1-800-633-0405 ReeR MOSAIC-MR2 Safety Relay

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The ReeR MOSAIC (MOdular SAfety Integrated Controller) MR2 safety relay module provides 2 relays with 2 NO safety contacts, plus 1 NC contact connectable to 1 OSSD pair, plus 1 NC contact for external device monitoring.

Features

- Two NO dry contact safety outputs
- One NC dry contact monitoring
 output
- One NC contact for external device monitoring
- Two safety relays with guided contacts
- Removable terminal block plus
 screw contacts
- MR2 is not on the MSC 5-way ReeR proprietary bus



Safety Data per EN 13849-1						
Category	4					
Performance level	е					
MTTF _d (years)	2335					
DC _{avg}	98.9%					
Safety Data	per IEC/EN 62061, IEC/EN 61508					
SIL CL	3					
SIL	3					
HFT	1					
DC _{avg}	98.9%					
SFF	99.6%					
PFH _d (t-20a)	Please refer to product insert					

Safety data is dependent on circuit architecture. See manual for further details.



MOSAIC-MR2 Expansion Unit						
Part Number Price Voltage		Voltage	Description	Connection		
MOSAIC-MR2	\$146.00	24VDC	Safety relay extension module, 2 NO safety outputs, 1 NC monitoring output	Removable terminal block, screw contacts		

MOSAIC-MR2 Specifications					
	General Specifications				
Operating Temperature	-10°C to +55°C [14°F to 131°F]				
Storage Temperature	-20°C to +85°C [-4°F to 185°F]				
Altitude	2000m (max)				
Vibration Resistance	Tested to IEC 60068-2-6				
Degree of Protection	IP 20				
Housing	Polyamide				
Weight	260g [9.17 oz]				
Agency Approvals and Standard	cULus, CE, TÜV				
Terminal Designation per EN 50 005	AWG 12-30 solid/stranded. Use 60/75°C copper (Cu) conductor only.				
Wire Fixing	Screw or clamp terminal blocks with 8, 16 or 24 terminals, plus rear panel plug-in connector. Terminal tightening torque 5-7 lb•in (0.6-0.7 N•m).				
Input Specifications					
Nominal Voltage	24VDC				
Voltage Range	± 20%				
Maximum Consumption	3W				
	Output Specifications				
Electrical Contact Llfe	>105 switching cycles				
Mechanical Life	>20x106				
Contact Type	2 NO positively driven / 1 NC auxiliary contact				
Operate Delay	Typ. 10ms				
Release Delay	Typ. 5ms				
Nominal Output Voltage	240VAC				
Thermal Current (Ith)	Max 6A				
Short Circuit Strength	Fuse: NO contacts 10 A gG/gL / NC contacts: 6A gG/gL IEC/EN 60269				
Switching Capacity	AC15: 3A/250VAC – DC13:2A/24VDC				
Switching Frequency	Max 20 switching cycles/min				

Note: See product manual for complete details.

Note: To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

1-800-633-0405 **Electrical Connections** to MOSAIC-MR2

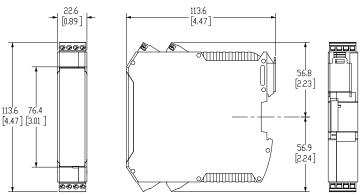


- Wire size range: AWG 12-30 (solid/stranded) (UL).
- Use 60/75°C copper (Cu) conductor only.
- Turn off power before making connections.
- The supply voltage must be 24VDC ± 20% (PELV, in compliance with the standard EN 60204-1 (Chapter 6.4).
- · Do not use the MOSAIC to supply external devices.
- The same ground connection (0VDC) must be used for all system components.
- Separate power supplies are recommended for the safety module and for other electrical power equipment (electric motors, inverters, frequency converters) or other sources of disturbance.
- Cables used for connections of longer than 50m [164ft] must have a cross-section of at least 1mm² (AWG16).





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MR2 Module Connections						
Terminal	Signal	Туре	Description			
1	24VDC	_	24VDC power supply			
4	0VDC	-	0VDC power supply			
5	OSSD1_A	Input	Control ZONE 1			
6	OSSD1_B	Input	CONTROL ZONE 1			
7	FBK_K1_K2_1	Output	Feedback K1K2 ZONE 1			
9	A_NC1	Output	NC contact ZONE 1			
10	B_NC1	Output	NC CONTACT ZONE T			
13	A_NO11	Output				
14	B_NO11	Output	NO1 contact ZONE 1			
15	A_NO12	Output				
16	B_NO12	Output	NO2 contact ZONE 1			

Please see the Mosaic manual for wiring examples.

Safety Products



Warning: Safety products sold by AutomationDirect are Safety components only. The purchaser/installer is solely responsible for the application of these components and ensuring all necessary steps have been taken to assure each application and use meets all performance and applicable safety requirements and/or local, national and/or international safety codes as required by the application. AutomationDirect cannot certify that our products, used solely or in conjunction with other AutomationDirect or other vendors' products, will assure safety for any application. Any person using or applying any products sold by AutomationDirect is responsible for learning the safety requirements for their individual application and applying them, and therefore assumes all risks, and accepts full and complete responsibility, for the selection and suitability of the product for their respective application.

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