

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



- 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

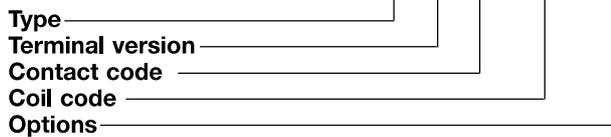
## Product Description

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**



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%

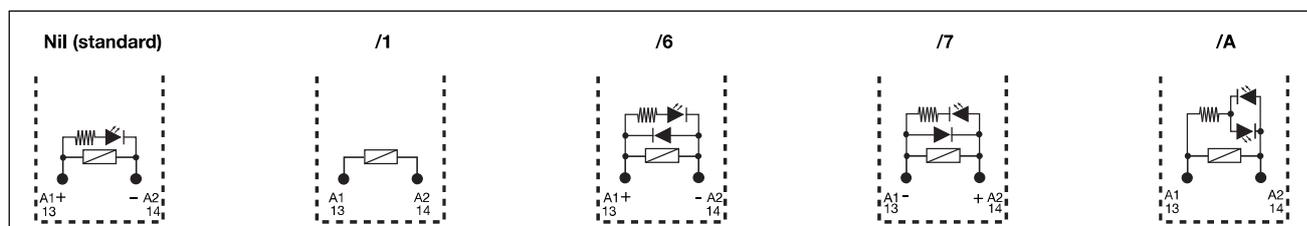
## Coil Characteristics, AC 1.2VA

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

<b>Contact rating</b> (with resistive load)	<b>5A - 250VAC</b>	<b>Initial contact resistance</b>	<b>50mΩ (@ 1A 6VDC)</b>
<b>UL rating</b>	<b>5A - 250VAC/30VDC 1/6HP @ 240VAC @ 60°C (160°F)</b>	<b>Max. inrush current</b>	<b>51A TV3 (according to UL1054)</b>
<b>Max. rating</b> (5x10 <sup>4</sup> ops)	<b>5A - 250VAC / 30VDC</b>	<b>Max. switch. voltage</b>	<b>250VAC / 30VDC @ 5A</b>
<b>Material</b>	<b>AgSn<sub>2</sub>In<sub>2</sub>O<sub>3</sub></b>	<b>Max. switch. power</b>	<b>1250VA / 150W @ 5A</b>
<b>Minimum Current</b> Min. applicable load /5 version	<b>10mA @ 12VDC 1mA @ 6VDC</b>	<b>Life</b> Electrical life Mechanical life	<b>1x10<sup>6</sup> cycles (1800 Ops/h) 1x10<sup>7</sup> cycles (1800 Ops/h)</b>

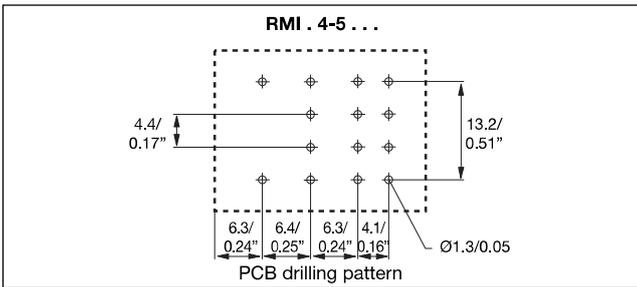
## Insulation

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

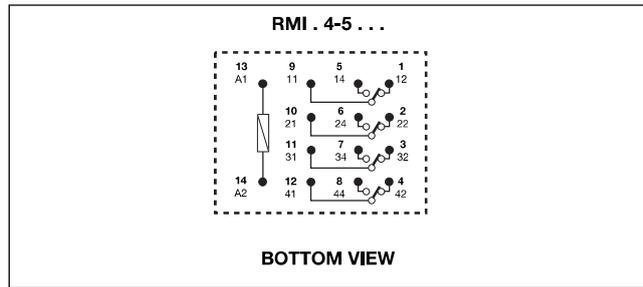
## General Data

<b>Nominal coil power</b>	<b>0.9W DC / 1.2VA AC</b>	<b>Shock resistance</b> Functional Destructive	<b>100m/s<sup>2</sup> /10g 1000m/s<sup>2</sup> /100g</b>
<b>Operating time</b> (At nominal voltage)	<b>25ms max.</b>	<b>Humidity</b>	<b>35% to 95% RH non-condensing</b>
<b>Release time</b> (At nominal voltage)	<b>25ms max.</b>	<b>Terminals</b>	<b>PCB or Soldering Lugs (Plug-in)</b>
<b>Ambient temperature</b>	<b>-55° to +70°C (-67° to +158°F)</b>	<b>Weight</b>	<b>~37g (~1.30oz)</b>
<b>Vibration resistance</b>	<b>10 to 55Hz 1.5mm (0.06")</b>		
<b>Construction</b>	<b>Dust cover</b>		

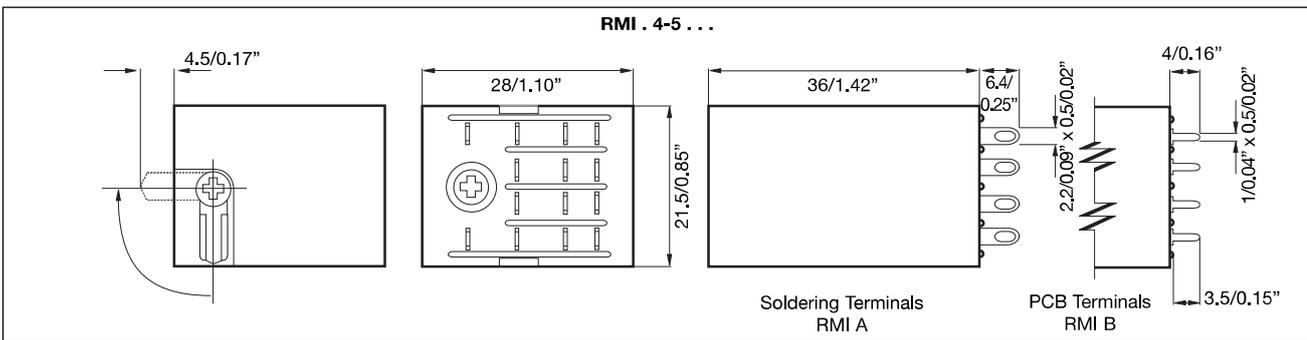
### Pin View mm/inches



### Wiring Diagram

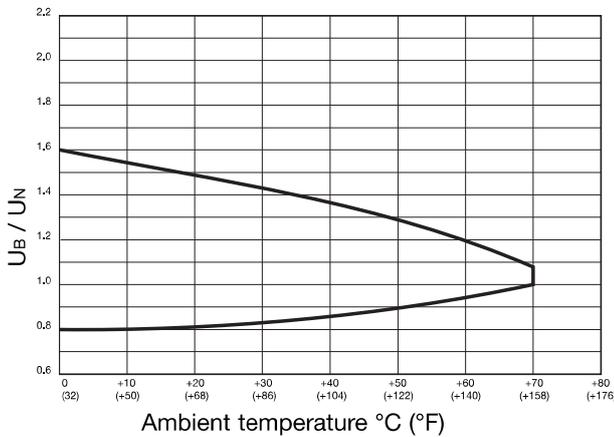


### Dimensions mm/inches

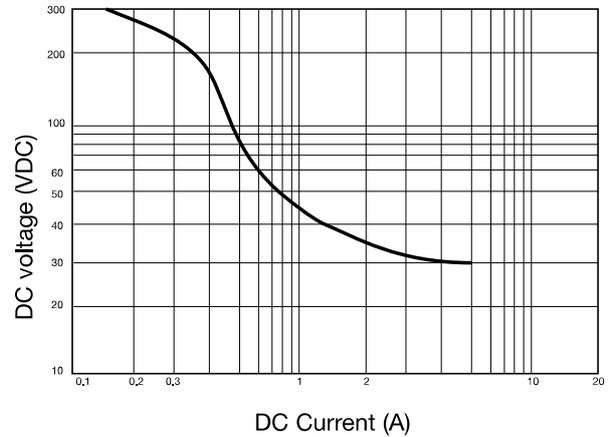


### Diagrams

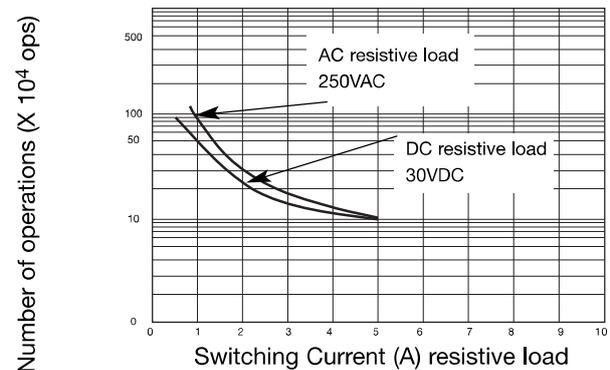
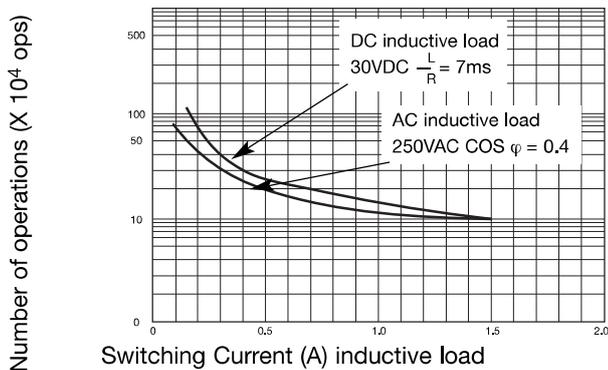
#### 1 Coil Operating Range



#### 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.