

4, 8 or 16 Channel relay modules
DIN rail mounting
LED indication of relay operation
Provides relay interface to
programmable controllers
PNP signal operated (NPN
available by request)

(RM4 - 2C shown)

Introduction

The RM16-2C is a 16 channel double pole change-over (DPCO) relay module, the RM8-2C is a 8 channel double pole change-over (DPCO) relay module and the RM4-2C is a 4 channel double pole change-over (DPCO) relay module

Connections are made to the modules via phoenix screw terminals. There is LED indication of relay operation and the modules are designed to be DIN rail mounted. Finder (standard) or Schrack relays are used, relay sockets are optional. Standard modules are supplied for switching from PNP signals (NPN versions available on request). Flywheel diodes are fitted to all channels.

General Ratings

Storage temperature	-20 to +70 °C
Operating temperature	0 to 50 °C
Humidity	0-90%
Weight	220g (RM4-2C) 482g (RM8-2C) 1000g (RM16-2C)
Dimensions	RM4-2C: 77 mm width 112.5 mm length 68 mm height* RM8-2C: 77 mm width 202.5 mm length 68 mm height* RM16-2C 77 mm width 253 mm length 68 mm height*
	*59 mm if specified without relay sockets
Screw terminal wire gauge	Up to 2.5 mm csa (12 AWG)
Maximum current per channel	5 amps (resistive load)
Maximum voltage per channel	240Vac 50Hz or 30Vdc.
Relay coil voltage (nominal)	24Vdc (maximum 42Vdc, minimum 18.7Vdc)**
	**Other relay coil voltages are available to order
Relay coil current	30mA (at nominal 24Vdc, includes LED)
Unit Housing	Phoenix 6.6 Polyimide plastic moulding to the dimensions above
Unit Mounting	The unit can be mounted on all standard NS32 and NS35 DIN rail profiles to EN50 045, EN50 035 and EN50 022 standards



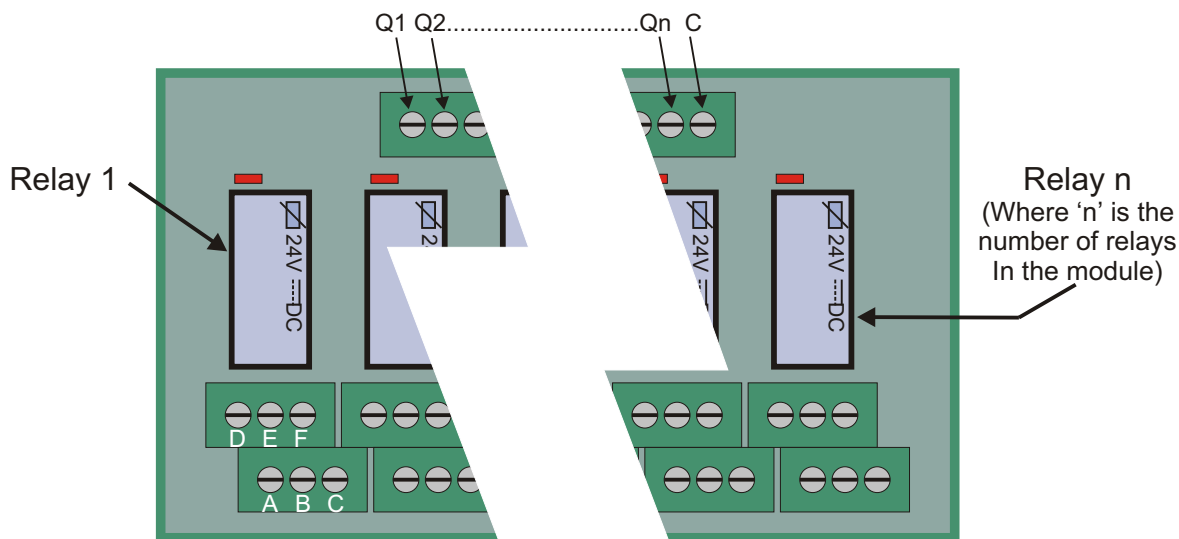
Relay Specifications

Contact:	Material Silver/Nickel (90/10), Resistance initially < 50 milli ohm, for long life protect contacts with a suitable arc suppressing circuit.
Mechanical Life:	20 000 000 operations DC.
Operate Time:	15mS.
Release Time:	20mS.

Connection Details

The diagram below should be used for reference when making connections to the **RM4-2C** and the **RM16-2C**. When making connections to the **RM8-2C** please see the diagram on page 3.

Q1 to Qn are the outputs from the PLC which switch the relays. 'C' is the common (on the RM16/2C there are two common terminals next to each other). Q1 to Qn need to be +VE on the PNP version and signal ground on the NPN version. 'C' needs to be signal ground on the PNP version and +VE on the NPN version.



Connections to the relay contacts are made by the terminals A,B,C,D,E,F. Each relay is connected in the same way:
 A = Contact 1, NORMALLY OPEN (NO)
 B = Contact 1, COMMON (C)
 C = Contact 1, NORMALLY CLOSED (NC)
 D = Contact 2, NORMALLY OPEN (NO)
 E = Contact 2, COMMON (C)
 F = Contact 2, NORMALLY CLOSED (NC)

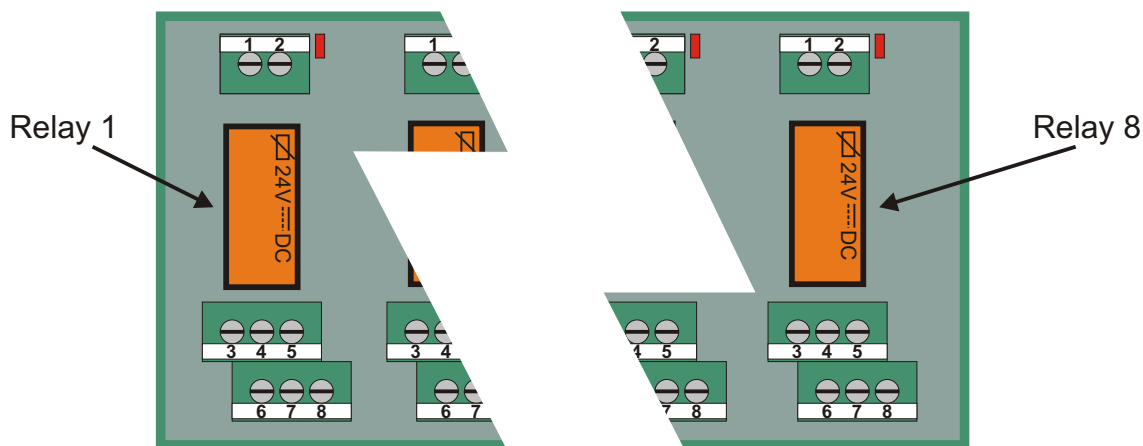
Please Note: The letters A,B,C,D,E,F are used for illustration purposes only. The relay output terminal blocks are numbered numerically or alpha-numerically (depending on module type ordered) for ease of wiring diagram creation etc. Likewise the connection terminal block from the PLC outputs to the relay coils and the commons are numerically numbered.



Connection Details (continued)

The diagram below should be used for reference only when making connections to the **RM8/2C**

Terminals 1 & 2 on each relay are the coil terminals. The output from the PLC which is intended to switch the relay should be connected to these terminals.
 Terminal 1 = +Ve
 Terminal 2 = -Ve



Terminals 3,4,5,6,7 & 8 on each relay are the contact connections.
 3 = Contact 1, NORMALLY CLOSED (NC)
 4 = Contact 1, COMMON (C)
 5 = Contact 1, NORMALLY OPEN (NO)
 6 = Contact 2, NORMALLY OPEN (NO)
 7 = Contact 2, COMMON (C)
 8 = Contact 2, NORMALLY CLOSED (NC)

Health and Safety

As these products are capable of switching high voltages and relatively high currents, care must be exercised in the usage of these products.



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Order Codes

Part Number

RM4/2C - Four channel DPCO relay module
RM8/2C - Eight channel DPCO relay module
RM16/2C - Sixteen channel DPCO relay module

Example order code for RM8/2C:

RM8/2C - PNP - 24v - NS - L - 2P

NPN or PNP operation _____ ↑
Coil voltage 6v, 12v, 24v, 48v, 110v _____ ↑
Relay Socket S, no socket NS _____ ↑
LED indicator L or no LED NL _____ ↑
Screw/Saddle connector SS or two part connector 2P _____ ↑

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