



air-only



water heater



electric wire heater

LOW
NOISEWIRE
HEATERANTI
FREEZE**BASIC FEATURES**

- Length 2.5 m
- **Air flow up to 4700 m³/h** (ISO 27 327-1)
- The construction of the adjustable exhaust lamellas ensures a high output
- The insulated shell means completely silent curtain operation, even at full output
- Easy installation
- AirGENIO control (COMFORT and SUPERIOR)
- Standard colour RAL 9016 (any RAL – based colours may be provided on customer's request)

The **VENESSE** is a vertical air curtain for right and left installation for use in representative premises, such as **banks, offices, restaurants and shopping centres** with a recommended width up to 4 m.

The **VENESSE** is for use in dry indoor environments with an ambient temperature of +5 °C to +35 °C, and relative humidity up to 80 %. It is suitable for moving air that is free of large dust particles, grease, chemical vapours and other impurities. The air curtain has IP 20 electrical protection. The air curtain's installation must always be planned by a HVAC engineer designer.


PRIMARY PARAMETERS

Air curtains with an electric heater unit are equipped with an operational thermometer with automatic reset for temperatures above 50°C and an emergency thermometer with manual reset, which turns the entire device off if the temperature inside the air curtain exceeds 115 °C. Air curtains with LPHW coil are designed for a maximum operational water temperature of +100 °C and maximum operational pressure of 1.6 MPa

Type	Recommended installation height [m]	Air output [m³/h] ^{*1}			Acoustic pressure at 3m[dB(A)] ^{*2}			Sound power [dB(A)] ^{*3}
		Speed 3	Speed 2	Speed 1	Speed 3	Speed 2	Speed 1	
VCV-B-25S	4,0	4700	3400	2450	55	49	41	76
VCV-B-25E		4600	3300	2400	55	48	40	76
VCV-B-25W		4350	3100	2200	54	48	40	76

^{*1} Airflow volume according ISO27327-1

^{*2} Acoustic pressure values at 3 m distance for maximum speed. Directional factor: Q=2.

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

Type	Heater power output [kW]		Total power input [kW]	Total voltage/current [V/A]	Motor voltage/current [V/A]	Temperature increase Δt [°C]	Frequency [Hz]	Weight [kg]
	1st level	2st level						
VCV-B-25S	-	-	1,65	230/7	230/6,5	-	50	95
VCV-B-25E	13	24,0	25,65	400/42	230/6,5	15,5 ^{*1}	50	103
VCV-B-25W	-	50,1 ^{*2}	1,65	230/7	230/6,5	34,4	50	104

^{*1} At the maximum air flow and maximum heater power

^{*2} Intake air temperature +18°C, water temperature gradient of 90/70 °C and highest fan speed.

LPHW coil parameters

Type	Air output	Heat output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
LPHW coil parameters for water temperature gradient 60/40 °C					
VCV-B-25W	4350	24,2	34,6	19	0,3
LPHW coil parameters for water temperature gradient 70/50 °C					
VCV-B-25W	4350	32,9	40,6	34	0,4
LPHW coil parameters for water temperature gradient 80/60 °C					
VCV-B-25W	4350	41,5	46,5	52	0,5
LPHW coil parameters for water temperature gradient 90/70 °C					
VCV-B-25W	4350	50,1	52	73	0,6

* Temperature of intake air +18 °C



Recommended mixing points for LPHW 2-way valve

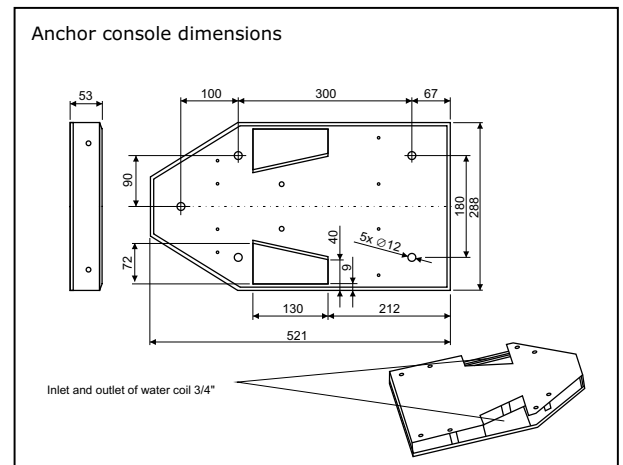
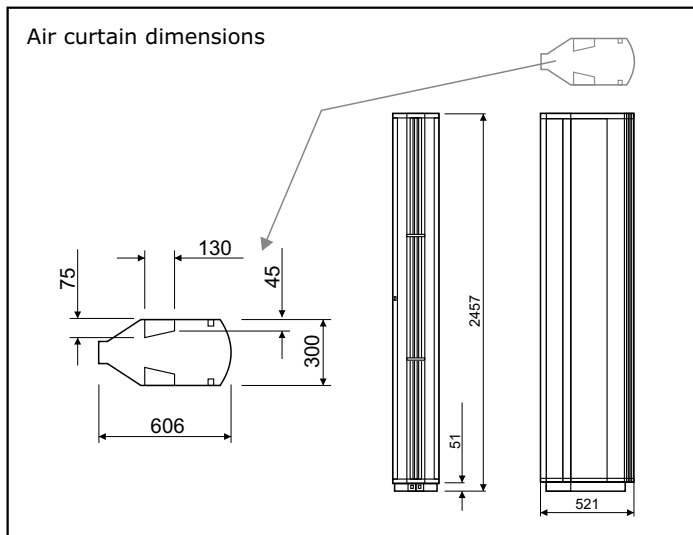
Type	Control	90/70 °C	80/60 °C	70/50 °C	60/40 °C
		2-way valve			
VCV-B-25W	COMFORT	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20
	SUPERIOR	ZV2-024-08,0-20	ZV2-024-08,0-20	ZV2-024-08,0-20	ZV2-024-08,0-20

Recommended mixing points for LPHW 3-way valve

Type	Control	90/70 °C	80/60 °C	70/50 °C	60/40 °C
		3-way valve			
VCV-B-25W	COMFORT	ZV3-230-21,0-20	ZV3-230-21,0-20	ZV3-230-21,0-20	ZV3-230-21,0-20
		RT-3-07	RT-3-07	RT-3-07	RT-3-07
	SUPERIOR	ZV3-024-10,0-25	ZV3-024-10,0-25	ZV3-024-10,0-25	ZV3-024-10,0-25

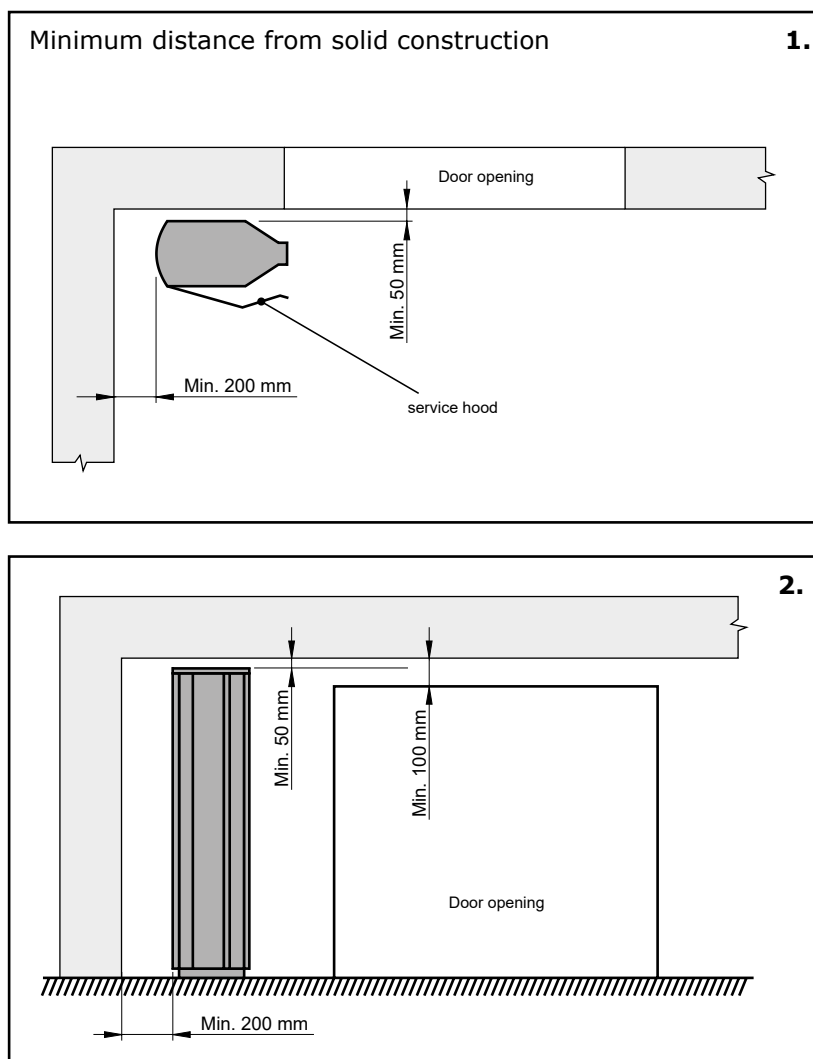


DIMENSIONS



INSTALLATION AND ASSEMBLY

- The **VENESSE** air curtain is intended for vertical installation.
- The air curtain must be placed as close as possible to the upper edge of the door opening (see illustration.1).
- For correct operation, we recommend that the air curtain is higher than the door opening (optimally by 100 mm) see illustration 2.
- The anchor stand and its cover are included. All necessary connections can be routed through the stand, e.g., electrical power, water, communication cable, etc.
- Connections can also be made from the top down, through a special opening in the air curtain's upper cover.
- For the air curtain to operate correctly, it must be installed at the correct distance (see illustrations 1 and 2).
- The air curtain is universally designed for two-sided operation. Thus, the direction of the service cover can be selected. It should always point into the room.



CONTROL

The **VENESSE** air curtains are produced with COMFORT or SUPERIOR controls (CO and SU).
The basic differences among individual control types are given in table underneath.

**CONTROL****Overview of functions and sensor connections**

AirGENIO control		COMFORT	SUPERIOR
	Type of controller	Touch screen	Touch screen
	Mode	Manual / Auto	Manual / Auto
	Control of air output	3 speeds	3 speeds
	Control of electric heater	OFF / Level1 / Level2	N/A
	Control of water heater	ON/OFF	0-10V
	Antifreeze protection of LPHW	YES	YES
	Possibility of connecting a door contact	YES (12V)	YES (12V)
	External control	YES	YES
	Temperature measurement	YES (NTC)*	YES (NTC)*
	Chaining air curtains	YES – max 10+1 pcs	YES – max 10+1 pcs
	Indication of selected function	YES (Display)	YES (Display)
	Controller connection to air curtain	Communication cable (UTP)	Communication cable (UTP)
	Self learning mode	YES	YES
	BMS connection	Modbus RTU	Modbus RTU, Modbus TCP, BACnet
	Error contact	YES	YES
	2 nd control panel ready	YES	YES

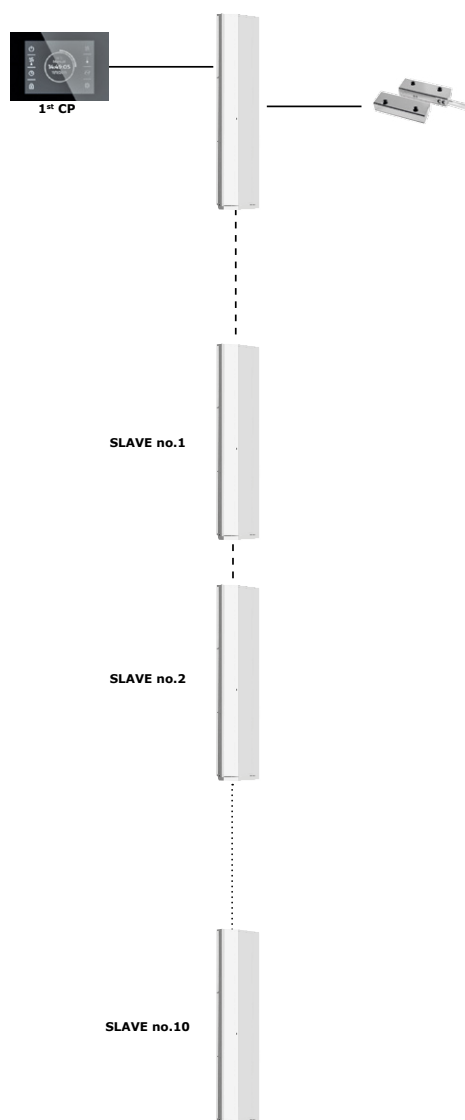
*¹) Temperature sensor included in standard. Temperature shown on display.



CHAINING EXAMPLE

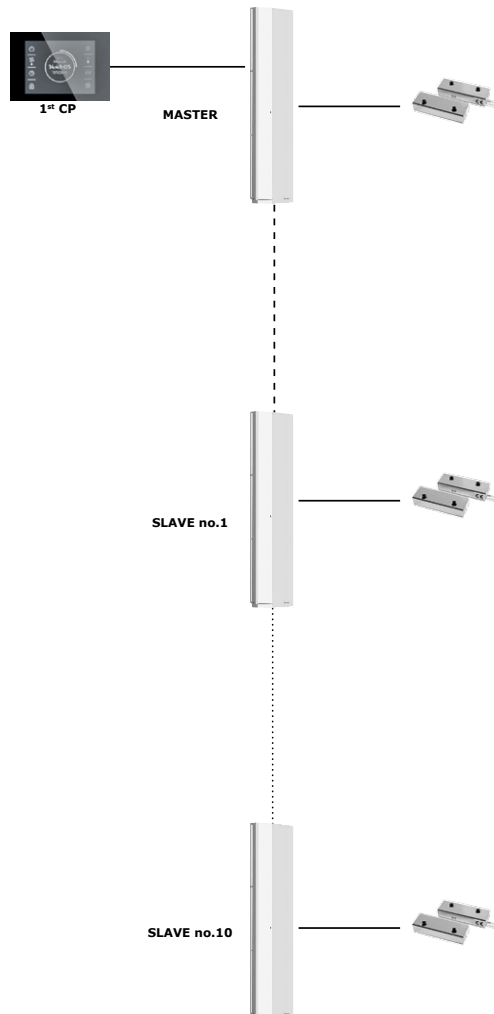
COMFORT / SUPERIOR

Global Door contact function active



COMFORT / SUPERIOR

Global Door contact function not active





ACCESSORIES

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

REQUIRED ACCESSORIES

For air curtain with water heater only.

2-way or 3-way valve with servo drive (230V)

ZV2-230-xx,x-xx

ZV3-230-xx,x-xx

(for control CO)



3-way valve with servo drive RT

RT-3-07 (K_{vs} 07)

(for control CO)



2-way or 3-way valve with servo drive (0-10V)

ZV2-24-xx,x-xx

ZV3-24-xx,x-xx

(for control SU)



Door contact in a metal housing

DK-B-3



Room thermostat

TER-P



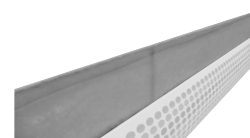
Flexible connection hoses

OH-xxx



Filter for VENESSE products (only VCV-B-25W and VCV-B-25S)

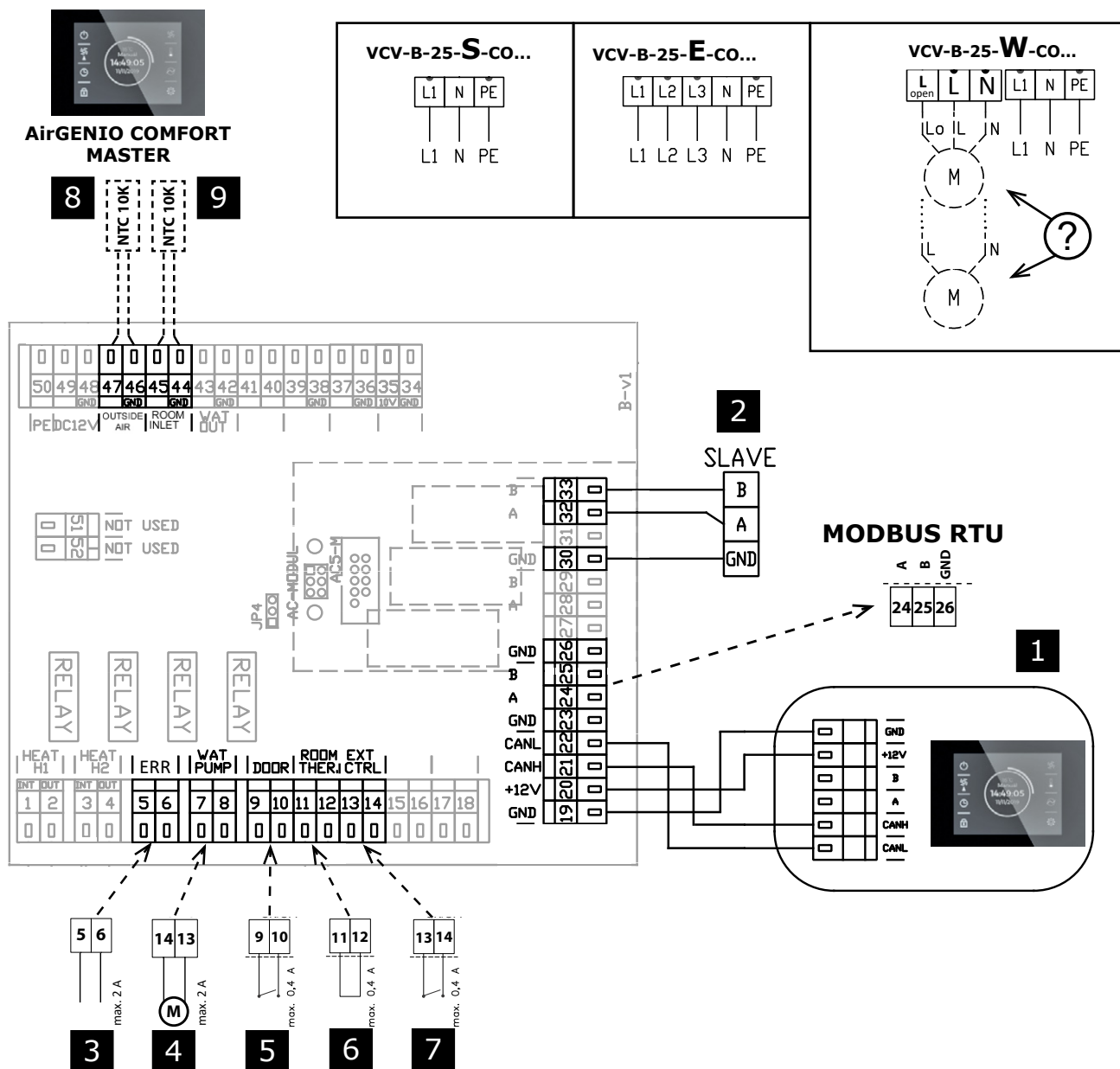
FI-VCV-2390X280X4





WIRING DIAGRAMS

All connection schematics shown in the catalogue are for information only. When assembling the product, follow only the values, instructions and schematics shown on the product itself or delivered with the product.

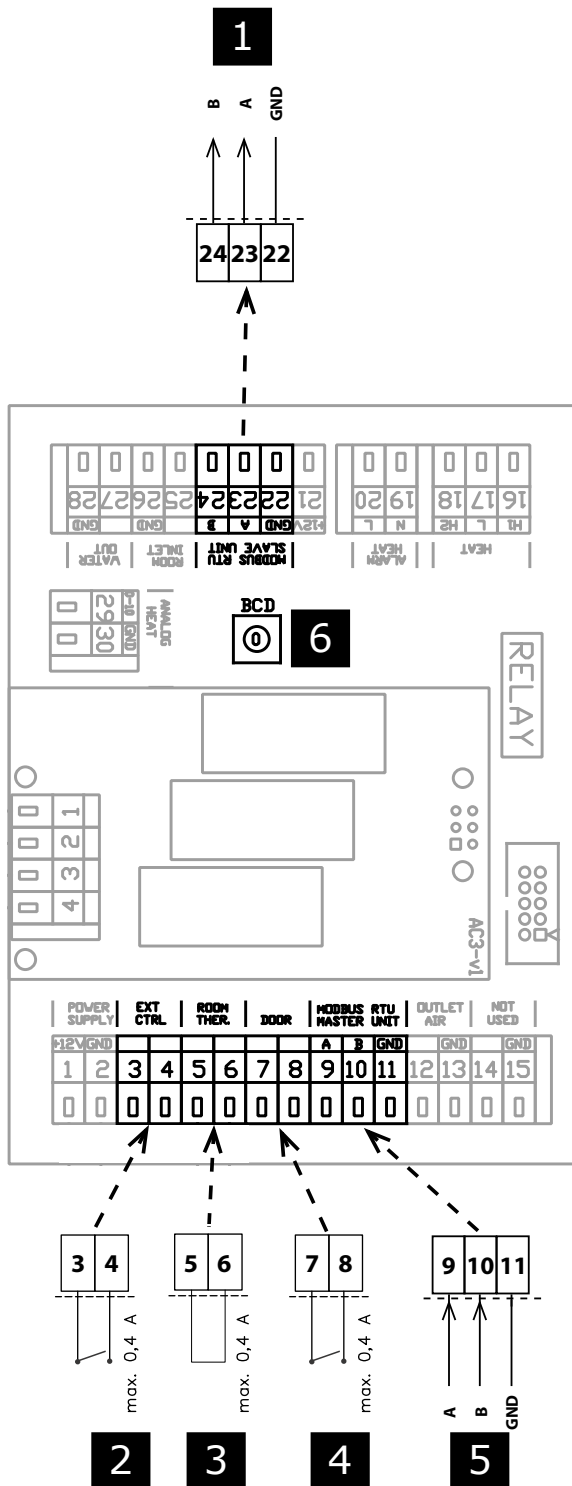
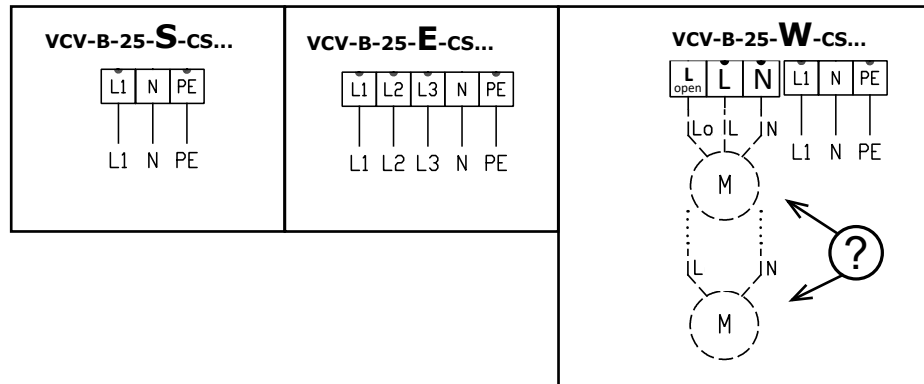


	EN
1	Control panel
2	Signal to SLAVE unit
3	ERROR contact (relay contact, NO/NC)
4	Water pump (relay contact)
5	DOOR contact (input, NO/NC)
6	Room thermosat (input, NO/NC)
7	External control (input, NO/NC)
8	Outside air temp. sensor (include delivery)
9	Room temp. sensor (include delivery)



WIRING DIAGRAMS

AirGENIO COMFORT SLAVE



	EN
1	Signal to SLAVE unit
2	External control - ON/OFF
3	Room thermostat (input)
4	DOOR contact (input)
5	Signal from MASTER unit

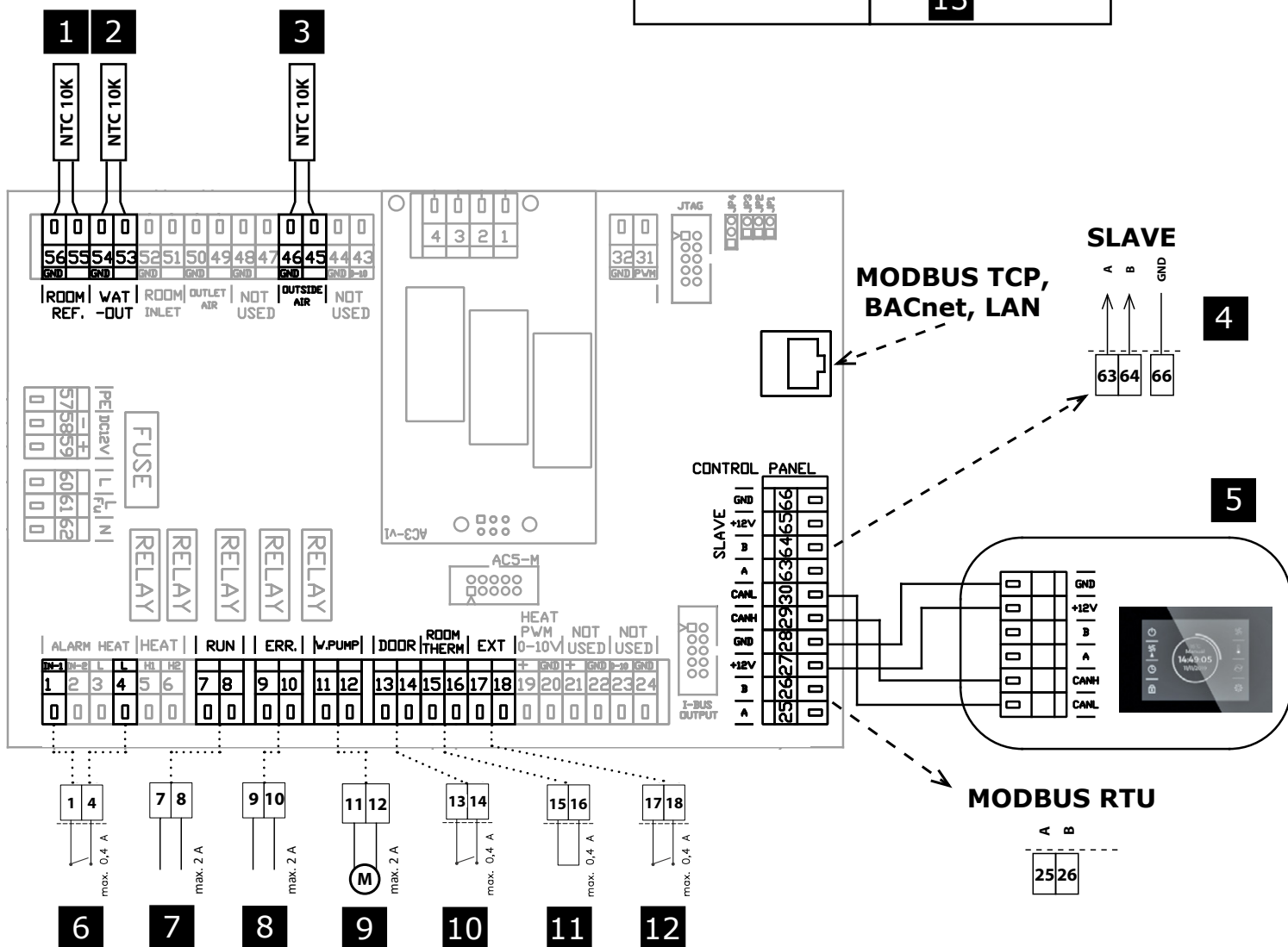
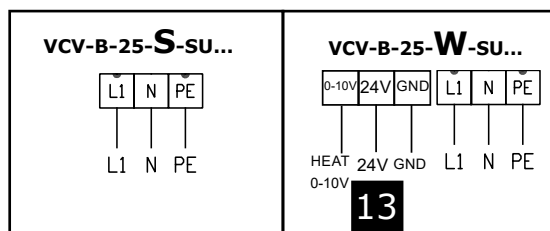
SLAVE	BCD ⑥
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	A



WIRING DIAGRAMS



AirGENIO SUPERIOR MASTER

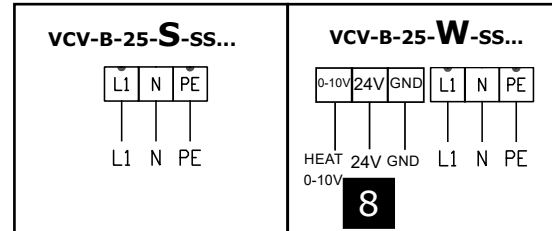
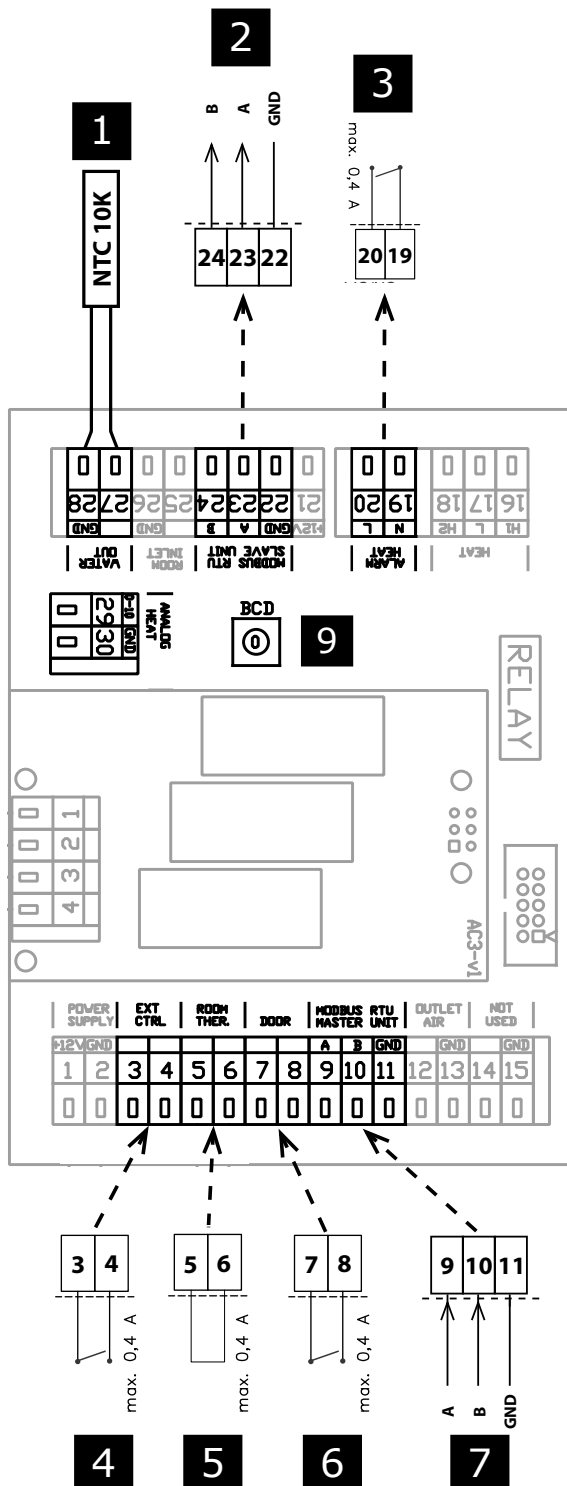


EN	
1	Room sensor (accessories)
2	LPHW out sensor (included in delivery)
3	Outside air sensor (included in delivery)
4	Signal to SLAVE unit
5	Control panel
6	Antifreeze thermostat (NC)
7	RUN contact (relay contact, NO/NC)
8	ERROR contact (relay contact, NO/NC)
9	Water pump (relay contact)
10	DOOR contact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



WIRING DIAGRAMS

AirGENIO SUPERIOR
SLAVE



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

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



KEY TO CODING

VCV-B-25 E-CO-0-2

2 – 2VV version

0 – White colour RAL 9016 (standart)

9 – Other colours according to RAL

N – Stainless steel

CO – Comfort master control

CS – Comfort slave control

SU – Superior master control (available only for LPHW and ambient version)

SS – Superior slave control (available only for LPHW and ambient version)

E – Electric heater 3-phase 400V

W – LPHW coil

S – Air-only

25 – Nominal width 2500 mm

B – Output series

VCV – **VENESSE** air curtain