For your safety

**DANGER**

Risk of fatal injury from electrical current.
All work on the device should only be carried out by trained and qualified electricians. Observe the country-specific regulations as well as the valid KNX guidelines.

**CAUTION**

The device could become damaged.
- Only operate the device according to the specifications stated in the Technical data.
- All devices that are installed next to the actuator must be equipped with at least basic insulation.

**CAUTION**

The motors can become damaged.
- Connect the bus voltage first and only then the load voltage.

**CAUTION**

If the toggle times are too short, the roller shutter motor could be damaged.
The toggle time at the factory setting is 500 ms. A longer toggle time may be necessary for other motors. Refer to the manufacturer’s specifications in the data sheet for the motor.

Now you can check the functionality of the actuator and the connected loads without having to load the application from the ETS. (See the “Manual operation” section.)

**Putting the actuator into operation**

1. Press the programming button.
   The programming LED lights up.
2. Load the physical address and application into the device from the ETS.
   The programming LED goes out.
   The operating LED lights up: The application was loaded successfully, the device is ready for operation.

Roller shutter actuator REG-K/4x/10 with manual mode

Operating instructions

Art. no. MTN649704

Connections, displays and operating elements

![Connections diagram]

**For your safety**

**DANGER**

Risk of fatal injury from electrical current. The device could become damaged.
Safety clearance must be guaranteed in accordance with IEC 60664-1. There must be at least 4 mm between the individual cores of the 230 V supply cable and the KNX line.

**CAUTION**

The motor can become damaged.
Only connect one motor per channel.

**Roller shutter actuator introduction**

The roller shutter actuator REG-K/4x/10 with manual mode (referred to below as the actuator) can control up to four roller shutter drives with limit switches independently of one another.

You can switch the actuator to manual operation and check that it works even without ETS programming, and you can control the connected loads directly at the actuator in the event of a bus failure.

The actuator has a bus coupler. It is installed on a DIN rail, with the bus connection made via a bus connecting terminal. It is supplied with power from the bus voltage. A data rail is not required.

**When and how the LEDs light up**

- **RUN (green)** lights up during normal operation.
- **Manual (red)** lights up during manual operation.
- **Channel (yellow)** lights up during movement.

**Mounting the actuator**

1. Set the actuator onto the DIN rail.
2. Connect KNX.
3. Connect the bus voltage.
4. Wait at least 30 seconds.
5. Connect the load.
6. Connect the load voltage.

**CAUTION**

The actuator can be damaged.
Connect the bus connection with correct polarity.

![Diagram of roller shutter actuator]

**Art. no. MTN649704**
Manual operation

Normally, you control the roller shutter using push-buttons or by remote control. However, you can also switch the actuator to manual operation and then raise or lower each roller shutter manually using its channel keys. In order to be able to do this, the ETS parameter "Manual operation enabled" must be set to "enabled" and bus voltage must be present.

Manual operation before downloading the application for the first time

Immediately after the initial installation, you can switch the actuator to manual operation, e.g. in order to test the drives.

Manual operation with the ETS setting "Bus and manual operation"

In manual operation, the actuator also responds to KNX telegrams. The command last received is given priority. Exception: Safety alarms (e.g. weather) always have priority with this setting.

Manual operation with the ETS setting "Manual operation only"

In manual operation, the actuator does not respond to KNX telegrams, nor to safety alarms. This setting can be useful when carrying out maintenance, for example.

CAUTION

Loads could be damaged. When operating loads in 'Manual operation only' using the channel keys, prioritised safety functions (e.g. weather alarm position, disable position) no longer work. To prevent damage, you should therefore be very careful when operating manually.

Make sure that the ETS parameter "Manual operation mode" is set to 'Bus and manual operation' (not 'Manual operation only'), when you hand over the system to the operator.

Time-limited manual operation is another function that can be set in the ETS. With this function, you can set a time period after which manual operation (including 'Manual operation only') is cancelled automatically. The actuator then responds to KNX telegrams again.

Exit manual operation

1. Press the manual operation key (c) again. The red manual operation LED (c) goes out. The green operating LED (c) lights up. The actuator now only responds to KNX telegrams.

What should I do if there is a problem?

The red manual operation LED and the green operating LED are not lit. Manual operation cannot be activated.
- The bus voltage has failed. – Check the bus voltage.
- Application was not loaded properly. – Load it again.

The green operating LED is not lit.
- The bus voltage has failed. – Check the bus voltage.
- Application was not loaded properly. – Load it again.
- Red manual operation LED is lit: Manual operation is activated and "Manual operation only" is set in the ETS. Only manual operation is possible. There is no fault.
- Switch off manual operation.

The actuator does not react to the manual operation key, the red manual operation LED does not light up, manual operation is not possible.
- ETS parameter "Manual operation enabled" is set to 'blocked'. There is no fault.
- Set the "Manual operation enabled" parameter to "enabled/enable"
- "Manual operation enabled" is blocked by an object (value=0), there is no fault.
- Enable manual operation via object.

In manual operation, the actuator does not react to the activation of the channel keys, the red manual operation LED lights up, manual mode is not possible.
- The green operating LED is still lit: ETS parameter "Manual operation mode" is set to 'Bus and manual operation', a prioritised function (e.g. weather alarm or lock) is activated, there is no malfunction.
- Wait until the high-level function has been completed, or switch the ETS parameter "Manual operation type" to "Manual operation only".

In manual operation, the actuator controls connected motors without a channel key being pressed.
- The ETS parameter "Manual operating mode" is set to 'Bus and manual operation'. The control command for the actuator came via a bus telegram. There is no fault.
- Switch the ETS parameter "Manual operating mode" to "Manual operation only".

Controlling the roller shutter in manual operation

1. Press the channel key (c).
2. To raise (arrow up) or lower (arrow down) the roller shutter: press the corresponding channel key (c) again.

WARNING

Roller shutters can cause injury when they are moving. If you are operating roller shutters using channel keys, make sure that no people are in the range of movement.

1. To raise (arrow up) or lower (arrow down) the roller shutter: press the corresponding channel key (c) again.
2. To halt the movement of travel: press the channel key (c) again.

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If you have technical questions, please contact the Customer Care Center in your country.

www.schneider-electric.com

This product must be installed, connected and used in compliance with prevailing standards and/or installation regulations. As standards, specifications and designs develop from time to time, always ask for confirmation of the information given in this publication.

Technical data

External auxiliary voltage: AC 110–240 V; 50–60 Hz, max. 2 VA
Power supply from bus: DC 24 V, max. 175 mA
Insulation voltage: AC 4 kV between bus and switch outputs
Nominal voltage: AC 230 V
Nominal current: 10 A, inductive cos ϕ = 0.6
Motor load: max. 1800 W at AC 230 V
Switching frequency: max. 15 times per minute at nominal load
Fuse: one 10 A circuit breaker connected upstream per channel
Ambient temperature
Operation: -5 °C to +45 °C
Storage: -25 °C to +55 °C
Transport: -25 °C to +70 °C
Environment: can be used at up to 2000 m above sea level (MSL)
Max. humidity: 93 %, no moisture condensation
Operating elements: 1 programming button, 1 "Manual" manual operation key, 2 channel keys per channel
Display elements: 1 red LED: programming check, 1 green LED: ready for operation, "RUN", 1 red LED: manual operation status,
2 yellow status LEDs per channel
Bus connection: two 1 mm pins for bus connecting terminal
Live conductor connection: per channel one plug-in 4-gang screw terminal for max. 2.5 mm²
Device width: 4 depth units = approx. 72 mm

Device width: 4 depth units = approx. 72 mm