KNX SA 4MDC REG

Installation instructions

Der SonnenLichtManager

Valid from
1 October 2022
Keep for future use.

General information

Fig. 1 KNX SA 4MDC REG

The KNX SA 4MDC REG sun shading actuator is a device for the central operation of up to four sun shading drives 24 V DC.
The device is operated using a KNX bus system. The sun shading actuator and the drives are supplied with 24 V DC.

Intended use

The KNX SA 4MDC REG was developed to control sun shading products. The approval of the manufacturer must be obtained for any use of the device other than its intended purpose specified in these instructions.
The sun shading actuator is intended for installation in enclosed electrical operating facilities.

Safety instructions

WARNING
The electrical installation (assembly)/dismantling must be performed by a certified electrician in accordance with the electrical installation regulations published by the Association of German Electrical Engineers (VDE 0100) or the standards and legal requirements of the country in which the device is being installed. The electrician must observe the installation instructions included with the supplied electrical devices.

WARNING
If hazard-free operation cannot be assumed, the device may not be started or must be deactivated. This assumption is justified if:
- **▶ the housing or the connecting lines show signs of damage,**
- **▶ the device is no longer working.**

WARNING
It is important to comply with the following points in the interest of personal safety.

- Children may not play with the operating elements of the control unit or the remote control. Store remote controls out of reach of children.
- Make sure that no persons or objects are in the range of movement of the driven parts (blinds, external venetian blinds, etc.).
- Disconnect the device from the supply voltage if cleaning or other maintenance work must be performed.

Function of the sun shading actuator

You will find a detailed description of the software functions for the KNX sun shading actuators in the manual (art. no. 2014788). You can download the manual and the product database of the sun shading actuator from www.warema.com.

Installation

The device is intended for installation in a distribution cabinet. The device is mounted by clipping it onto a DIN rail (TH 35-15).

Electrical connection

An on-site overload current protection device (fuse) and a disconnecting and isolating switch to switch off the entire system must be provided.

The electrical connection is made as shown in the wiring diagram on the reverse side (Fig. 4), the connection to the KNX bus system and the drives is made using spring terminals, the connecting lines are designed as screw terminals.

Commissioning

After the installation has been completed and the operating voltages have been applied, the device can be operated using a keypad (Fig. 2).

You will find a detailed description on the further commissioning in the KNX manual (art. no. 2014 787).

Local operation

The keypad has 4 buttons, the Up / Down / Select and Prog buttons, and an LED. The Select button is used to select the channel. The selected channel is displayed by one of the 4 channel LEDs. If the SEL button is pressed again after selecting channel 4, all channels are selected.

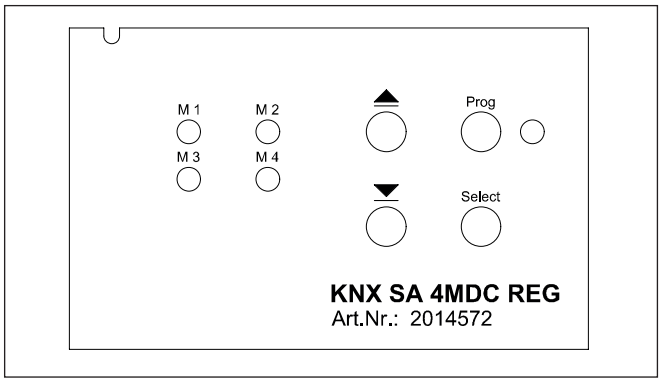

Fig. 2 Keypad

Local operation on the device has the same priority as manual operation via communication objects. The operating behaviour is the same as the "KNX behaviour":
Brief push of the button = Step / Stop,
Long push of the button = Move.

WARNING
Never randomly press the buttons on the keypad without having a line of sight to the sun shading system.

Programming

- Press the programming button (Fig. 2) to put the device into programming mode. The LED lights up red when programming mode is active. The device is programmed on a PC using the ETS. This software ends the programming mode automatically. The red LED goes out.
- If the programming mode is to be ended earlier, press the programming button again. The red LED goes out.

Maintenance

There are no parts within the device that require maintenance. In the event of a malfunction, the built-in miniature fuses should only be changed by a certified electrician.

Cleaning

Clean the housing with a soft, dry cloth. Do not use detergents, cleaning agents, solvents, abrasive substances or steam cleaners!

Liability

In the event of failure to comply with the product information contained in these instructions, or if the device is used in any manner other than its designated or intended use, the manufacturer may refuse to honour warranty claims for product damage. In this case, liability for consequential damage to persons or property will also be excluded.

Obligations for the disposal of electrical devices

A marking with this symbol indicates the following obligations under the scope of legal regulations:

- The owner of this electrical device must dispose of it separately from unsorted municipal waste for further recycling.
- Used batteries and accumulators that are not enclosed in the old device, as well as lamps/bulbs that can be removed from the old device without breaking, must be disposed of separately.
- Distributors of electrical devices and disposal companies are obliged to take back the equipment free of charge.
- The owner must take it upon themselves to delete any personal data contained in the electrical device prior to disposal.

Technical data

KNX SA 4MDC REG	min.	typ.	max.	Unit
Operating voltage (SELV)	21.6	24	26.4	V DC
Current consumption in standby mode		6.0		mA
Current consumption with four activated relays		45		mA
Output per drive				
Switching capacity per channel at 24 V DC		20	72	W
Interface KNX				TP 1
Current consumption KNX	3.5		13	mA
Voltage		29		V DC
Ambient conditions				
Operating temperature	0		50	°C
Storage temperature	0		70	°C
Humidity (not condensing)	10	40	85	$\%F_{rel}$
Degree of soiling				2
Connection				
Connecting line				Screw terminals
KNX bus system, drives				Spring terminals
Wire cross sections				
Supply line 24 V DC				max. 2.5 mm^2
KNX bus system				0.6 - 0.8 mm Ø
Motor outputs				max. 1.5 mm^2
Housing				**Degree of protection**
DIN rail-mounted housing				IP30
Safety class (PE is looped through)				III
Miscellaneous				
Conformity				CE can be viewed at www.warema.de/ce
This device complies with the EMC directives for use in residential and commercial areas.				
Article numbers				
KNX SA 4MDC REG				2014572

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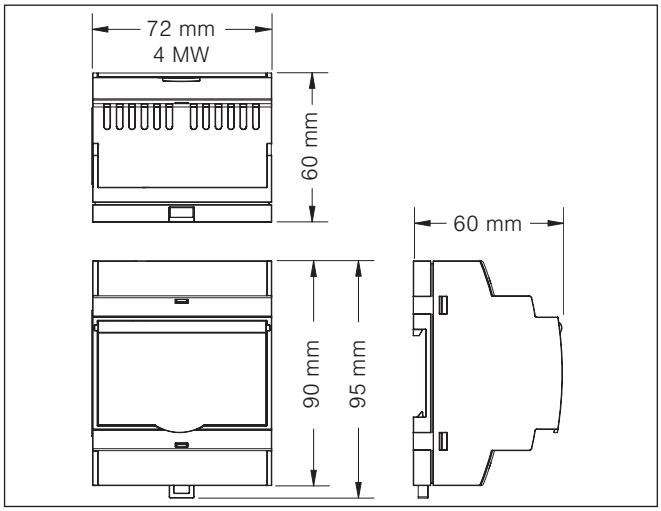

Fig. 3 Dimensions of 4 MW DIN rail-mounted housing for KNX SA 4MDC REG.

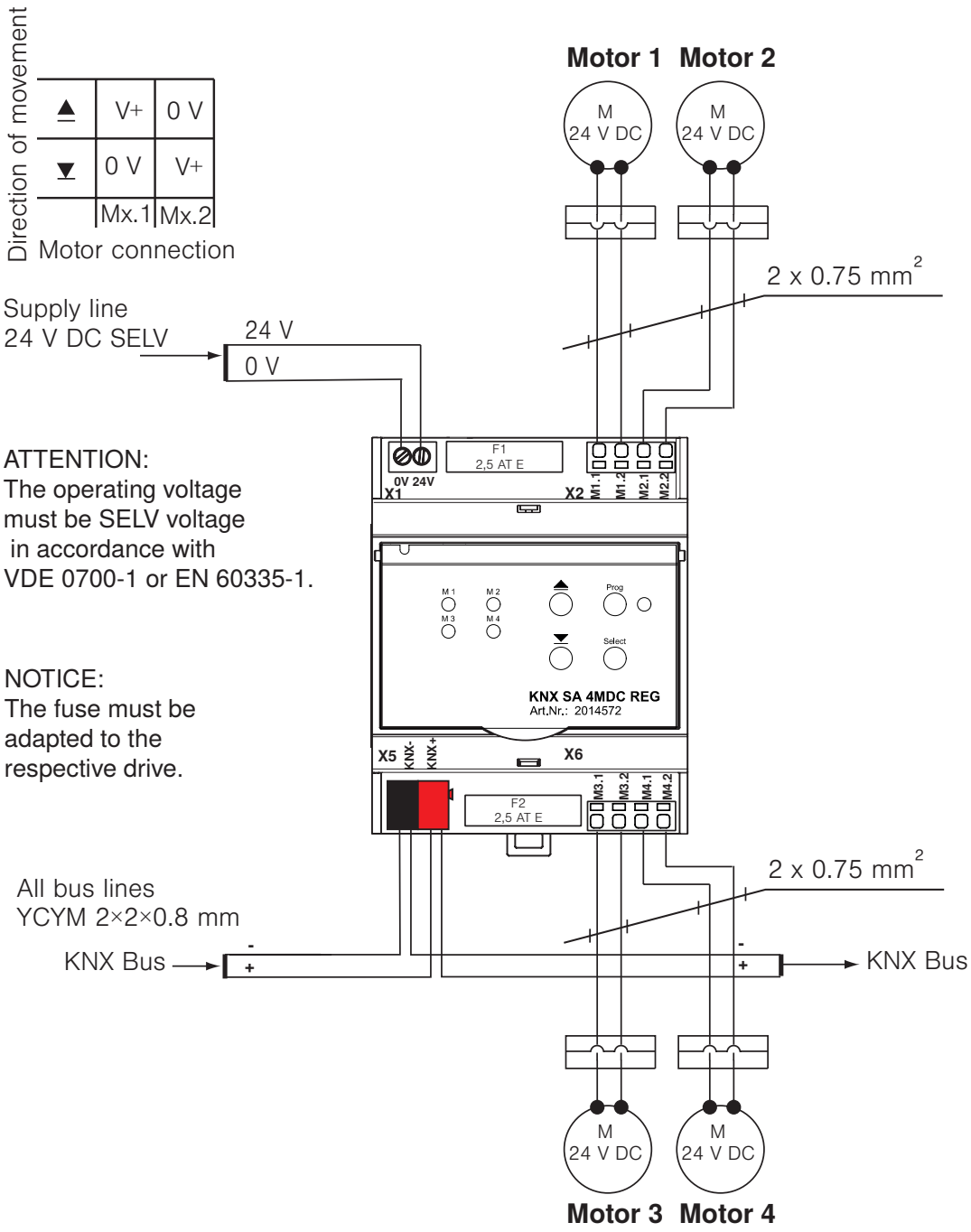

Fig. 4 Connection example KNX SA 4MDC 230 REG