



# MSG1-UP 24V PS

**Motor control unit with integrated power supply for a 24 V DC motor**

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## **Technical specifications and installation instructions**

Item number 70452



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# 1. Description

With the **Motor control unit MSG1-UP 24 V PS** the 24 V DC motor for a shutter, an awning, a blind or window is controlled. The electronic output with polarity change switches silently. An internal power supply transforms the 230 V AC mains voltage into 24 V DC to power the motor.

The device has an input to the central controller, e.g. for time switches, switches or control systems and a manual input for a push-button. Both inputs are fitted with a time automatic for step operation and lock mode.

## Functions:

- For a 24 V DC drive
- Input for central control
- Input for manual operation
- The inputs are not locked, i.e. they have the same priority
- Direction change pause 1 second
- Integrated **power supply** transforms the 230 V AC mains voltage into 24 V DC to power the motor

## 1.1. Technical specifications

Housing	Plastic
Colour	White
Assembly	Flush mounting (in junction box $\varnothing$ 60 mm, 60 mm deep)
Protection category	IP 20
Dimensions	approx. 50 x 50 x 52 (W x H x D, mm)
Weight	approx. 80 g
Ambient temperature	Operation -20...+50°C, storage -30...+85°C
Ambient humidity	5...80% RH, non-condensing
Operating voltage	230 V AC, 50 Hz
Power consumption	Standby: approx. 0.7 W (2.2 VA)
Output	1 x output 24 V DC with polarity changer for drive Up/Down (+/-motor). Load capacity: at 500 mA up to 60 seconds motor travelling time at 400 mA up to 150 seconds motor travelling time at 300 mA up to 320 seconds motor travelling time
Inputs	1x Central command Up/Down. 1x Manual command via present button Up/Down. Both inputs are binary inputs for potential-free NO contacts. Maximum line length 10 m

The product is compliant with the provisions of EU guidelines.

## 2. Installation and commissioning

### 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. Installation

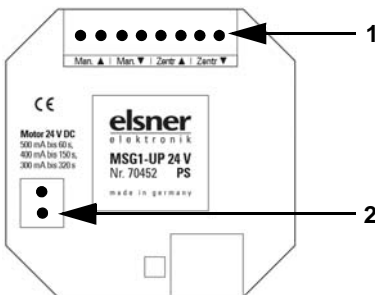
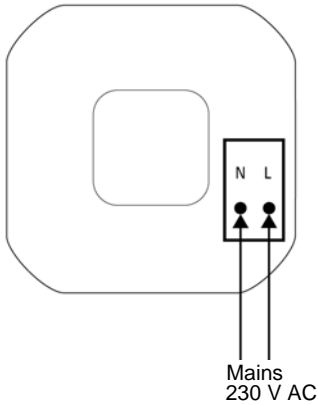


Fig. 1

- 1 Manual and central input terminals (Up/Down)
- 2 Motor terminal +/-



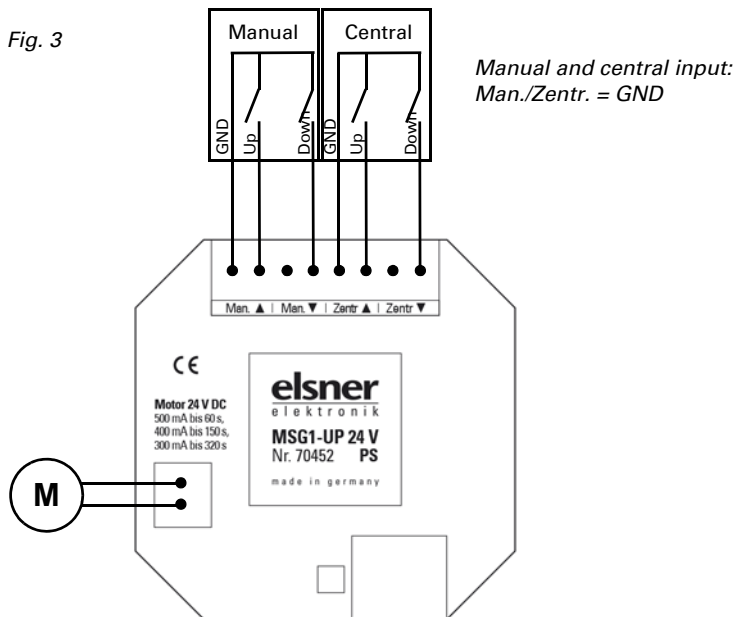
*Fig. 2*  
*Connection for the operating voltage*

## 2.3. Connection

The **Motor control unit MSG1-UP 24 V PS** is installed in a flush-mounted socket. The connection for the drive is made at the "Motor" terminal. Manual and central commands are fed in at the inputs manual up/down and central up/down.

In addition, 230 V AC are connected that are transformed into 24 V DC by the internal power supply to power the drive.

### 2.3.1. Connection scheme inputs and motor outputs



## 2.4. Instructions for assembly and initial start-up

Never expose the actuator to water (e.g. rain) or dust. This can damage the electronics. You must not exceed a relative air humidity of 80%. Avoid condensation.

## 3. Operation

The central input of the **MSG1-UP 24 V PS** allows e. g. an automatic control unit, a timer or even a normal unlocked twin push button (Up/Down) to be connected.

The manual individual operation of the drive can be performed via an unlocked twin push button at the manual input.

Central and manual command are equivalent; the inputs are not locked. Both inputs are equipped with an automatic timer: Using a short move command, the drive can be exactly positioned. Thus, for example, the slats on shutters can be set by short pressure on the button. With a longer move command (longer than 1 second), the drive travels in lock mode to the end position. A short move command in the opposite direction stops the movement.