

ECA-1-10-AC | CEILING FAN SPEED CONTROLLER

Mounting and operating instructions



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SAFETY AND PRECAUTIONS



Read all the information, the datasheet, mounting and operating instructions and study the wiring and connection diagram before working with the product. For personal and equipment safety, and for optimum product performance, make sure you entirely understand the contents before installing, using or maintaining this product.



For safety and licensing (CE) reasons, unauthorised conversion and /or modifications of the product are inadmissible.



The product should not be exposed to abnormal conditions, such as: extreme temperatures, direct sunlight or vibrations. Long-term exposure to chemical vapours in high concentration can affect the product performance. Make sure the work environment is as dry as possible; avoid condensation.



All installations shall comply with local health and safety regulations and local electrical standards and approved codes. This product can only be installed by an engineer or a technician who has expert knowledge of the product and the safety precautions.



Avoid contact with energised electrical parts. Always disconnect the power supply before connecting, servicing or repairing the product.



Always verify that you apply appropriate power supply to the product and use appropriate wire size and characteristics. Make sure that all the screws and nuts are well tightened and fuses (if any) are fitted well.



Recycling of equipment and packaging should be taken into consideration and these should be disposed of in accordance with local and national legislation / regulations.



In case there are any questions that are not answered, please contact your technical support or consult a professional.

PRODUCT DESCRIPTION

The ECA controllers are especially developed to control ceiling fans. They feature four positions that are switched in parallel to vary the voltage supplied to the motor. The controllers are suitable for inset mounting (IP44) and surface mounting (IP54).

ARTICLE CODES

Article code	Rated maximum current [A]	Fuse (5*20 mm) [A]
ECA-1-10-AC	1,0	F-1,25 A-H

INTENDED AREA OF USE

- Control of ceiling fans with voltage controllable motors
- For indoor use only

TECHNICAL DATA

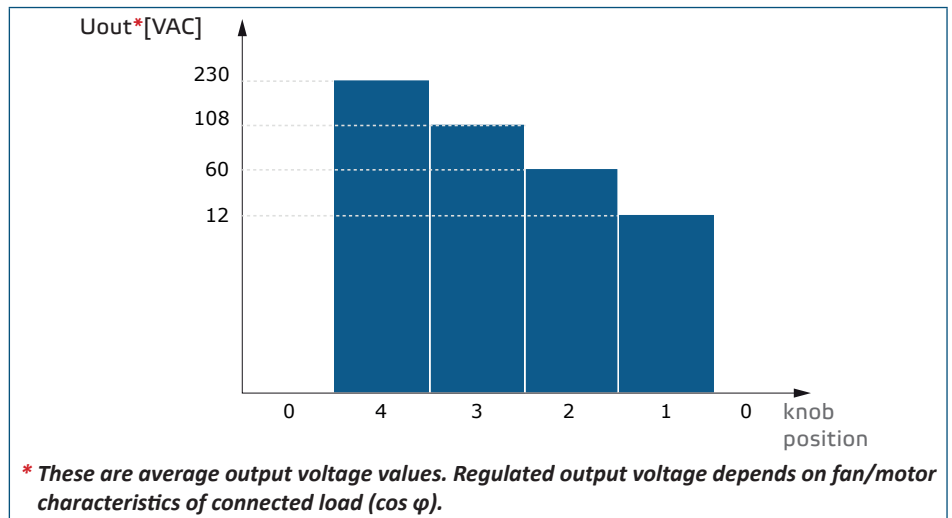
- Power supply: 230 VAC / 50–60 Hz
- Output: 12–230 VAC / max. 1,5 A
- Maximum load: 150 W
- Enclosure:
 - ▶ External: ASA, white-ivory (RAL9010), IP54 (according to EN 60529)
 - ▶ Internal: polyamide, white-ivory (RAL9010), IP44 (according to EN 60529)
- Operating ambient conditions:
 - ▶ temperature: 0–35 °C
 - ▶ rel. humidity: < 100 % rH (non-condensing)
- Storage temperature: -10–40 °C

STANDARDS

- Low Voltage Directive 2014/35/EU
- EMC Directive 2014/30/EU:
- RoHS Directive 2011/65/EU



OPERATIONAL DIAGRAMS



WIRING AND CONNECTIONS

M	Regulated output to motor, line
N	Regulated output to motor, neutral
N	Supply voltage, neutral
L	Supply voltage, line
Connections	Cable cross section: max. 2,5 mm ²

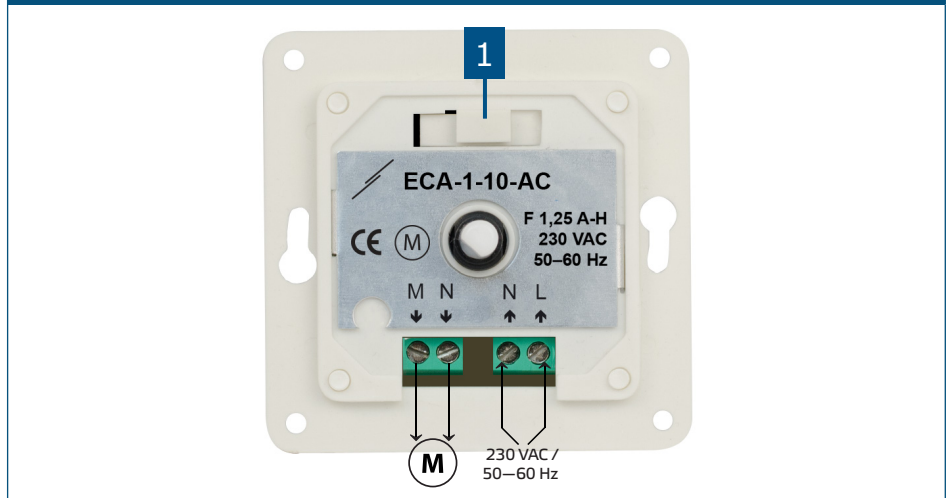
MOUNTING INSTRUCTIONS IN STEPS

Before you start mounting unit, read carefully "**Safety and Precautions**". Then proceed with the following mounting steps:

For inset mounting

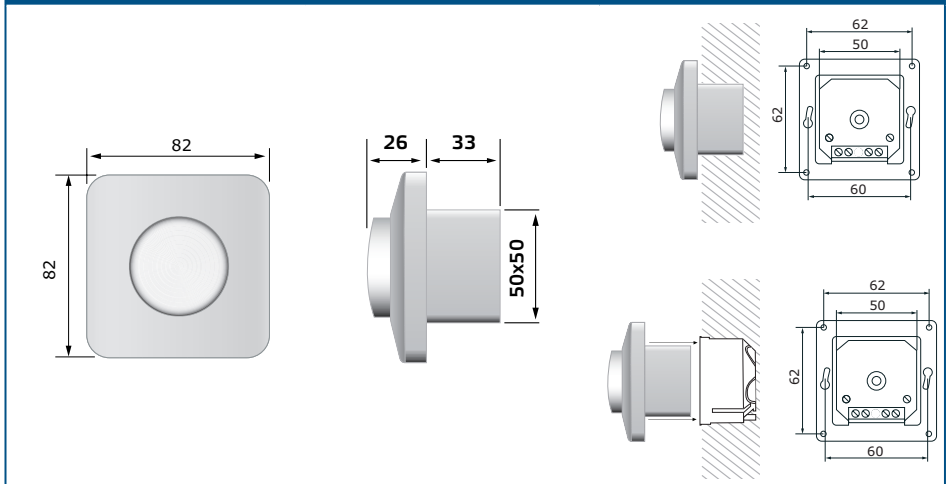
1. Remove the knob by turning it to the right until it pops out.
2. Unscrew the nut to remove the cover of the external enclosure.
3. Do the wiring according to the wiring diagram (see **Fig. 1 Wiring and connections**).

Fig. 1 Wiring and connections



4. Mount the internal enclosure into the wall according to the mounting dimensions shown in **Fig. 2**. *Mounting dimensions - inset mounting.*

Fig. 2 Mounting dimensions - inset mounting

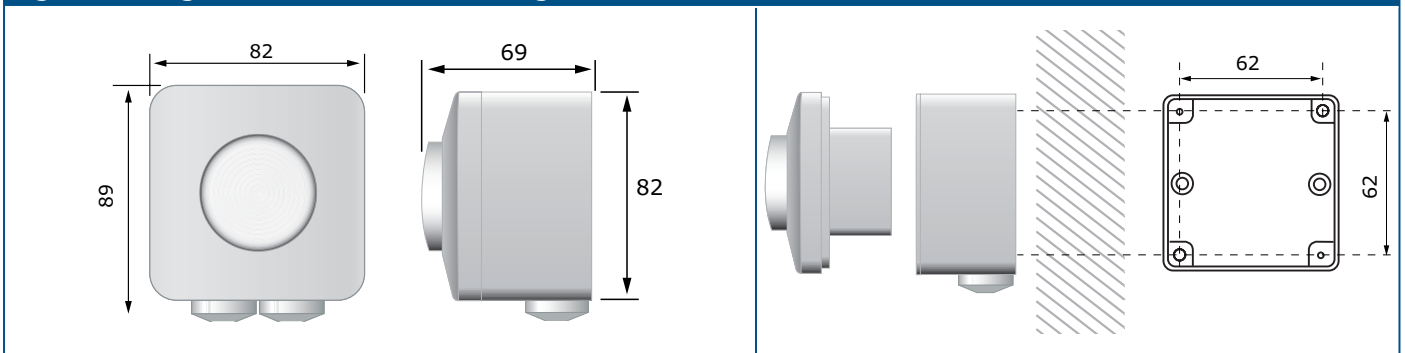


5. Mount back the cover and secure it with the nut.
6. Put back the knob and turn it to 0 position.
7. Turn on the power supply.

For surface mounting

1. Remove the knob by turning it to the right until it pops out.
2. Unscrew the nut to remove the cover of the external enclosure.
3. Mount the external enclosure onto the surface by means of screws and dowels adhering to the mounting dimensions shown in **Fig. 3** *Mounting dimensions - surface mounting.*

Fig. 3 Mounting dimensions - surface mounting



4. Insert the cables through the grommets.
5. Do the wiring according to the wiring diagram (see **Fig. 1 Wiring and connections**).
6. Insert the internal enclosure into the external one and fix it using the screws and washers included in the set.

NOTE

Mount the unit so that the terminal block and connections are at the lower side.

7. Mount back the cover and secure it with the nut.
8. Put back the knob and turn it to 0 position.
9. Turn on the power supply.

NOTE

A 5 mm hole can be drilled at the bottom of the external enclosure to drain the condensed water.

OPERATING INSTRUCTIONS

The controller is to be used only with voltage controllable fans / motors. You can connect several motors to the controller as long as the current limit is not exceeded. The motor used should be protected internally against overheating. The controller restarts after power failure.

In case of faulty operation

Please check if:

- the right voltage is applied;
- all connections are correct;
- the machine to be regulated is functioning;
- the fuse of the controller is OK.

In case that the fuse has blown up, remove the knob by turning it to the right, beyond the end stop and then pull. Open the cover and unscrew the nut. Remove the fuse holder with the help of a screwdriver. Replace the fuse. Mount all the parts back in place.

ATTENTION

Use only fuses with type and rating specified above; otherwise, loss of warranty will ensue.

TRANSPORT AND STORAGE

Avoid shocks and extreme conditions; stock in original packing.

WARRANTY AND RESTRICTIONS

The warranty against manufacturing flaws is valid for two years starting from the date of delivery. Any alterations or adjustments to the product absolve the manufacturer of all liability. The manufacturer disclaims all liability for typographical or other errors in this document.

MAINTENANCE

In normal conditions this product is maintenance-free. If soiled, clean with a dry or damp cloth. In case of heavy pollution, clean with a non-aggressive product. In these circumstances the unit should be disconnected from the supply. Pay attention that no fluids enter the unit. Only reconnect it to the supply when it is completely dry.