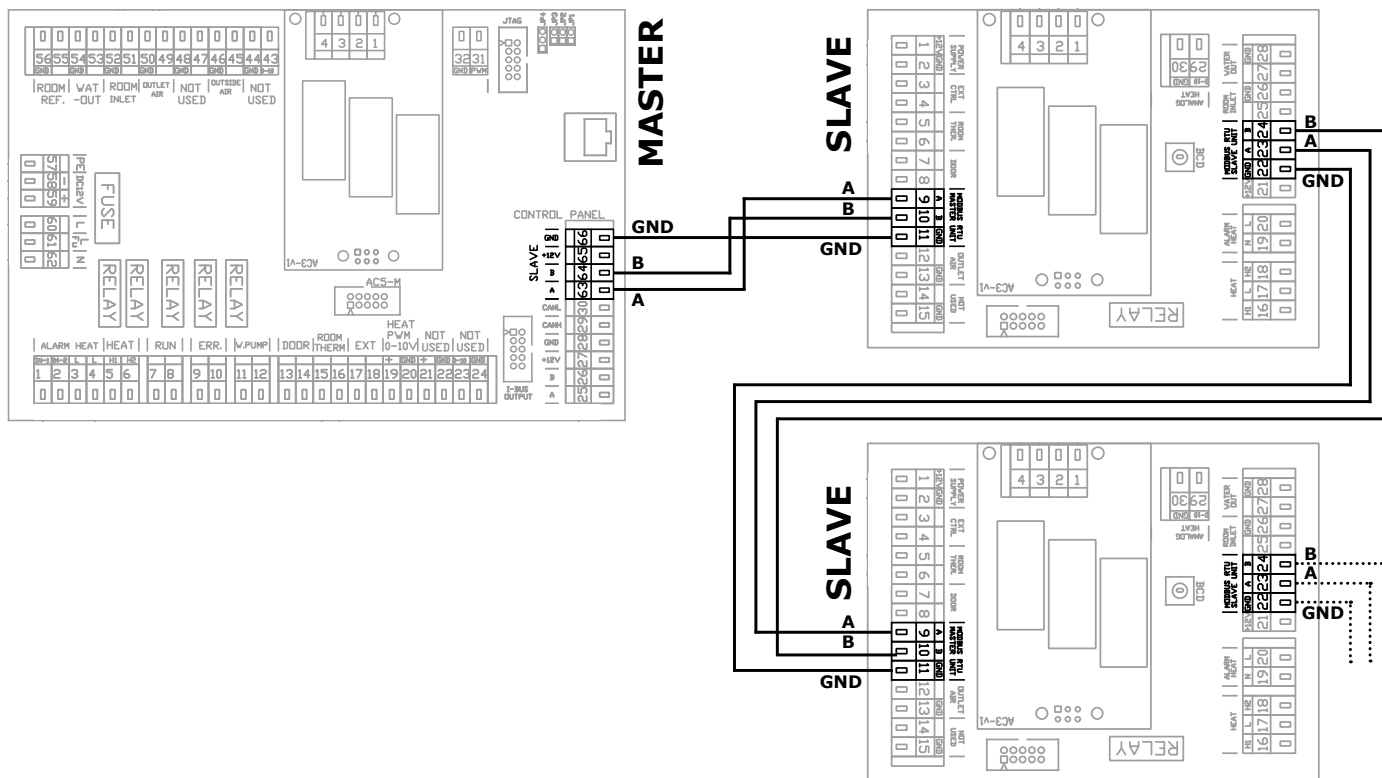
EN	
1	Signal to SLAVE unit
2	Antifreeze thermostat (NC)
3	External control - ON/OFF
4	Room thermostat (input)
5	DOOR contact (input)
6	Signal from MASTER unit
7	Water valve control (0-10V)

8	
SLAVE	BCD
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	A

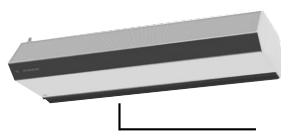


WIRING DIAGRAMS Chaining

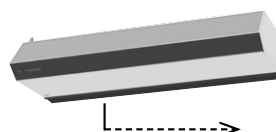
AirGENIO SUPERIOR



MASTER



SLAVE 1



SLAVE 2

SLAVE 10



⚠ Max 150m ⚠



ACCESSORIES

OPTIONAL ACCESSORIES

More details can be found on the relevant page in this catalogue

2-way or 3-way valve with servo drive (0-10V)
ZV2-024-xx,x-xx
ZV3-024-xx,x-xx



Mixing node
SMU2-024-xx



Room thermostat
TER-P



Room temperature sensor
CT-ROOM



2nd Control panel
ND-REMOTE-CONTROL



Mechanical door switch (230V)
DS

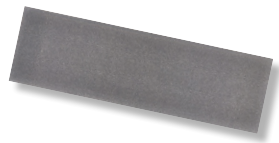


Magnetic door contact in a metal housing with higher protection against mechanical damage
DK-B-3



FILTR-VCST5D-150-G1

- 150-G1**(COARSE 30%)
- 200-G1**(COARSE 30%)
- 250-G1**(COARSE 30%)



* The 3-meter long air curtain = 2x FILTR-VCST5D-150-G1



KEY TO CODING

VCST5 D 150-S0 EC-S1-0 A0

