

**BISTABLE**

- DC coils. AC supply through rectifying diode
- Miniature size
- for PCB mounting
- High switching capacity
- 2-coil bistable relays

**Contacts**

Contact number & arrangement		1C/O, 1NO	
Contact material		<b>AgCdO</b> , AgSnO <sub>2</sub>	
Max. switching voltage	AC/DC	400 V / 250 V	
Min. switching voltage		24 V AgCdO, 24 V AgSnO <sub>2</sub>	
Rated load	AC1	16 A / 250 V AC	
	DC1	16 A / 24 V DC	
Min. switching current		100 mA AgCdO, 100 mA AgSnO <sub>2</sub>	
Max. inrush current		25 A	
Rated current		16 A	
Max. breaking capacity	AC1	4 000 VA	
Min. breaking capacity		2,4 W AgCdO, 2,4 W AgSnO <sub>2</sub>	
Resistance		≤ 100 mΩ	
Max. operating frequency	AC1	• at rated load	3 600 cycles/hour
		• no load	18 000 cycles/hour

**Coil**

Rated voltage	AC	DC coil + diode D ❶
	DC	3...36 V ❶
Operating range of supply voltage		see Table 1
Duration of supply voltage pulse		min. 10 ms; max. 230 s 20 °C, 120 s 40 °C, 40 s 70 °C

**Insulation**

Insulation category		C250
Insulation rated voltage		400 V AC
Dielectric strength	• coil - contact	5 000 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)		5 ms	
Electrical life	• resistive AC1	1 000 cycles/hour	> 10 <sup>5</sup>
		500 cycles/hour	> 1,5 x 10 <sup>5</sup>
Mechanical life (cycles)			> 5 x 10 <sup>7</sup>
Dimensions (L x W x H)			15...18 g
Weight		29,4 x 12,5 x 25,2 mm	for IP 67 H=26,5 mm
Ambient temperature	• storing		-40...+80 °C
	• operating		-40...+70 °C
Cover protection category			IP 40 or IP 67
Shock resistance			10 g
Vibration resistance		2,5 mm	5...45 Hz
		10 g	45...200 Hz
Solder bath temperature			max. 270 °C
Soldering time			max. 5 s

Standard contact material marked with bolt type.

❶ RMB632 bistable relays supply - see page 66

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



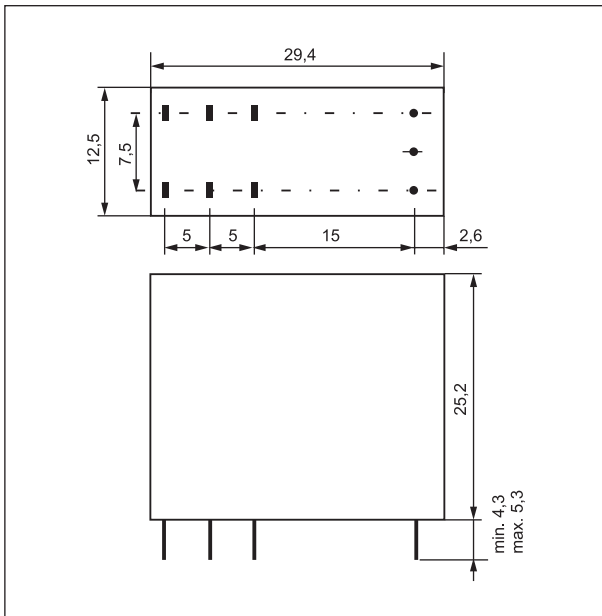
Coil data - AC/DC voltage version

Table 1

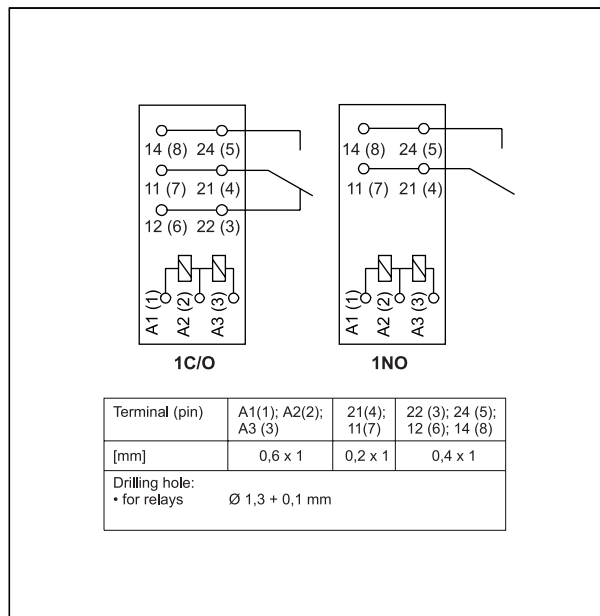
Coil code	Rated voltage V AC/DC	Coil 1-2 resistance at 20 °C Ω	Coil 1-2 tolerance of resistance ±%	Coil 2-3 resistance at 20 °C Ω	Coil 2-3 tolerance of resistance ±%	Coil operating range at 20 °C V AC/DC	
						min.	max.
1003	3	8,0	10	31,5	10	2,77	5,00
1006	6	23,5	10	115,0	15	4,70	9,35
1009	9	42,5	10	195,0	15	6,42	12,50
1012	12	89,0	10	435,0	15	8,54	18,00
1024	24	225,0	10	1 100,0	15	13,60	28,50
1036	36	605,0	15	2 620,0	15	21,60	42,50

**Supplying mode:** Magnetic circuit with high remanence allows the relays to remain in certain position independtly from coil energizing. The relays are not allowed to be supplied continuesly. Only pulse supply is allowed. Pulse duration is between 10 ms and the time shown in **Coil Data** (depending on ambient temperature) on page 65.

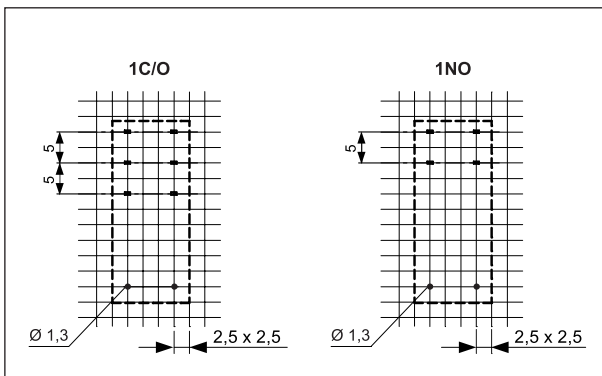
Dimensions



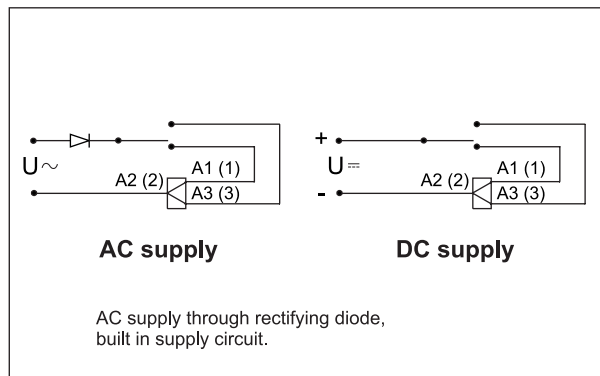
Connections diagram (pin side view)



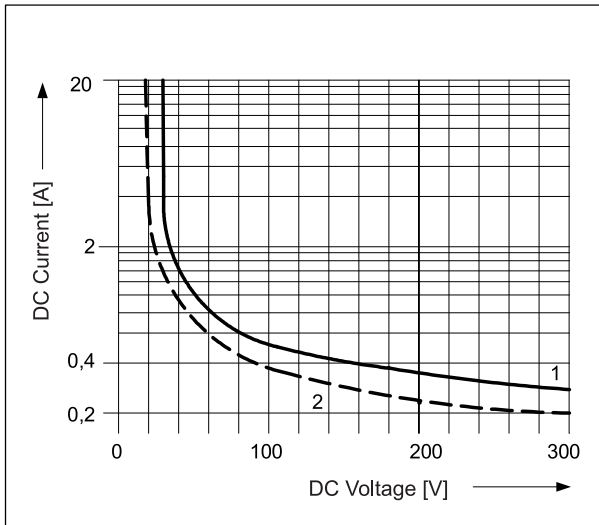
Mounting holes layout  
(view from soldering side)



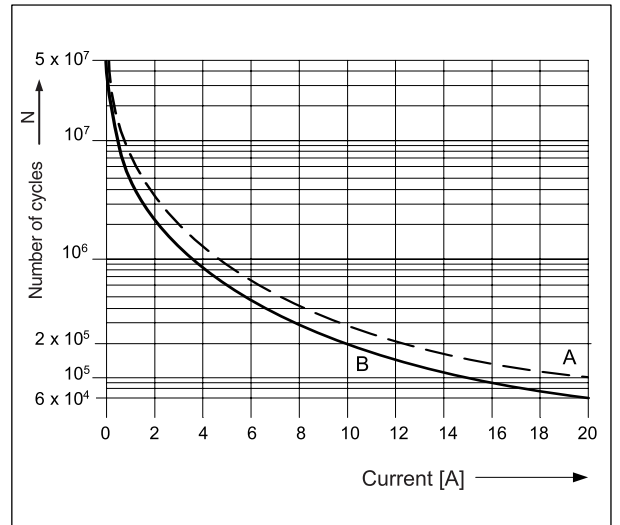
2-coil circuit



**Max. DC breaking capacity**  
**A - resistive load**  
**B - inductive load (L/R ≤ 40 ms)**  
 Fig. 1



**Electrical life**  
**at 250 V AC, 1000 cycles/hour**  
**Temperature: A = 40 °C, B = 70 °C**  
 Fig. 2



**Mounting**

Relays **RMB632** are mounted only on PCBs.

**Ordering codes**

