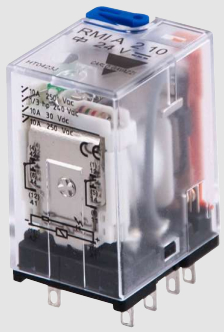
Midi Industrial Relay
Type RMI. 2-10 10A
Monostable



RMI A 210

- **High switching power**
- **Small size**
- **2 poles configuration**
- **AC coils 6 to 230VAC**
- **DC coils 5 to 110VDC**
- Matched sockets available
- **Standard with LED, Push with arm and Flag**
- **IP 40**
- **Compliant 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 2 change-over contact configuration.
PCB, solder and plug-in terminals.

Approvals

E73404 051377

Ordering Key

RMI A 210 12VDC /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
2 change over contacts	(DPDT {2-form C})	10A	**210**

Coil Characteristics, DC

Coil Code	Nominal voltage VDC	@ +20°C (+68°F)		Coil resistance Ω
		Pick-up voltage VDC	Drop-out voltage DVC	
5VDC	5	4.0	0.5	28.0 ±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	640.0 ±10%
48VDC	48	38.4	4.8	2560.0 ±15%
60VDC	60	48.0	6.0	4000.0 ±15%
110VDC	110	88.0	11.0	12250 ±15%

Specifications are subject to change without notice. Pictures are just an example. For special features and/or customization, please ask to our sales network.

CARLO GAVAZZI

Coil Characteristics, AC

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	11 ±10%
12VAC	12	9.6	3.6	44 ±10%
24VAC	24	19.2	7.2	177 ±10%
48VAC	48	38.4	14.4	708 ±10%
115/120VAC	110-120	96.0	36.0	4080 ±15%
230VAC	220-240	176.0	66.0	16300 ±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)	**10A - 250VAC / 30VDC**
UL rating	**10A - 250VAC / 30VDC 1/3HP @ 240VAC**
Max. rating	**10A - 250VAC / 30VDC**
Material	**AgCe**
Initial contact resistance	**50mΩ (@ 1A 6VDC)**

Minimum Current Min. applicable load /4 and /5 versions	**5mA @ 12VDC 1mA @ 6VDC**
Max. switch. voltage	**250VAC / 30VDC @ 10A**
Max. switch. power	**2500VA / 300W @ 10A**
Life Electrical life Mechanical life	**1x10^5 cycles (1800 Ops/h) 2x10^7 cycles (1800 Ops/h)**

Insulation

Dielectric strength (1min.)	
Between coil and contacts	1500 VAC
Between open contacts	1000 VAC
Contact/Contact	1500 VAC
Insulation resistance	**1.000MΩ - 500VAC**

Insulation according to EN61810-5	
Rated insulation voltage	**250V**
Impulsive insulation voltage	**3.6kV**
Pollution degree	**2**
Overvoltage category	**III**

General Data

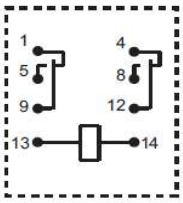
Nominal coil power	DC0.9~1.1W/AC0.9~1.4VA
Operating time (At nominal voltage)	**20ms max.**
Release time (At nominal voltage)	**20ms max.**
Ambient temperature	**-55° to +70°C (-67° to +158°F)**
Vibration resistance	**10 to 55Hz 1.0mm (0.04")**
Construction	**Dust cover**

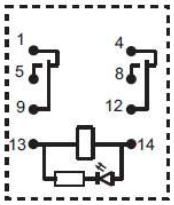
Shock resistance Functional Destructive	**100m/s^2 /10g 11ms 1000m/s^2 /100g**
Humidity	**35% to 95% RH non-condensing**
Terminals	**PCB or Soldering Lugs (Plug-in)**
Weight	**~37g (~1.30oz)**

Specifications are subject to change without notice. Pictures are just an example. For special features and/or customization, please ask to our sales network.

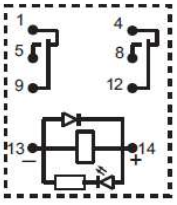
Wiring Diagram

RMIA210 10A





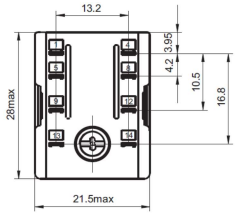
With LED

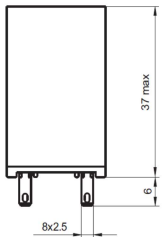


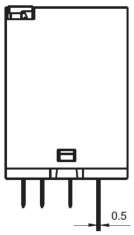
DC, with fly-wheel diode

Dimensions mm/inches

RMIA210 10A

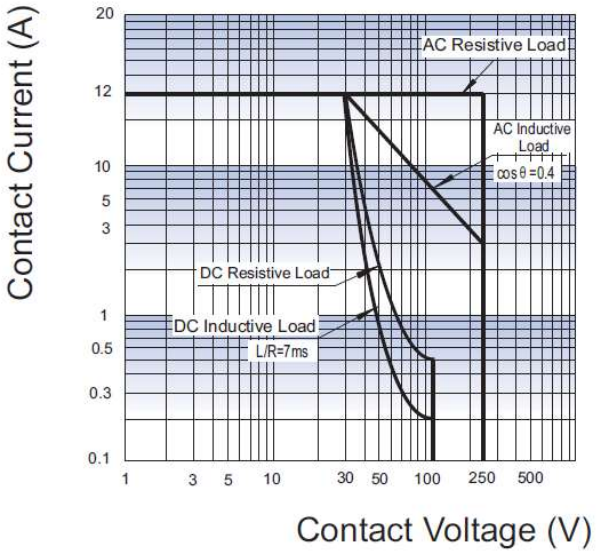






Diagrams

RMIA210 10A



Bases and Sockets

DIN rail sockets codes are **ZMI2NA, ZMI4NA, ZMI2SA, ZMI4SA, ZMI2GA, ZMI4GA, ZR08** and **ZDM14A** details and specifications from page 45 to 49 of industrial relays catalogue.
PCB sockets codes are **ZC15/2A, ZC15/4A, ZC15/2** and **ZC15/4** details and specifications on page 51 of industrial relays catalogue.

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**
- Matched sockets available
- **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 051377

Ordering Key

RMI A 45 12VDC /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

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	28 ±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	640.0 ±10%
48VDC	48	38.4	4.8	2560.0 ±15%
60VDC	60	48.0	6.0	4000.0 ±15%
110VDC	110	88.0	11.0	12250.0 ±15%

Specifications are subject to change without notice. Pictures are just an example. For special features and/or customization, please ask to our sales network.

CARLO GAVAZZI

Coil Characteristics, AC

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	11 ±10%
12VAC	12	9.6	3.6	44 ±10%
24VAC	24	19.2	7.2	177 ±10%
48VAC	48	38.4	14.4	708 ±10%
115/120VAC	110-120	96.0	36.0	4080 ±15%
230VAC	220-240	176.0	66.0	16300 ±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

Dielectric strength (1min.)	
Between coil and contacts	1500VAC
Between open contacts	1000VAC
Contact/Contact	1500VAC
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**

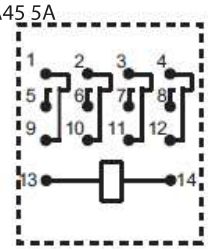
General Data

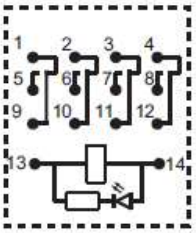
Nominal coil power	DC0.9~1.1W/AC0.9~1.4VA
Operating time (At nominal voltage)	**25ms max.**
Release time (At nominal voltage)	**25ms max.**
Ambient temperature	**-55° to +70°C (-67° to +158°F)**
Vibration resistance	**10 to 55Hz 1.5mm (0.06")**
Construction	**Dust cover**

Shock resistance	
Funktional	**100m/s²/10g**
Destructive	**1000m/s²/100g**
Humidity	**35% to 95% RH non-condensing**
Terminals	**PCB or Soldering Lugs (Plug-in)**
Weight	**~37g (~1.30oz)**

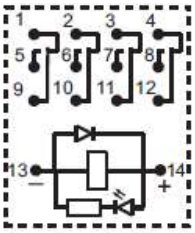
Wiring Diagram

RMIA45 5A





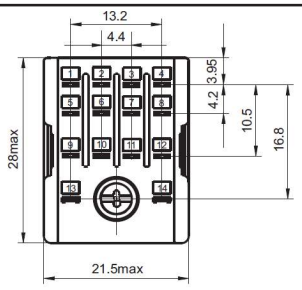
With LED

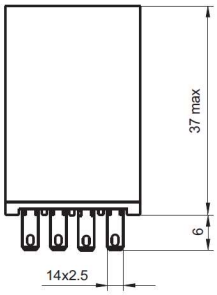


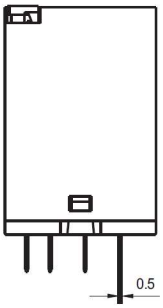
DC, with fly-wheel diode

Dimensions mm/inches

RMIA45 5A

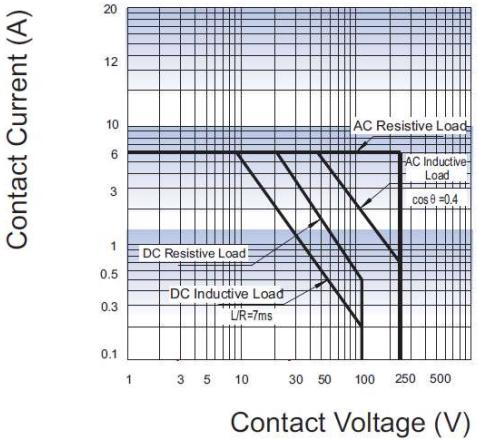






Diagrams

RMIA45 5A



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.

Specifications are subject to change without notice. Pictures are just an example. For special features and/or customization, please ask to our sales network.