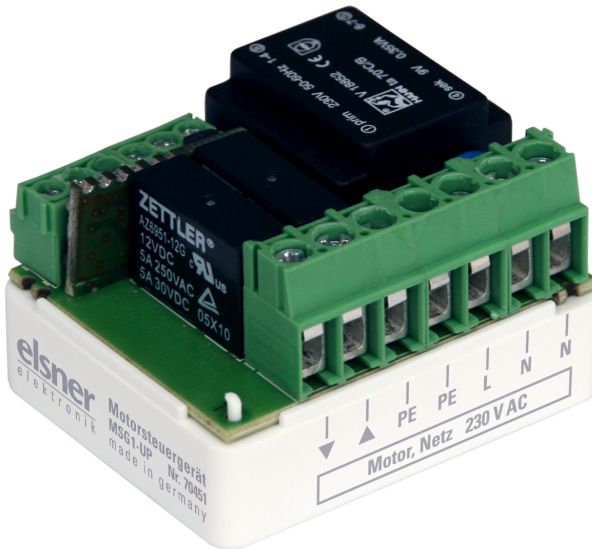




MSG1-UP

Motor control unit

Technical specifications and installation instructions



Elsner Elektronik GmbH Control and Automation Technology

Sohlegrund 16

D - 75395 Ostelsheim
Germany

Phone+49 (0) 70 33 / 30 945-0 info@elsner-elektronik.de
Fax +49 (0) 70 33 / 30 945-20 www.elsner-elektronik.de

1. Description

The **Motor Control Unit MSG1-UP** controls 230 V drives, e.g. shading or window motors. The relay at the motor output is a low-wear zero-crossing switch.

The device is equipped with inputs for central control and for a manual switch. The central input can be set to dead man's switch or lock and is suitable e. g. for timers, push buttons or control systems. An unlocked twin push button is connected to the switch input for manual operation. This input is equipped with time-automated buttons (step operation/lock).

Functions:

- For a 230 V drive (Up/Down)
- Input for central control
- Input for manual operation
- Setting the central control unit to "Dead man" or "Lock". As long as voltage is present at the central input, the manual operation is blocked
- Direction change pause 1 second

1.1. Technical specification

Assembly	Installation
Protection category	IP 00
Dimensions	approx. 38 x 47 x 28 (W x H x D, mm)
Weight	approx. 60 g
Ambient temperature	Operation -20...+70 °C, storage -55...+90°C. Avoid condensation
Operating voltage	230 V AC
Output	1× 230V drive (Up/Down/PE/N), fused with 4 A T
Inputs	1× Central command (Up/Down/+/-) 1× Manual command via present button (Up/Down/+/-) Voltage for inputs 8...28 V Maximum line length 100 m

The product conforms with the provisions of EU directives.

2. Installation and start-up

2.1. Installation notes



Installation, testing, operational start-up and troubleshooting should only be performed by an electrician.

**DANGER!****Risk to life from live voltage (mains voltage)!**

There are unprotected live components within the device.

- VDE regulations and national regulations are to be followed.
- Ensure that all lines to be assembled are free of voltage and take precautions against accidental switching on.
- Do not use the device if it is damaged.
- Take the device or system out of service and secure it against unintentional use, if it can be assumed, that risk-free operation is no longer guaranteed.

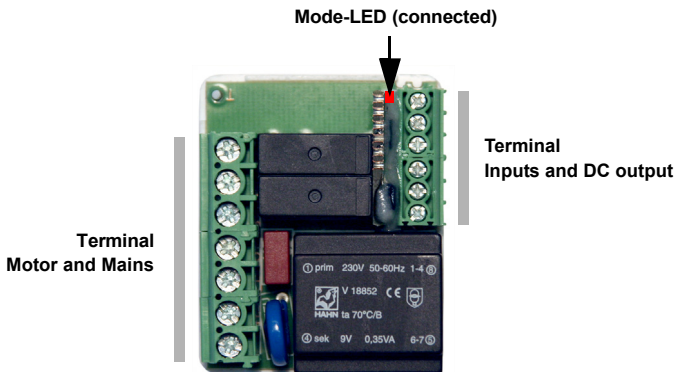
The device is only to be used for its intended purpose. Any improper modification or failure to follow the operating instructions voids any and all warranty and guarantee claims.

After unpacking the device, check it immediately for possible mechanical damage. If it has been damaged in transport, inform the supplier immediately.

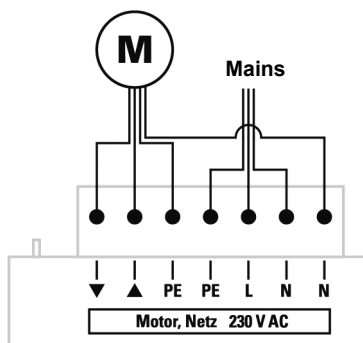
The device may only be used as a fixed-site installation; that means only when assembled and after conclusion of all installation and operational start-up tasks and only in the surroundings designated for it.

Elsner Elektronik is not liable for any changes in norms and standards which may occur after publication of these operating instructions.

2.2. Design of the **MSG1-UP / Connection**

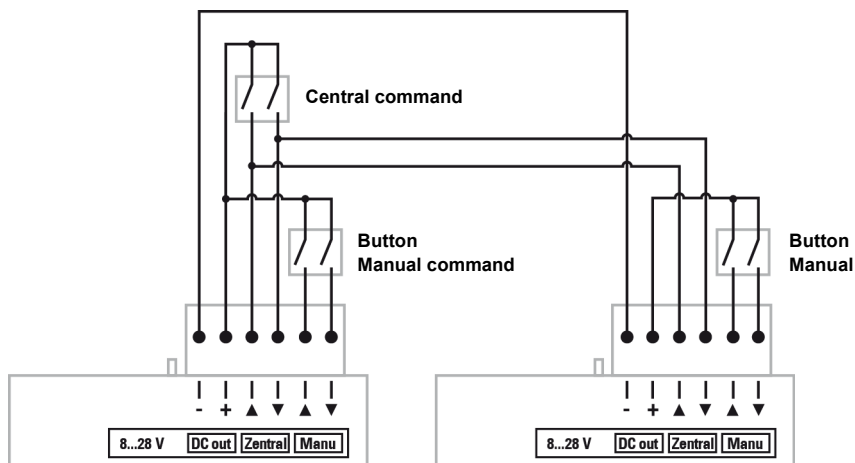


Connection of drive and operating voltage:

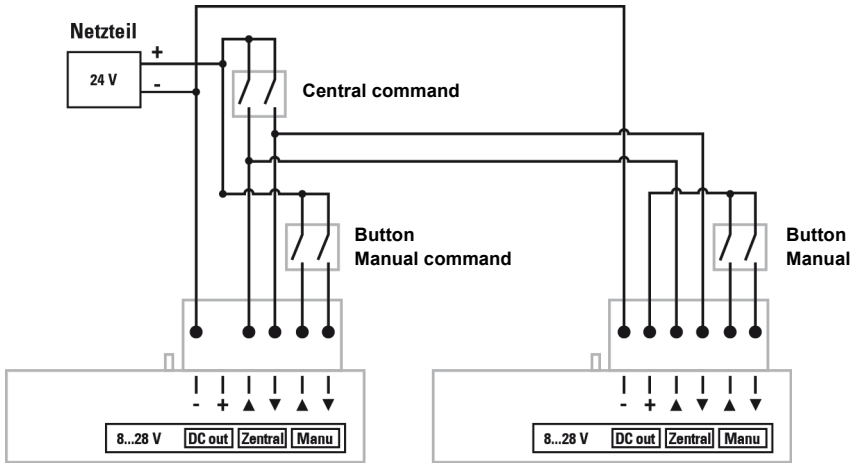


Connection of the control inputs:

Example with two motor control units that receive the same central command. In this case, the connections "-" must be bridged for potential equalisation. In this way, a **MSG1-UP** can supply up to 100 further motor control units with voltage for central piloting.



Alternatively, the voltage for the central and manual input can be supplied by an external 24 V DC power supply unit.



2.3. Notes on mounting and commissioning

Device must not be exposed to water (rain). This could result in the electronic being damaged. A relative air humidity of 95% must not be exceeded. Avoid bedewing.

3. Operation

3.1. Central operation

The central input of the **MSG1-UP** allows e. g. an automatic control unit, a timer or even a normal unlocked twin push button (Up/Down) to be connected. The central command (continuous voltage) always has priority over a movement command from the manual input.

If there are "Up" and "Down" movement commands at the central input at the same time, the drive moves up (secure position).

The central control unit can be set to the operating modes "Lock" (default) or "Dead man". By simultaneously pressing the *Up* and *Down* buttons at the manual input, you can switch between the operation modes:

1. Press the buttons *Manual-Up* and *Down* simultaneously for 5 seconds, in order to set the device to readiness for change.

OR

Switch the mains voltage briefly off and on again.

After the mains voltage is connected, the device is also in a state of readiness for change.

2. The device is now ready for change and it indicates the currently active mode via the mode-LED.

LED flashes: Dead man mode

LED on: Lock mode.

3. To change the mode, please press *Up* and *Down* again for 5 seconds.
4. The device leaves the state of readiness for change after 60 seconds of inactivity or if you press *Up* and *Down* again for a short time.

3.2. Individual operation

The manual individual operation of the drive can be performed via an unlocked twin push button at the manual input. This input is equipped with time-automated buttons. By a short button stroke, the drive can be exactly positioned (e.g. slats of blinds). At a longer button stroke (longer than 1 second), the drive travels in lock mode to the end position. A short stroke on the opposite direction button stops the travel.