

Safety Light Curtains

RM-4



Resource Module — Connects up to Four Independent Safety Devices

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- Type 4 safety product when used in combination with a Type 4 safety light curtain
- Provides centralized connections for solid-state safety outputs from up to four safety devices and produces a single pair of solid-state safety outputs
- Diagnostic display
- 150 mm DIN enclosure
- Diagnostic display
- Removable terminal blocks
- Compatible with Omron STI' MS4800, F3SJ, PA4600, OS3101 and OS32C



Specifications

Performance	
Response Time:	1 msec
Indicators/Diagnostics:	Power On, Solid-State Safety Input, MPCE Fault, Machine Run, Machine Stop, Interlock/Fault; 2-Digit, 7-Segment LED Display for Operational Faults, DIP Switch Faults, Solid-State Safety Faults, MPCE Faults, and Controller Faults.
Electrical	
Input Power:	24 VDC $\pm 10\%$ supply that meets the requirements of IEC 60204-1 and IEC 61496-1 (see Omron STI part number 42992, 40128 or equivalent).
Safety Solid State Safety Outputs:	Two PNP outputs each sourcing 625mA @ 24 VDC
Auxiliary (Non-Safety) Output:	User selectable. Either one NPN output sinking 100 mA @ 24 VDC or one PNP output sourcing 500 mA @ 24 VDC
Start Required Lamp Output:	NPN output sinking 500 mA @ 24 VDC
MPCE Monitor:	50 mA @ 24 VDC (RM-4 sourcing current)
Cable Connections/ Terminal Blocks:	2 rows of contact terminal blocks, 1.63 mm max. wire (14 AWG)
Environmental	
Enclosure Rating:	IP20
Operating Temperature:	0 to 55°C (3 to 131°F)
Relative Humidity:	95% maximum, non-condensing
Conformity/ Approvals	
Conformity to Standards:	CE approved and conforms to IEC 61496-1, IEC 61508, EN 954-1, EN 60204-1, EN 50178, and Type 4 safety category. UL listed.
Mechanical	
Enclosure:	Polycarbonate
Mounting:	DIN rail mount
Dimensions:	150 mm x 75 mm x 110 mm (5.85 in. x 2.95 in. x 4.33 in.)
Input Signal Cable Lengths	
Safety Device Solid State Safety Inputs:	Use 0.813 mm (20 AWG) or larger shielded wire with cable capacitance <100 pF/ft., max. length 60 m (198 ft.)
MPCE Monitor Input:	Use 0.643 mm (22 AWG) unshielded wire, max. length 10 m (33 ft.), shielded cable max. length 50 m (164 ft.)
Start Input:	Use 0.643 mm (22 AWG) unshielded wire, max. length 60 m (198 ft.)
Output Signal Cable Lengths	
Solid State Safety A and Solid State Safety B Output and Return:	Use 0.813 mm (20 AWG) or larger unshielded wire with cable capacitance <100 pF/ft., max. length 10 m (33 ft.), Shielded cable max. length 50 m (164 ft.)
RM-4 Auxiliary Outputs (PNP Out and NPN Out):	Use 0.813 mm (20 AWG) or larger unshielded wire, max. length 10 m (33 ft.), Shielded cable max. length 50 m (164 ft.)
Start Required Lamp Output:	Use 0.813 mm (20 AWG) or larger unshielded wire, max. length 60 m (198 ft.)

Specifications are subject to change without notice.



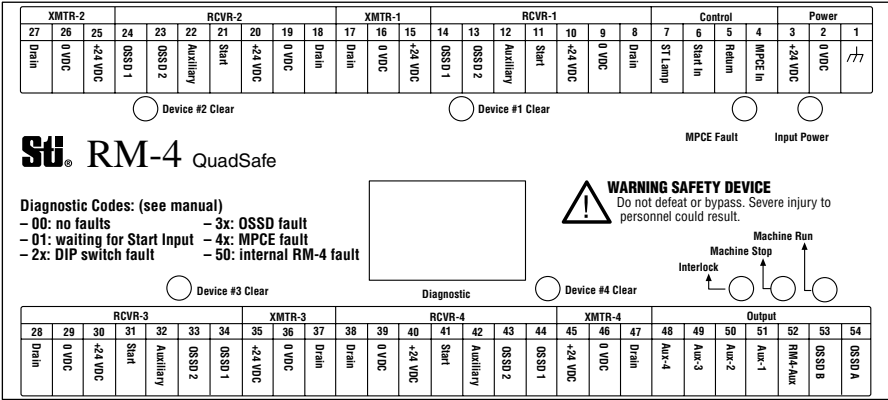
Description

The RM-4 is a resource module which provides simple and reliable connections for up to four safety light curtains. It is ideal for applications that require multiple safety devices. The RM-4 represents the status of several safety devices, combining them into a single pair of safety outputs. This greatly reduces panel space, as fewer force-guided control relays are needed.

Power Supply Requirement

Total System Components	Number of Devices	Power Supply Requirements			
		50 watts	75 watts	100 watts	125 watts
4	2 Relays				
3	2 Relays				
2	2 Relays				
1	2 Relays				

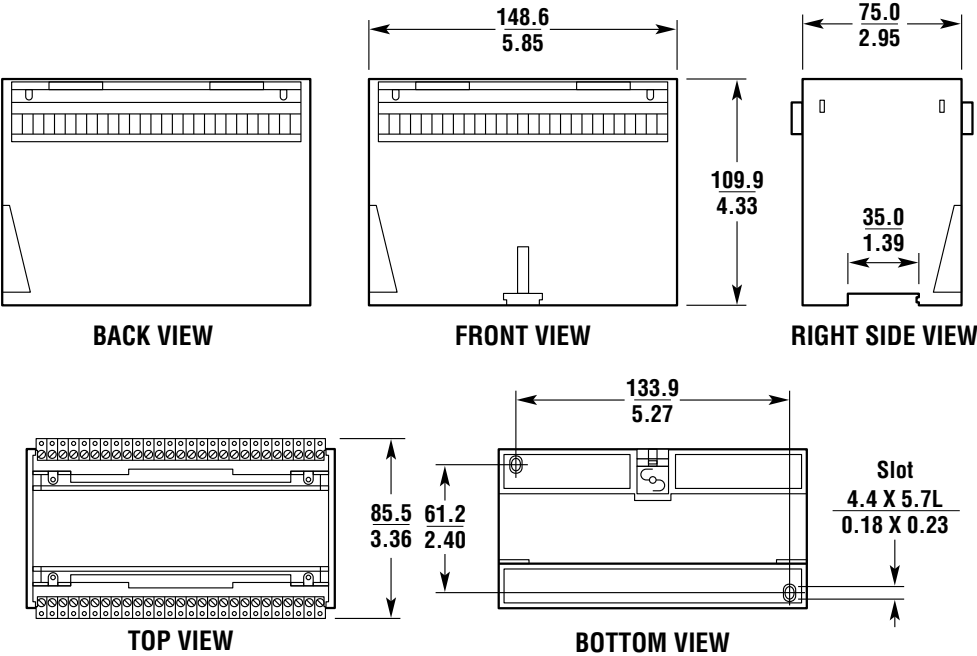
Terminal Orientation Reference



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Dimensions

(mm/in.)



Ordering

Model No.	Description
RM-4	RM-4 controller, 24 VDC, DIN-rail mount

- For information on the OS3101, see page B16
- For information on the OS32C, see page B6
- For information on the PA4600, see page C3
- For information on the MS4800, see page D13
- For information on safety light curtain accessories, see page D42