

Motor control unit IMSG-UC-2H



Technical data

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Product description

The IMMSG-UC-2H motor control unit allows two 230V 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:

- For **two 230V drives** (Up/Down)
- With **key pad** (manual operation) and status LEDs
- **2 hand switch connections (extension inputs)** for unlocked double button (manual operation on the spot, can be set to Standard or Comfort mode)
- **Central and extension inputs** with variable voltage (6...80 V DC, 6...240 V AC)
- Setting the central control unit to "Deadman" or "Latch"
- Commands at the central and button inputs have the same priority
- **Storing one movement position** per drive
- Pause to reverse direction 1 second, motor runtime 240 seconds
- Connect through clamps
- Potential-free relays

Central operation

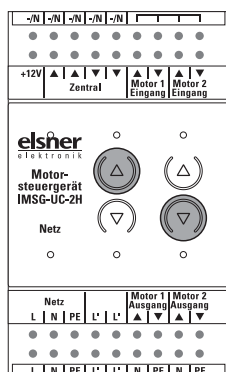
The central input of the IMMSG-UC-2H allows, for example, an automatic control unit, a timeswitch or a normal, unlocked double button (Up/Down) to be connected. The central command (continuous voltage) always has priority over a movement command from the extension inputs.

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)

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:



Press the \triangle button of channel 1 and the ∇ button of channel 2 for 5 seconds at the same time

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 \triangle (channel 1) and ∇ (channel 2) again.

Individual operation

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 ∇), 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":

Standard mode (default)

- 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 ∇ button for longer than 1 second
- To confirm the On LED on the channel flashes 5 times

Comfort mode:

- 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 ∇ 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

Individual movement position

The IMMSG-UC-2H 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).

Storing a movement position

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 \triangle and ∇ 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 \triangle and ∇ 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 \triangle . For windows, you can skip this point.
- Store by again pressing the \triangle and ∇ buttons for 1 second long at the same time
- As feedback the drive moves briefly up and down. The storage is complete and the IMMSG-UC-2H 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.

Calling up a movement position

The stored position can be called up by pressing the ∇ 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.

Technical data

Housing:	Plastic
Colour:	White
Installation:	Series installation on mounting rails
Protection rating:	IP 20
Dimensions:	approx. 53 x 88 x 60 (W x H x D, mm), 3 modules
Weight:	approx. 190 g

Ambient temperature:	Operation -20...+70°C, storage -55...+90°C
Ambient humidity:	max. 95% rH, avoid dew
Auxiliary voltage:	230 V AC, 50 Hz
Inputs:	<ul style="list-style-type: none"> • Central (Up/Down) • 2 x hand switches (Up/Down buttons)
Outputs:	<ul style="list-style-type: none"> • 2 x Drive 230 V (PE/N/Down/Up), each 4 A

The following standards were used for assessing the product with regard to electro-magnetic compatibility:

- EN 60730-1:2000-11 + A11:2002

The product was tested by an accredited EMC laboratory in accordance with the abovementioned standards.

Installation and commissioning

Warning, mains voltage!

National legal regulations are to be observed.



Installation, testing, commissioning and fault repair of the motor control unit may only be carried out by a qualified electrician. Shut off the voltage to all cables to be fitted and take safety precautions against unintended activation.

The motor control unit is intended exclusively for appropriate use. Any improper alteration or non-observance of the operating instructions will void any warranty or guarantee claim.

After unpacking, the unit shall be checked immediately for any possible mechanical damage. The supplier shall be immediately notified in the event of any transport damage.

The motor control unit must not be used if damaged.



If it is assumed that danger-free operation can no longer be guaranteed, the equipment shall be taken out of service and secured against unintended operation.

The motor control unit may only be operated as a fixed installation, meaning a built-in condition and following the completion of all installation and commissioning work, and only in the intended environment.

Elsner Elektronik shall not be liable for any changes to norms or standards after the publication of these operating instructions.

Installation notes

Ensure that the unit does not come into contact with water: Even a few drops may damage the electronics.

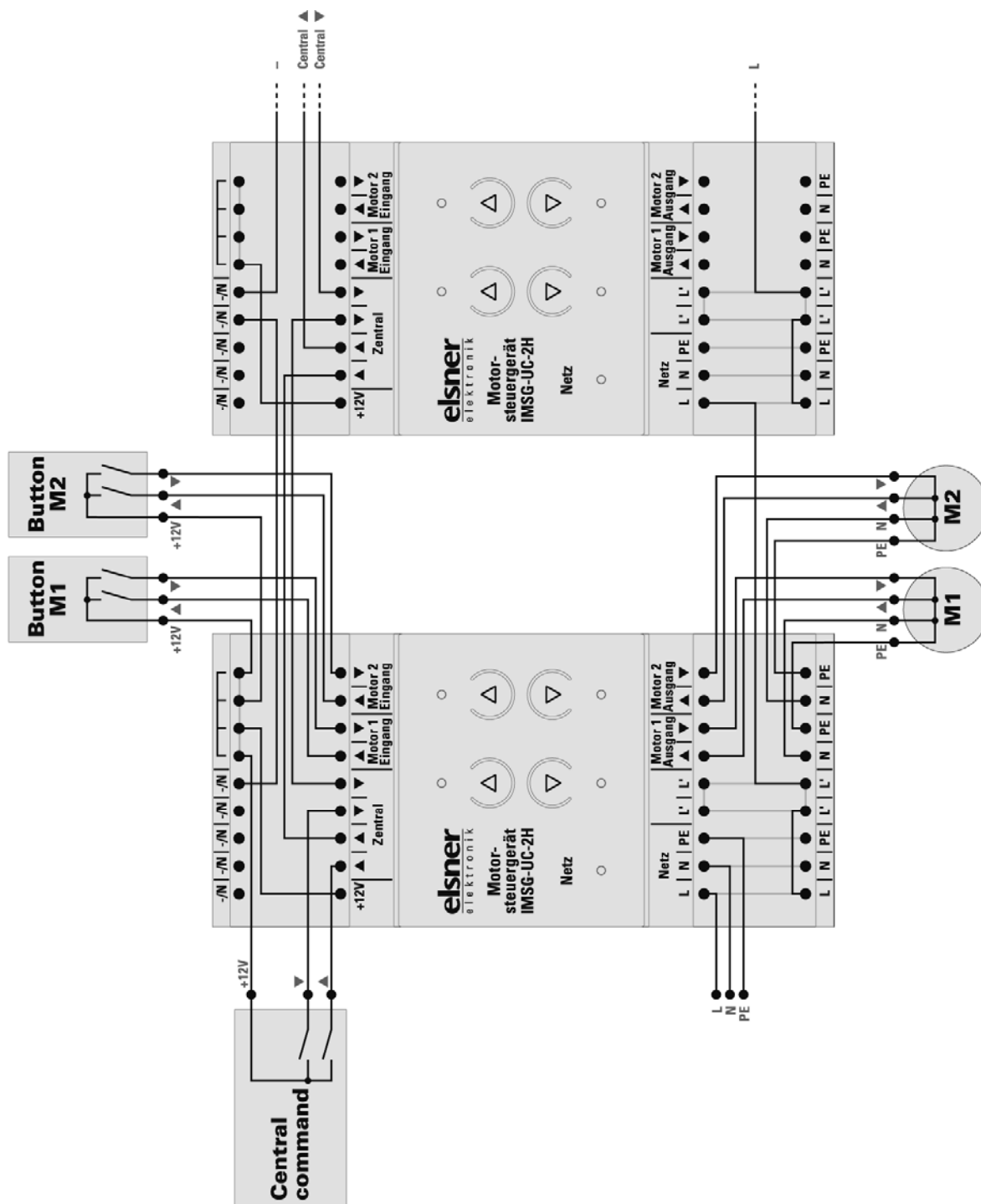
Ensure that the unit is correctly connected. An incorrect connection can lead to damage to the motor control unit or to any electronic device connected to it.

Connection diagrams

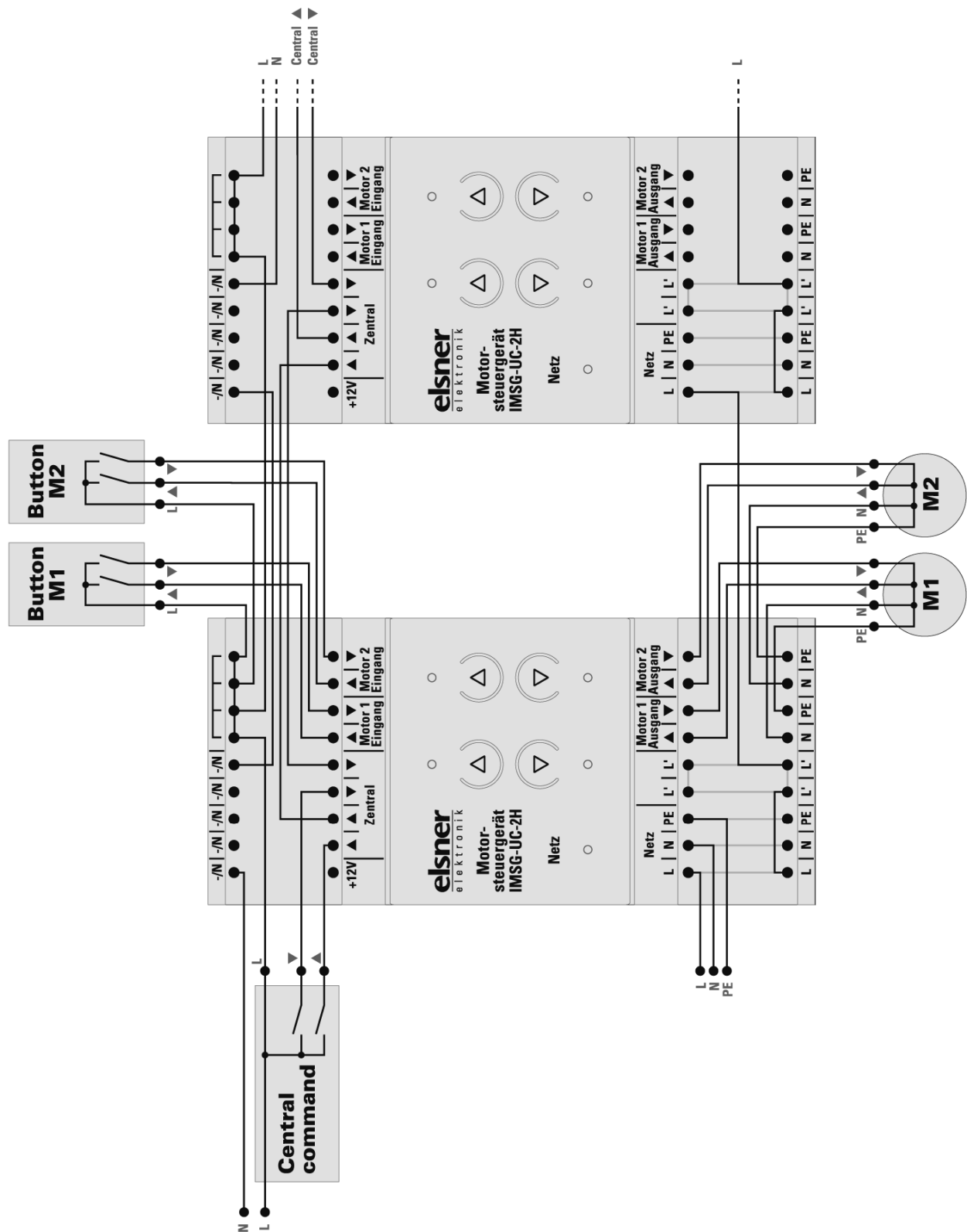
When making connections please note:

- Mixing different control voltages for central and on-the-spot operation is not permitted for IMSG-UC
- If two motor control units are switched in series behind one another (central commands Up and Down are looped through), the -/N connections must be bridged for equipotential bonding
- Cable length for inputs max. 200 m

Control with 12V



Control with 230V



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

