







- General purpose relays
- Protection category IP 40 or IP 67
- For PCB
- DC coils - standard and sensitive
- Recognitions, certifications, directives: RoHS,    

Contact data

Number and type of contacts		2 C/O, 2 NO, 2 NC
Contact material		AgCu/Au 0,2 μm , AgCdO, AgCdO/Au 3 μm
Max. switching voltage	AC/DC	400 V / 250 V
Min. switching voltage		10 V AgCu/Au 0,2 μm, 10 V AgCdO, 5 V AgCdO/Au 3 μm
Rated load	AC1	8 A / 250 V AC
	DC1	8 A / 24 V DC
Min. switching current		5 mA AgCu/Au 0,2 μm, 5 mA AgCdO, 2 mA AgCdO/Au 3 μm
Rated current		8 A
Max. breaking capacity	AC1	2 000 VA
Min. breaking capacity		0,5 W AgCu/Au 0,2 μm, 0,5 W AgCdO, 0,05 W AgCdO/Au 3 μm
Contact resistance		≤ 100 mΩ
Max. operating frequency		
• at rated load	AC1	600 cycles/hour
• no load		72 000 cycles/hour

Coil data

Rated voltage	DC	6...110 V standard version	5...110 V sensitive version
Must release voltage		DC: ≥ 0,1 U _n	
Operating range of supply voltage		see Tables 1, 2	
Rated power consumption	DC	0,8 W standard version	0,5 W sensitive version

Insulation

Insulation category		C250
Insulation rated voltage		400 V AC
Dielectric strength		
• between coil and contacts		4 000 V AC
• contact clearance		1 000 V AC
• pole - pole		2 500 V AC
Contact - coil distance		
• clearance		≥ 8 mm
• creepage		≥ 8 mm

General data

Operating time (typical value)		7 ms
Release time (typical value)		2 ms
Electrical life		
• resistive AC1		> 2 x 10 ⁵ 8 A, 250 V AC
• cos φ		see Fig. 2
Mechanical life (cycles)		> 3 x 10 ⁷
Motor load - according to the UL 508		1/8 HP 120 V AC, single-phase motor
Dimensions (L x W x H)		IP 40: 28 x 12,5 x 26 mm IP 67: 28 x 12,5 x 26,5 mm
Weight		20 g
Ambient temperature		
• storage		-40...+85 °C
• operating		-40...+70 °C
Cover protection category		IP 40 or IP 67
Shock resistance		20 g
Vibration resistance	(2 NO/2 NC)	10 g / 5 g 10...150 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.

Coil data - standard DC voltage version

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.
1006	6	47	3,9	8,5
1012	12	170	7,9	16,2
1024	24	740	16,8	33,6
1036	36	1 350	22,0	45,5
1048	48	3 200	34,0	70,0
1060	60	5 000	42,0	87,0
1096	96	10 000	61,0	125,0
1110	110	13 000	77,0	140,0

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

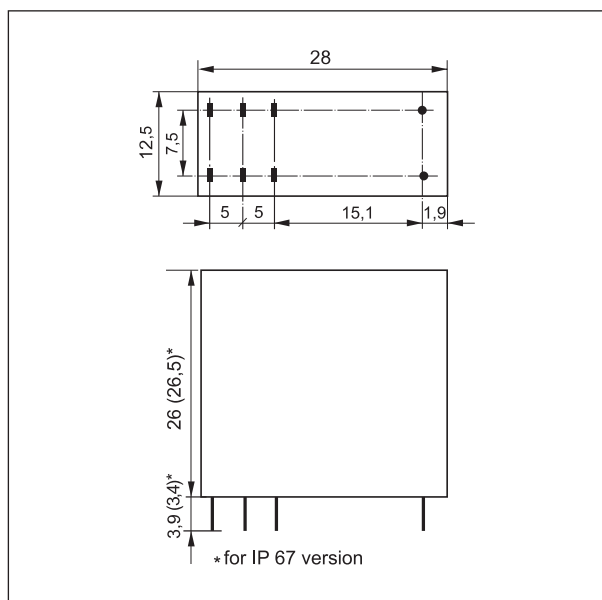
Coil data - sensitive DC voltage version

Table 2

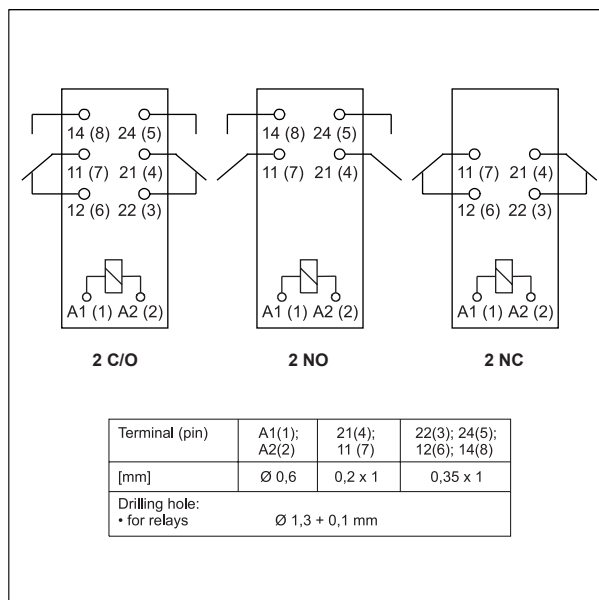
Coil code	Rated voltage V DC	Coil resistance ±10% at 20 °C Ω	Coil operating range at 20 °C V DC	
			min.	max.
S005	5	47	3,5	8,5
S006	6	70	4,4	10,3
S012	12	270	8,8	20,3
S024	24	1 100	17,5	41,0
S036	36	2 000	24,0	55,0
S048	48	4 400	35,0	82,0
S060	60	6 500	44,0	100,0
S110	110	20 000	88,0	188,0

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

Dimensions

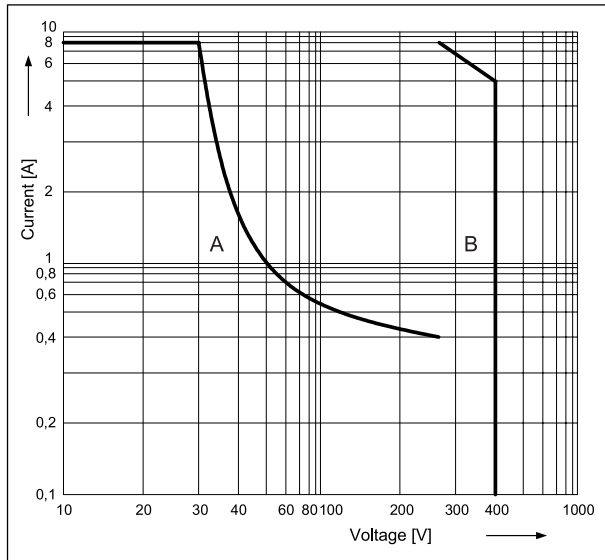


Connections diagrams (pin side view)



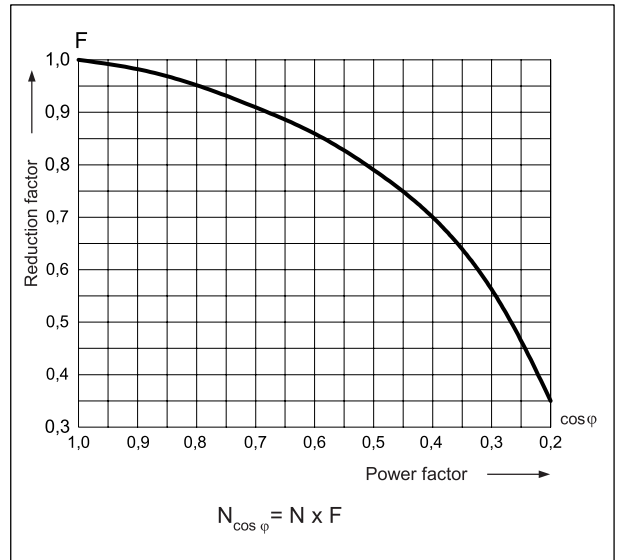
Max. breaking capacity
A - resistive load DC
B - resistive load AC

Fig. 1



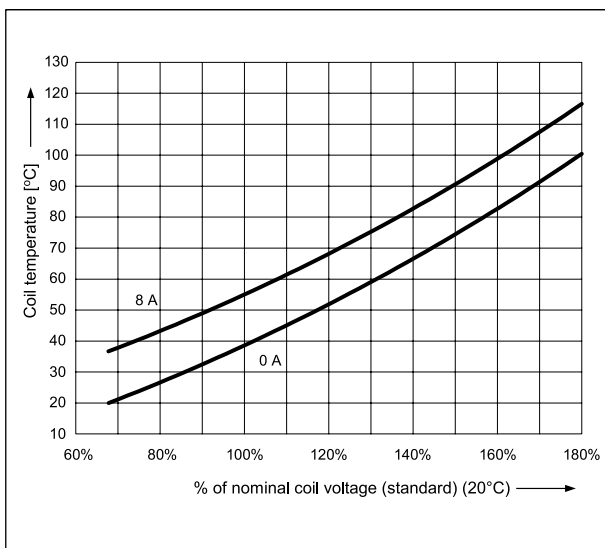
Electrical life reduction factor at AC inductive load

Fig. 2



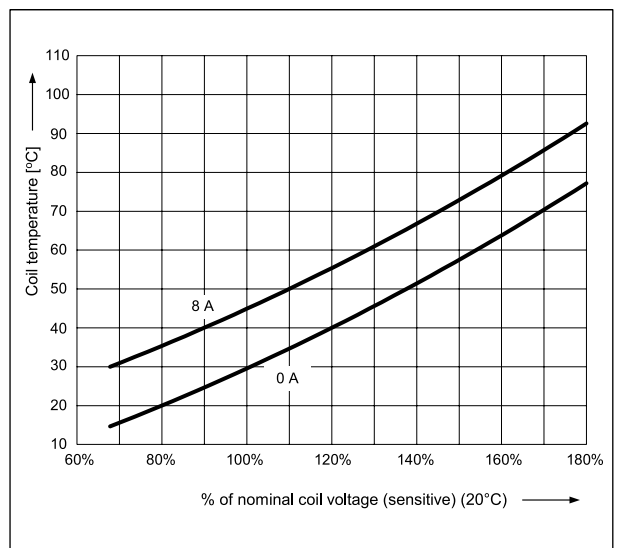
Coil temperature rise - standard version

Fig. 3

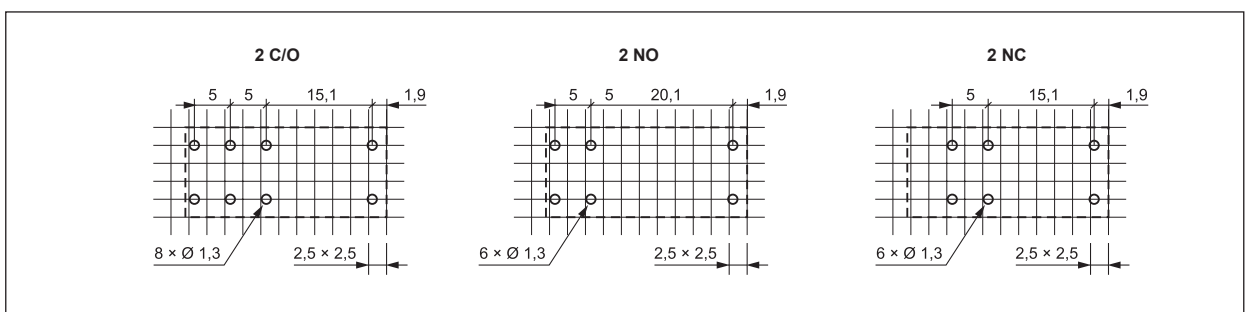


Coil temperature rise - sensitive version

Fig. 4



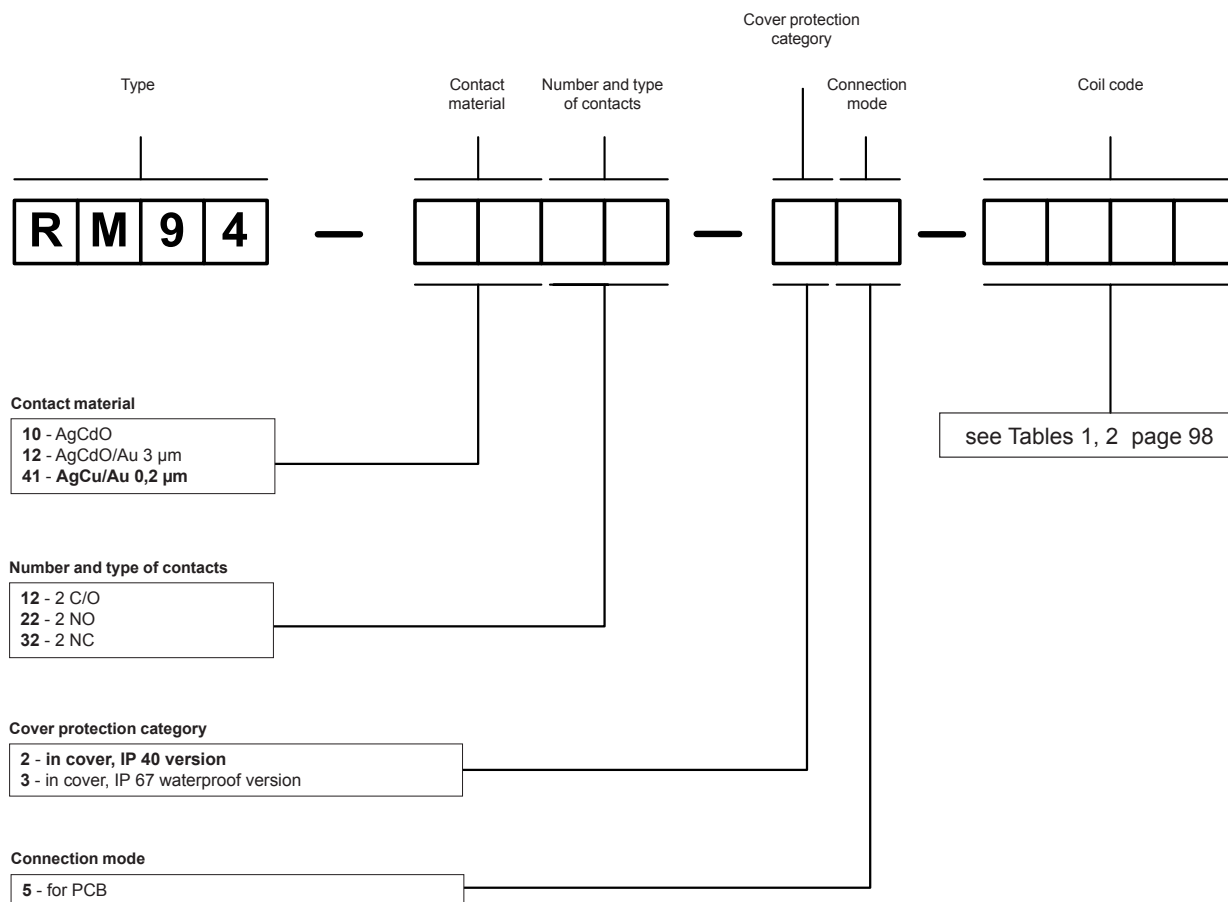
Mounting openings raster (solder side view)



Mounting

Relays **RM94** are designed for direct PCB mounting.

Ordering codes



Examples of ordering codes:

- RM94-4112-25-1024** relay **RM94**, contact material AgCu/Au 0,2 μm, with two changeover contacts, in cover IP 40, for PCB, voltage version 24 V DC
- RM94-4122-35-S024** relay **RM94**, contact material AgCu/Au 0,2 μm, with two normally open contacts, in cover IP 67, for PCB, voltage version 24 V DC, sensitive version

Print on relay cover

Type marking on relays cover **RM94** do not match the ordering codes.

Examples of marking:

- RM94P-24-W** **RM94P** - relay **RM94**, with one changeover contact
24 - voltage version 24 V DC
W - in cover, IP 67 waterproof version
- RM94P-24-S-W** **RM94P** - relay **RM94**, with one changeover contact
24 - voltage version 24 V DC
S - sensitive version
W - in cover, IP 67 waterproof version