

# ASD.SNR ADAPTER WING AC (1-4-0101-0578)

Installation and operating instructions



## 1. APPLICATION

The use of an adapter (model 1-4-0101-0578) enables the use of a door sensor (model 1-4-0101-0454) together with a wall-mounted WING/VOLCANO AC controller (model 1-4-0101-0438) for WING air curtains equipped with AC motors. The application of adapter allows the air curtain WING AC to work only when the door is opened.

The door sensor (model 1-4-0101-0454) cannot be connected directly between the controller and the WING air curtain because it is not designed to carry such high voltage (Max. switching voltage 0-24V). Therefore, it must be connected to an adapter (model 1-4-0101-0578) which is equipped with relays that can operate at 230V.

In addition, the adapter ensures the protection of heating elements in air curtains equipped with electric heaters by cooling them down for 30 seconds. The adapter also has potentiometer that allows to delay switching off the air curtain after the door are closed (0-

120 second). Thanks to that the curtain does not start and stop every few seconds, which would be the case if it worked on very busy opening doors.

Cooperate with:



1-4-0101-0454



1-4-0101-0438

## 2. DESCRIPTION OF CONNECTIONS

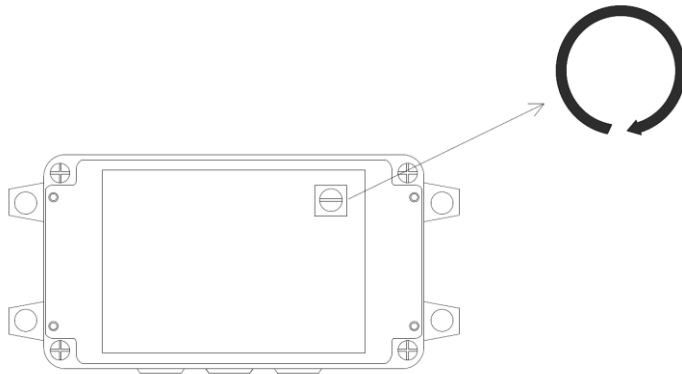
Cube	Terminal	Description
X <sub>1</sub>	N	Neutral connection the adapter
	L1	Phase relay (230V) between the air curtain and the controller
	L2	Potentiometer "0-120 seconds" input
	L3	Potentiometer "0-120 seconds" output
X <sub>Z</sub>	K2	Potentiometer "0-120 seconds" input
	K3	Potentiometer "0-120 seconds" output
	L4	Fan switch-off delay for electric air curtains – input
	K5	Fan switch-off delay for electric air curtains - output
X <sub>2</sub>	DS	Door sensor connection
	DS	Door sensor connection

## 3. OPERATION

**Caution.** Before attempting to any installation works, ensure that WING unit (being a power supply source for this controller) is mechanically disconnected from electric power supply.

## Door Sensor Adapter WING AC (1-4-0101-0578)

- The adapter, connected according to the scheme 4.3 for electric curtains, allows the electric curtain to operate based on the position of the sensor; it also protects the electric heaters from overheating thanks to the fan operation delay (cooling of the heating elements for 30 sec.)
- In addition, the adapter allows you to manually set a delay time for the curtain to operate when the door is closed. It is possible to set a delay time of 0-120 seconds after the door is closed. This way the air curtain will not be activated and deactivated every time the door position is changed very often (rush hours when the doors to the facility are constantly opened and closed). Setting the delay time value is done by turning the potentiometer located in the corner of the adapter where one full turn corresponds to 12 seconds.



Turn the potentiometer located in the corner of the adapter with a flathead screwdriver. One full turn is signalled by a characteristic “snap” sound will be heard. One full potentiometer turn corresponds to 12 seconds. Potentiometer can be rotated up to 10 times (120 seconds)

## 4. INSTALLATION AND WIRING

**Caution.** Before attempting to any installation works, ensure that WING unit (being a power supply source for this controller) is mechanically disconnected from electric power supply.

4.1 For connecting with WING W100 AC; W150 AC; W200 AC models, apply connections like shown on Figure 1.

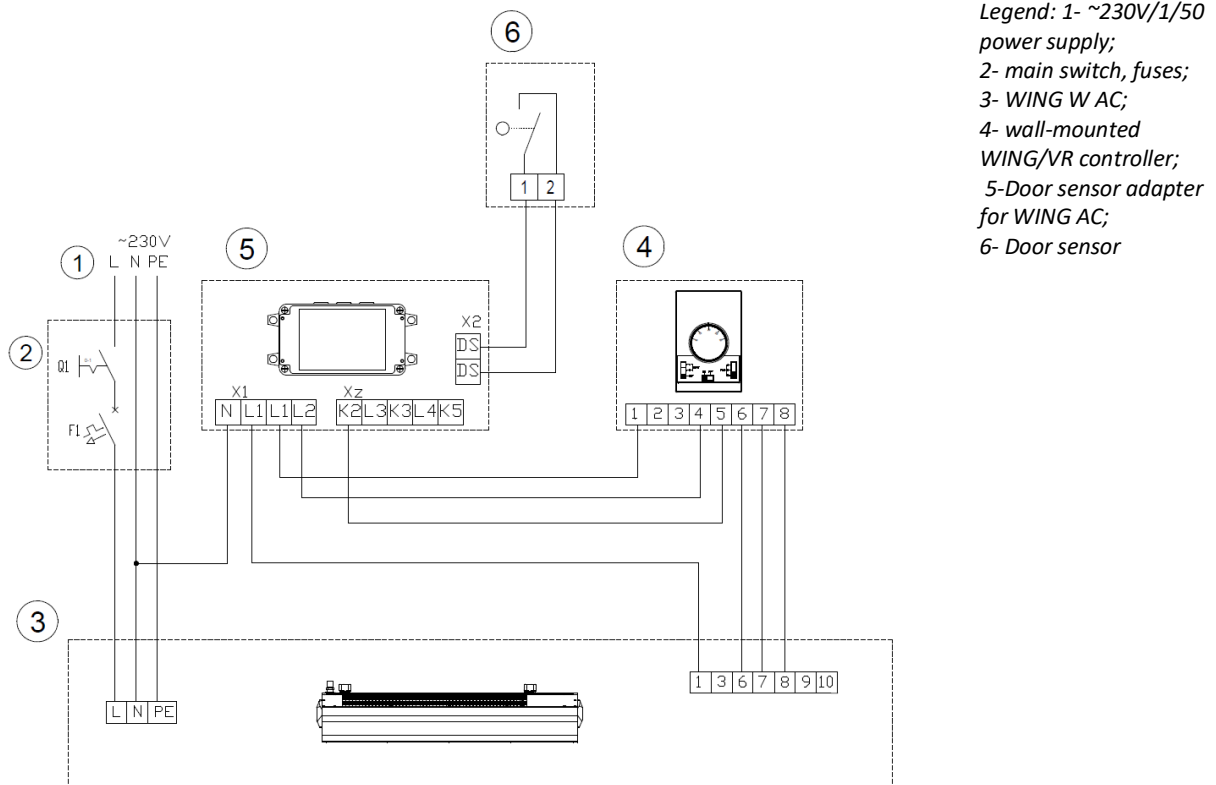


Figure 1 – W100 AC, W150 AC, W200 AC connections

4.2 For connecting with WING C100 AC; C150 AC; C200 AC models, apply connections like shown on Figure 1.

### Door Sensor Adapter WING AC (1-4-0101-0578)

Legend: 1- ~230V/1/50 power supply;  
 2- main switch, fuses;  
 3- WING C AC;  
 4- wall-mounted WING/VR controller;  
 5-Door sensor adapter for WING AC;  
 6- Door sensor

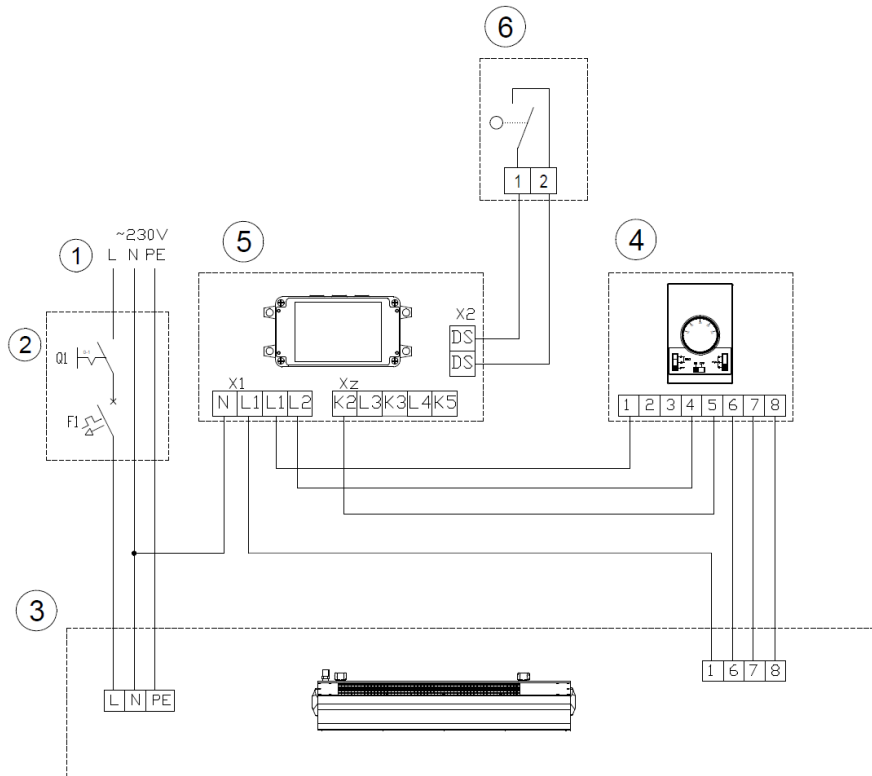


Figure 2 – C100 AC, C150 AC, C200 AC connections

4.3 For connecting with WING E100 AC; E150 AC; E200 AC models (~400V/3/50Hz), apply connections like shown on Figure 1.

Legend: 1- ~400V/3/50 power supply;  
 2- main switch, fuses;  
 3- WING E AC;  
 4- wall-mounted WING/VR controller;  
 5- Door sensor adapter for WING AC;  
 6- Door sensor

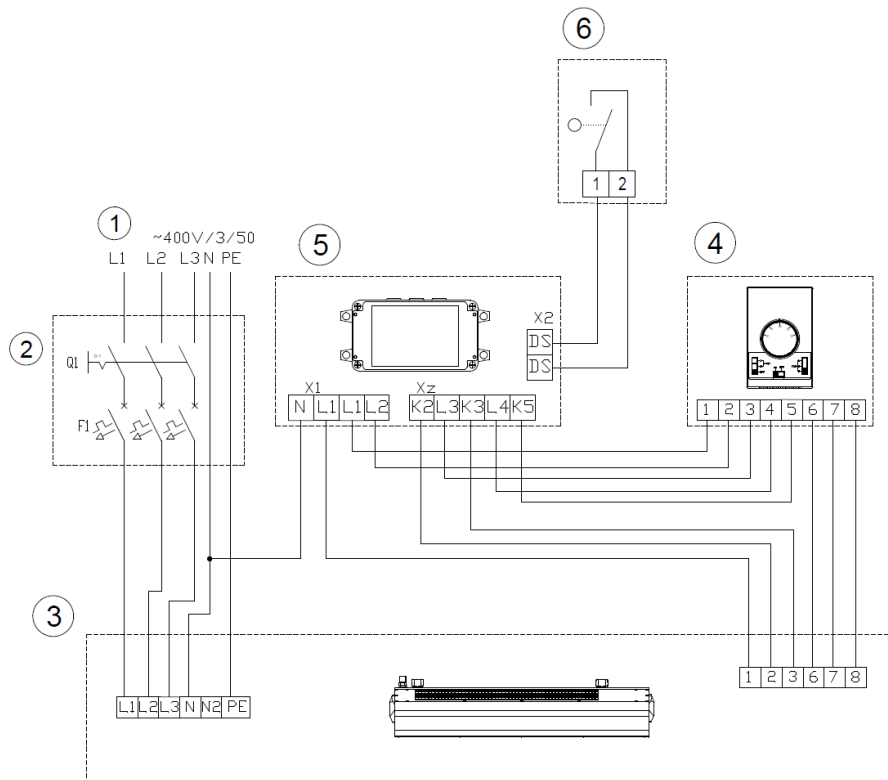


Figure 3 – E100 AC, E150 AC, E200 AC connections

**5. TECHNICAL PARAMETERS**

- Dimension: 140 x 70 x 43 mm
- Power supply: 230V AC 50 Hz
- Rated input power: 1W
- Storage temperature: -30....70°C
- Operation temperature: -30....70°C
- Protection level: IP55

**6. NORMS AND STANDARDS**

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