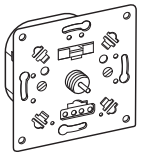
en

merten™

Speed controller insert

User Guide



MEG5143-0000

For your safety

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Safe electrical installation must be carried out only by skilled professionals. Skilled professionals must prove profound knowledge in the following areas:

- Connecting to installation networks
- Connecting several electrical devices
- Laying electric cables
- Safety standards, local wiring rules and regulations

Failure to follow these instructions will result in death or serious injury.

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK

The outputs may carry an electrical current even when the device is switched off.

- Before working on the loads, always disconnect the device from the supply via the upstream miniature circuit breaker.

Failure to follow these instructions will result in death or serious injury.

Notice

HAZARD OF EQUIPMENT DAMAGE

- Always operate the device with the specified minimum load.
- Protect the circuit with a 10 A miniature circuit breaker if further loads are to be switched via the switch output or looped on the X terminal of the device.
- Ensure that the device is disconnected from its circuit during the insulation resistance test.

Failure to follow these instructions can damage the device.

Speed controller insert introduction

With the speed controller insert (hereafter referred to as "speed controller"), you can switch single-phase electric motors on and off and infinitely control their speed using a rotary knob.

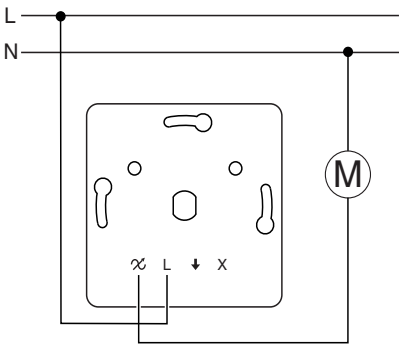
Installing the speed controller

The maximum allowed load is reduced due to the decreased heat dissipation when you do not install the device into a single standard flushmounted mounting box:

Load reduction by	Mounted in cavity walls *	Several installed together in combination *	In 1-gang or 2-gang surface- mounted housing	in 3-gang surface-mounted housing
25 %	x	x		
30 %			x	
50 %				x

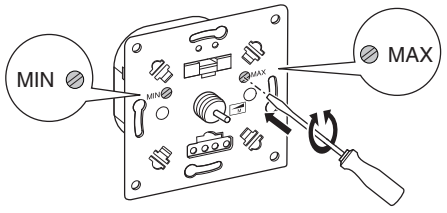
* If several factors apply, add the load reductions together.

Wire the speed controller for the application required.



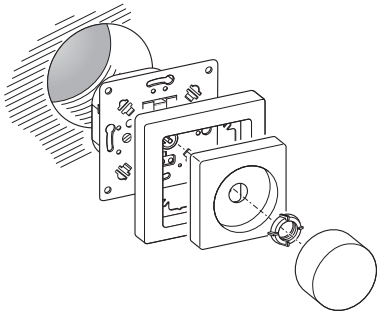
Setting the minimum and maximum speed.

Set the minimum brightness before installing the covers.

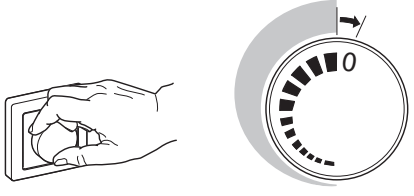


① Switch the speed controller on by turning the rotary knob clockwise (see Operation).
② Set the maximum speed with the right-hand set-screw.
③ Turn the rotary knob further in a clockwise direction until the minimum position is reached (see Operation).
④ Set the minimum speed using the set-screw (MIN).

Installing the speed controller and covers.



Operating the speed controller



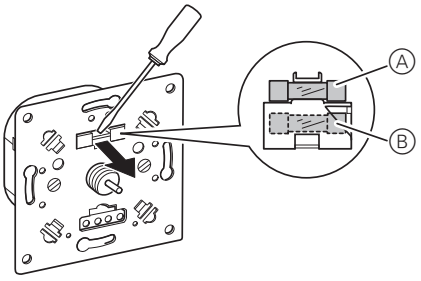
- By turning the rotary knob clockwise slightly you can switch the connected motor on.
- The motor is now running at maximum speed.
- By turning the rotary knob further in a clockwise direction you can reduce the speed.
- To switch the motor off, turn the rotary knob in an anticlockwise direction as far as it will go.

What should I do if there is a problem?

The connected motor doesn't switch on.

- Check the fuse, replace if necessary.
- If there is an overload due to the fact that the operating temperature is too high, it will not be possible to switch the speed controller back on and it must be replaced.

How to change the fuse



① Remove the covers.
② Prise the fuse holder out using a screwdriver.
③ Remove blown fuse Ⓐ and replace with replacement fuse Ⓑ.

Technical data

Mains voltage:	AC 230 V, 50 Hz
Nominal load:	20 - 400 W
Minimum load:	20 W
Load type:	Single-phase motors
Load on the switch output:	max. 2 A, cos φ=0.6
Short-circuit protection:	Fuse, F4.0AH
Connecting terminals:	Screw terminals for max. 2x2.5 mm²
Surge protection:	Electronic
Operating temperature:	+5 °C to +35 °C

Dispose of the device separately from household waste at an official collection point. Professional recycling protects people and the environment against potential negative effects.

Merten GmbH

Fritz-Kotz-Str. 8
51674 Wiehl - Germany
se.com/contact

Schneider Electric

V5143-581-01-UG-en 09/24