

# MSR245P

## Description

The MSR245P is a display module for the modular Minotaur MSR200 family of monitoring safety relays. The MSR245P Display Module is interfaced to an MSR200 system through an MSR240P Communication Module, using the RS232 interface, with a two-core shielded cable. The display is refreshed approximately every six seconds.

Using the four-line LCD display and the three 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 microprocessor, in the base module, scans all the inputs starting with the base module and working its way to the left. The first scanned input is "base module input 1." The last scanned input would be input two of the module furthest from the base module.

The display shows the lowest scanned input that de-energized the safety outputs (safety outputs open). After the lowest scanned input is cleared, the display will refresh and show the next input which is open. In this way, each open input circuit can be troubleshot and closed. When all inputs are closed, the user can scroll through the display.

The MSR245P requires 24V DC supply voltage. The power supply input as well as the RS232 are galvanically isolated from the MSR200 system, but can be connected non-isolated if required.

The messages in the MSR245 are capable of being customized with application specific text. The first three lines of the display can be changed to describe each of the inputs (3 x 20 characters). The text language can be selected and written in either English or German.

For programming, a PC running under Windows™ must be connected to the nine-pole sub-miniature D connector on the back of the MSR245 using a standard serial data interface cable.

The program allows the user to generate and transfer the text blocks into the nonvolatile memory of the MSR245.

The software for text programming and the manual is available for download on the Rockwell Automation safety website at [www.ab.com/safety](http://www.ab.com/safety).

## Features

- Recalls and displays system information
- Simple menu selection
- Stores details of last registered stop occurrence
- Clearly readable backlit display
- Back-lit four-line alphanumeric display
- RS232 interface



## Specifications

Safety Ratings	
Standards	IEC/EN 60204-1, ISOTR 12100
Certifications	CE Marked for all applicable directives
Power Supply	
Input Power Entry	24V DC
Power Consumption	0.5 W
Environmental and Physical Characteristics	
Enclosure Type Rating/ Terminal Protection	IP40 (NEMA 1)/ IP20
Operating Temperature [C (F)]	-5...+55 ° (23...131 °)
Vibration	10...55 Hz, 0.35 mm
Shock	10 g, 16 ms, 100 shocks
Mounting	Panel or 35 mm DIN Rail (option)
Weight [g (lb)]	210 (0.46)
Conductor Size, Max.	0.2...2.5 mm <sup>2</sup> (24...14 AWG)

## Example Messages

**Bold = standard text**

Not Bold = text depending on function

System menu:

Manual/auto **reset**

**Output** active/deactivated

Monitoring active/device ready

**EDM** active/deactivated (feedback circuit)

Input configuration:

Input Module 4

MSR220 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

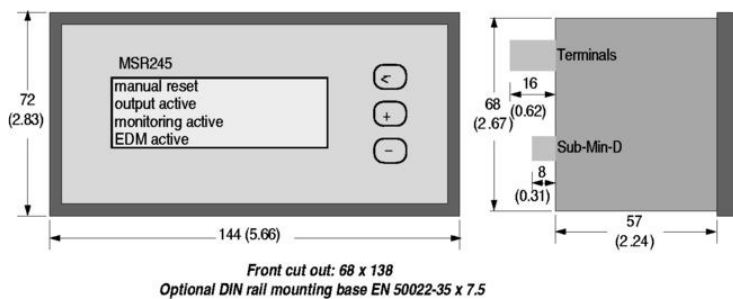
**Output active/inactive**

## Product Selection

Description	Cat. No.
Display module	440R-H23184
DIN Rail Base Adapter Kit	440R-H23185

## Approximate Dimensions

Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes.



## Typical Wiring Diagrams

