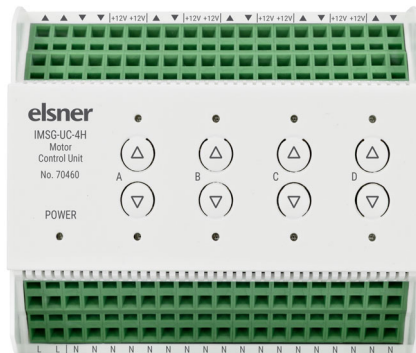




# IMSG-UC-2H/4H

## Motor control unit

Item numbers 70459 (IMSG-UC-2H), 70460 (IMSG-UC-4H)





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This manual is amended periodically and will be brought into line with new software releases. The change status (software version and date) can be found in the contents footer. If you have a device with a later software version, please check **www.elsner-elektronik.de** in the menu area "Service" to find out whether a more up-to-date version of the manual is available.

## Clarification of signs used in this manual



Safety advice.



Safety advice for working on electrical connections, components, etc.

### **DANGER!**

... indicates an immediately hazardous situation which will lead to death or severe injuries if it is not avoided.

### **WARNING!**

... indicates a potentially hazardous situation which may lead to death or severe injuries if it is not avoided.

### **CAUTION!**

... indicates a potentially hazardous situation which may lead to trivial or minor injuries if it is not avoided.



**ATTENTION!** ... indicates a situation which may lead to damage to property if it is not avoided.

# 1. Safety and usage instructions

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

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## **DANGER!**

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

- Inspect the device for damage before installation. Only put undamaged devices into operation.
  - Comply with the locally applicable directives, regulations and provisions for electrical installation.
  - Immediately take the device or system out of service and secure it against unintentional switch-on if risk-free operation is no longer guaranteed.
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Use the device exclusively for building automation and observe the operating instructions. Improper use, modifications to the device or failure to observe the operating instructions will invalidate any warranty or guarantee claims.

Operate the device only as a fixed-site installation, i.e. only in assembled condition 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.

## 1.1. Safety notice for automatic functions

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## **WARNING!**

### **Risk of injury from automatically moving components!**

Parts of the system can be started by the automatic controls and be a danger to persons.

- No persons may remain in the travelling range of parts driven by an electric motor.
  - Adhere to the relevant building regulations.
  - Ensure that the return path/access to the building is not blocked if spending time outside the building (danger of being locked out).
  - Correctly decommission the system for maintenance and cleaning work.
- 

If there is a power outage, the system does not work. Therefore, shadings should be moved to a save position if there are anticipated weather conditions, for example, if this has not already been done by the automatic function (product protection).

If the power supply is removed, the connected drive switches off. When the power is restored, the consumer remains switched off until a new movement command is received by the actuator.

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**For information on installation, maintenance, disposal, scope of delivery and technical data, please refer to the installation instructions.**

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## 2. Description

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The Motor control unit allows two or four 230 V drives to be controlled. The unit offers the possibility of operating the connected motors via integrated buttons or manually via up/down hand switches.

### **Functions:**

- With **key pad** (manual operation) and status LEDs
- **Central and extension inputs** with variable voltage (12...80 V DC, 12...240 V AC)
- Setting the central control unit to "Deadman" or "Latch"
- The central command (continuous voltage) has priority over a movement command from the extension inputs
- **Storing one movement position** per drive
- Pause to reverse direction 1 second, motor runtime 240 seconds
- **Cascading** with several devices possible.
- Connect through clamps
- Potential-free relays

### **Functions IMSG-UC-2H:**

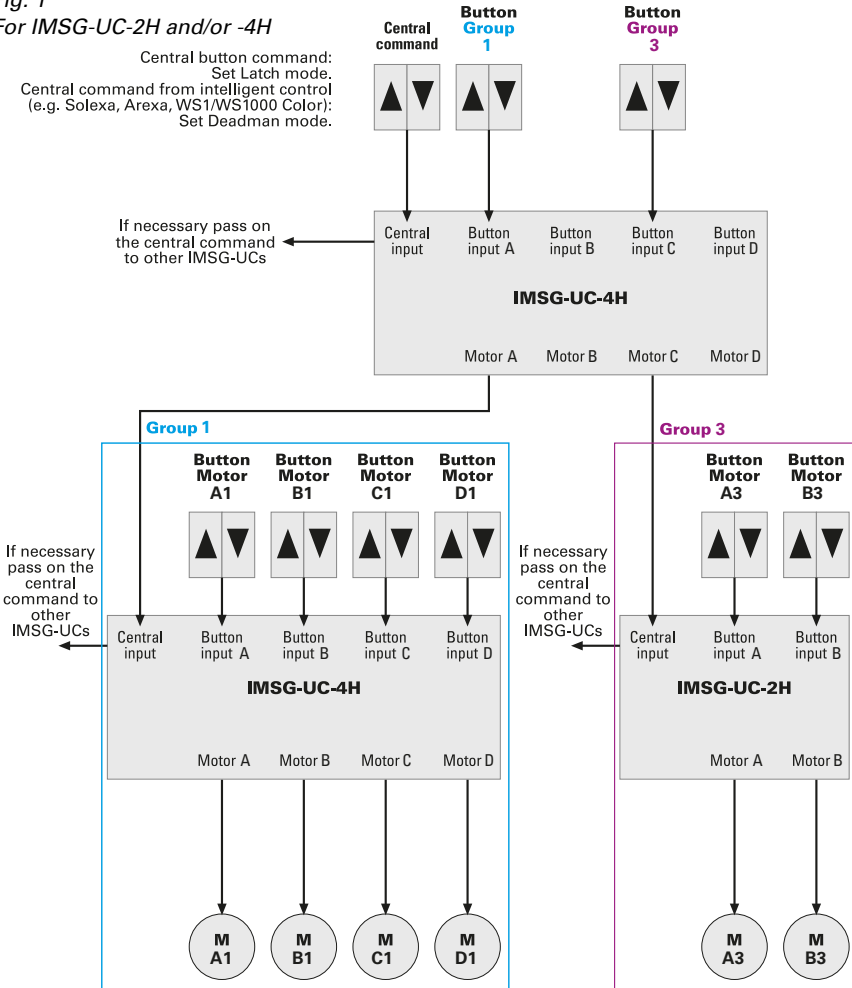
- For **two 230V drives** (Up/Down)
- **2 hand switch connections (extension inputs)** for unlocked double button (manual operation on the spot, can be set to Standard or Comfort mode)

### **Functions IMSG-UC-4H:**

- For **four 230V drives** (Up/Down)
- **4 hand switch connections (extension inputs)** for unlocked double button (manual operation on the spot, can be set to Standard or Comfort mode)

## 2.1. Connection example: Cascading

Fig. 1  
For IMSG-UC-2H and/or -4H



Instead of the drives, additional IMSG-UCs can be connected here for sub-groups.

### 3. Operation

#### 3.1. Central operation

The central input of the Motor control unit allows, for example, an automatic control unit, a timeswitch or a normal, unlocked double button (Up/Down) to be connected. The central command (continuous voltage) always has priority over a movement command from the extension inputs.

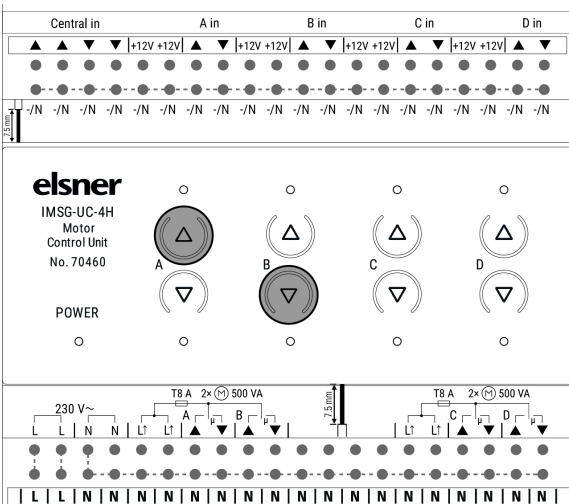
**LED signals during central control (continuous voltage):**

During movement:	Channel LEDs in the direction of movement flash every 2 seconds
Runtime reached:	Channel LEDs in the direction of movement continue to flash every 2 seconds

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

**Set operating mode**

The central control unit can be set to the operating modes "Latch" (default) or "Deadman". You can switch between the operating modes using the following buttons integrated on the device:



*Fig. 2  
Press the ▲ button of channel 1 and the ▼ button of channel 2 for 5 seconds at the same time (IMSG-UC-2H accordingly)*

If the **Latch mode** is active, the **Network LED is on**.

If the **Deadman mode** is active, the **Network LED flashes** every second.

Change the operating mode by pressing ▲ (channel 1) and ▼ (channel 2) again.

## 3.2. Individual operation

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Manual individual operation of the drives can take place via the integrated Up/Down buttons at the device or via unlocked double buttons (extension inputs). The movement mode can be stopped via both buttons ( $\triangle$  or  $\nabla$ ), regardless of the current direction of movement.

### LED signals during manual control:

During movement:	Channel LED in the direction of movement flashes every second
Runtime reached without interruption:	LED for the direction travelled remains on
Intermediate position reached:	LEDs off

Manual operation can be set to "Standard mode" or "Comfort mode":

### 3.2.1. Standard mode (default)

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- If a button is pressed for less than 1 second, the drive will move in a step-by-step fashion. This allows, for example, slats to be positioned precisely.
- If a button is held for longer than 1 second, the drive moves to its final position (switching off after 240 seconds of maximum runtime)

This is how you set the Standard mode:

- Press the  $\triangle$  button on the channel to be set for 5 seconds and then additionally the  $\nabla$  button for longer than 1 second
- To confirm the On LED on the channel flashes 5 times

### 3.2.2. Comfort mode

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- If a button is held for less than 0.3 seconds, the drive moves to its final position (switching off after 240 seconds of maximum runtime)
- If a button is held for longer than 0.3 seconds, but less than 2 seconds, the drive moves only while the button is pressed and stops immediately when it is released (deadman function)
- If a button is held for longer than 2 seconds, the drive moves to its final position (switching off after 240 seconds of maximum runtime)

This is how you set the Comfort mode:

- Press the  $\nabla$  button on the channel to be set for 5 seconds and then additionally the  $\triangle$  button for longer than 1 second
- To confirm the Off LED on the channel flashes 5 times

## 3.3. Individual movement position

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The Motor control unit can store one movement position for each connected drive. This allows fast and uncomplicated movement to a position that is needed often (e.g. a shutter position or the partial opening of a window).

### 3.3.1. Storing a movement position

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Storing a position is carried out as follows:

- Move the drive to the starting/zero position, i.e. close the window, retract the awning or raise the blinds
- Press the  $\Delta$  and  $\nabla$  buttons for three seconds at the same time
- As feedback the drive moves briefly up and down. You are in now Programming mode
- Move to the desired position
- Store the position by pressing the  $\Delta$  and  $\nabla$  buttons for 1 second long at the same time
- As feedback the drive moves briefly up and down
- With blind slats, now open the slats to the desired angle. With awnings, tighten the canvas with  $\Delta$ . For windows, you can skip this point.
- Store by again pressing the  $\Delta$  and  $\nabla$  buttons for 1 second long at the same time
- As feedback the drive moves briefly up and down. The storage is complete and the Motor control unit is again in normal mode

Note: As soon as a central command arrives (e.g. because of a wind or rain alarm), the Programming mode will be interrupted! In this case, please carry out the position storage again when the central command is no longer present.

### 3.3.2. Calling up a movement position

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The stored position can be called up by pressing the  $\nabla$  button of the appropriate channel for 3-6 seconds.

The drive will move to the movement position directly if it is in a secure position and the runtimes of previous commands have expired. If the drive is in an intermediate position, it will move initially to the secure position and then to the stored position after expiry of the runtime.



## Questions about the product?

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You can reach the technical service of Elsner Elektronik under  
**Tel. +49 (0) 70 33 / 30 945-250** or  
**service@elsner-elektronik.de**

We need the following information to process your service request:

- Type of appliance (model name or item number)
- Description of the problem
- Serial number or software version
- Source of supply (dealer/installer who bought the device from Elsner Elektronik)

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