

RM87 MINIATURE POWER RELAY

COIL DATA

Rated voltage	3...110 V DC, 24...240 V AC
Must release voltage	> 0,1 U _h
Operating range of supply voltage	see Table and information below
Rated power consumption	0,4...0,48 W



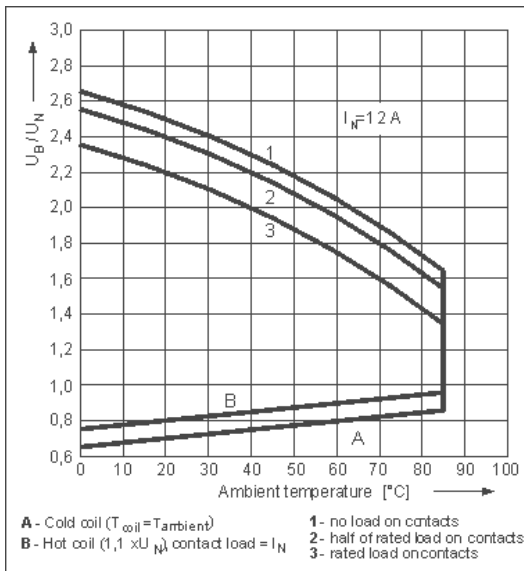
Coil data - DC version

Coil code	Rated voltage V DC	Coil resistance +/- 10% at 20°C, Ohm	Operating range of supply voltage at 20°C, V DC	
			min.	max.
1003	3	22	2.1	7.6
1005	5	60	3.5	12.7
1006	6	90	4.2	15.3
1009	9	200	6.3	22.9
1012	12	360	8.4	30.6
1018	18	710	12.6	45.9
1024	24	1440	16.8	61.2
1036	36	3140	25.2	91.8
1048	48	5700	33.6	122.4
1060	60	7500	42	153
1110	110	25200	77	280

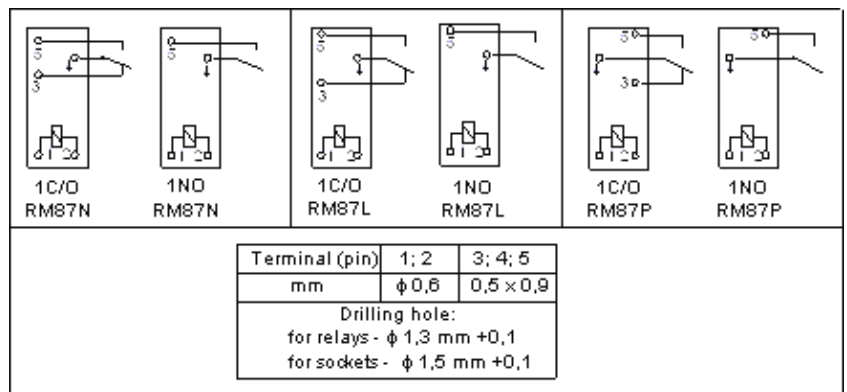
Coil data - AC version

Coil code	Rated voltage V AC	Coil resistance +/- 10% at 20°C, Ohm	Operating range of supply voltage at 20°C, V AC	
			min.	max.
5024	24	400	19,2	28,8
5048	48	1550	38,4	57,6
5060	60	2600	48,0	72,0
5110	110	8900	88,0	132,0
5115	115	9600	92,0	138,0
5120	120	10200	96,0	144,0
5220	220	35500	176,0	264,0
5230	230	38500	184,0	276,0
5240	240	42500 (15%)	192,0	288,0

COIL OPERATING RANGE



CONNECTIONS DIAGRAM



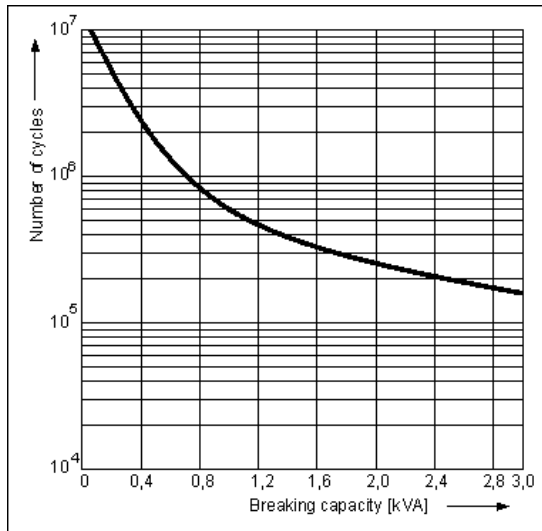
CONTACTS DATA

Contact number & arrangement	1C/O, 1NO
Contact material	AgNi // AgNi/Au 5 μm // AgSnO ₂
Voltage	
Max. switching voltage AC/DC	400 V / 300 V
Min. switching voltage AC/DC	5 V (AgNi, AgNi/Au 5 μm) 10 V (AgSnO ₂)
Current	
Rated load AC1	12 A / 250 V AC
DC1	12 A / 24 V DC
Min. switching current	5 mA
Max. inrush current	120 A for NO AgSnO ₂
Rated current	12 A
Max. breaking capacity	3 000 VA
Min. breaking capacity	0,3 W (AgNi, AgNi/Au 5 μm) 0,5 W (AgSnO ₂)
Resistance	< 100 m Ω at 1 A, 24 V
Max. operating frequency	
at rated load	600 cycles/hour
no load	72 000 cycles/hour

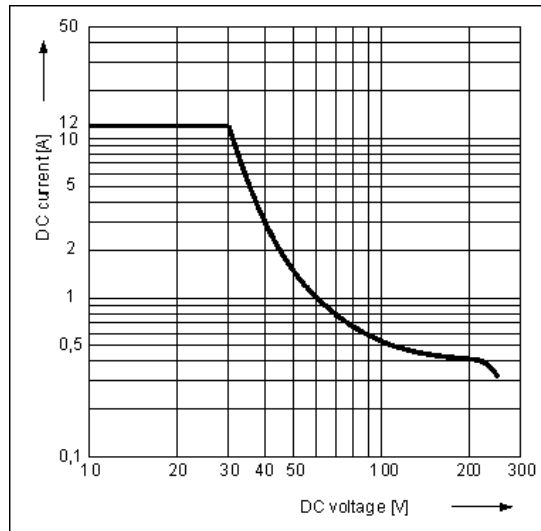
INSULATION DATA

Insulation category	C250
Voltage	
Insulation rated voltage	400 V AC
Dielectric strength	
coil-contact	5 000 V AC
contact-contact	1 000 V AC
Contact-coil distance	
clearance	> 10 mm
creepage	> 10 mm

ELECTRICAL LIFE AT AC RESISTIVE LOAD



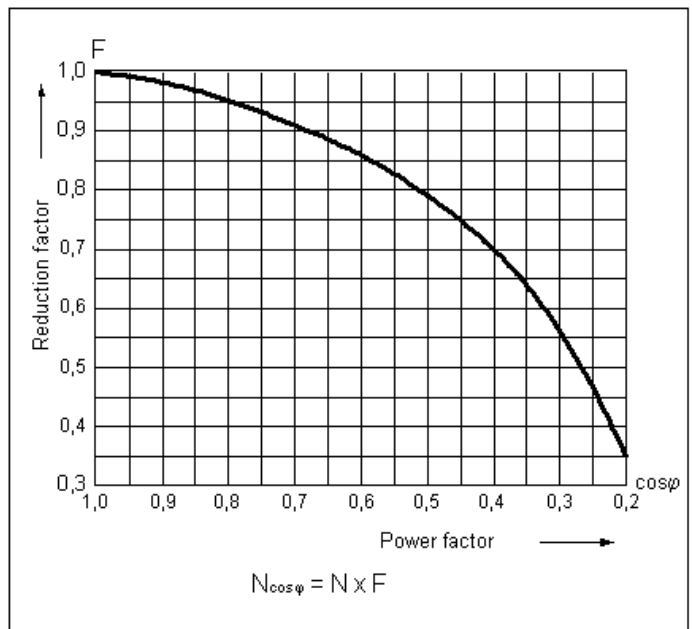
MAX. DC RESISTIVE LOAD BREAKING CAPACITY



GENERAL DATA

Operating time (typical value)	7 ms
Release time (typical value)	3 ms
Electrical life	
resistive	>10 ⁵ at 12 A, 250 V AC
cos φ	see diagram
L/R = 40 ms	>10 ⁵ at 0,12 A, 220 V DC
Mechanical life (cycles)	>3 × 10 ⁷
Dimensions (L x W x H)	29 x 12,7 x 15,7 mm
Weight	14 g
Ambient temperature	
storing	-40...+85 °C
operating	-40...+85 °C
Cover protection category	IP40 or IP67
Shock resistance	30 g
Vibration resistance	10 g for 10...150 Hz
Solder bath temperature	max. 270°C
Soldering time	max. 5s

ELECTRICAL LIFE REDUCTION FACTOR AT AC INDUCTIVE LOAD

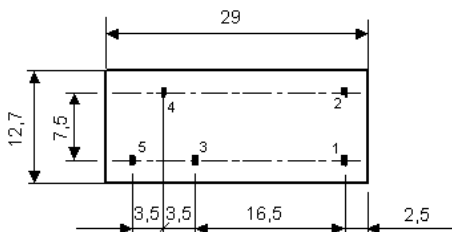


MOUNTING:

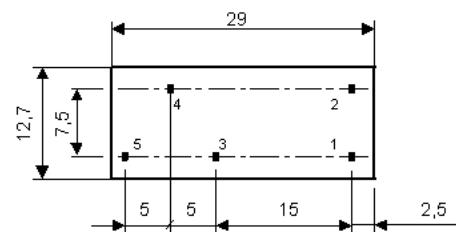
- direct PCB mounting (PCB terminals socket GW92 (clip PW80 0002) and PW80 (clip RM81 0001))
- DIN rail mount socket with screw terminals GZ92 (GZ80 1002 or MS16)+ Indicator modules for GZ92 sockets

DIMENSIONS

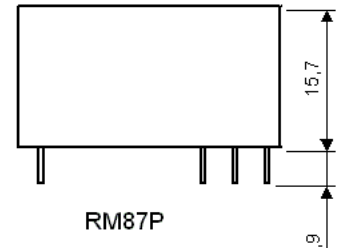
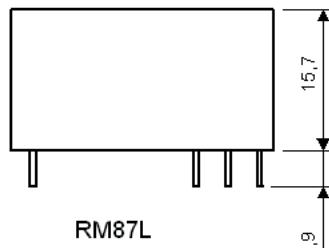
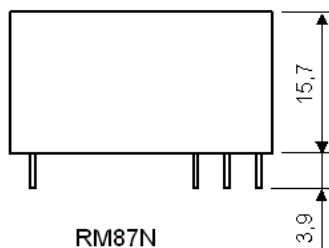
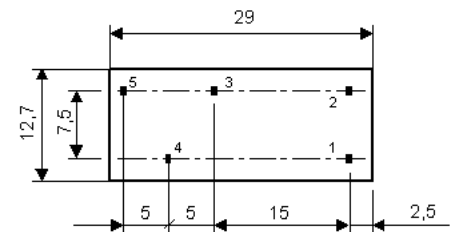
Raster 3,5 mm



Raster 5 mm LEFT



Raster 5 mm RIGHT



HOW TO ORDER RM87 RELAY: ORDERING CODES

