Display Module F245

Diagnostic Display for F200 Safety Systems

Characteristics

- Recalls and displays system information, status and alarm messages, and input configuration of an F200 System
- Simple menu-selection via 3 function key-switches
- Stores details of the last registered emergency stop occurrence
- Clearly readable backlit 4-line alphanumeric LCD display
- RS232 interface

Description

The communication module **F245** can be added to an F200 system to locally display details of the operating condition and the system functions.

Using the 4-line LCD display and the 3 function key-switches, the configuration of external circuits, and the on-off status of all inputs of the system can be checked and interrogated.

The inputs are automatically numbered, starting from the Basic Module to the left, so that only the actually connected Input Modules are shown on the display.

The **F245** Display Module is interfaced to an F200 system through an F240 Communication Module, using the RS232 interface, with a 2-core shielded cable.

The **F245** requires 24V DC supply voltage. The power supply input as well as the RS232 are galvanically isolated from the F200 system, but can be connected non-isolated if required.

The following text examples are stored as system information in three menu blocks:

Bold = standard text
Cursive = text depending on function

System menue:
- *Manual* / *auto* **reset**
- **Output** *active* / *deactivated*
- *Monitoring active* / *device ready*
- **EDM** *active* / *deactivated* (feedback circuit)

Input configuration:
- **Input Module** *4*
- *F220 emergency off*
- **Input 1**: *2-channel*
- **Input 2**: *1-channel*

Functions / Interruption messages:
- **Input Module** *4* **Input** *2* **causes interrupt**
- *safety mats or cross-fault causes interrupt*
- *transmission fault*
- *fault EDM loop*
- *fault Y40 loop*
- *malfunction*
- **Output** *active* / *inactive*

Mode of Operation

The menus of the Input Expansion Module are selected via the "+"and "-" key-switches. The "←" key-switch is used to revert to the System menu.
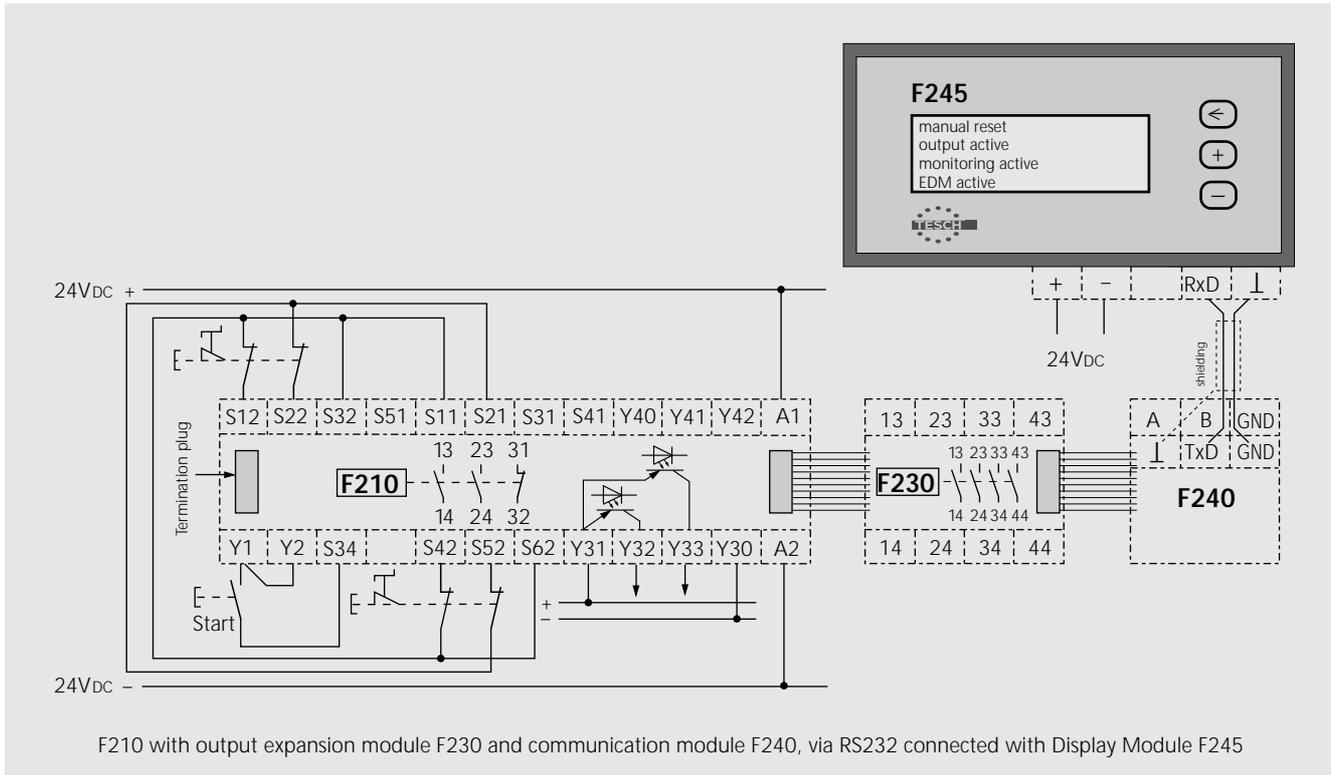
The LCD backlight is turned on using the function key-switches, and turns off automatically after approx. 5 minutes, if there is no operator interaction.

In the event of an emergency stop command or fault occurrence, an error message is displayed. This message is saved even after the system is shut-off/re-started, so that the cause of tripping can be reconstructed. The display can be updated only after the system is shut-off again or if the menu is changed.

The **F245** can be front panel mounted, or DIN rail mounted using an optional base adaptor kit.

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Automation Control Components

Wiring Example

F210 with output expansion module F230 and communication module F240, via RS232 connected with Display Module F245

Technical Data

Rated voltage	24 V_{DC}
Power consumption	Approx. 0.5 W
Ambient temperature	-5 °C to + 55 °C
Storage temperature	-25 °C to + 70 °C
Protection class	Terminals IP 20, casing IP 40
Terminals	Terminal box with wire protection
Wire cross section	2.5 mm^2
Interface	RS 232
Weight	Approx. 250g

Models and Ordering Data

Interface:	RS 232
Type F 245 24V_{DC}	**Order No.**
Display Module	074 00187
Din rail base adaptor kit	919 00612

Dimensional Diagram

Front cut out: 68 $^{+0.7}$ x 138 $^{+1.0}$ (all dimensions in mm)
Optional DIN rail mounting base EN 50022-35 x 7.5