



KNX MCU-02

Actuator for 2 motors

Product description

Actuator for the electronic operation of venetian and canvas blinds, awnings, roller shutters or windows.

Security advices

- Equipment connection and start-up shall be carried out by authorized skilled electricians only.
- For installation, assembly, operating and accident prevention please comply with the regional provisions in force.
- The device shall be disconnected prior to connection and maintenance operations.
- Do not start the device in case of dangerous situation, but rather set it out of service.
- The device shall be used for the intended use only and according to the specified technical data.
- The wiring of control section and BUS must meet SELV requirements.

Instructions for installation

Local control

- Upper end position: long keypress AUF (> 0,4 s)
- Lower end position: long keypress AB (> 0,4 s)
- Shading position: long keypress AB (> 0,4 s), immediately followed by short keypress AB (< 0,4 s)
- Stop: short keypress in opposite direction (< 0,4 s)
- Move slats: short keypress when stationary (< 0,4 s)

Status display of the local control

- LED flashing: manual operation locked out – security lock-out
- LED on: automatic lock-out set

Configuration

- The configuration is made through the Konnex association's ETS3 or later (Engineering Tool Software). For any detail as to adjustments and functions please refer to the relevant guide on-line.
- By means of the programming key it is possible to enable or disable the programming mode. The programming LED shows the mode concerned. If the LED is off, there is no BUS tension. The physical address can be programmable only with LED on.

Starting-up

- Check the device, terminals and connections (visual control)
- The motors shall not be connected in parallel.
- Activate the power supply. Check on the device the tension and LED state.
- Through the unit test key check the operation and direction of the device.
- Should the rotation direction be wrong, carry out the correct connection of the motor. Same function as the local control.
- After the test move venetian blinds, awnings, façade awnings, roller shutters or windows to the safety final position (usually upwards).
- Mount all covers; apply special labels, if necessary; update the technical documentation.



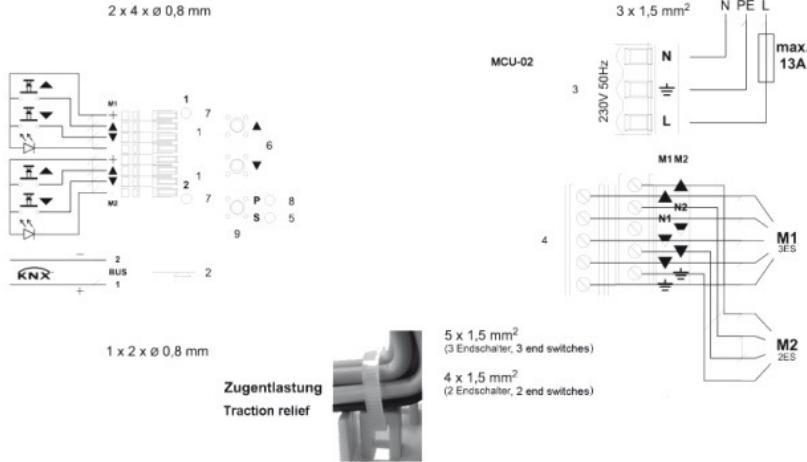
Technical Details

CE

Connections	Voltage range	230 V AC \pm 10 %
	Frequency range	50 Hz
Motor connection	Cable	3 wires (L, N, PE), 1,5 mm ² , single or fine wire
	Fuse protection	circuit breaker max. 13 A
Motor type	Type of protection	IP 20
	Motor type	asynchronous motor 230 V AC, 50 Hz, max. 2,5 A, with 2 or 3 mechanical end switches
Power factor	Cable	> 0,9
	Cable	5 wires (AUF, AB1, AB2, N, PE), 1,5 mm ² , single or fine wire, neutral conductor of the motor can be lead singly or together
Environment	Operation area	dry rooms 0° to +50°C pollutional index 2
	Local control	Circuit
Local control	Cable	SELV (12 V / 20 mW) 4 wires (AUF, AB, LED, +), 1 x \emptyset 0,8mm oder 2 x \emptyset 0,5mm, single wire, twisted, cable length max. 100 m, use potential-free contacts
	Connecting clamp	\emptyset 0,5 ... 0,8 mm, single-wire
KNX	Bus connection	according to KNX standard
General	Mounting	Dado trunking, intermediate floor or hollow ceiling
	Measurements	202 x 69 x 49 mm (LxWxH)
	Weight	300 g



Connection plan



Legend

Connections

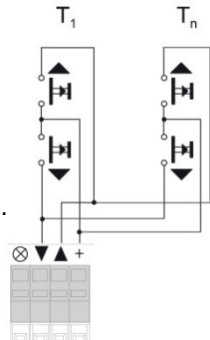
- Ⓜ M1, M2 local operation
- Ⓚ BUS KNX bus
- Ⓛ L, N, PE power supply
- Ⓜ M1, M2 motors
- △▲ AUF upper end position
- ▼▽ AB, AB2 lower end position
- ▼▽ AB1 shading position
- + common connection for control-unit (12 V DC)

Operation and display

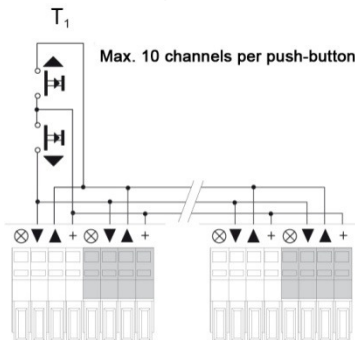
- Ⓢ S Status LED
- Ⓚ group test-button
- ①, ② LED for motor status
- Ⓟ P LED for programming
- Ⓟ P push-button for programming
- Ⓛ LED status display of local operation (1,6 mA / 20 mW)
- T push-button or switch for operation

Caution! Incorrect connection can seriously damage the device!
The neutral conductor of the motor can be connected singly or together.

Wiring of several control sections to one local operation connection:



Wiring of one control section to several local operation connections

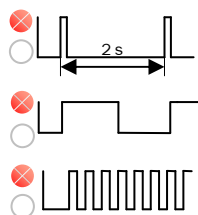


Local control with status display:
Only one LED allowed. Do not link LED connections to each other.

Display at the device

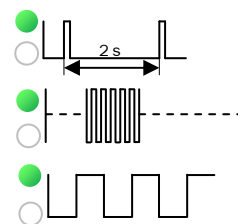
LED for the motor status

- normal operation, power supply present
- manual operation locked out or security lock-out enabled
- check motor or supply line



Status LED

- normal operation, power supply present
- telegram being received
- no bus supply present



If LED is on, the automatic lock-out is set.
If LED is off, the channel is switched off.

If the LED is **red**, a device error is given.

Programming LED

If LED is on, the device is in the programming modus.

Legend

- Ⓡ red LED active
- Ⓚ green LED active
- LED off