

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

CARLO GAVAZZI



RMI A 45

- High switching power
- Small size
- Wide range of application
- 5A switching capacity
- 4 poles configuration
- AC coils 6V to 380V
- DC coils 6V to 240V
- Standard with LED, Push arm and Flag
- IP 40
- Complain with the CE low voltage directive
- TÜV, UL, CSA, IMQ, RINA (marine) 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.

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: 20 relays
Box size: (W 240 x D 105 x H 38) mm Weight: 680g
(W 9.45 x D 4.13 x H 1.50) inches Weight: 23.99oz

Approvals



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 Min.	Drop-out voltage VDC Min.	
6DC	6	4.5	0.6	40.0 ±10%
9DC	9	6.75	0.9	90 ±10%
12DC	12	9.0	1.2	160.0 ±10%
24DC	24	19.2	2.4	650.0 ±10%
36DC	36	25.0	3.6	1500.0 ±10%
48DC	48	38.4	4.8	2600.0 ±15%
100DC	100	80.0	10.0	11000.0 ±15%
110DC	110	88.0	11.0	11000.0 ±10%
220DC	220	165.0	22.0	42000.0 ±10%
240DC	240	180.0	24.0	64000.0 ±10%

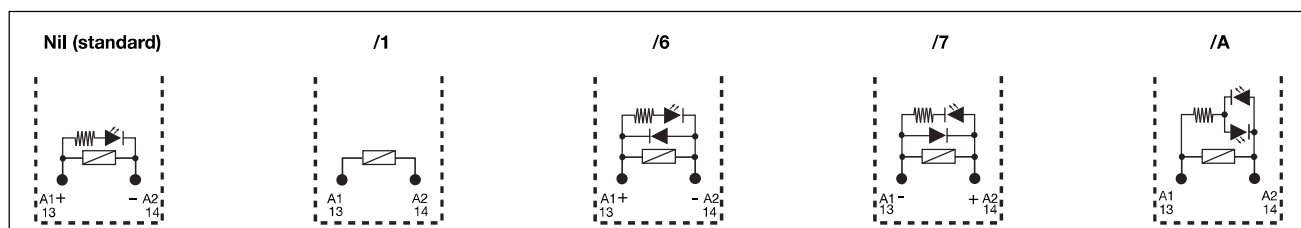
Coil Characteristics, AC 1.2VA

Coil Code	Nominal voltage VAC	@ +20°C (+68°F)		Coil resistance Ω
		Pick-up voltage VAC	Drop-out voltage VAC	
6AC	6	4.8	1.8	11.5 ±10%
12AC	12	9.6	3.6	40.0 ±10%
24AC	24	19.2	7.2	160.0 ±10%
36AC	36	28.8	10.8	370.0 ±10%
48AC	48	38.4	14.4	600.0 ±10%
110AC	110	88.0	33.0	3750.0 ±15%
120AC	120	96.0	36.0	3900.0 ±15%
220AC	220	176.0	66.0	13000.0 ±15%
240AC	240	192.0	72.0	18790.0 ±15%
380AC	380	304.0	114.0	42000.0 ±15%

Options

Nil = Standard with Push Arm -LED (A1+) (A2-) Flag
/1 = Without LED
/5 = Flash Gilded Contacts Au > 1µm

/6 = Free-Wheeling Diode (A1+) (A2-)
/7 = Free-Wheeling Diode (A1-) (A2+)
/A = Polarity free LED



Contact Characteristics

Contact rating (with resistive load)	5A - 250VAC	Initial contact resistance	50mΩ (@ 1A 6VDC)
UL rating	5A - 250VAC/30VDC 1/6HP @ 240VAC @ 60°C (160°F)	Max. inrush current	51A TV3 (according to UL1054)
Max. rating (5x10 ⁴ ops)	5A - 250VAC / 30VDC	Max. switch. voltage	250VAC / 30VDC @ 5A
Material	AgSn₂In₂O₃	Max. switch. power	1250VA / 150W @ 5A
Minimum Current Min. applicable load /5 version	10mA @ 12VDC 1mA @ 6VDC	Life Electrical life Mechanical life	1x10⁶ cycles (1800 Ops/h) 1x10⁷ cycles (1800 Ops/h)

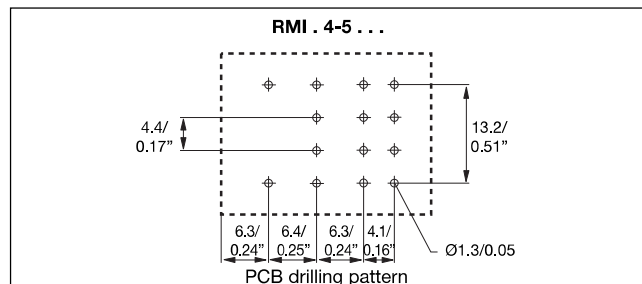
Insulation

Test Voltage (1 min.) Between coil and contacts Between open contacts Contact/Contact	2000VAC Vr.m.s 1000VAC Vr.m.s 1000VA Vr.m.s	Insulation according to EN61810-5 Rated insulation voltage Impulsive insulation voltage Pollution degree Overvoltage category	250V 3.6kV 2 III
Initial insulation resistance	1.000MΩ - 500VAC		

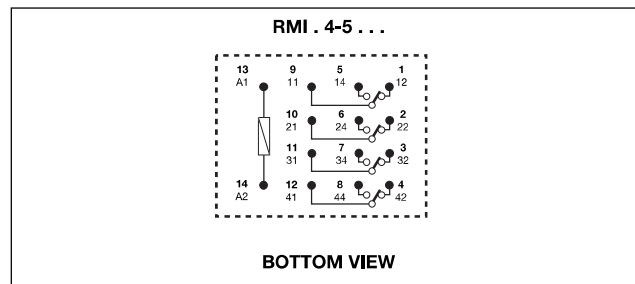
General Data

Nominal coil power	0.9W DC / 1.2VA AC	Shock resistance Functional Destructive	100m/s² / 10g 1000m/s² / 100g
Operating time (At nominal voltage)	25ms max.	Humidity	35% to 95% RH non-condensing
Release time (At nominal voltage)	25ms max.	Terminals	PCB or Soldering Lugs (Plug-in)
Ambient temperature	-55° to +70°C (-67° to +158°F)	Weight	~37g (~1.30oz)
Vibration resistance	10 to 55Hz 1.5mm (0.06")		
Construction	Dust cover		

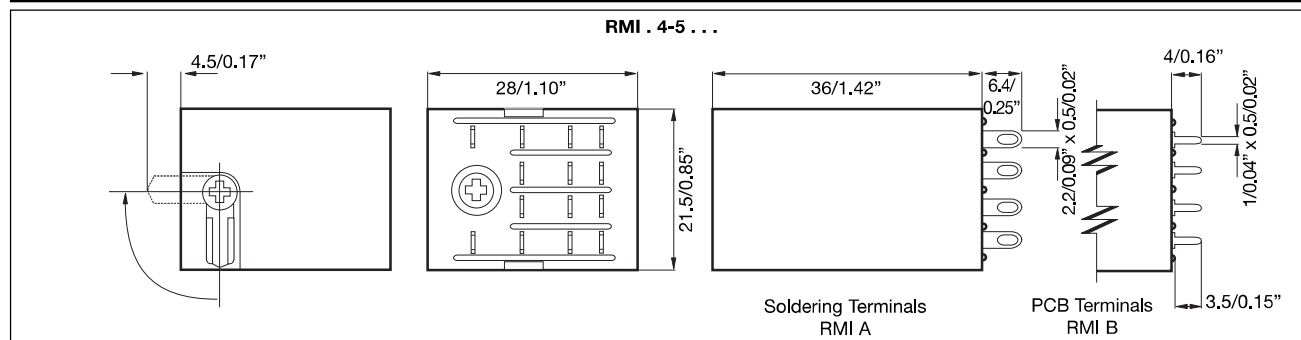
Pin View mm/inches



Wiring Diagram

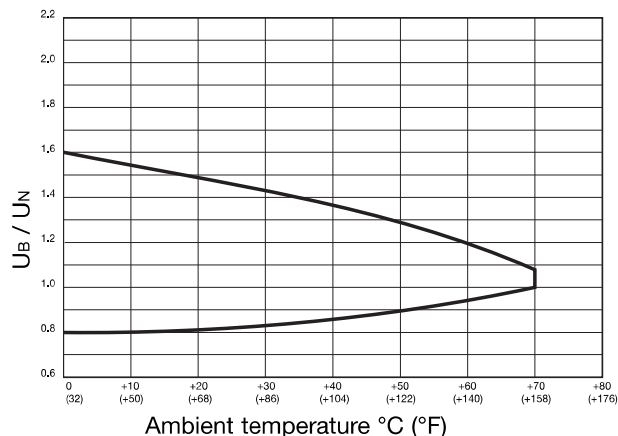


Dimensions mm/inches

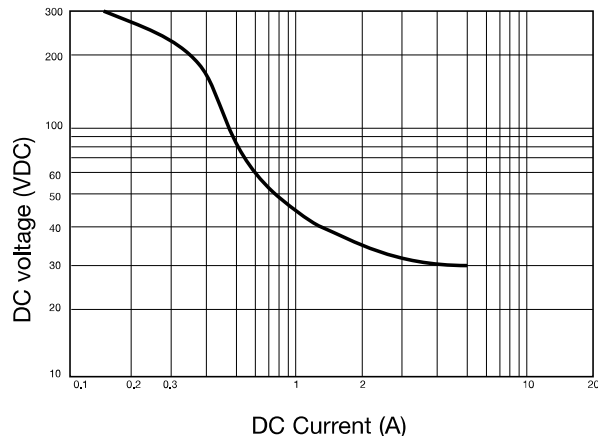


Diagrams

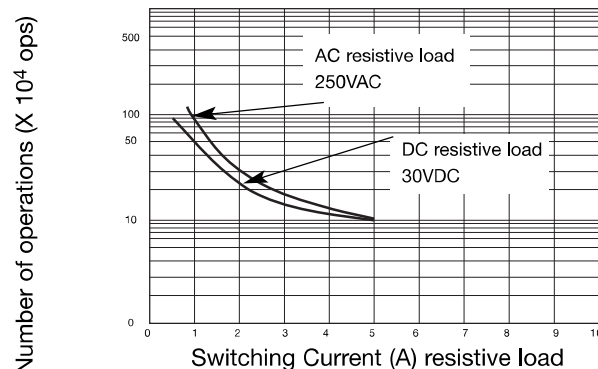
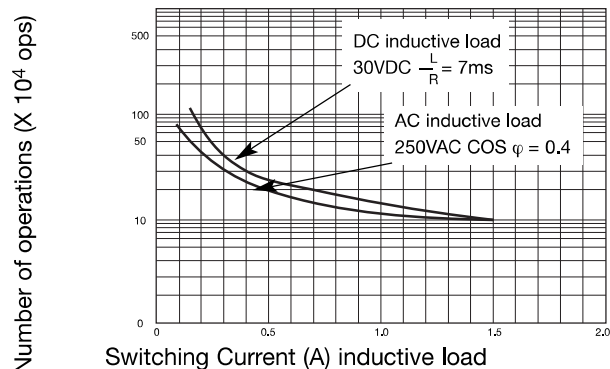
1 Coil Operating Range



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.