



BISTABLE
2-COILS

- Height 15 mm • IP 67
- For PCB
- Insulation 4 kV / 8 mm
- High switching capacity, low power consumption
- Bistable relays with two coils • DC coils
- Terminals raster: type A - 3,2 mm for version 1 C/O,
type A - 5,0 mm for version 1 NO ①
- Recognitions, certifications, directives: RoHS,

Contact data

Number and type of contacts		1 C/O, 1 NO
Contact material		AgSnO₂ , AgCdO, AgCdO/Au 3,5 μm
Max. switching voltage	AC/DC	400 V / 300 V
Min. switching voltage		24 V AgSnO ₂ , 24 V AgCdO AgCdO/Au 3,5 μm - contact Relpol S.A.
Rated load	AC1	8 A / 250 V AC
Min. switching current		100 mA AgSnO ₂ , 100 mA AgCdO 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 AgSnO ₂ , 2,4 W AgCdO AgCdO/Au 3,5 μm - contact Relpol S.A.
Contact resistance		≤ 100 mΩ
Max. operating frequency		
• at rated load	AC1	3 600 cycles/hour
• no load		20 000 cycles/hour

Coil data

Rated voltage	DC	3...24 V ②
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
Rated surge voltage		4 000 V AC
Overvoltage category		III PN-EN 60664-1
Insulation pollution degree		3
Dielectric strength		
• between coil and contacts		4 000 V AC
• contact clearance		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)		7 ms
Electrical life		
• resistive AC1		> 10 ⁵ 8 A, 250 V AC
• cos φ = 0,4		> 10 ⁵ 5 A, 250 V AC
Mechanical life (cycles)		> 3 x 10 ⁷
Dimensions (L x W x H)		29 x 10 x 15 mm
Weight		10 g
Ambient temperature		
• storage		-40...+80 °C
• operating		-40...+70 °C
Cover protection category		IP 67
Environmental protection		RTII PN-EN 116000-3
Vibration resistance		10 g 10...100 Hz
Solder bath temperature		max. 270 °C
Soldering time		max. 5 s

The data in bold type pertain to the standard versions of the relays.

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

① Relays with other rasters available - contact Relpol S.A.

② Supply of bistable relays **RMB962** - see page 2

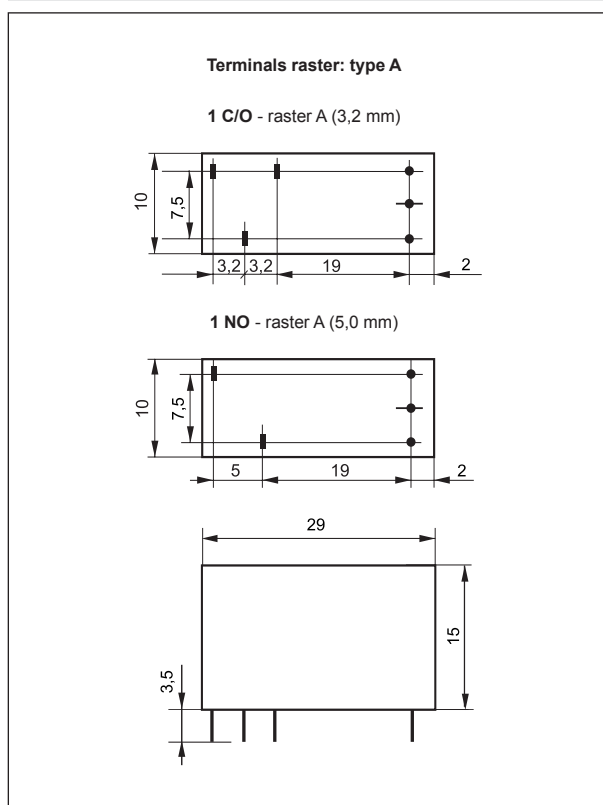
Coil data - bistable DC voltage version

Table 1

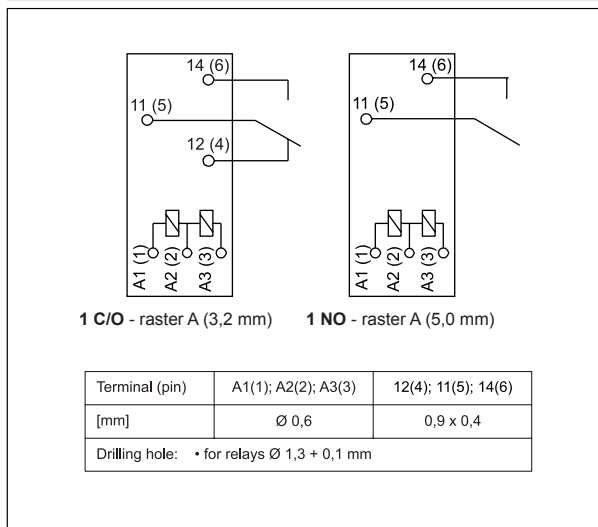
Coil code	Rated voltage V DC	Coil 1-2 resistance ± 10% at 20 °C Ω	Coil 2-3 resistance ± 10% at 20 °C Ω	Coil 1-2 operating range at 20 °C V DC	
				min.	max.
1003	3	18,5	26	2,4	5,3
1006	6	75,0	100	4,8	10,6
1008	8	130,0	180	6,4	14,2
1012	12	300,0	400	9,6	21,2
1018	18	670,0	900	14,4	31,9
1024	24	1 200,0	1 600	19,2	42,2

Supplying mode: energizing only in pulse mode. Min. pulse duration 10 ms; max. pulse duration 5 s.

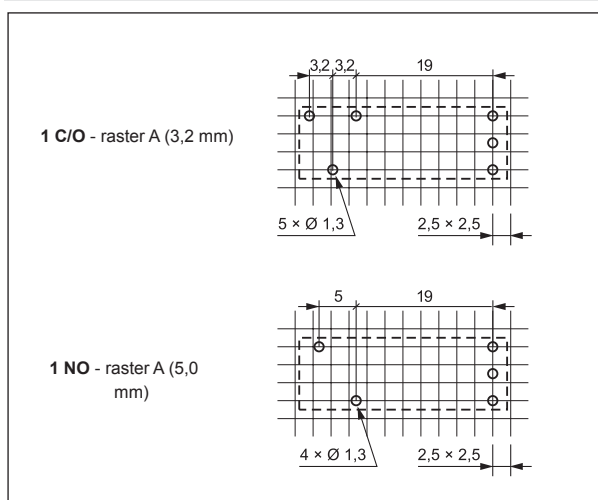
Dimensions



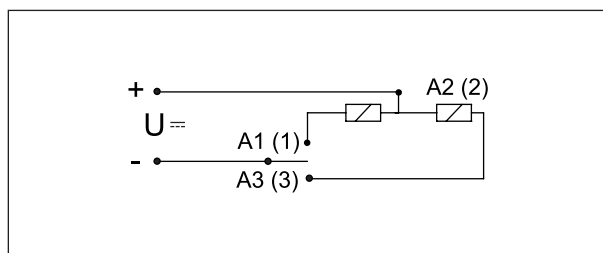
Connections diagrams (pin side view)



Mounting openings raster ● (solder side view)



Two coils circuit

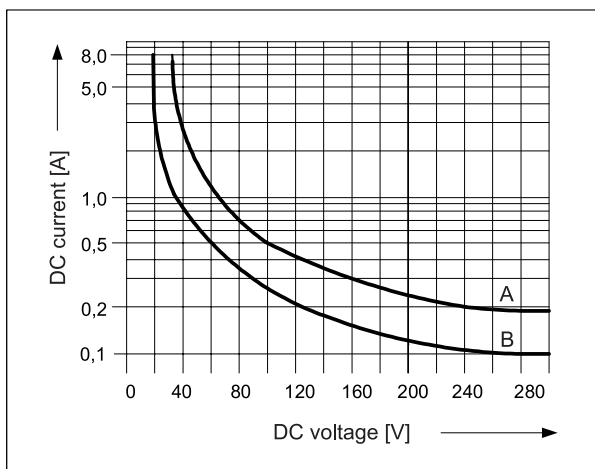


Mounting

Relays RMB962 (raster A (3,2 / 5,0 mm)) are designed for direct PCB mounting.

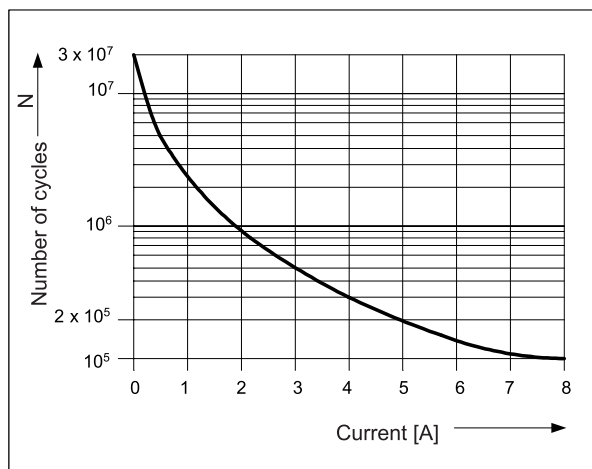
Max. DC breaking capacity
A - resistive load
B - inductive load ($L/R \leq 40$ ms)

Fig. 1

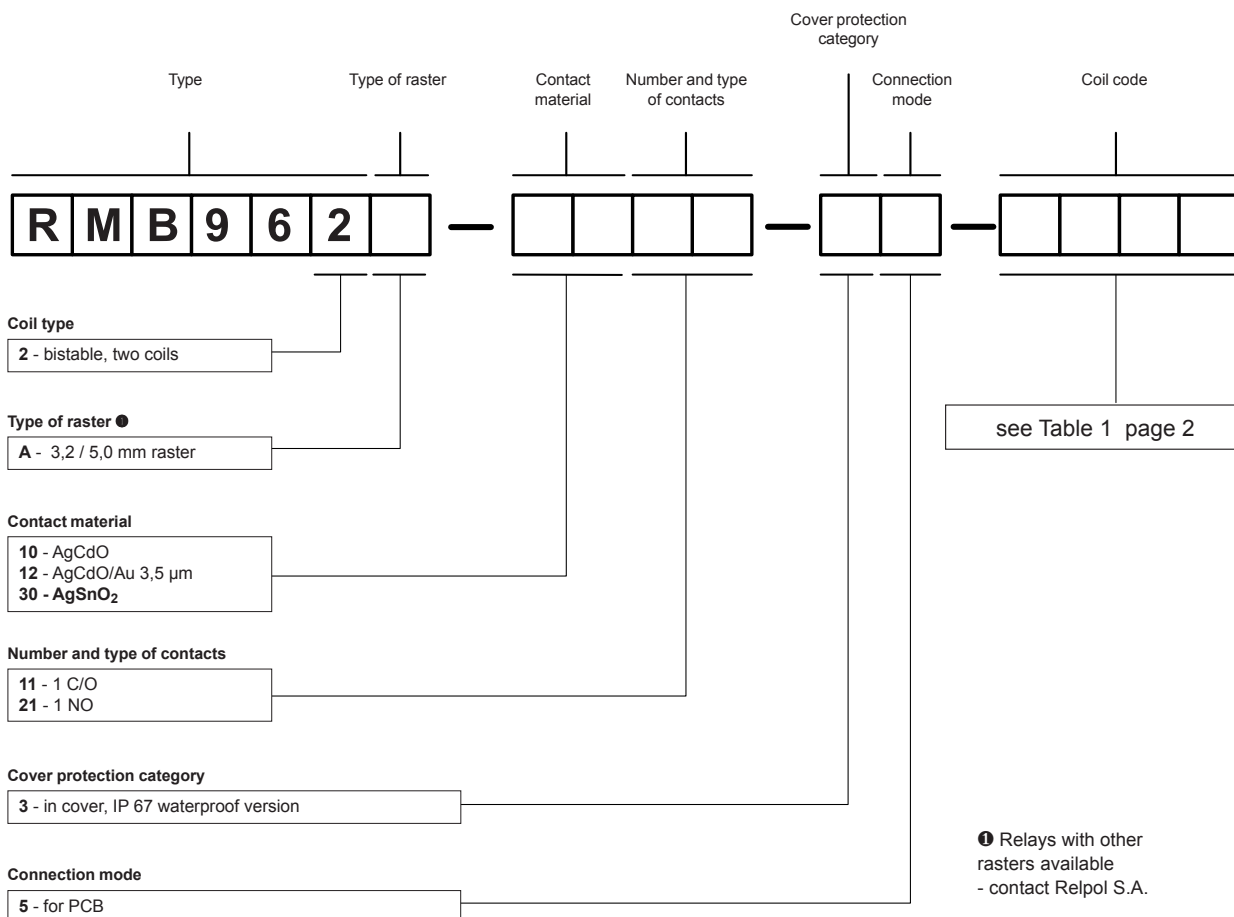


Electrical life
at 250 V AC, 360 cycles/hour

Fig. 2



Ordering codes



Examples of ordering codes:

RMB962A-3011-35-1012

bistable relay **RMB962** with two coils, contact material AgSnO₂, with one changeover contact - raster type A (3,2 mm), in cover IP 67, for PCB, voltage version 12 V DC

RMB962A-3021-35-1012

bistable relay **RMB962** with two coils, contact material AgSnO₂, with one normally open contact - raster type A (5,0 mm), in cover IP 67, for PCB, voltage version 12 V DC