

## Device description

## FSM24, FSM26 Front Switching Modules

### Application

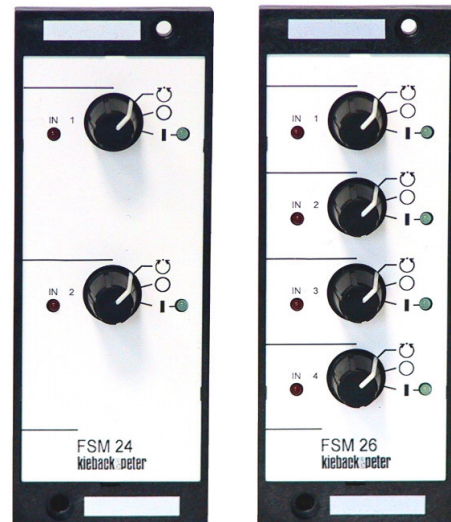
The Front Switching Modules FSM24 or FSM26 is employed in Automatic/Manual operations as well as for feedback of the inputs of the Field Bus Modules FBM26 or FBM26U.

The relay outputs of the Field Bus Modules FBM26(U) in the stand-alone manual operation are switched with the FSM24/FSM26. The relay outputs as well as the digital inputs of the Field Bus Modules FBM26(U) can be displayed on the assigned LEDs.

Only one FSM24 or FSM26 can be connected to a Field Bus Module FBM26(U) at a time. The Front Switching Modules FSM24/FSM26 forms a functional unit with the FBM26(U).

### Types

|       |   |
|-------|---|
| FSM24 | Front Switching Modules for 1-level aggregates with two Manual/Auto switches Auto/Off/On for the relay outputs K1 and K2 as well as with four LEDs for the display of both relay outputs and the digital inputs IN1 and IN2 of the FBM26(U) |
| FSM26 | Front Switching Modules for 1-level aggregates with four Manual/Auto switches Auto/Off/On for the relay outputs K1..K4 as well as with eight LEDs for the display of the relay outputs and the digital inputs IN1..IN4 of the FBM26(U)      |



FSM24

FSM26



Notice

For a connected FBM26, the current flow "Yes/No" over the relay outputs K1..K4 is displayed on the LED.  
For a connected FBM26U, the switch state "On/Off" of the relay outputs K1..K4 is displayed on the LED.

### Technical data

|                                |   |   |
|--------------------------------|---|---|
| Operation                      | Only in connection with dem Field Bus Modules FBM26(U)  |   |
| Operating voltage              | 12 V DC +20%/−10%, FSM24: 30 mA, 0.4 VA, FSM26: 50 mA, 0.6 VA<br>Voltage supply obtained from the the QBS interface |   |
| Connection                     | Terminal connections on the QBS bus, max. 30 m  |   |
| Operating elements             | FSM24   | Two Manual/Auto switches for the settings Auto/Off/On of the relay outputs K1..K2 of the Field Bus Modules FBM26(U)   |
|                                | FSM26   | Four Manual/Auto switches for the settings Auto/Off/On of the relay outputs K1..K4 of the Field Bus Modules FBM26(U)  |
| Displays                       | FSM24   | Two green LEDs for the display of the relay outputs K1 and K2 of the FBM26(U)<br>(FBM26: display of the current flows / FBM26U: display of the switch states)<br>Two red LEDs for the display of the digital inputs IN1 and IN2 of the FBM26(U) |
|                                | FSM26   | Four green LEDs for the display of the relay outputs K1..K4 of the FBM26(U)<br>(FBM26: display of the current flows / FBM26U: display of the switch states) four red LEDs for the display of the digital inputs IN1..IN4 of the FBM26(U)        |
| Degree of enclosure protection | IP20  |   |
| Environmental conditions       | Temperature   | 0..45°C   |
|                                | Humidity  | 20..80 % rF,<br>not condensing  |
| Weight                         | FSM24   | 80 g  |
|                                | FSM26   | 90 g  |
| Accessories                    | WAS01   | Wall Mounting Set for the wall mounted  |

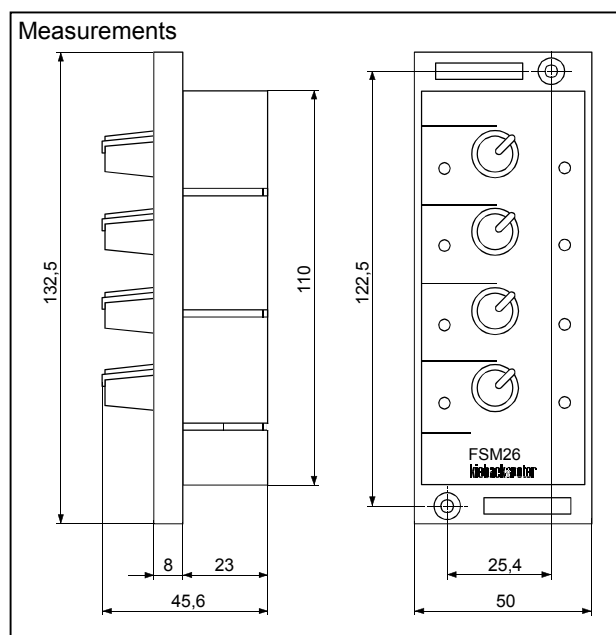


Figure shows FSM26,  
same measurements for FSM24

Date 16.09.2002

**Mounting**

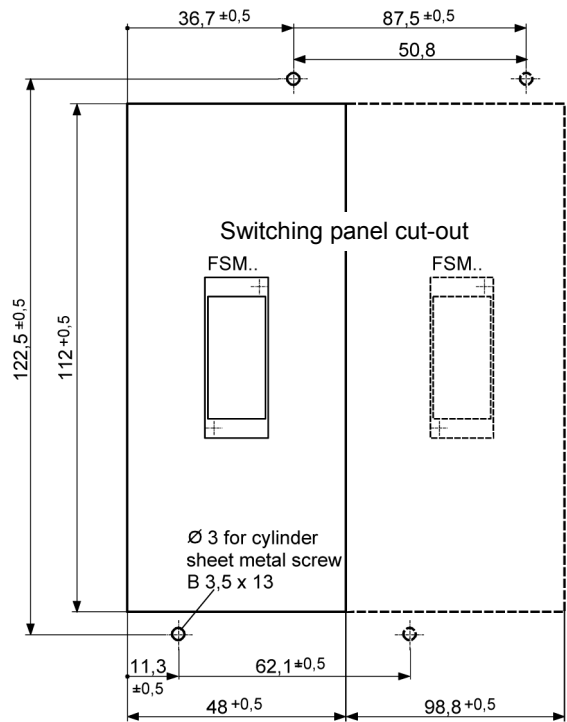
The Front Switching Modules FSM24/FSM26 can be installed in the switching panel door or in a 19" cassette frame KA.

Two screws for mounting in a 19" cassette frame KA are provided.

If it is desired, the Wall Mounting Set WAS01 is available as an accessory



The switching panel mounting or the mounting in a 19" cassette frame may only be carried out by qualified and trained personnel on a switching cabinet which is current-free!!



**Installation**



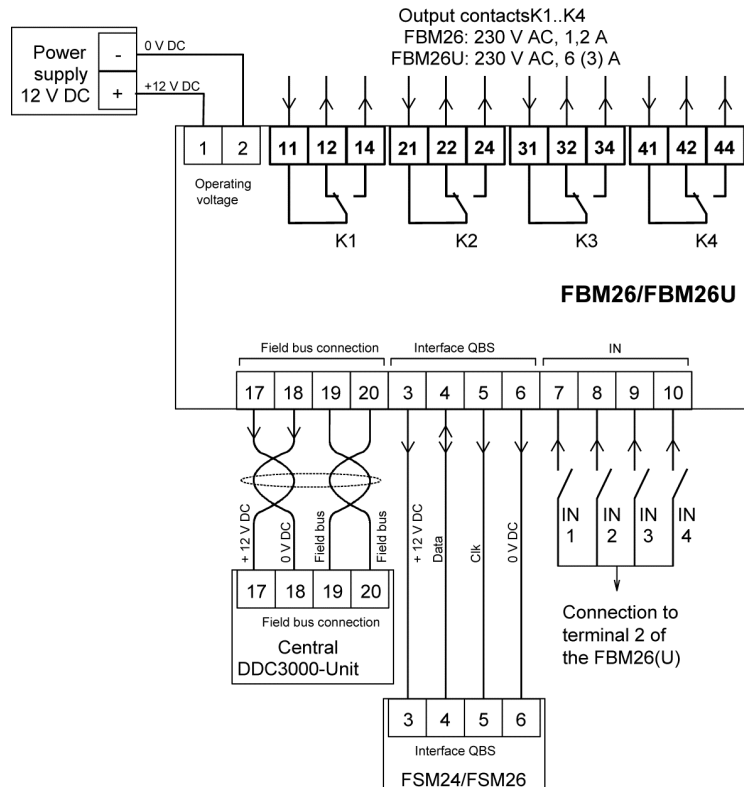
The electro installation of the device connections in the switching panel may only be carried out by qualified and trained personnel, e.g. carried through by a trained electrician!

The VDE legal provisions and the local regulations must be maintained.

The Front Switching Modules FSM24/FSM26 wird an the QBS interface of the Field Bus Modules FBM26(U) connected.

The 4-wire control line QBS can have a max. length of 30 m.

**Connection**



**Device description**

**FSM24, FSM26 Front Switching Modules**

**Function /operation**

The Front Switching Modules FSM24 have two channels for driving the Field Bus Modules FBM26(U).  
 The Front Switching Modules FSM26 have four channels for driving the Field Bus Modules FBM26(U).

• **Manual/Auto switch**

The drive of the FBM26(U) is done with the Manual/Auto switches of the FSM24 or FSM26.

The Manual/Auto switch 1 is assigned to the relay output K1 of the Field Bus Modules FBM26(U)  
 The Manual/Auto switch 2 is assigned to the relay output K2 of the Field Bus Modules FBM26(U)  
 The Manual/Auto switch 3 is assigned to the relay output K3 of the Field Bus Modules FBM26(U)  
 The Manual/Auto switch 4 is assigned to the relay output K4 of the Field Bus Modules FBM26(U)

• **LED Function display**

A green LED is located next to every Manual/Auto switch.

With these LEDs, the relay outputs of the connected Field Bus Modules FBM26(U) are displayed.

For FBM26: The respective LED lights up as soon as current flows on the switching relay output (current recognition).

For a switched relay output without current flow, e.g. for voltage interruption on the relay contacts, the LED does not light up.

For FBM26U: The respective LED lights up as soon as the relay output switches (independent of current flow).

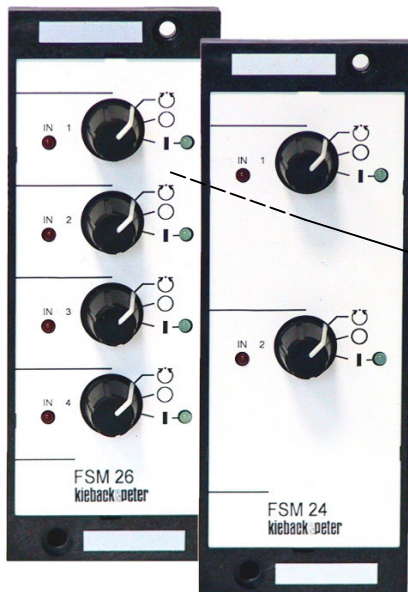
|                     |                                 |                      |
|---------------------|---------------------------------|----------------------|
| LED I from switch 1 | display of the relay outputs K1 | } FSM24 }<br>} FSM26 |
| LED I from switch 2 | display of the relay outputs K2 |                      |
| LED I from switch 3 | display of the relay outputs K3 |                      |
| LED I from switch 4 | display of the relay outputs K4 |                      |

• **LED IN**

Furthermore, a LED IN is located next to every Manual/Auto switch.

The LEDs IN is activated by the digital FBM inputs IN and light up when the digital inputs are switched on.

|              |                            |                      |
|--------------|----------------------------|----------------------|
| LED IN1 = On | for digital input IN1 = On | } FSM24 }<br>} FSM26 |
| LED IN2 = On | for digital input IN2 = On |                      |
| LED IN3 = On | for digital input IN3 = On |                      |
| LED IN4 = On | for digital input IN4 = On |                      |



**Individual operating field, Fig. operating field 1**

Manual/Auto switch for the control of the relay output of the FBM26(U),  
 in the Fig. for K1

