

Binary inputs for the **MX** series

BMG 6  
BME 6

1.0 Designated use

The binary inputs for the **MX** series are as follows:

- **BMG 6** (6-channel basic module, bus coupling),
- **BME 6** (6-channel upgrade module)

The binary inputs are suitable for use with the European Installation Bus **EIB KNX** in combination with the **theben** product database. ETS (EIB Tool Software) enables application programs to be selected, and specific parameters and addresses to be assigned and transferred to the device. A type BCU 2.1 bus coupling is integrated into the basic modules. A basic module can be expanded simply by adding up to 2 upgrade modules. Any combination of **MX**-series modules is possible, e.g.

- BMG 6 + BME 6 + RMG 4 S** (12 x input + 4 x switch)
  - BMG 6 + BME 6 + DME 2** (12 x input + 2 x dim)
  - BMG 6 + BME 6 + RME 4 C-Load** (12 x input + 4 x C-Load)
- etc.

2.0 Safety



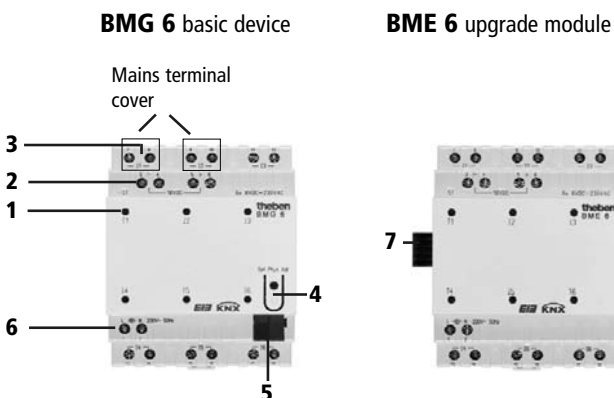
**WARNING**

**Danger of death through electric shock or fire!**

- Installation should only be carried out by professional electrician!

The regulations and instructions in the ZVEI/ ZVEH Handbook must be observed to ensure that the bus lines are installed and the units are commissioned in a professional manner.

3.0 Description



After connecting, place the enclosed mains terminal covers onto the connection screws of the mains terminals, as the connecting cables routed over them may carry safety extra-low voltage (SELV).

**BMG 6**

- 1 LEDs On** = voltage is applied at the inputs **I 1 ... I 6** (the LEDs are only illuminated if bus voltage is present)
- Power unit output for polling voltage (for floating contacts)
- Multi-voltage input for 8 ... 48 V DC; 8 ... 250 V AC
- Programming key and LED for physical address
- Bus connection: **Note the correct polarity!**
- Power supply for power unit (see 3)

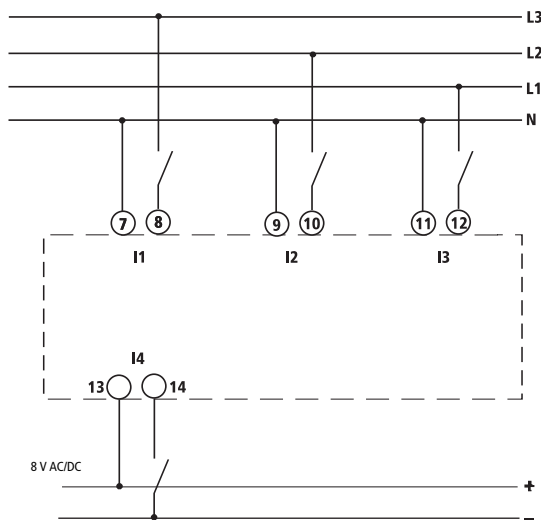
**BME 6**

- Plug for connection between upgrade module and basic device

Connection for binary inputs **BMG 6** and **BME 6**

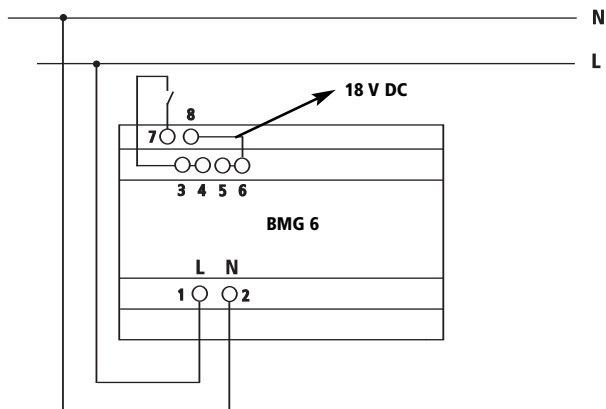
- There are two connection types:
- floating
  - external voltage

Connection to the mains/external voltage



- Any phase or any voltage between 8-230 V AC/DC can be connected to the inputs, as desired.
- Mixing is permissible.

Connection of floating contacts



- Devices **BMG 6** and **BME 6** are equipped with an internal power unit.

This makes it possible to call up floating contacts. The power unit is required for this purpose only.

- If no floating contacts are being used, it is not necessary for the power unit to be connected.

## 4.0 Bus failure

In case of failure of the bus, the inputs are requested following restoration of the bus voltage, and the statuses – if parameterised – are transmitted to the bus.

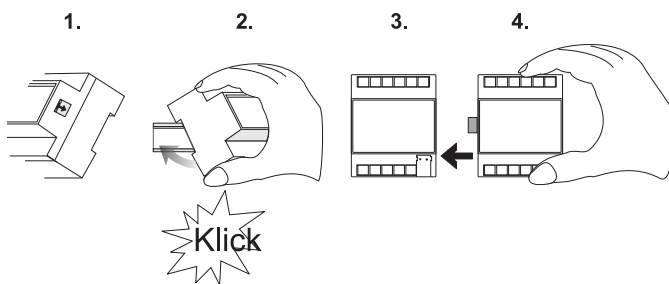
## 5.0 Connecting an upgrade module

- ☞ Open the slide on the right-hand side of the module.
- ☞ Lock the module onto the distributing bus bar.
- ☞ Push the modules fully together.

### Connection:

- ☞ Ensure correct polarity of the bus connection terminal.
- ☞ Close the binary input as shown on the wiring diagram in Chapter 3.0.

The bus is connected to the basic module.



## 6.0 Technical data

### BMG 6 and BME 6

#### Mains power supply (for power unit only)

Operating voltage:	230 V AC ± 10 %, 50 Hz
Power draw:	2.5 VA
Output voltage:	approx. 18 V~/ 20 mA

#### Bus power supply

Power draw:	<10 mA
Connection:	Bus terminal

#### Inputs

Quantity:	6
Average current draw of inputs:	≤ 2 mA
Voltage range:	8 V DC ... 48 V DC; 8 ... 250 V AC

Max. line length:	approx. 100 m
Ambient temperature:	-10 °C to +50 °C
Protection class:	II
Degree of protection:	IP 20 to EN 60529 subject to designated installation

The device is suitable for use in conditions with a normal level of pollution. Observe deviating technical data on the device rating plate! Technical changes reserved. The devices comply with European Directives 73/23/EEC (low-voltage directive) and 89/336/EEC (EMC Directive).

If the devices are combined with others for use within a system, ensure that the system as a whole does not cause radio interference.

The ETS database can be found under [www.theben.de](http://www.theben.de).

Please refer to the Handbook for detailed functional descriptions.

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