Midi Industrial Relay
Type RMI. 4-5 5A
Monostable

RMI A 45

- **High switching power**
- **Small size**
- **4 poles configuration**
- **AC coils 6 to 230VAC**
- **DC coils 5 to 110VDC**
- **3750VAC dielectric coil to contacts**
- **Standard with LED, Push with arm and Flag**
- **IP 40**
- **Complain with the CE low voltage directive**
- **TÜV, UL, CSA, IMQ approved**

Product Description

The RMI relay (relay mini-industrial) can be used for a wide range of industrial applications.

Available in 4 change-over contact configuration.
PCB, solder and plug-in terminals.

Approvals

E73404

Ordering Key

RMI A 45 12DC /1

Type
Terminal version
Contact code
Coil code
Options

Terminal version: A = Soldering terminals
B = PCB terminals

Box content: 25 relays
Box size: (W 125 x D 165 x H 50) mm Weight: 850g
(W 4.92 x D 6.50 x H 1.97) inches Weight: 29.98oz

Type Selection

Contact configuration		Contact rating	Contact code
4 change over contacts	(4PDT {4-form C})	5A	**45**

Coil Characteristics, DC 0.9W

Coil Code	Nominal voltage VDC	@ +20°C (+68°F)		Coil resistance Ω
		Pick-up voltage VDC	Drop-out voltage VDC	
5VDC	5	4.0	0.5	27.5 ±10%
6VDC	6	4.8	0.6	40.0 ±10%
12VDC	12	9.6	1.2	160.0 ±10%
24VDC	24	19.2	2.4	650.0 ±10%
48VDC	48	38.4	4.8	2600.0 ±15%
60VDC	60	48.0	6.0	11000.0 ±15%
110VDC	110	88.0	11.0	11000.0 ±15%

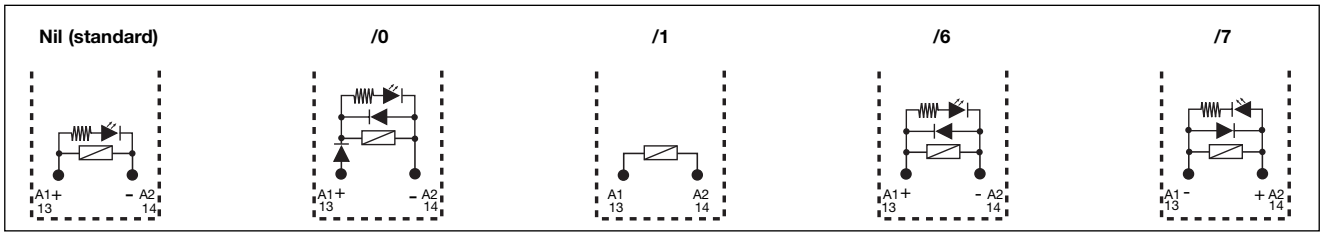
CARLO GAVAZZI

Coil Characteristics, AC 1.2VA

Coil Code	Nominal voltage VAC	@ +20°C (+68°F)		Coil resistance Ω
		Pick-up voltage VAC	Drop-out voltage VAC	
6VAC	6	4.8	1.8	40.0 ±10%
12VAC	12	9.6	3.6	160.0 ±10%
24VAC	24	19.2	7.2	650.0 ±10%
48VAC	48	38.4	14.4	2600.0 ±10%
115/120VAC	110-120	96.0	36.0	11000.0 ±15%
230VAC	220-240	176.0	66.0	11000.0 ±15%

Options

Nil = Standard with Push Arm -LED (A1+) (A2-)- Flag
/0 = Diode against polarity reverse + free-wheeling Diode (A1+) (A2-)
/1 = Without LED
/2 = Without Flag
/3 = Without Push Arm
/4 = Plated Contacts Au > 5µm
/5 = Flash Gilded Contacts Au > 1µm
/6 = Free-Wheeling Diode (A1+) (A2-)
/7 = Free-Wheeling Diode (A1-) (A2+)



Contact Characteristics

Contact rating (with resistive load)		**5A - 250VAC**
UL rating		**5A - 250VAC/30VDC 1/6HP @ 240VAC**
Usually rating	(1x10^5 ops)	**5A - 250VAC / 30VDC**
Max. rating	(5x10^4 ops)	**5A - 250VAC / 30VDC**
Material		**$AgSn_2In_2O_3$**

Minimum Current Min. applicable load /4 and /5 versions	**5mA @ 12VDC 1mA @ 6VDC**
Initial contact resistance	**50mΩ (@ 1A 6VDC)**
Max. switch. voltage	**250VAC / 30VDC @ 5A**
Max. switch. power	**1250VA / 150W @ 5A**
Life	
Electrical life	**1x10^5 cycles (1800 Ops/h)**
Mechanical life	**1x10^7 cycles (1800 Ops/h)**

Insulation

Test Voltage (1 min.)	
Between coil and contacts	**3750VAC Vr.m.s**
Between open contacts	**750VAC Vr.m.s**
Contact/Contact	**1250VA Vr.m.s**
Initial insulation resistance	**1.000MΩ - 500VAC**

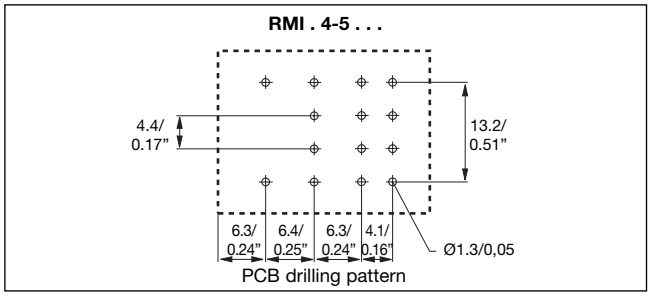
Insulation according to EN61810-5	
Rated insulation voltage	**250V**
Impulsive insulation voltage	**2.2kV**
Pollution degree	**2**
Overvoltage category	**II**

General Data

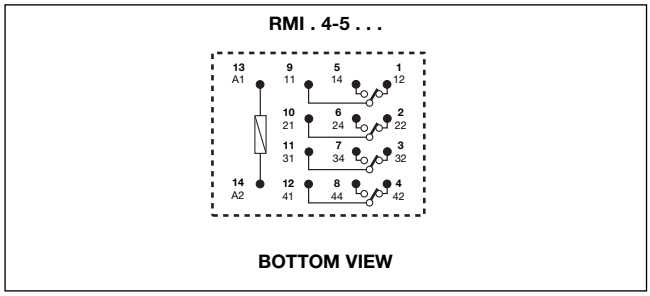
Nominal coil power	**0.9W DC / 1.2VA AC**
Operating time (At nominal voltage)	**25ms max.**
Release time (At nominal voltage)	**25ms max.**
Ambient temperature	**-55° to +70°C (-67° to +158°F)**
Vibration resistance	**10 to 55Hz 1.5mm (0.06")**
Construction	**Dust cover**

Shock resistance	
Funktional	**100m/s^2 /10g**
Destructive	**1000m/s^2 /100g**
Humidity	**35% to 95% RH non-condensing**
Terminals	**PCB or Soldering Lugs (Plug-in)**
Weight	**~37g (~1.30oz)**

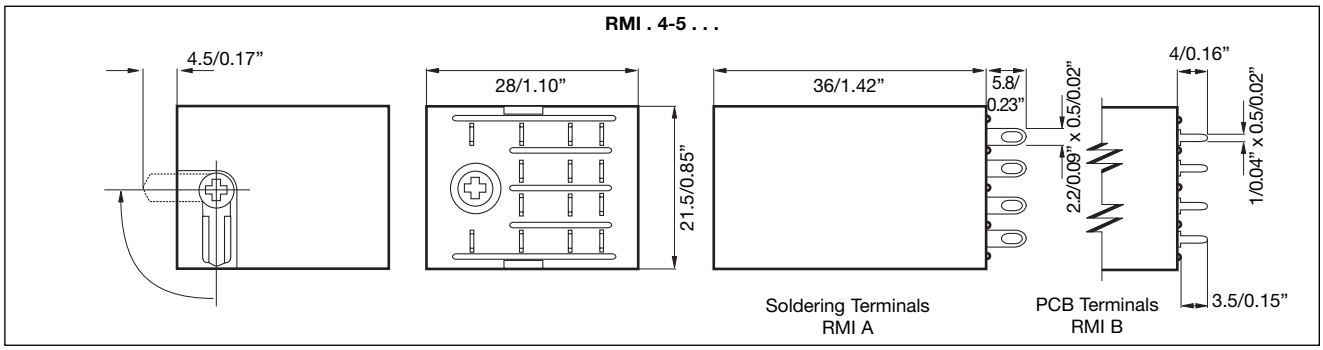
Pin View mm/inches



Wiring Diagram

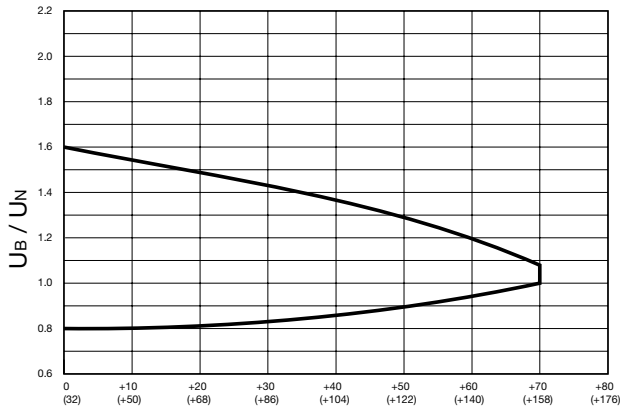


Dimensions mm/inches

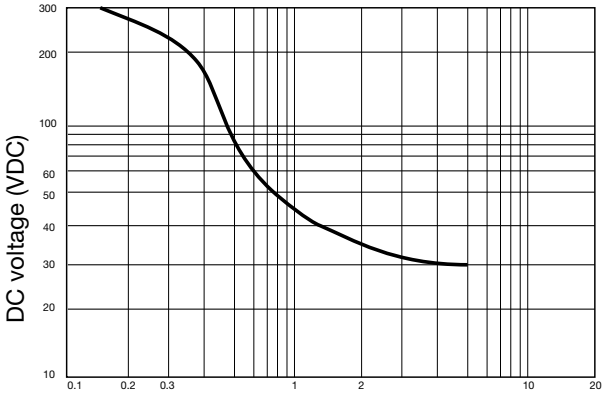


Diagrams

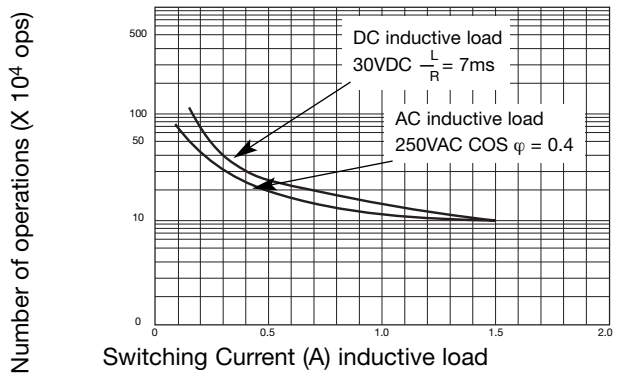
1 Coil Operating Range

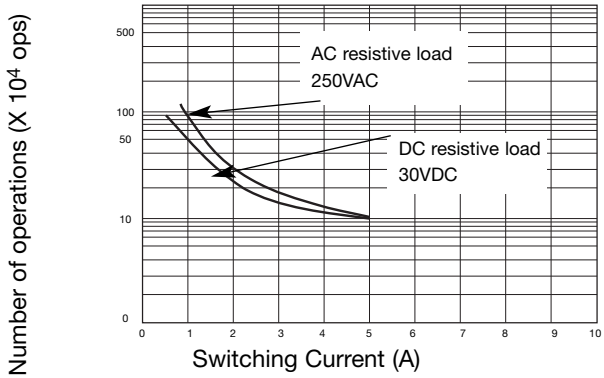


2 Max. DC load breaking capacity



3 Electrical life





Bases and Sockets

DIN rail sockets codes are **ZMI4NA, ZMI4SA, ZMI4GA, and ZDM14A** details and specifications from page 45 to 49 of industrial relays catalogue.
PCB sockets codes are **ZC15/4A and ZC15/4** details and specifications on page 51 of industrial relays catalogue.