



Introduction

The M-7068 provides 4 Form A signal relay output channels and 4 Form C signal relay output channels, while the M-7069 provides 4 Form A power relay output channels and 4 Form C power relay output channels. Both include 8 LED indicators that can be used to monitor the relay output status, and options are provided that allow power-on and safe digital output values to be configured. 4 kV ESD, 4 kV EFT and 3 kV surge protection are also provided to enhance noise protection capabilities in industrial environments. The M-7068 is the ideal solution for small signal switching, while the M-7069 is the ideal solution for high power applications.

System Specifications

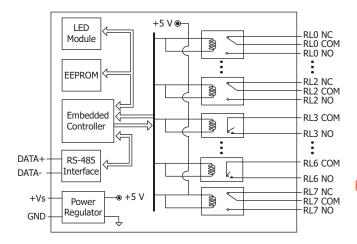
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Model	M-7068	7068D	M-7069	7069D	
CPU Module					
Watchdog Timer	Module, Communication (Programmable)				
Display					
Туре	7068D/69D: I/O LED Indicator				
Isolation					
Intra-module Isolation	2000 VD	С	3750 VD	С	
EMS Protection					
EFT (IEC 61000-4-4)		r 8 Relay r RS-485	and Powe Port Line	r Line	
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal ±8 kV Air for Random Point				
Surge (IEC 61000-4-5)	5) ±3 kV for Power Line				
LED Indicators	1				
Status	1 x Power and Communication				
Status	7068D/69D: 8 x Relay Output				
COM Ports					
Ports	1 x RS-485				
Baud Rate	1200 ~ 115200 bps				
Data Format	ta Format (N, 8, 1), (N, 8, 2), (E, 8, 1), (O, 8, 1		(0, 8, 1)		
Protocol	rotocol Modbus RTU, DCON				
Power					
Reverse Polarity Protection	Yes				
Input Range	+10 ~ +	30 VDC			
Consumption	1.6 W (Max.)	2.0 W (Max.)	2.1 W (Max.)	2.5 W (Max.)	

I/O Specifications

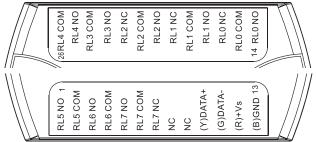
Model	M-7068(D)	M-7069(D)		
Relay Output				
Channels	8 (4 x Form A, 4 x Form C)			
Туре	Signal Relay	Power Relay		
Contact Material	Silver Nickel, Gold-covered	Silver Cadmium Alloy		
Contact Pating	Form A / Form C: 2 A @ 30 VDC	Form A: 6 A @ 35 VDC 6 A @ 240 VAC		
Contact Rating	0.24 A @ 220 VDC 0.25 A @ 250 VAC	Form C: 5 A @ 30 VDC 5 A @ 250 VAC		
Operate Time	3 ms (typical)	5 ms (typical)		
Release Time	4 ms (typical)	1 ms (typical)		
Electrical Endurance	2 x 10 ⁵ ops.	1 x 10 ⁵ ops.		
Mechanical	1 x 10 ⁸ ops.	Form A: 30 x 10 ⁶ ops.		
Endurance	1 X 10° 0µS.	Form C: 15 x 10 ⁶ ops.		
Power on Value	Programmable			
Safe Value	Programmable			

Mechanical		
Dimensions (mm)	72 x 123 x 35 (W x L x H)	
Installation	tion DIN-Rail Mounting	
Environment		
Operating Temperature	-25 ~ +75°C	
Storage Temperature	-40 ~ +85°C	
Humidity	10 ~ 95% RH, Non-condensing	

Internal I/O Structure



Pin Assignments



Applications

- Building Automation
 - Remote Maintenance Remote Diagnosis
- Factory AutomationMachine AutomationRemote DiagnosisTesting Equipment

Wire Connections

Relay Output	ON State Readback as 1	OFF State Readback as 0	
Form A Relay in RL3 ~ RL6	AC/DC TO RLx NO RLx COM	AC/DC × □⊖ RLx NO RLx COM	
Form C Relay in RL0 ~ RL2 and RL7	× Load1 □ □ RLx NC AC/DC □ □ RLx COM Load2 □ □ RLx NO	$\begin{array}{c c} & & & \\ \hline \hline & & & \\ \hline & & & \\ \hline \hline & & & \\ \hline \hline \\ \hline & & & \\ \hline \hline & & & \\ \hline \hline \\ \hline & & & \\ \hline \hline \\ \hline & & & \\ \hline \hline \\ \hline \\$	

Ordering Information

M-7068-G CR	8-ch Signal Relay (4x Form A and 4x Form C) Module using DCON and Modbus Protocols (Gray Cover) (RoHS)
M-7068D-G CR	8-ch Signal Relay (4x Form A and 4x Form C) Module with LED Display, using DCON and Modbus Protocols (Gray Cover) (RoHS)
M-7069-G CR	8-ch Power Relay (4x Form A and 4x Form C) Module using DCON and Modbus Protocols (Gray Cover) (RoHS)
M-7069D-G CR	8-ch Power Relay (4x Form A and 4x Form C) Module with LED Display, using DCON and Modbus Protocols (Gray Cover) (RoHS)

Accessories

tM-7520U CR	Tiny Isolated RS-232 to RS-485 Converter (RoHS)
tM-7561 CR	 Tiny USB to Isolated RS-485 Converter with CA-USB18 Cable (RoHS)
I-7514U CR	Isolated 4-channel RS-485 Repeater/Hub/Splitter (Gray Cover) (RoHS)
SG-3000 Series	Signal Conditioning Modules for Thermocouple, RTD, DC Voltage, DC Current and Power Input Transformers