MSE Compact 2/3/4/6 REG

Operating and installation instructions

warema

Der SonnenLichtManager

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Keep for future use..

General information

The MSE Compact 2/3/4/6 REG motor control unit is an electronic control device for the non-floating control of up to 6 sun shading drives. The MSE and drives have a 230 V AC power supply.
Connected drives can be operated on-site with a suitable operating element, and control through a sun shading control system is also possible. The required control voltage of 24 V DC is generated in the MSEs. Multiple MSEs can be consolidated to a group and controlled together.

Intended use

The MSE Compact 2/3/4/6 REG motor control unit was developed to control sun shading systems. The approval of the manufacturer must be obtained for uses outside of the purposes listed in these instructions.

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 regulations 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.

- Make sure that no persons or objects are located in the path of any driven parts (blinds, roller shutters, etc.)!
- Disconnect the MSE from the operating voltage if cleaning or other maintenance work must be performed!

Function

Tripping a switch on the subassembly can activate one of the two integrated control programs for the run time for 2 motors each at the same time. The defined run time always remains effective in pairs, regardless of any group that may have been built.

On the encoding switch you can perform the following settings:

Motor	Switch position		Programme
1-2	S1	ON	permanent mode
		OFF*	time mode
3-4	S2	ON	permanent mode
		OFF*	time mode
5-6	S3	ON	permanent mode
		OFF*	time mode

*= factory setting

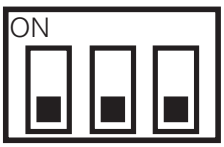

Fig. 1 factory setting encoding switch

Program 1:
Local operation with time mode:
This control behaviour is especially useful for slat products, such as external venetian blinds: The sun shading moves into the corresponding direction after the button is pressed. If the button is pressed for more than 2.5 seconds, the control switches to lock mode. The button may then be released. The sun shading system moves until the fixed run time of 3 minutes has expired. To release lock mode and stop the motor, the button opposite the move command button must be pressed briefly. If you simply want to tilt the slats, you can briefly touch one of the buttons.

Program 2:
Local operation in permanent mode:
This control behaviour is useful for roller shutters and fabric products: the sun shading system moves after the local button is pressed in the corresponding direction and immediately goes into lock mode. The push button may then be released and the sun shading system will move until the fixed run time of 3 minutes has expired. To release lock mode and stop the motor, the button opposite the move command button must be pressed briefly.

Central operation:

The local operation is blocked for the duration of central operation; any current move commands will be deleted.

Building groups:

Building groups is possible by looping the push button lines through several push button inputs. The looped-through group control line allows the building of groups across motor control units.

Installation

The motor control unit is designed for distributor installation (DIN rail-mounted housing).

Set the encoding switches according to the desired function (see page 1).

- When installing the device in a distributor, clip it onto a symmetrical DIN rail (TH 35 according to EN 60715: 2001).
- The motor control unit is electrically connected according to the wiring diagram on the back (see Fig. 4).

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.

Commissioning

The device is ready for operation after the installation has been completed and the operating voltage applied.

Maintenance

There are no parts within the device that require maintenance. In the event of a malfunction, the installed miniature fuse may only be exchanged 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

Failure to comply with the product information contained in these instructions and any use of the device other than its intended use and purpose 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. Also observe the information in the operating instructions for your sun shading system. The automatic or manual operation of the sun shading system when 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.

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.

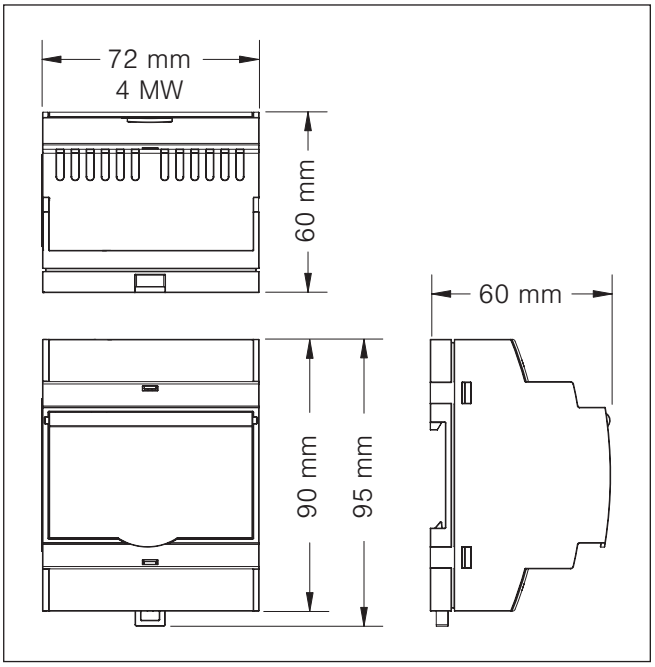

Fig. 2 DIN rail-mounted housing 4 MW for MSE Compact 2 / 3 / 4

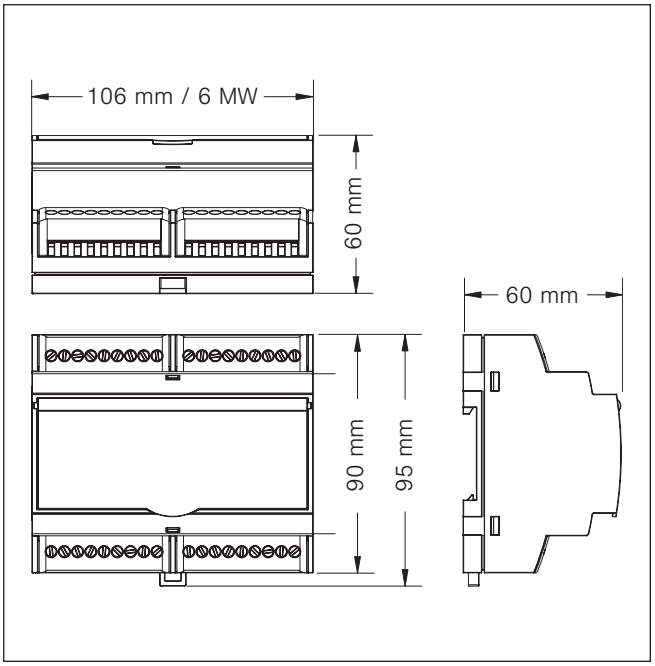

Fig. 3 DIN rail-mounted housing 6 MW for MSE Compact 6

Technical data

MSE Compact 2/3/4/6 REG	min.	typ.	max.	Unit
Supply 230 V AC				
Operating voltage	198	230	253	V AC
Power consumption	0.6	1.1	3.6	W
Output per drive				
Switching capacity at 230 V AC/cos ϕ =0.6			500	VA
Inputs (safety extra low voltage)				
Voltage, active	8	24	36	V DC
Current, active	0.5	1	1.5	mA
Voltage, inactive	–0.5	0	1	V DC
Run time up/down		3		min
Ambient conditions				
Operating temperature	0	20	50	°C
Storage temperature	0	20	50	°C
Humidity (not condensing)	10	40	85	$\%H_{rel}$
Degree of soiling				2
Housing				
Dimensions				See Fig. 2 and Fig. 3
Miscellaneous				
Degree of protection				IP 30
Safety class				II
Conformity				CE can be viewed at www.warema.de/ce
This device complies with the EMC directives for use in residential and commercial areas.				
Connection terminals				
Power cable				2.5 mm^2
Motor line				2.5 mm^2
Push button and control line				1.0 mm^2
Article number				
MSE Compact 2 REG				2016 481
MSE Compact 3 REG				2016 483
MSE Compact 4 REG				2016 485
MSE Compact 6 REG				2016 487

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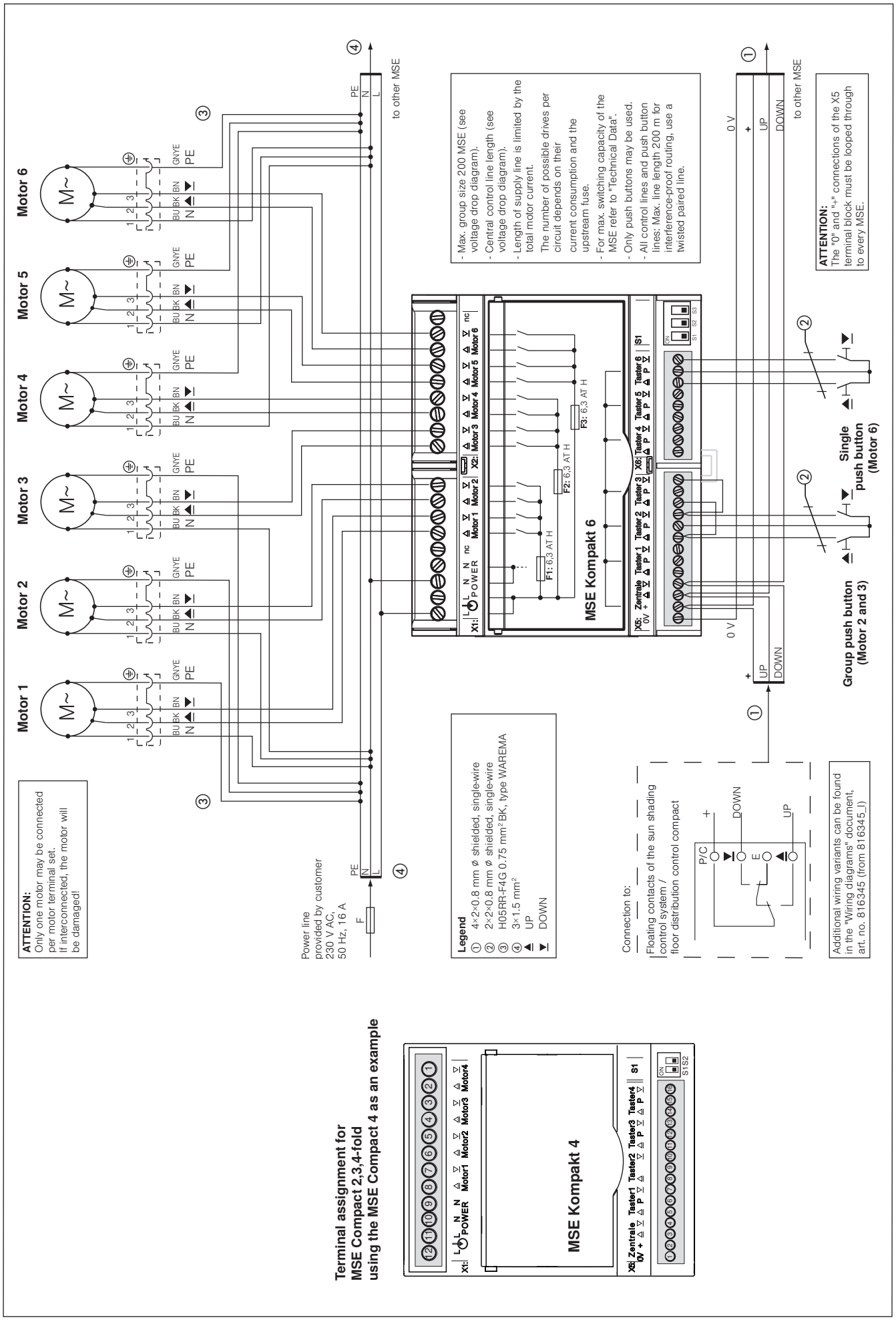

Fig. 4 Connection example MSE Compact 6 REG in 6 MW housing