



## BASIC FEATURES

- Fully automatic AirGENIO control system enabling individual setting and adjusting air speed and heating output for specific conditions.
- BMS control via Modbus RTU, Modbus TCP, BACnet with communication configuration
- Five-level AC fan speed control or EC motor control
- Designed for single-phase fans
- Controls both LPHW and electric coils
- NTC 10K temperature sensor input (measured in °C and °F)
- 36 months guarantee

The AirGENIO **IC** control unit is designed primarily for controlling 2VV industrial air curtains. The control unit shall be installed in dry indoor areas with an ambient temperature of +5°C up to + 40 °C and relative humidity of up to 90%.

The electric IP rating of the control box is IP66 (for AC fans) or IP40 (for EC fans).

The control unit housing is made of painted metal sheet.

## PRIMARY PARAMETERS

| Type         | Regulator's power supply [V/Hz] | Fan maximum current [A] | Electrical protection of control box [IP] | Weight [kg] | Fans* |
|--------------|---------------------------------|-------------------------|-------------------------------------------|-------------|-------|
| IC3-C-AC5-04 | 230 / 50~60                     | 4                       | 66                                        | 13,5        | N/A   |
| IC3-C-AC5-07 | 230 / 50~60                     | 7                       | 66                                        | 15          | N/A   |
| IC3-C-AC5-16 | 230 / 50~60                     | 16                      | 66                                        | 23          | N/A   |
| IC3-S-AC5-04 | 230 / 50~60                     | 4                       | 66                                        | 13,5        | N/A   |
| IC3-S-AC5-07 | 230 / 50~60                     | 7                       | 66                                        | 15          | N/A   |
| IC3-S-AC5-16 | 230 / 50~60                     | 16                      | 66                                        | 23          | N/A   |
| IC3-C-EC     | 115-230 / 50~60                 | N/A                     | 40                                        | 3           | 10    |
| IC3-S-EC     | 115-230 / 50~60                 | N/A                     | 40                                        | 3           | 5     |

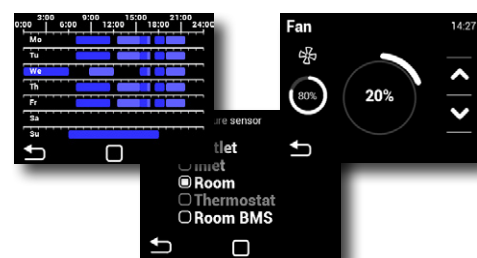
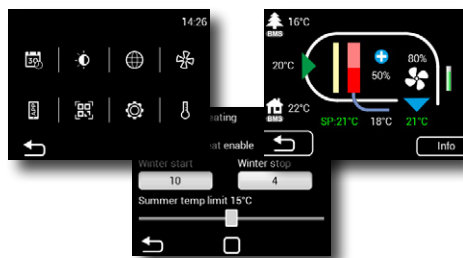
\* - Maximum number of connected EC fans to one control unit



## Description of AirGENIO IC control

### Remote controller can be used to:

- AUT/MAN Control
- Extended protection of electric heater by software and temperature sensors
- Alarm display
- Integrated automatic antifreeze protection of LPHW coil with adjustable limit temperatures
- Door switch and/or external switch can be optionally used for automatic control of air curtain
- Door switch advanced option
- Closed door after-running - adjustable time and temperature
- SMART DOOR FUNCTION - learns door settings
- Room thermostat and/or outside temperature sensor can be optionally used for fully automatic heating control
- Outside/Room/Required/Outlet temperature are measured and displayed on control panel
- Integrated Day/Week time schedule manager
- SUMMER/WINTER mode
- Error indication contact
- Graphical overview of air curtain operation



## Overview of the function

### Regimes

#### Heating boost

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

#### Smart door function

- self learning mode 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 mode.

#### 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-speed control

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

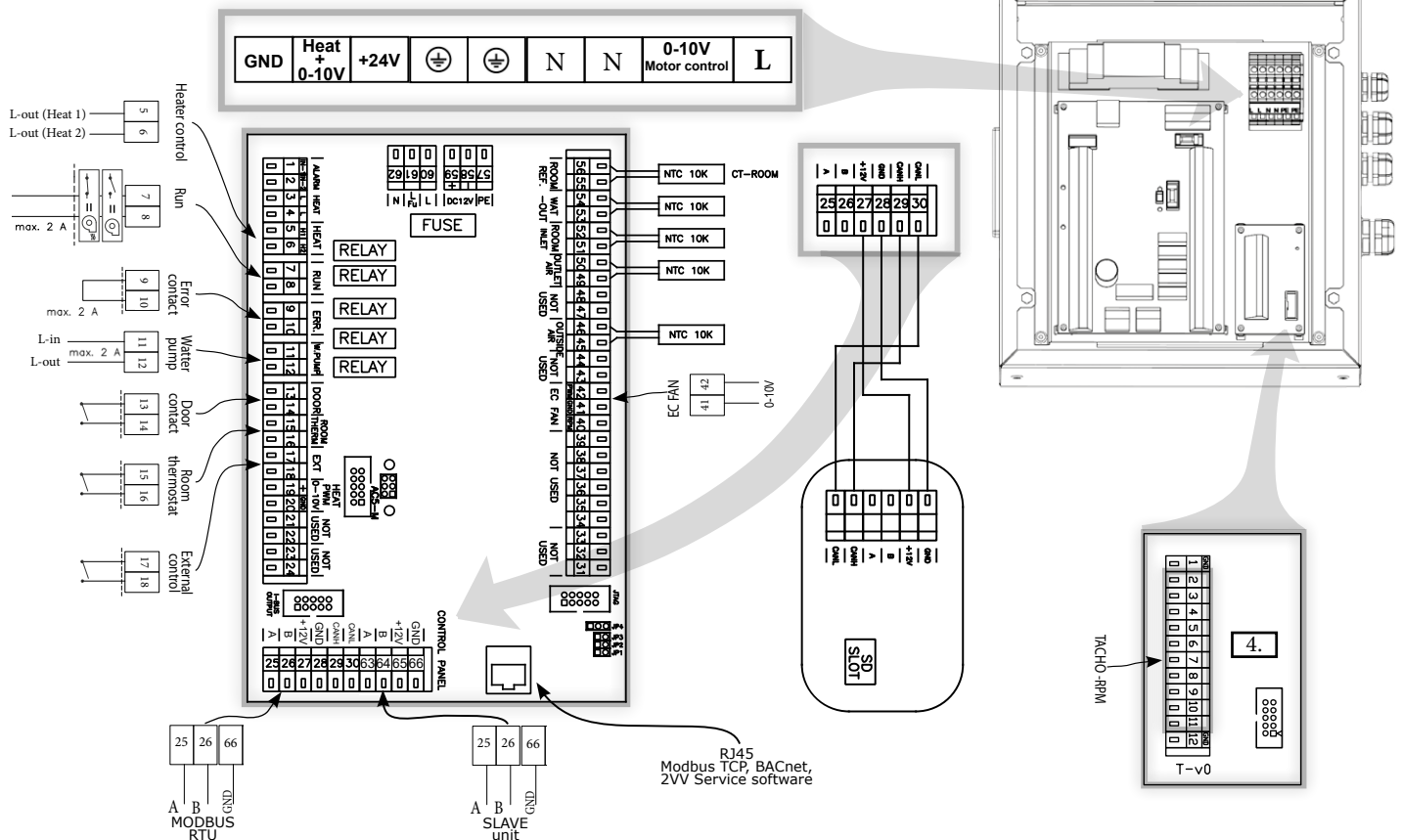


**IC3-C-AC**

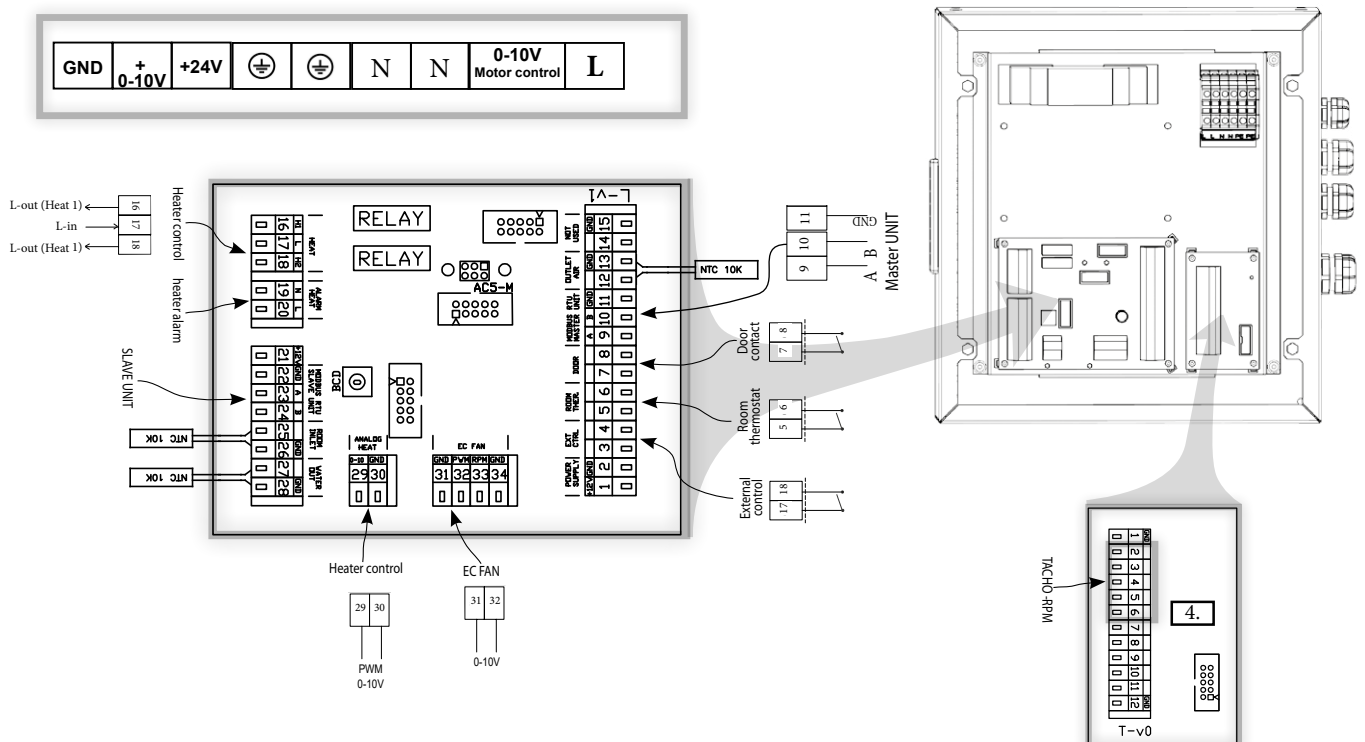


## WIRING DIAGRAMS

### IC3-C-EC

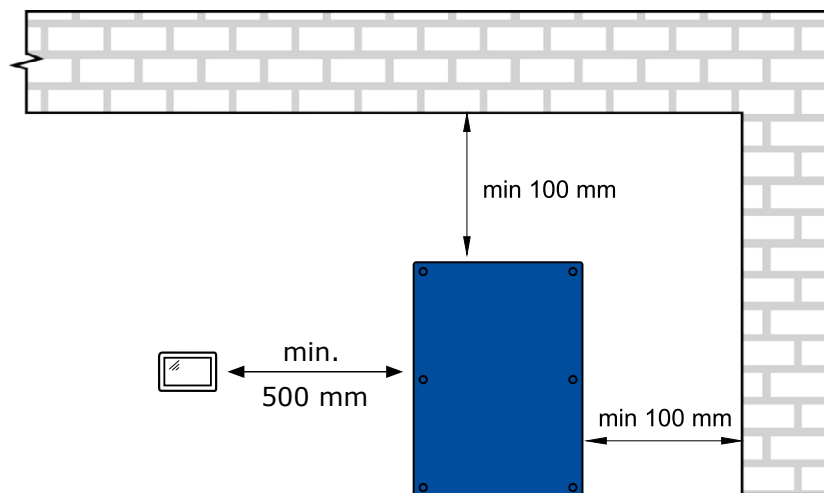


### IC3-S-EC



**INSTALLATION AND ASSEMBLY**

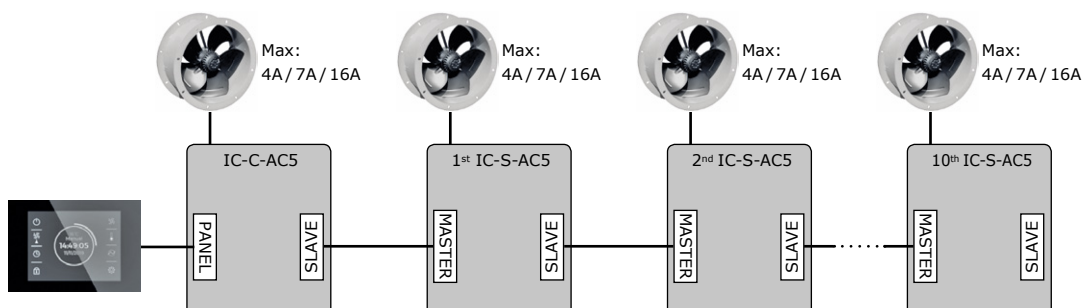
- The control unit is intended to be installed on a wall in the vertical position.
- The control unit must be installed in such a way that the air can flow around to prevent overheating.
- Comply with minimum recommended standoff distances. The control unit must be installed in such a way that ensures sufficient access for maintenance, service and disassembling.
- The control unit is attached using screws and dowels or bolts on a wall.
- There must not be any flammable materials within a distance of 100 mm from the regulator.



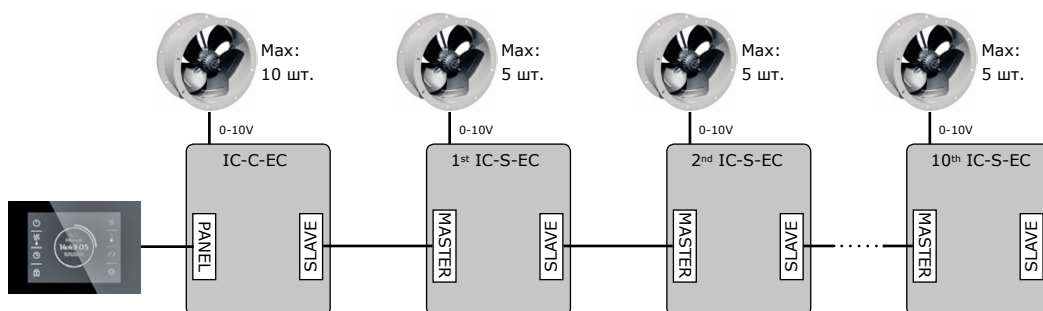


Chaining

## IC3-x-AC

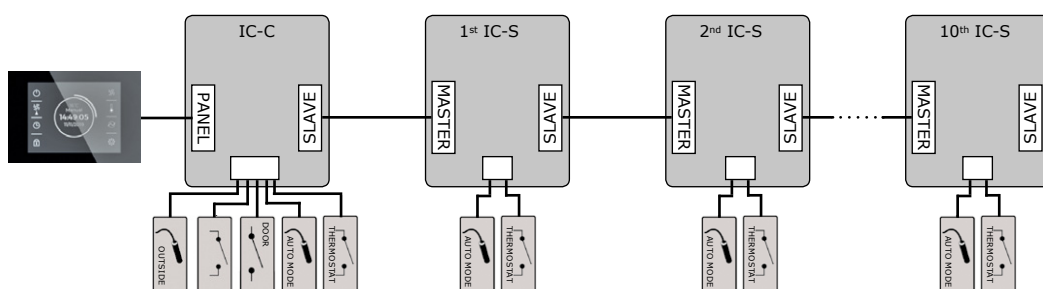


## IC3-x-EC

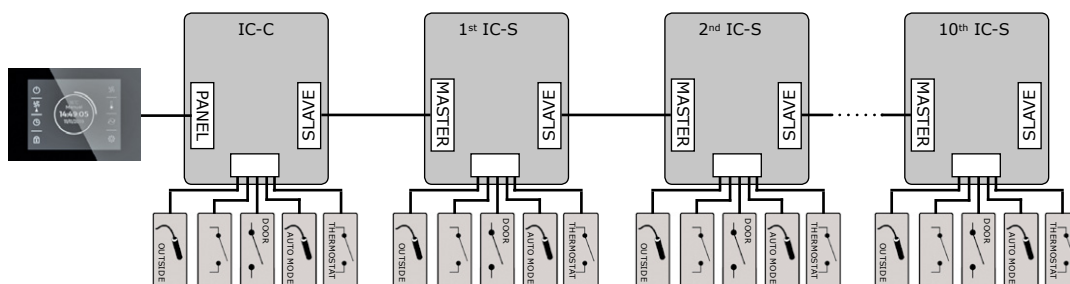


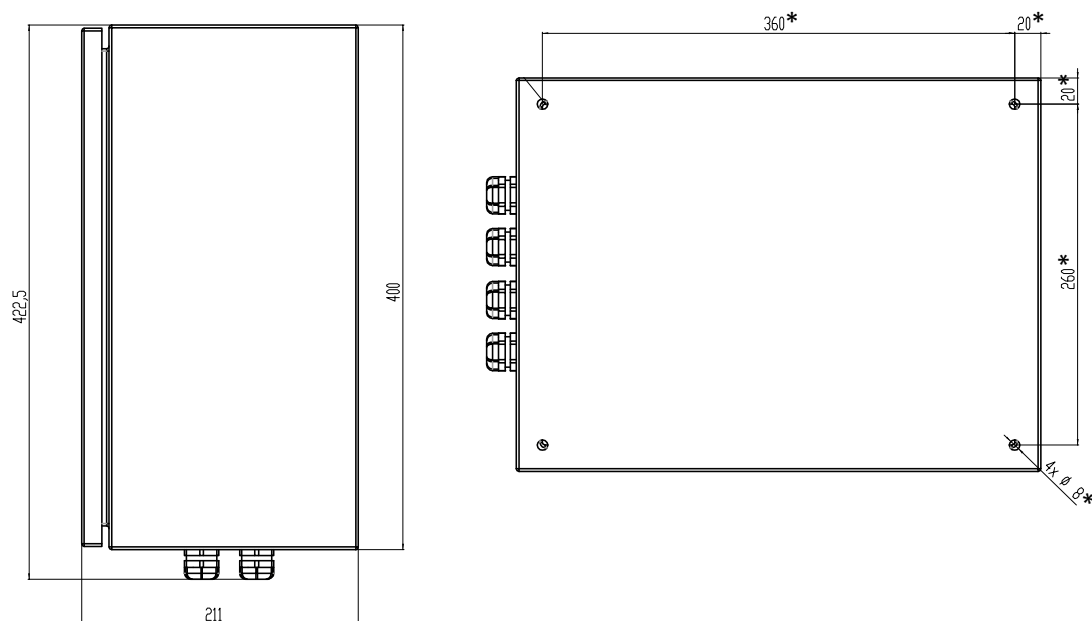
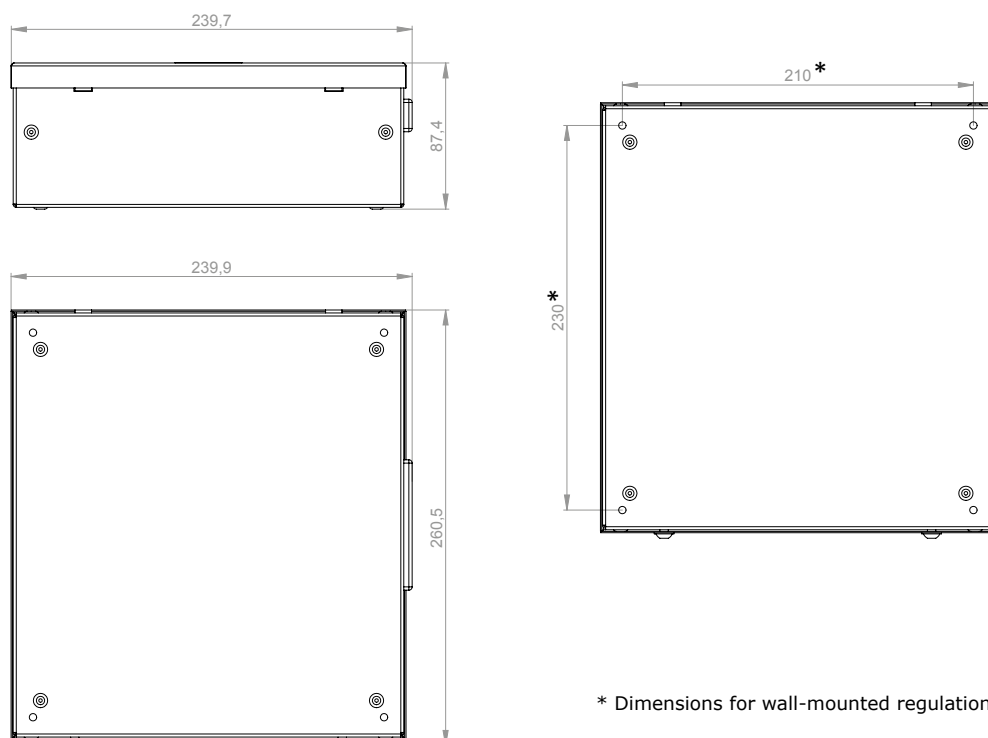
Chaining

## IC3 with Global settings



## IC3 without Global settings



**DIMENSIONS****IC3-C-AC / IC-S-AC****IC3-C-EC / IC-S-EC**

\* Dimensions for wall-mounted regulation



## ACCESSORIES

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

### 2-way or 3-way valve with servo drive

ZV2-230-xx,x-xx (230V, ON/OFF)

ZV3-230-xx,x-xx (230V, ON/OFF)

ZV2-24V-xx,x-xx (24V, 0-10V)

ZV3-24V-xx,x-xx (24V, 0-10V)



### Three-way valve with servo drive

**RTxx** – three-way valve necessary for controlling the water heater output.



### Mixing point

**SMU 2** – mixing unit is designed for controlling the heat-output of water-type heat exchangers.

It is used especially for controlling standalone water-type air heaters, heaters inbuilt into the ventilation units, heaters in air curtains, and so on.



### Contactor

**STYKAC-20-LC2** – three-phase contactor, 400V, max. resistance load 20 A, necessary for switching electric heaters.



### Door contact

**DK-B-3**



### Door switch

**DS**







## ACCESSORIES

**Wall-mounted temperature sensor**  
**CT-ROOM**

**Temperature sensor (3,2m; NTC)**  
**ND-CT-32**

**Room thermostat**  
**TER-P**



## KEY TO CODING

**IC3-C-AC5-16**

**04** – max load 4A

**07** – max load 7A

**16** – max load 16A

**AC5** - For AC fans with 5-speed

**EC** - For EC fans

**C** - Master

**S** - Slave

**IC3-C** - Control unit