

Installation instructions

KNX SA 4MDC REG



Keep for future use!
Valid from 1st March 2017

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 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. 2014 788). 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/DIN 60715).

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.

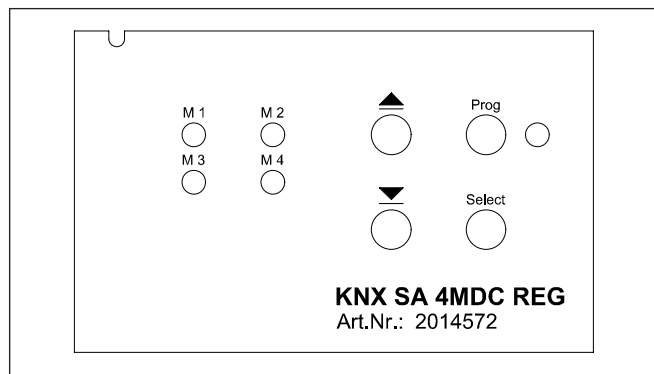


Fig. 2 Keypad

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 inside the device that require maintenance. In the event of a malfunction, the built-in miniature fuses should only be changed by a certified electrician.


Liability

Failure to comply with the product information in these instructions and any use of the device other than its intended use may result in the manufacturer refusing to honour warranty claims for product damage. In this case, liability for consequential damage to persons or property will also be excluded. Observe the information in the operating instructions for your sun shading system. The automatic or manual operation of the sun shading system while iced over as well as using the sun shading system during severe weather may cause damage and must be prevented by the user through suitable precautions.

Disposal

After use, the device must be disposed of according to legal regulations or turned in to your local recycling centre.

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
Conformity	 can be viewed at www.warema.com			
This device complies with the EMC directives for use in residential and commercial areas.				
Ambient conditions				
Operating temperature	0		50	°C
Storage temperature	0		70	°C
Humidity (not condensing)	10	40	85	%F _{rel}
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				
Automatic operation	Type 1			
Software class	A			
Location of use	clean ambient conditions			
Article numbers				
KNX SA 4MDC REG			2014 572	
WAREMA Renkhoff SE Hans-Wilhelm-Renkhoff Strasse 2 97828 Marktheidenfeld Germany				

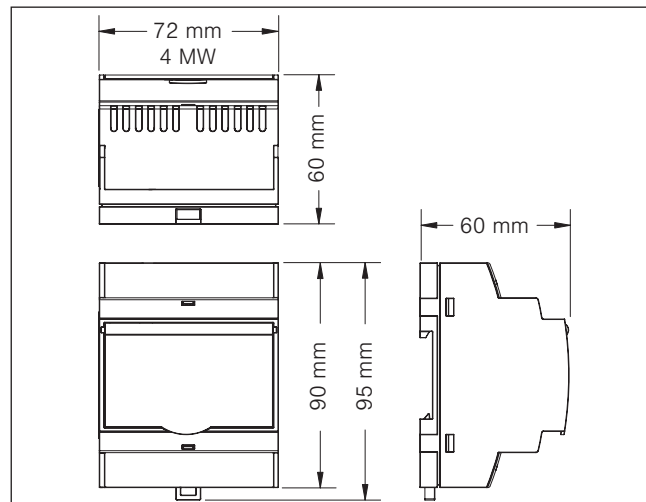


Fig. 3 Dimensions of 4 MW DIN rail-mounted housing for KNX SA 4MDC REG.

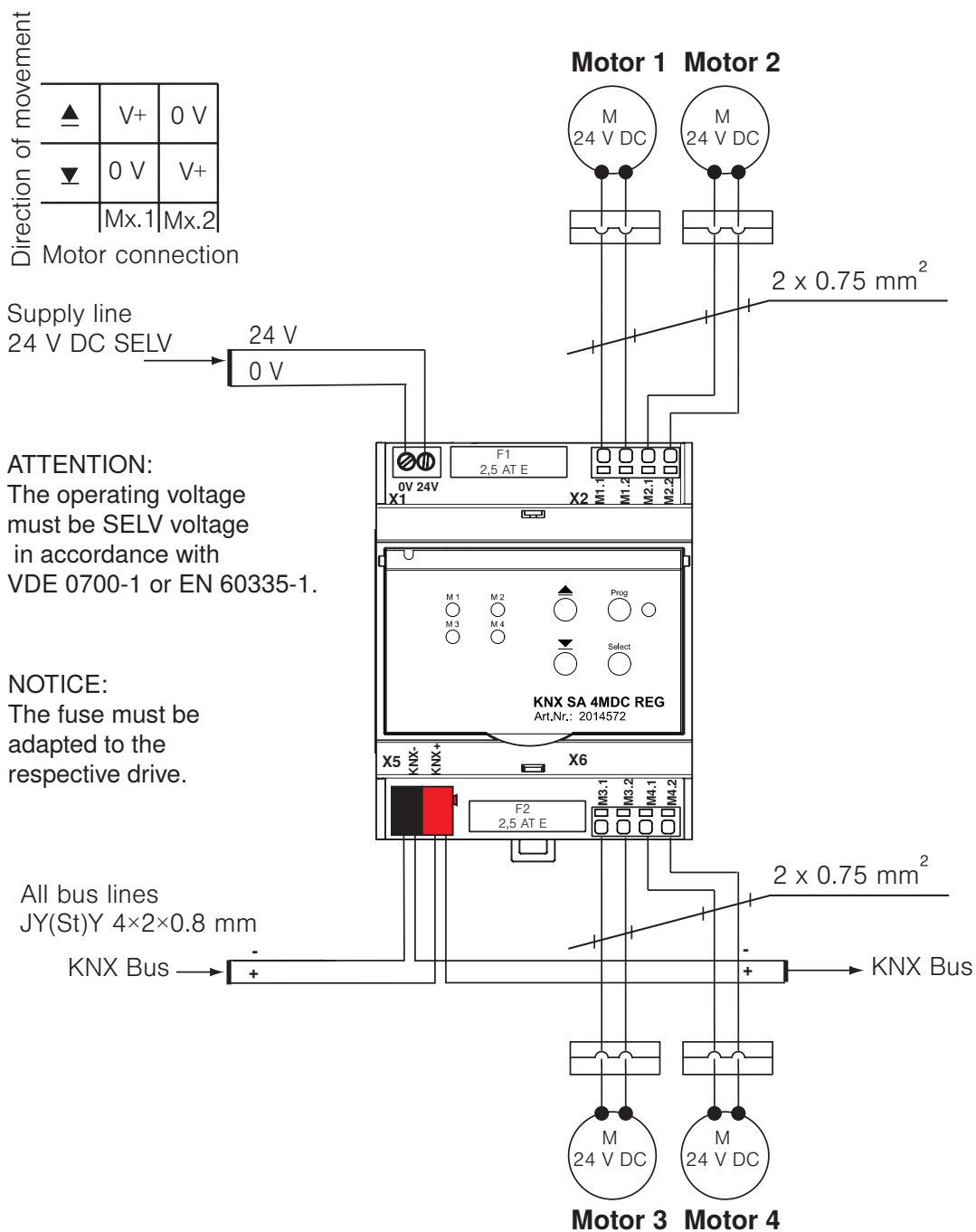


Fig. 4 Connection example KNX SA 4MDC 230 REG