

**BISTABLE**

- Height 15 mm
- for PCB mounting
- Insulation 4 kV / 8 mm
- High switching capacity
- Wash proof IP 67 version
- Low power consumption
- 1-coil bistable relays

Contacts

Contact number & arrangement		1C/O, 1NO
Contact material		AgCdO , AgSnO ₂ , AgCdO/Au 3,5 μm
Max. switching voltage	AC/DC	400 V / 300 V
Min. switching voltage		24 V AgCdO, 24 V AgSnO ₂ , AgCdO/Au 3,5 μm - contact Relpol S.A.
Rated load	AC1	8 A / 250 V AC
Min. switching current		100 mA AgCdO, 100 mA AgSnO ₂ , AgCdO/Au 3,5 μm - contact Relpol S.A.
Max. inrush current		10 A
Rated current		8 A
Max. breaking capacity	AC1	2 000 VA
Min. breaking capacity		2,4 W AgCdO, 2,4 W AgSnO ₂ , AgCdO/Au 3,5 μm - contact Relpol S.A.
Resistance		≤ 100 mΩ
Max. operating frequency		
• at rated load	AC1	3 600 cycles/hour
• no load		20 000 cycles/hour

Coil

Rated voltage	DC	3...48 V
Operating range of supply voltage		see Table 1
Duration of supply voltage pulse		min. 10 ms; max. 5 s

Insulation

Insulation category		C250
Insulation rated voltage		250 V AC
Insulation max. voltage		400 V AC
Dielectric strength		
• coil - contact		4 000 V AC
• contact - contact		1 000 V AC
Contact - coil distance		
• clearance		≥ 8 mm
• creepage		≥ 8 mm

General data

Operating time (typical value)		10 ms
Release time (typical value)		6 ms
Electrical life		
• resistive AC1		> 10 ⁵ 8 A, 250 V AC
• cos φ = 0,4		> 1,3 x 10 ⁵ 5 A, 250 V
Mechanical life (cycles)		> 3 x 10 ⁷
Dimensions (L x W x H)		29 x 10 x 15 mm
Weight		10 g
Ambient temperature		
• storing		-40...+80 °C
• operating		-40...+70 °C
Cover protection category		IP 67
Vibration resistance		10 g 10...100 Hz
Solder bath temperature		max. 270 °C
Soldering time		max. 5 s

Standard contact material marked with bolt type.

Note: At IP 67 version it is recommended that the vent pin is removed after soldering and washing process.



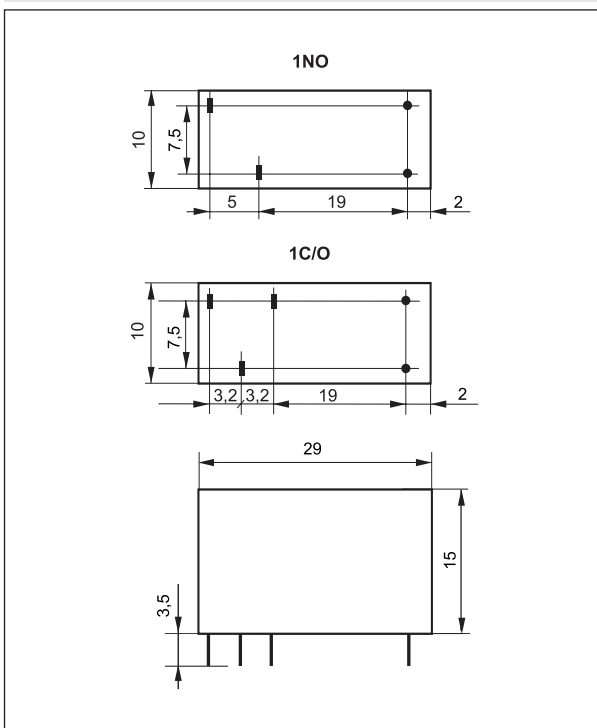
Coil data - bistable version, DC supply

Table 1

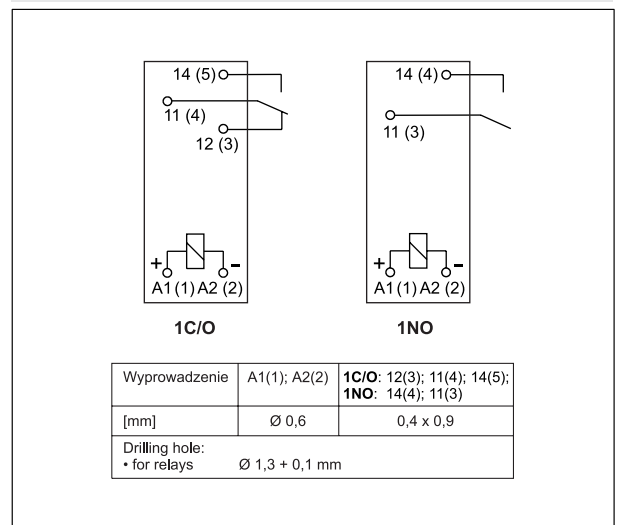
Coil code	Rated voltage V DC	Coil resistance ± 10% at 20 °C Ω	Coil operating range at 20 °C V DC	
			min.	max.
1003	3	40	2,4	5,3
1005	5	115	4,1	9,0
1012	12	640	9,7	21,2
1018	18	1 450	14,7	31,9
1024	24	2 550	19,5	42,2
1048	48	10 250	39,0	84,7

Energizing only in pulse mode. Min. pulse duration - 10 ms; max. pulse duration - 5 s.

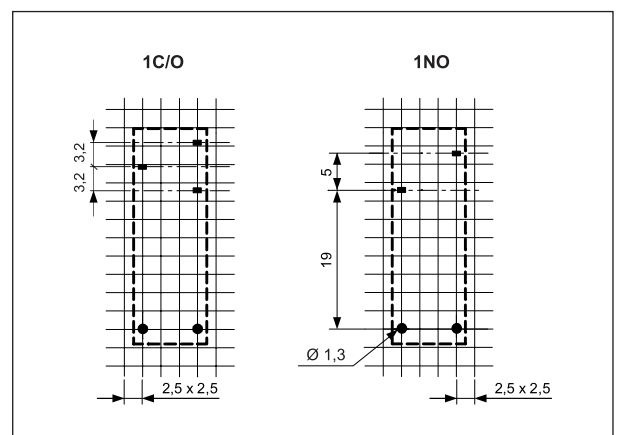
Dimensions



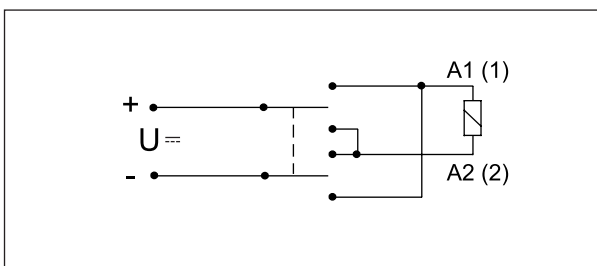
Connections diagram (pin side view)



Mounting holes layout
(view from soldering side)



1-coil circuit



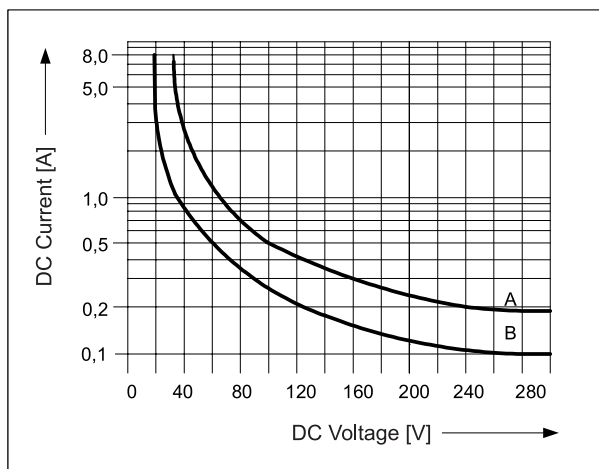
Mounting

Relays RMB961 1NO are mounted only on PCBs.

Relays RMB961 1C/O (3,2 mm pinning) are designed for: • direct PCB mounting • screw terminals sockets GZ96 with clip MS16, 35 mm DIN rail mount, EN 50022 or on panel mounting • terminals sockets for PCB mounting GW96 with clip MH16-2.

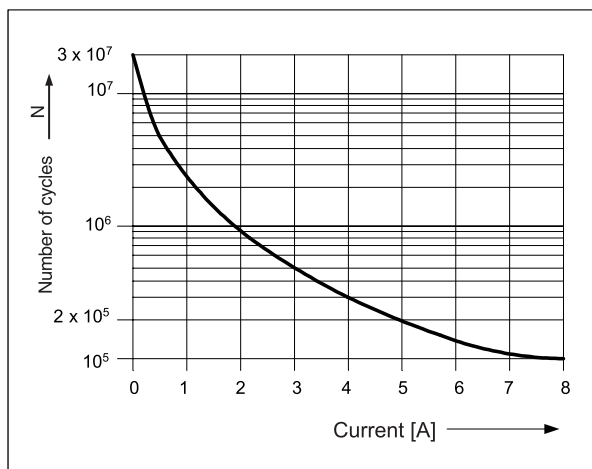
Max. DC breaking capacity
A - resistive load
B - inductive load ($L/R \leq 40$ ms)

Fig. 1



Electrical life
at 250 V AC, 360 cycles/hour

Fig. 2



Ordering codes

