

# Installation instructions

## KNX SA 2/4/6/8M230 REG



Keep for future use!  
Valid from 1st May 2017

### General information

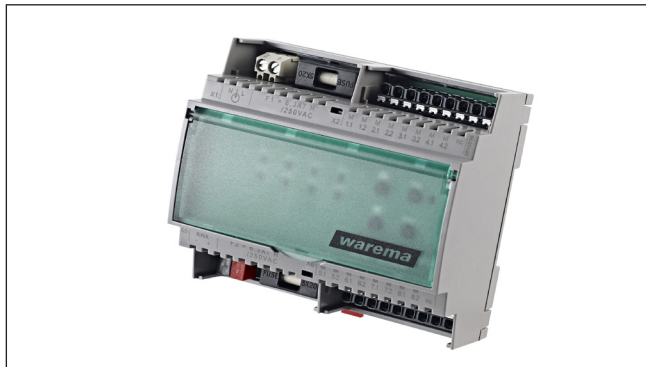


Fig. 1 KNX SA 8M230 REG

The KNX SA 2/4/6/8 M230 REG sun shading actuator is a device for the central operation of up to eight sun shading drives (the following uses the sun shading actuator for eight motors as an example).

The device is operated using a KNX bus system. The drives and the motor control unit are supplied via a 230 V AC control line.

### Intended use

The KNX SA 2/4/6/8M230 REG was developed to control sun shading products. The approval of the manufacturer must be obtained for uses outside of the purposes listed 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 path of the driven parts (venetian blinds, external venetian blinds, etc.).
- Disconnect the device from the operating 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](http://www.warema.com).

### Installation

The device is intended for installation in a distribution cabinet. The unit is installed 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. 5), the connection to the KNX bus system and the drives is made using spring terminals, the connecting lines are designed as screw terminals.



#### WARNING

**All terminals and connections under current must be covered completely against touching by the switch panel. It should not be possible to open the switch panel cover without using tools.**

## 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 8 channel LEDs. If the SEL button is pressed again after selecting channel 8, all channels are selected.

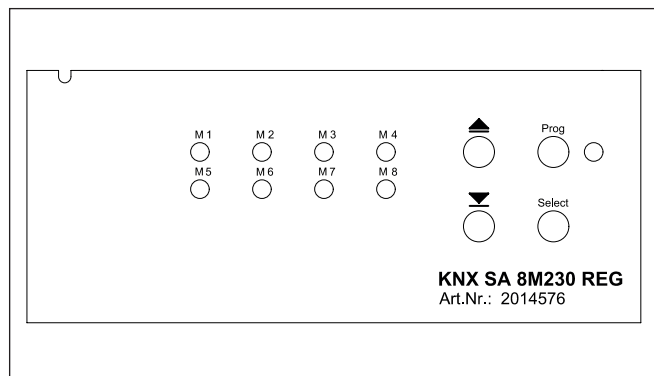


Fig. 2 Keypad

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 2/4/6/8M230 REG	min.	typ.	max.	Unit
Operating voltage	198	230	253	V AC
Mains frequency	50	50	60	Hz
Power consumption in standby mode	0.7	1.3	2.4	W
Output per drive*				
Switching capacity 230 V AC/cos φ =0.6			500	VA
*The total power per fuse must not exceed 1000 VA.				
Interface KNX	TP 1			
Current consumption KNX	3.5		13	mA
Voltage		29		V DC
Conformity	<div>CE</div> <div>can be viewed at <a href="http://www.warema.com">www.warema.com</a></div>			
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 <sub>rel</sub>
Connection				
Connecting line	Screw terminals			
KNX bus system, drives	Spring terminals			
Wire cross sections				
Connecting line 230 V AC	max. 2.5 mm <sup>2</sup>			
KNX bus system	0.6–0.8 mm Ø			
Motor outputs	max. 1.5 mm <sup>2</sup>			
Housing	Degree of protection			
DIN rail-mounted housing	IP30			
Safety class (PE is looped through)	I			
Miscellaneous				
Automatic operation	Type 1			
Software class	A			
Location of use	clean ambient conditions			
Article numbers				
KNX SA 2M230 REG	2014 568			
KNX SA 4M230 REG	2014 570			
KNX SA 6M230 REG	2014 574			
KNX SA 8M230 REG	2014 576			
WAREMA Renkhoff SE Hans-Wilhelm-Renkhoff Strasse 2 97828 Marktheidenfeld Germany				

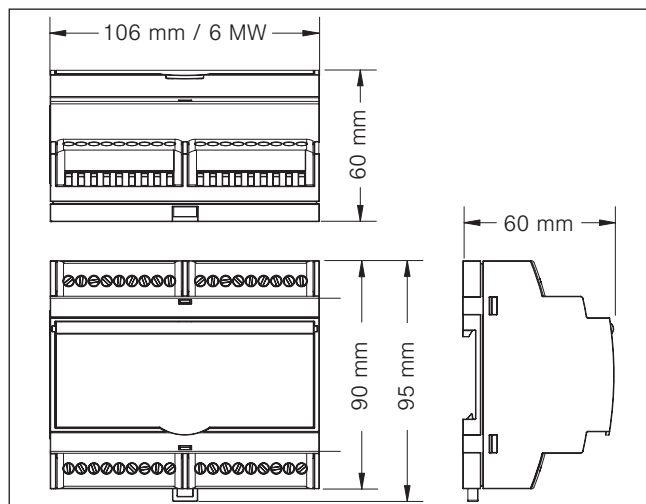


Fig. 3 Dimensions of 6 MW DIN rail-mounted housing for KNX SA 6M230 REG and KNX SA 8M230 REG

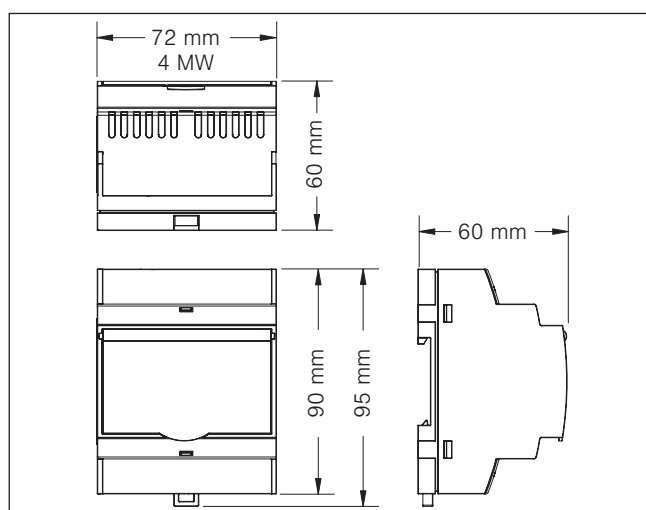


Fig. 4 Dimensions of 4 MW DIN rail-mounted housing for KNX SA 2M230 REG and KNX SA 4M230 REG.

**ATTENTION:**  
Only one motor can be connected per motor terminal set.  
If interconnected, the motor will be damaged!

The total power per fuse must not exceed 1000 VA.

All motor lines  
H05-RR-F 4 G 0.75 black,  
type WAREMA

Supply line  
230 V AC,  
50/60 Hz, 16 A,  
3 x 1.5 mm<sup>2</sup> L

All bus lines  
JY(St)Y 4x2x0.8 mm

KNX Bus

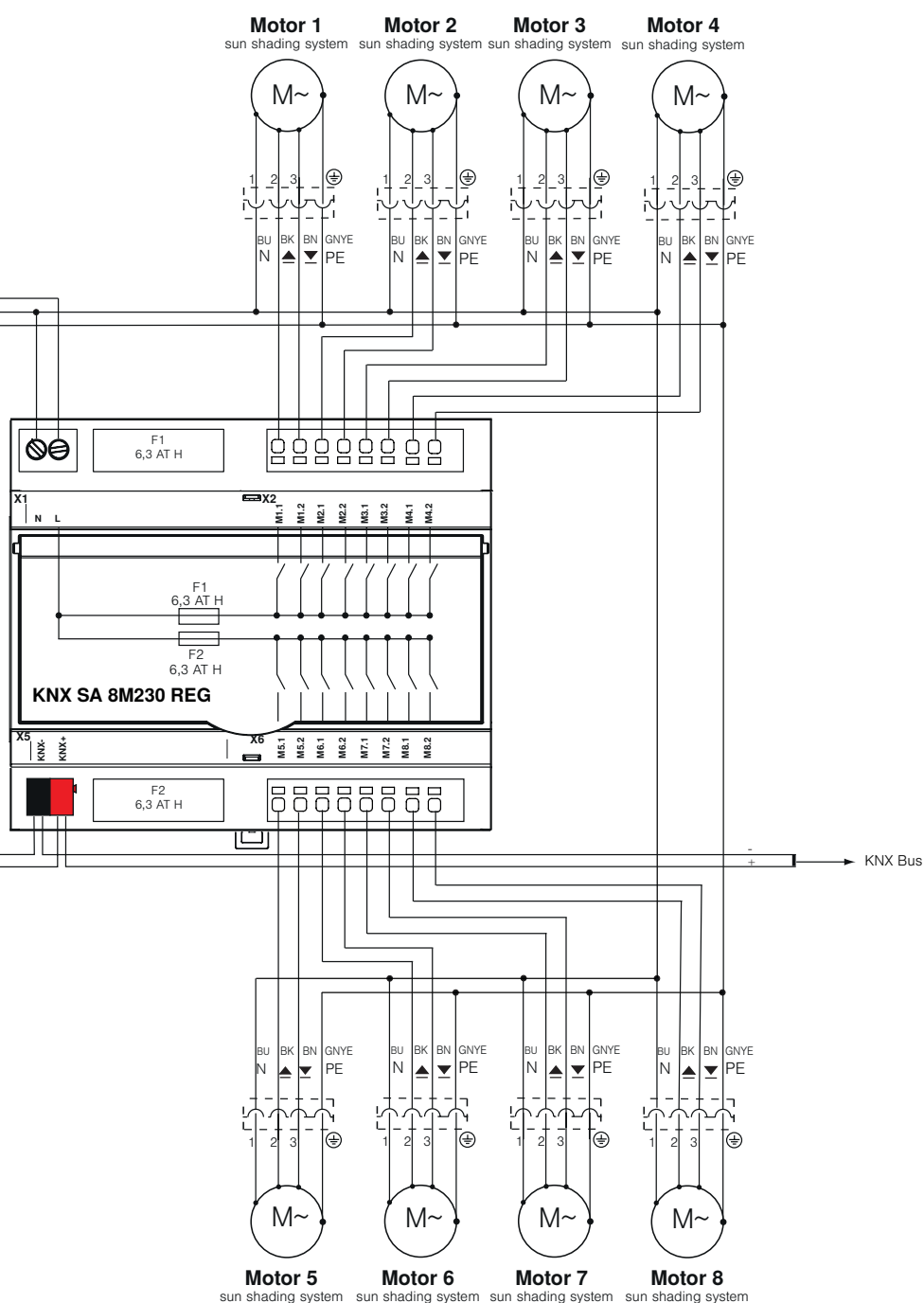


Fig. 5 Connection example KNX SA 8M230 REG