

Miniature Power Relays Series M15

Type M15 .R. . . 100/001

Bistable



- Bistable miniature power relay
- Miniature size 15 mm high
- PCB-mounting
- 4 kV / 8 mm insulation
- Switching capability 8 A / 250 VAC
- General purpose, industrial electronics
- Sealed according to IP 67
- 4 different pin layout configurations
- Low coil power consumption

Product Description

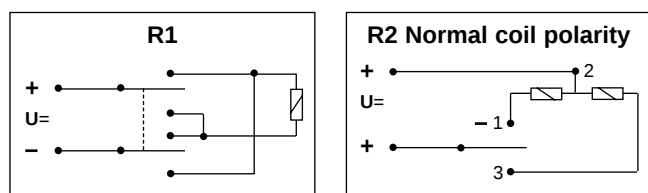
Bistable miniature power relay. Sealed according to IP 67. Suitable for automatic soldering.

Space saving design for compact packages. Very low contact noise due to short bounce time (NO contact).

Ordering Key M15 M R1 I A H 001 8 24VDC

Type _____
 Pin layout configuration _____
 R1 = one coil; R2 = two coils _____
 Insert "I" for reverse coil polarity _____
 Contact material _____
 Version (H = Sealed) _____
 Contact code _____
 Contact rated current _____
 Coil rated voltage _____

Circuit Diagram



Pin layout

M = 3.5 mm
 B = 5.0 mm
 F = 2.5 mm
 E = 3.2 mm / 5.0 mm

Contact material

A = Ag CdO
 B = Ag Ni
 C = Ag CdO, Au plated
 D = Ag CdO, gilded
 E = AgNi, Au plated
 F = Ag, gilded
 S = Ag SnO₂

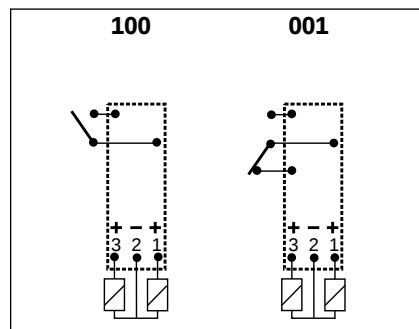
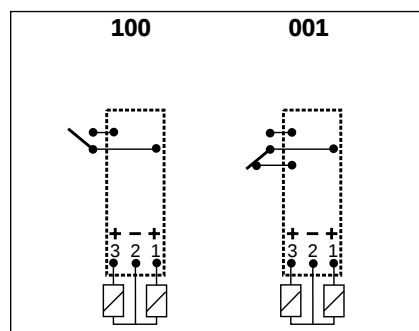
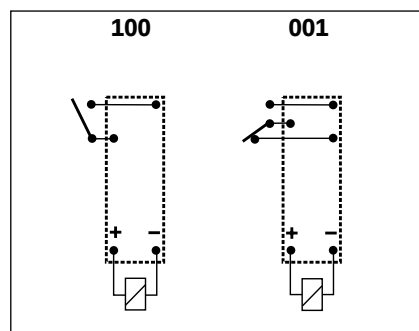
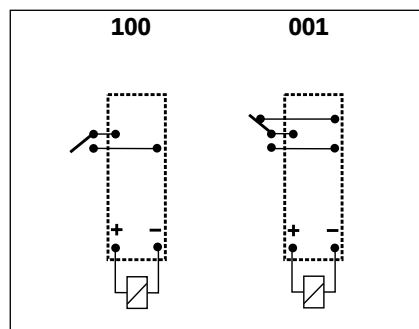
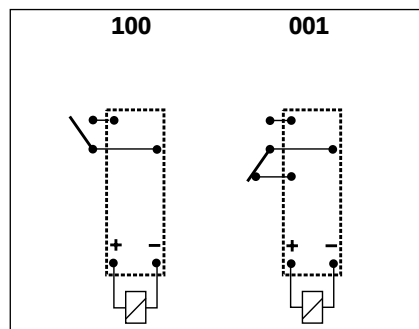
Type Selection

Contact configuration	Contact rating	Contact code
1 normally open contact (SPST-NO {1-form A})	8 A	100
1 change over contact (SPDT-CO {1-form C})	8 A	001

Coil Characteristics, DC (20°C)

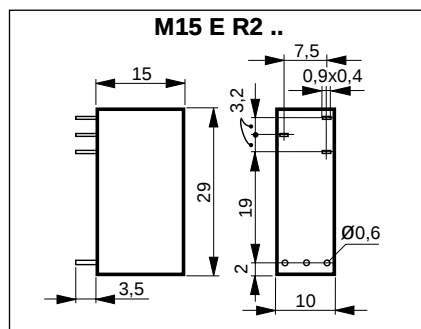
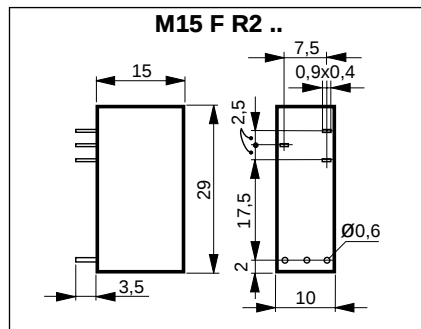
Rated Voltage VDC	R1 Version			R2 Version			
	Operating range		Coil resistance $\Omega \pm 10\%$	Operating range		Coil resistance	
	Min. VDC	Max.VDC		Min. VDC	Max.VDC	Coil 1-2 $\Omega \pm 10\%$	Coil 2-3 $\Omega \pm 10\%$
3.0	2.4	5.3	40	2.4	5.3	18.5	26
5.0	4.1	9.0	115	-	-	-	-
6.0	4.8	10.6	160	4.8	10.6	75.0	100
8.0	6.5	14.2	290	6.4	14.2	130.0	180
12.0	9.7	21.2	640	9.6	1.2	300.0	400
18.0	14.7	31.9	1450	14.4	31.9	670.0	900
24.0	19.5	42.2	2550	19.2	42.2	1200.0	1600
48.0	39.0	84.7	10250	-	-	-	-

Wiring Diagrams

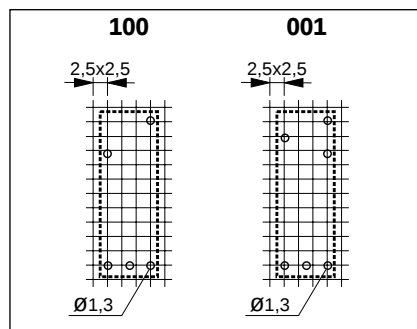
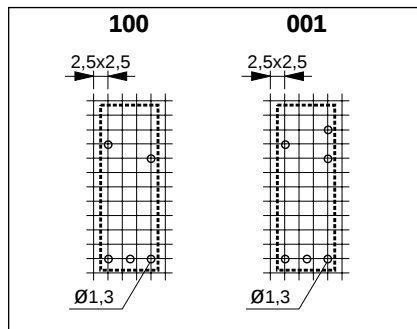


Specifications are subject to change without notice

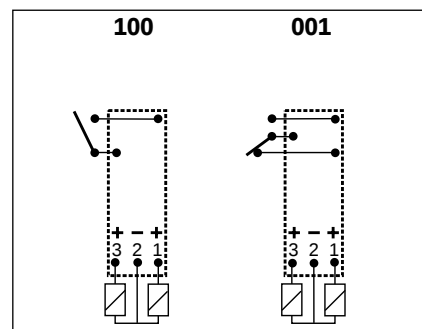
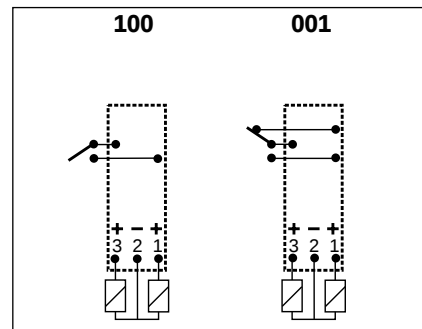
Dimensions (cont.)



Pin View (cont.)



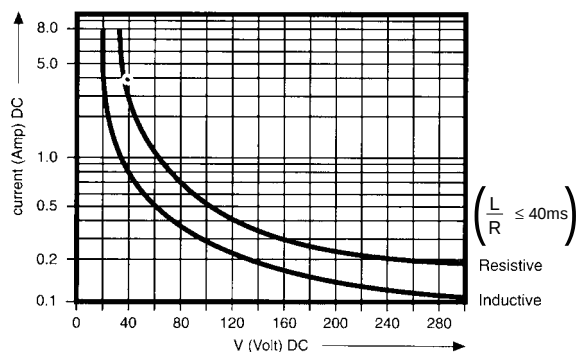
Wiring Diagrams



View from solder side with de-energized position contacts.

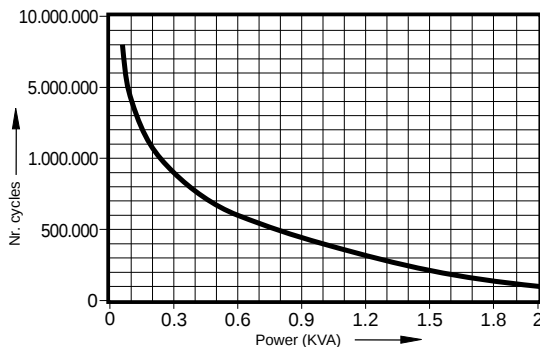
Diagrams

1 Max. switching power DC



2 Expected switching cycles/switching current at 250 VAC.

For resistive loads and repetition rate 360 cycles/h.



Application Hints

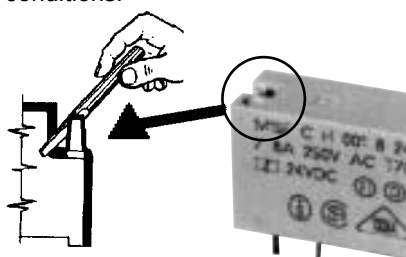
Use of sealed relays.

The M15 relay types are filled with inert gas and are completely sealed (according to IEC 68 part 2 - 17 { DIN 40046} QC 2 - test).

They are flux proof and are suited for automated soldering (wave soldering) as well as for immersion washing. If maximum utilization of the switching capacity is required, it is recommended to open the relay after completion of the soldering/washing process by breaking out the corresponding pin as indicated.

Product safety.

Operations outside the stated ratings shown in this catalogue may result in a possible failure or unsafe operating conditions.



Diagrams

3 Reduction of expected life against load power factor cos φ

For all types

