MAS-DO-RL

masibus
A Sonepar Company

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Issue No.:09

8-Channel Digital Output Module

Masibus Relay Output Field Interface Board has 8/16 channels, with 24VDC coil voltage and 1CO contact configuration.
It has screw terminals at both end for interfacing PLC digital output to field signals.

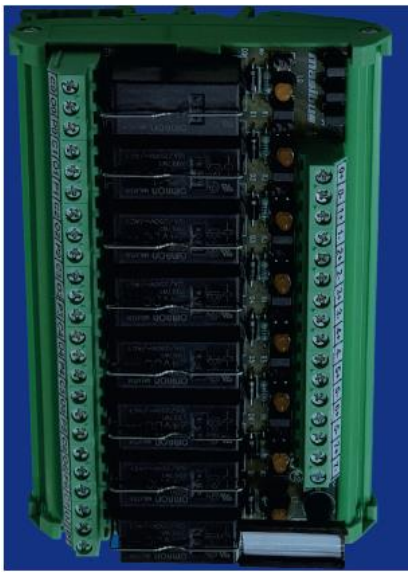
APPLICATION

Convert Open Collector to Relay Output
Protect Expensive control systems against FieldFaults
MCC Interface
SCADA/DAS/PLC

SPECIFICATION

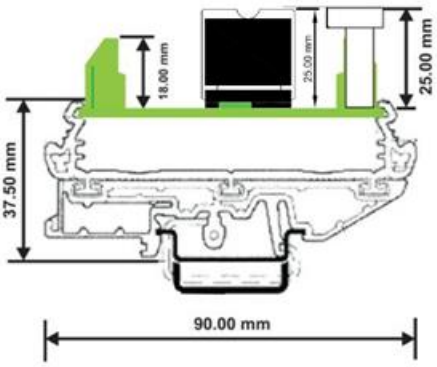
CONTACT	
Relay Type	SPDT (1CO), Plug-In Type (G2RL / G5Q) Series
Resistive Load	For G2RL - 12A at 250VAC / 12A at 30VDC For G5Q (NO) - 3A at 250VAC / 5A at 30VDC For G5Q (NC) - 3A at 30VDC
Inductive Load	2A at 250VAC / 3A at 30VDC
Max. Switching Voltage	For G2RL - 440VAC/300VDC For G5Q - 277VAC/30VDC
Relay ON Time	For G2RL - 15 ms max., For G5Q – 10 ms max.
Relay OFF Time	For G2RL - 5 ms max., For G5Q – 5 ms max.
Contact Resistance	100 mΩ maximum
Insulation Resistance	1000 MΩ min.
COIL	
Nominal Voltage	24VDC
Must Operating Voltage	75% max. of rated voltage
Must release Voltage	5% min. of rated voltage
Max. Voltage	130% of Rated Voltage (at 85°C)
Input Current / Channel	6.7mA
Protection across Relay Coil	Free Wheeling Diode
Indication / Channel	Green LED
GENERAL	
No. of Channels & Type	8 Channel
Relative Humidity	Max. 90% (non-condensing)
Operating temperature	0 to 50°C
Isolation	For G2RL – 1.5KVAC, For G5Q – 4 KVAC
Mounting	Universal Din Rail
Environmental Protection	Conformal Coating on PCB (Bottom Side)
Dimensions	
Profile Material	PVC
Dimensions	128mm(L) x 90mm(W) x 60mm(D) (For 8 Channel) 252mm(L) x 90mm(W) x 60mm(D) (For 16 Channel)
Weight	Approx 550 gm
Terminal	PCB Mounted Terminal (wire size of up to 2.5 Sq.mm.)

8-CHANNEL RELAY OUTPUT MODULE

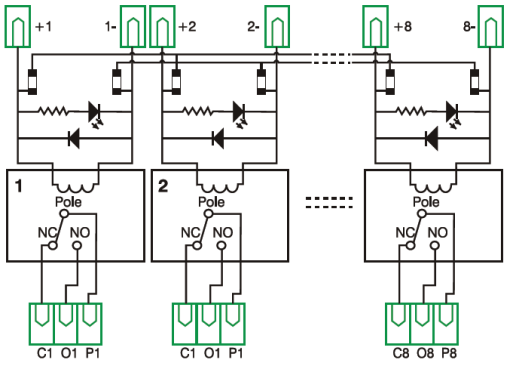


- **Relay module with 8/16 - Channel**
- **Freewheeling diode across the relay coil for protection**
- **Jumpers for selection between positive/negative looping**
- **Available with pluggable relays**

Dimension

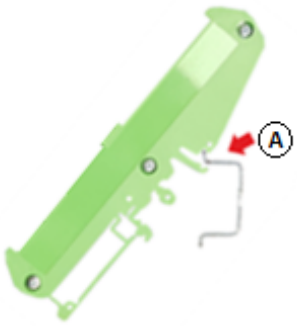


Dimensions :
For 8 Channel: 128mm(L) x 90mm(W) x 60mm(D)
For 16 Channel: 252mm(L) x 90mm(W) x 60mm(D)



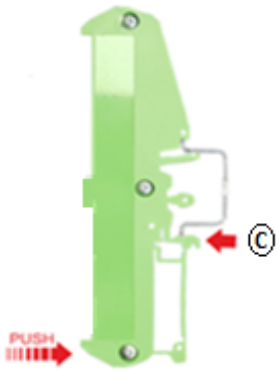
INSTALLING MODULE ON THE DIN RAIL

STEP 1: Put the Module on the part Ⓐ of the rail as shown below.



STEP 2: Put the Module on the part Ⓑ of the rail as shown below.

STEP 3: Press it from direction Ⓒ and load it to DIN Rail until clicking sound comes.

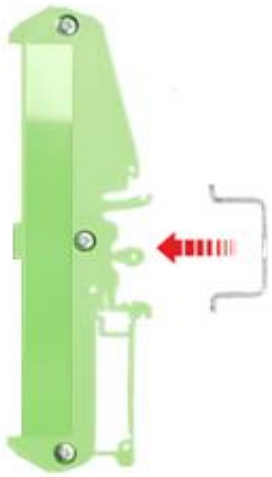


REMOVING MODULE FROM THE DIN RAIL

STEP 1: Put Screwdriver on the part Ⓓ as shown below.

STEP 2: Pull it downward using screwdriver as shown below.

STEP 3: Remove the Module from DIN Rail as shown below



REPLACEMENT OF COMPONENT

Note : Switch off all phases of the externally supplied power used in the system while replacing Relay from Relay Socket or fuse from fuse holder.

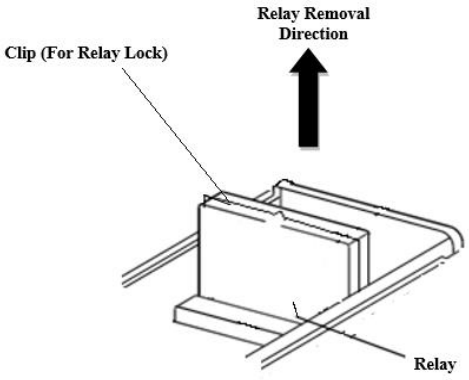
REPLACEMENT OF RELAY FROM RELAY SOCKET

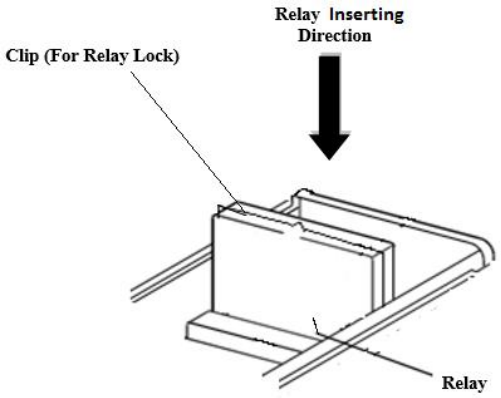
REMOVING RELAY FROM RELAY SOCKET

STEP 1: Remove Relay Clip from upper part of relay and Gently Remove Relay from Relay Socket (removal direction shown in figure)

INSERTING RELAY IN RELAY SOCKET

STEP 2: Insert New Relay from upper direction taking a note of the relay installation direction. After confirming that the relay is firmly connected and there is no bent in its lead, turn on the power supply





PRECAUTIONS FOR RELAY REPLACEMENT

When the G2RL-1 relay is replaced, always use a relay that is compatible with the G2RL-1 (**Coil Rating of Relay** - 24V DC, 16.7mA, **Contact rating for Relay** - 12A at 250VAC OR 12A at 24V DC).

TROUBLE SHOOTING

Sr. No	Fault Description	Probable Cause	Counter Measures
1	Green LED for Module Side Internal Supply does not glow	Not Getting Sufficient Supply or connections are not as per connection details for Module Side	Check connections and supply applied
2	Channel Red LED Glow	Fuse Fail	Check loose mounting of fuse or Check Power Line Shorting
3	Contact Failure	Excessive device Load Connected or Relay terminals bend and not Make proper contact with socket.	Check the connected Load capacity. Check relay mounting on socket.

ORDERING CODE

ORDERING CODE								
Model No		**No of Channels**		**Contact**		**Voltage**		**Rated Current (Resistive load)**
MAS-DO-RL	XX		XX		XX		XX	
	08	8 Channel	1CO	Single change over	24	24VDC Coil Voltage	-	10A
	16	16 Channel	2CO	Two change over			02	5A

CABLE ORDERING CODE		
Model	**Input Type & Range**	
m-PC-D25F-LG	XX	
	C	2.5 Meter
	D	3.0 Meter
	E	3.5 Meter
	F	5.0 Meter
	G	7.0 Meter
	S	Special

Note: 20 Core 0.14mm^2 with DB 25 Female connector at one end and lug at another end.