

## DATA SHEET



### mH-MK

Sixteen-channel control module  
of the F&Home system

The logo consists of the text 'F&Home' in a grey sans-serif font. Above the ampersand is a red graphic element resembling a roofline or a stylized 'A' shape.

The mH-MK control module is a dedicated component of the F&Home system for the visualization of binary states on the mH-TS12 or mH-TS15 touch panel. Signals applied to the input of the control module are displayed in the form of icons on touch panels in the following way: device on, device off, window open, window closed, etc. The module is mounted in the switchgear (occupies a field of 5 modules) and is supplied with 24 V DC voltage. The module inputs are supplied with 24 V signals from sensors such as reed switches, inductive sensors, relays with a contact separated from the mains. The control is carried out fully on a 24 V low voltage line, which ensures full safety. The mH-MK module communicates with the system via the CAN line.

### Inputs

The inputs of the mH-MK module are designed for connection of 24 V safe voltage signals. Triggering of the input takes place when the voltage appears at the module input.

The input list for the mH-MK module is shown in the following table.

| Level | Inputs       |                        |
|-------|--------------|------------------------|
| 1     | 101 -<br>116 | Inputs from 1 to 116   |
| 2     | 229 -<br>244 | Inputs from 229 to 244 |

### Power supply

The mH-MK module is supplied with 24 V DC voltage. Inputs operate with the voltage of 24 V - the same potential must be provided as the power supply of the module. If the sensors are powered from other power supplies, connect the ground of all power supplies.

### CAN

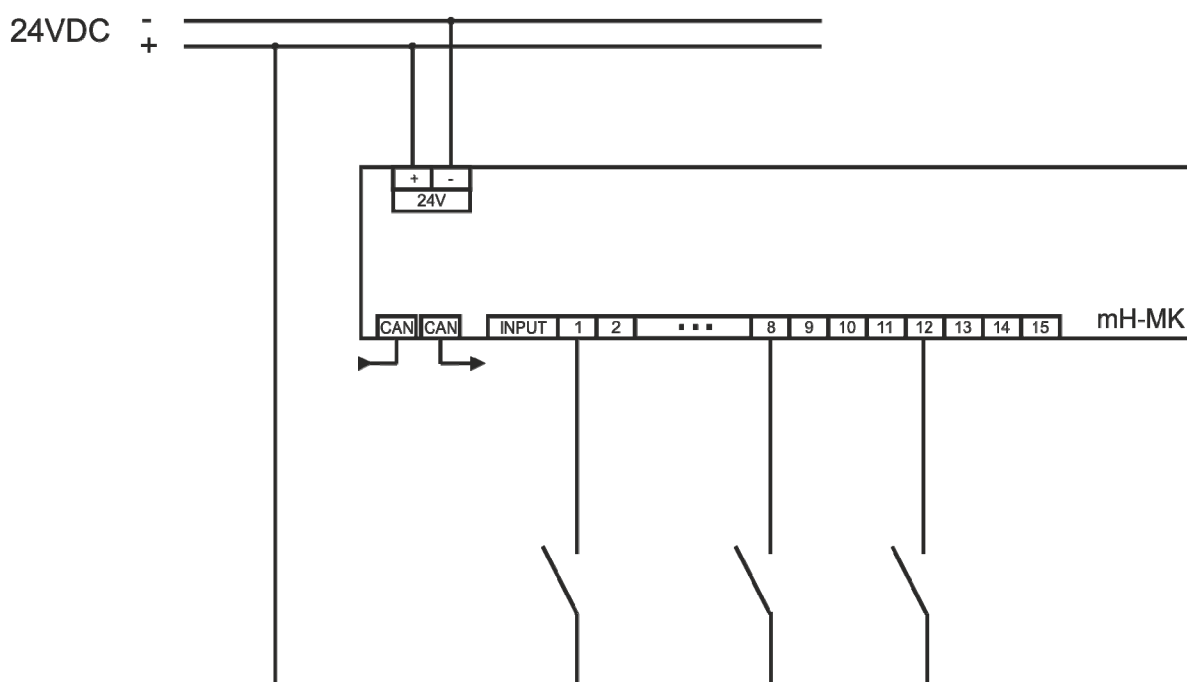
Two RJ-45 sockets on the module front panel are used to connect the CAN communication network cables, which must be connected to adjacent modules using the CAN cables provided with the system.

**Operating principle**

Cables from sensors located in the building are routed to the module. When a signal appears at the input, information is transmitted to the touch panel, which visualizes the status of the input through an icon on the screen. The module does not operate autonomously. Requires a connected touch panel for operation.

**Connection diagram**

**WARNING:** The description and numbering in the connection diagram refer to level 1. For the remaining levels, the numbering is shifted according to the relation:  $33 + (N-1) \times 128$ , where N is the level number.



**Operation signaling**

The operation of the mH-MK module is indicated by four LEDs on the front of the module. The meaning of the individual controls is as follows:

|            |   |
|------------|---|
| <b>U</b>   | The blinking of the U diode means that the device is connected to the power supply and is working properly. The constantly lighted U diode indicates an error or malfunction of the module. |
| <b>RX</b>  | Indicates that the module is in the process of receiving data through the CAN network.  |
| <b>TX</b>  | Indicates that the module is in the process of sending data through the CAN network.  |
| <b>Err</b> | Indicates that there is no communication between the mH-L4 module and the host computer (possible power outage/damage to the host computer or damage to the communication cables).          |



## Technical data table

|                                    |  |
|------------------------------------|--|
| Module type                        | logic - 16 channels                              |
| Rated supply voltage               | 24 V DC  |
| Power supply voltage tolerance     | -20%, +10%                                       |
| Output voltage                     | 24 V   |
| Maximum output current             | 15 ma  |
| Storage temperature                | -20°C to +50°C                                   |
| Operating temperature              | 0°C, +45°C                                       |
| Humidity                           | <=85% (without condensation or aggressive gases) |
| Dimensions                         | 87.5 x 65 x 90 mm (5 modules)                    |
| Dimensions of the packaging        | 105 x 104 x 75 mm                                |
| Ingress protection                 | IP20   |
| Operating position                 | any  |
| Enclosure type                     | for DIN rail                                     |
| Net weight                         | 136 g  |
| Gross weight (including packaging) | 185 g  |

**WARNING**

The method of connection is specified in this manual. Installation, connection and adjustment should be carried out by authorized electricians who are familiar with the operating instructions and the functions of the module.

The correct operation is affected by the way the module is transported, stored and used. Installation of the module is not recommended in the following cases: missing components, damage to the module or its deformation.

In case of malfunction, please contact the manufacturer.