

Operating instructions

Blind actuator **JMG 4 24VDC** *EIB*
Expansion units **JME 4 24VDC / FME 8** *EIB*

1.0 Use in accordance with the intended application

The blind actuators of type **JMG 4 24VDC**, **JME 4 24VDC** and **RME 8** are suitable for use with the European installation bus - *EIB* in connection with the **theben**-product database. The blind actuator **JMG 4 24VDC** is fitted with the BCU 2 for the bus communication.

• **Basic device JMG 4 24VDC**

4 drive channels 24 V DC

• **Expansion units**

The basic module can be expanded by adding an extension module.

JME 4 24VDC

4 drive channels 24 V DC

FME 8

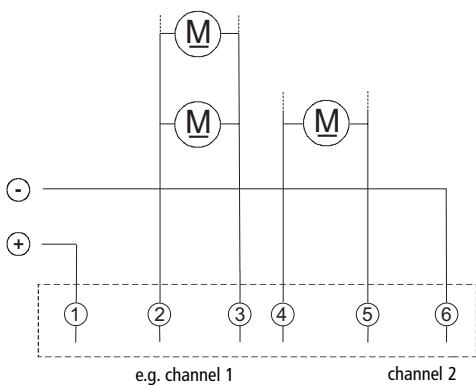
8 window contact inputs with safety extra low voltage (SELV)

2.0 Electrical connections

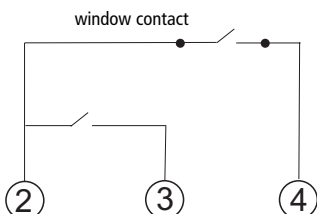
Both routing and connecting up the bus cable as well as installation work must be carried out in accordance with the applicable regulations and guidelines of DIN-VDE, as well as with the EIB Handbook from ZVEI/ZVEH. The work may only be carried out by qualified electricians with appropriate EIB training. National norms and the applicable safety regulations shall be observed. Any changes made to the device will invalidate the guarantee.

2.1 Connecting the drives

connection for blinds actuator



2.2 Window contacts FME 8



- The COM ports provide an SELV for the window contacts.
- All COM ports are internally connected to each other.
- This voltage can be used to supply additional consumers.

2.3 Bus connection

Behaviour without ETS programming

- Manual operation is possible
- Window contacts have no effect

3.0 Behaviour during a power or an operational failure

Note concerning power failure

All relays – irrespective of their assigned parameters – drop during a power failure. This means that the electric circuit is opened.

Note concerning a bus failure only

Provided power is still being supplied the channels can be switched from the device's keypad in the event the bus fails.

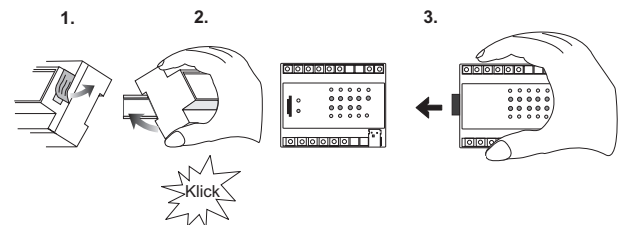
4.0 Expansion modules

The blind actuator **JMG 4 24VDC** can be expanded by using max. 1 expansion module. No new EIB programming is required when replacing a defective expansion device.

- ➡ Remove the strip of insulation of the right-hand side of the **JMG 4 24VDC** device (fig. 1).
- ➡ Keep the strip of insulation for further use by attaching underneath the opening for the plug-in contact.
- ➡ Snap the modules **JMG 4 24VDC** and the expansion module onto the multiterminal rail (fig. 2).
- ➡ Push the module **JMG 4 24VDC** and the expansion module completely together (fig. 3).

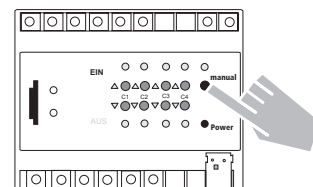
➡ **Removal instructions**

When moving the expansion module, always protect the opening of the remaining actuator by covering with a strip of insulating tape!



5.0 Hand-operated switch "manual"

"manual"-mode ON/OFF

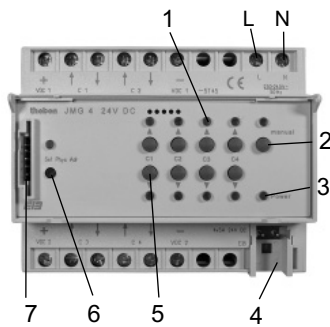


In **"manual"-mode**, the LED is illuminated and all safety-relevant bus telegrams are blocked. This means that only the safety commands can be executed starting at Object 40.

6.0 Description

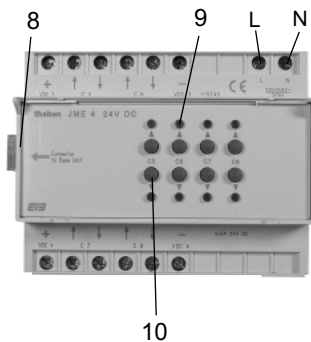
JMG 4 24VDC basic devices

- 1 **LED** displays the switching status of the pertinent relay
- 2 **Manual key** (see 5.0)
- 3 **Power-LED** (blinks, if no bus communication or programmed expansion device, refer to handbook)
- 4 Bus connection (Please observe the polarity!)
- 5 Keys (**UP**, **DOWN** and **STOP**)
- 6 **Set Phys Adr** programming key and LED for physical address
- 7 **Key interface** for enabling additional functions (refer to handbook) Key for JMG 4 24VDC Part number 907 0 304



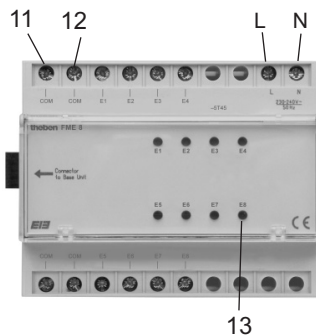
JME 4 24VDC expansion module

- 8 Interface between expansion module and the basic device
- 9 **LED** on = contact (like basic device)
- 10 Keys (like basic device)



Window contact module FME 8

- 11 COM = output voltage (all COM ports are internally linked)
- 12 Inputs
- 13 **LED** status displays



- E1 bis E4 can be internally linked.
- E5 to E8 provide only status messages for the EIB.



Control 1:

The slats are no longer turned by the next Up command.



Control 2:

- Raise until the blinds no longer turn.
- Start the slat turn with the telegram "Slat [%]" with 0 % = 00 hex. The downward motion must stop at the same time as the slat.
- The slats are no longer turned by the next Down command.
- Since DC drives are not entirely accurate, use a value with +20% reserve.

Standard settings recommended for professional functions on the page "Drive mechanisms, general" for blinds

Wait time at changing direction	0,5 s
Running time correction of the DC drives	5%
Automatic execution of object value "slats [%]" after object "height [%]"	disabled (to measure running time correction)
Stretch-out time at lower position (for secure closing)	6 s

Professional applications for drive mechanisms

The calculation correction for the running time of the drives provides only slightly improved accuracy when using DC drives, since the time offset is greatly dependent on the position of the blind. Furthermore the stability of the power supply and a low-impedance cable to the drive are important.

TIP: Set 5 % for the calculation correction.

8.0 Technical data

	JMG 4 24VDC	JME 4 24VDC	FME 8
Operating voltage	230 V / 240 V ± 10 %		
Rated frequency	50 Hz		
Power consumption	approx. 4 VA		
EIB current consumption	≤ 8 mA	-----	----
Contact-making material	AgNi		
Contact type	potential-free make-contact element		
Switching capacity	5 A (24 V-) 5 A (12 V-)	----	
Terminal dimensions- (cross section)	heavy duty, 0.5 mm ² (0.8 diameter) to 4 mm ² flexible lead with ferrule 0.5 mm ² to 2.5 mm ²		
Permissible ambient temperature	-5 °C ... +45 °C (-5T45)		
Protection class	II following proper installation		
Protection type	IP 20 meeting EN 60529		
Device standard	EN 60730		
Appliance	45 x 105 x 60 mm (6 TE)		

The device is appropriate for use under the conditions of usual contamination. Also observe any technical information on the device's nameplate deviating from this! Subject to technical improvements. The devices meet the requirements of the European Directives 73/23/EWG (Low-voltage Directive) and 89/336/EWG (EMC Directive).

Ensure when using these devices together with other devices in one system that there is no radio interference caused by the whole system.

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7.0 Commissioning

The ETS-database can be found www.theben.de/downloadseite.htm#g. Please refer to the handbook for more detailed descriptions of these functions.

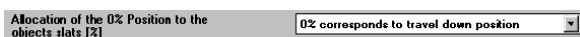
Standard drive application

Enter the running time with some reserve in the ETS (stopwatch time +30 %). Heavily loaded drives need more time for raising than for lowering. This also applies to regulated power supplies.

Determine the complete slat turn for blinds



Set parameters on the ETS page "Drive mechanism, general".



Lower the blind until the slats no longer turn.



Start the slat turn with telegram "Slat [%]" with 100 % = FF hex, 255 dez.
The upward motion must stop at the same time as the slat.