Speed controller EC motors

DESCRIPTION

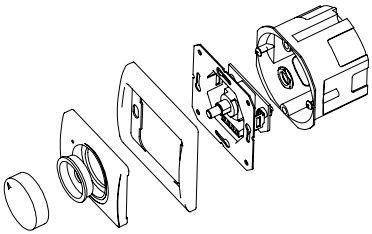
The speed controller is designed for smooth air flow control in the ventilation unit. The air flow control is carried out from zero to the maximum value by means of rotating the control knob.



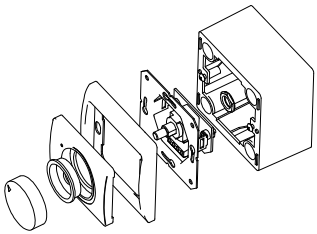
TECHNICAL DATA

Parameter	Value
Power supply voltage [V]	+48 or +10
Control voltage outlet [V]	0–10
Cable cross section [mm^2]	0.5
Temperature range [°C]	+1...+35
Max. humidity range [%]	80
IP on the front panel side	IP40
Weight [g]	120

CONTROLLER DESIGN

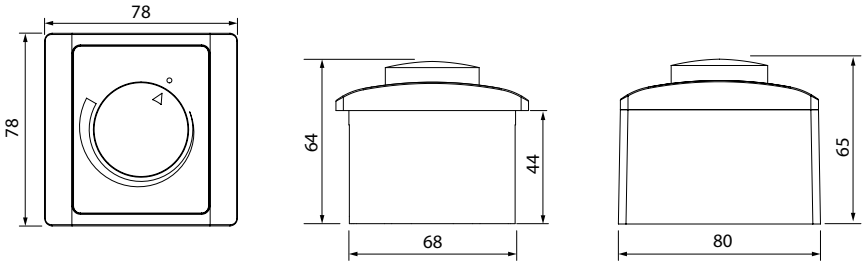


Modification for wall flush mounting



Modification for wall surface mounting

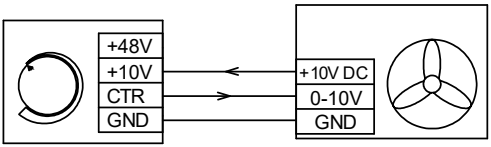
OVERALL AND CONNECTION DIMENSIONS



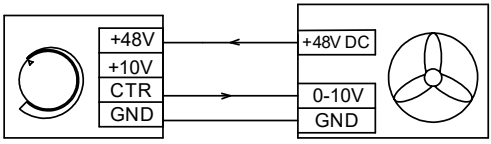
ELECTRIC CONNECTIONS

WARNING! Turn off power supply prior to any operations with the unit. Any installation, extension, redesign and technical maintenance operations must only be performed by qualified technicians possessing valid work permit for electrical works.

Controller wiring diagrams

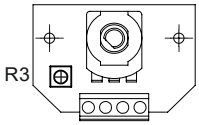


Connection to DC mains with 10 V power voltage



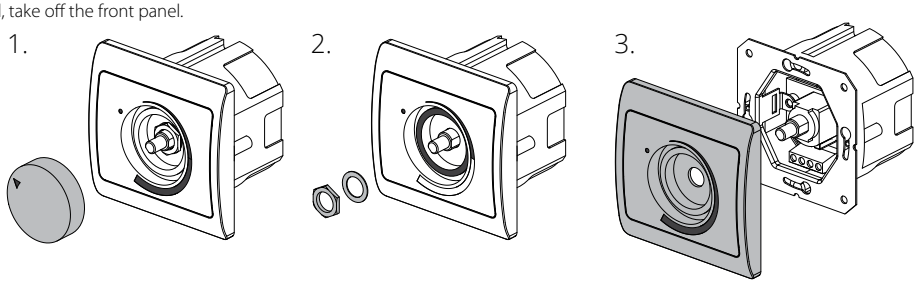
Connection to DC mains with 48 V power voltage

The minimum fan rotation speed is set with the R3 potentiometer located on the control board of the speed controller.

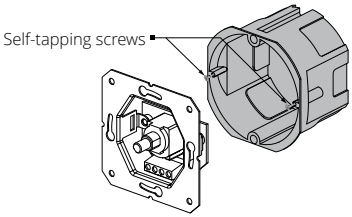


MOUNTING (based on the modification for the wall flush mounting)
WARNING! Make sure that the speed controller is not damaged. Do not use a damaged controller! Do not install the controller on an uneven surface! Do not apply undue force while tightening the screws to avoid the unit deformation.

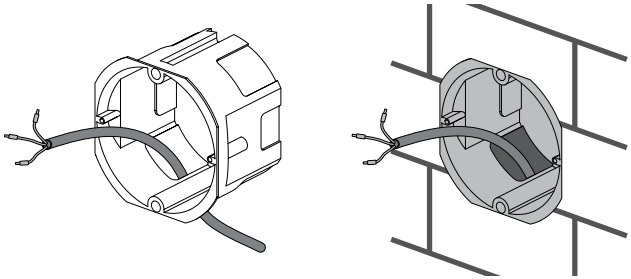
1. Take off the front panel of the speed controller as follows: remove the speed control knob, remove the nut that fixes the front panel, take off the front panel.



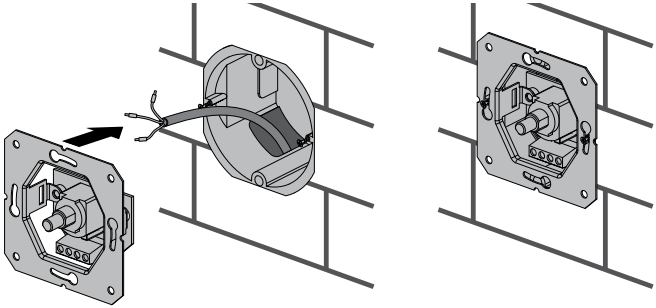
2. Release the two self-tapping screws to disconnect the mounting box from the speed controller. Disconnect the control cable from the speed controller. Remember the colour marking of the wire and terminals for re-connection after mounting of the speed controller.



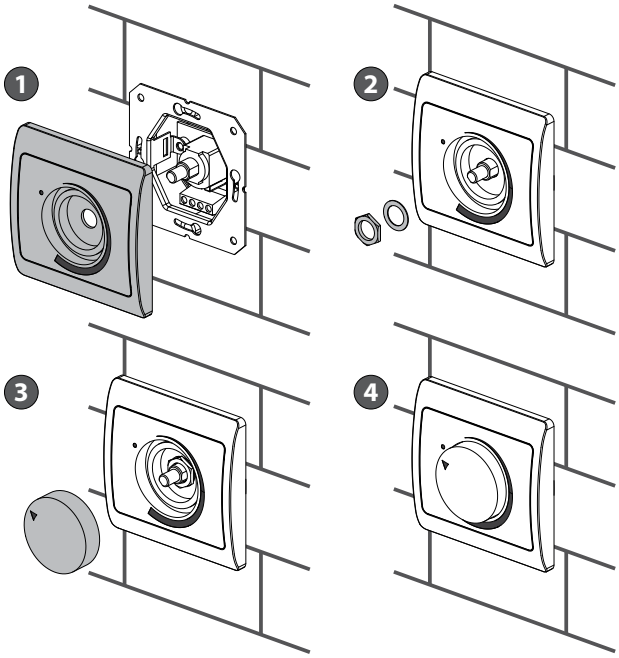
3. Install the mounting box in the wall. The supplied cable can be replaced with another cable with the cross section 3 x 0.5 mm^2 and the length up to 10 m.



4. Connect the cable to the speed controller in compliance with the wiring diagram. Insert the speed controller in the mounting box using the self-tapping screws.



5. Install the front panel of the speed controller as follows: install the front panel, fix the front panel using a washer and a nut, fix the control knob.



OPERATION GUIDELINES

RESTRICTIONS

- Do not operate the unit with mechanical damages of the casing and connecting wires.
- Protect the unit casing against water ingress and splashes.
- Do not install the unit in close proximity to the heating equipment.
- Do not operate the unit in aggressive or explosive environments.

STORAGE AND TRANSPORTATION REGULATIONS

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range from +5 ˚C to +40 ˚C and relative humidity up to 70 %.
- Storage environment must not contain aggressive vapors and chemical mixtures provoking corrosion, insulation, and sealing deformation.
- Use suitable hoist machinery for handling and storage operations to prevent possible damage to the unit.
- Follow the handling requirements applicable for the particular type of cargo.
- The unit can be carried in the original packaging by any mode of transport provided proper protection against precipitation and mechanical damage. The unit must be transported only in the working position.
- Avoid sharp blows, scratches, or rough handling during loading and unloading.
- Prior to the initial power-up after transportation at low temperatures, allow the unit to warm up at operating temperature for at least 3-4 hours.

DELIVERY SET

Name	Quantity
Speed controller	1 pc.
User's manual	1 pc.
Fastening kit	1 pc.
Packing box	1 pc.

MANUFACTURER'S WARRANTY

Unit Type	Speed controller
Article number	1818
Serial Number	
Manufacture Date	
Purchase Date	
Warranty Period	
Seller	Air-Transfer