






- General purpose relays
- For plug-in sockets, 35 mm DIN rail mount, EN 50022 or on panel mounting
- Flat insert connectors - faston 4,8 x 0,5 mm
- Recognitions, certifications, directives: RoHS,   

## Contact data

Number and type of contacts		2 C/O
Contact material		<b>AgNi</b> , AgCdO
Max. switching voltage	AC/DC	250 V / 250 V
Min. switching voltage		5 V AgNi, 10 V AgCdO
Rated load	AC1	12 A / 250 V AC
	DC1	12 A / 30 V DC
Min. switching current		5 mA AgNi, 10 mA AgCdO
Max. inrush current		20 A
Rated current		12 A
Max. breaking capacity	AC1	3 000 VA
Min. breaking capacity		0,3 W AgNi, 1 W AgCdO
Contact resistance		≤ 100 mΩ
Max. operating frequency		
• at rated load	AC1	1 200 cycles/hour
• no load		18 000 cycles/hour


## Coil data

Rated voltage	50/60 Hz AC	6...240 V
	DC	5...220 V
Must release voltage		AC: ≥ 0,2 U <sub>n</sub> DC: ≥ 0,1 U <sub>n</sub>
Operating range of supply voltage		see Tables 1, 2
Rated power consumption	AC	1,6 VA
	DC	0,9 W

## Insulation

Insulation category		B250
Insulation rated voltage		250 V AC
Dielectric strength		
• between coil and contacts		2 500 V AC
• contact clearance		1 000 V AC
• pole - pole		2 500 V AC
Contact - coil distance		
• clearance		≥ 2,6 mm
• creepage		≥ 4 mm

## General data

Operating time (typical value)		15 ms
Release time (typical value)		10 ms
Electrical life		
• resistive AC1		≥ 10 <sup>5</sup> 12 A, 250 V AC
• cos φ		see Fig. 2
Mechanical life (cycles)		≥ 10 <sup>7</sup>
Dimensions (L x W x H)		27,5 x 21,1 x 34,5 mm 
Weight		35 g
Ambient temperature		
• storage		-40...+70 °C
• operating		-40...+55 °C
Cover protection category		IP 40
Shock resistance		10 g
Vibration resistance		5 g 15...150 Hz

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

 For plug-in sockets version: standard

Coil data - DC voltage version

Table 1

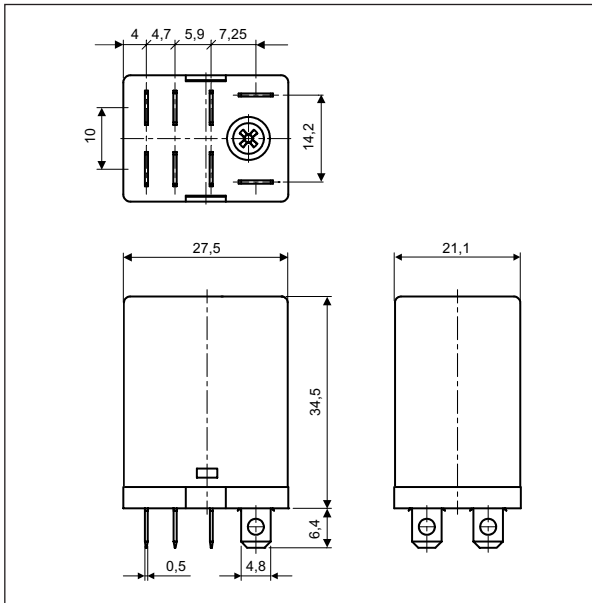
Coil code	Rated voltage V DC	Coil resistance $\pm 10\%$ at 20 °C $\Omega$	Coil operating range V DC	
			min. (at 20°C)	max. (at 55°C)
1005	5	28	4,0	5,5
1006	6	40	4,8	6,6
1012	12	160	9,6	13,2
1024	24	640	19,2	26,4
1048	48	2 600	38,4	52,8
1060	60	4 000	48,0	66,0
1080	80	7 100	64,0	88,0
1110	110	13 600	88,0	121,0
1125	125	16 000	100,0	137,5
1220	220	54 000	176,0	242,0

Coil data - AC 50/60 Hz voltage version

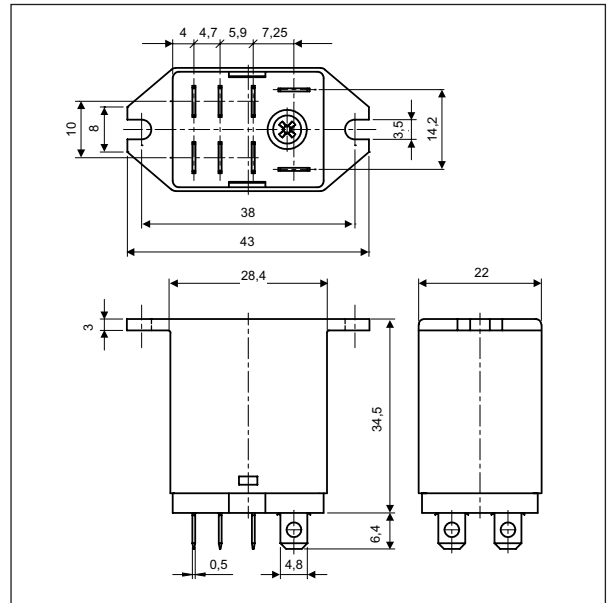
Table 2

Coil code	Rated voltage V AC	Coil resistance $\pm 10\%$ at 20 °C $\Omega$	Coil operating range V AC	
			min. (at 20°C)	max. (at 55°C)
5006	6	9,8	4,8	6,6
5012	12	39,5	9,6	13,2
5024	24	158,0	19,2	26,4
5042	42	470,0	33,6	46,2
5048	48	640,0	38,4	52,8
5060	60	930,0	48,0	66,0
5080	80	1 720,0	64,0	88,0
5110	110	3 450,0	88,0	121,0
5120	120	3 770,0	96,0	132,0
5127	127	4 000,0	101,6	139,7
5220	220	15 400,0	176,0	242,0
5230	230	16 100,0	184,0	253,0
5240	240	16 800,0	192,0	264,0

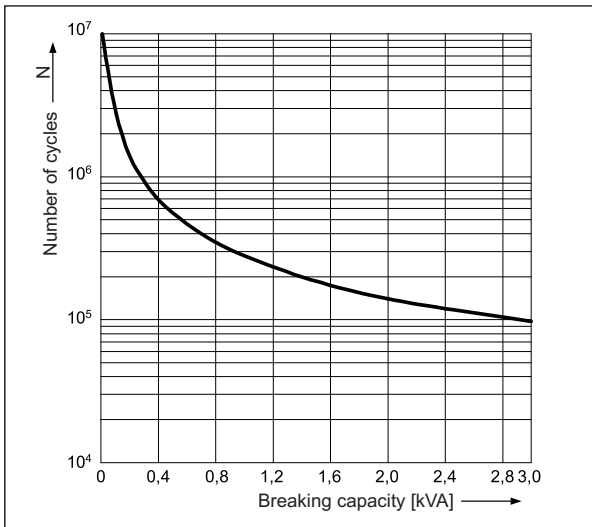
### Dimensions - plug-in version (standard)



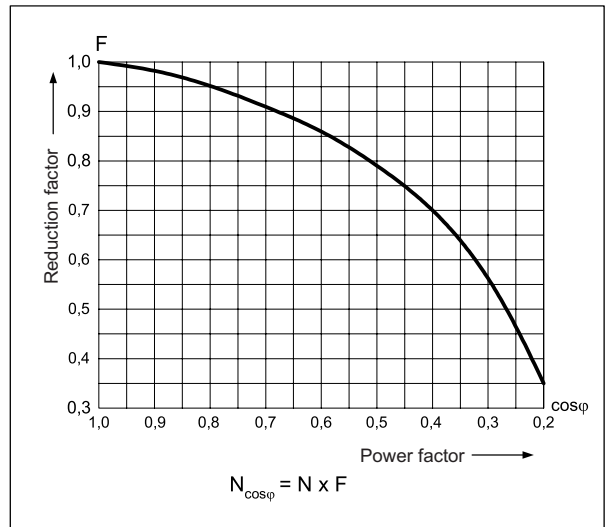
### Dimensions - version with mounting flange in the upper wall of the cover



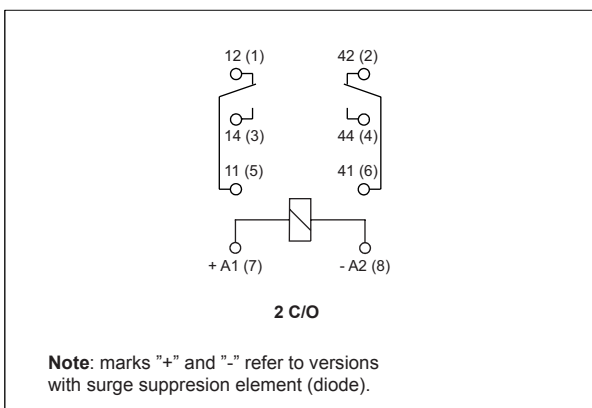
**Electrical life at AC resistive load. Maximum switching frequency at rated load** Fig. 1



**Electrical life reduction factor at AC inductive load** Fig. 2



### Connections diagram (pin side view)

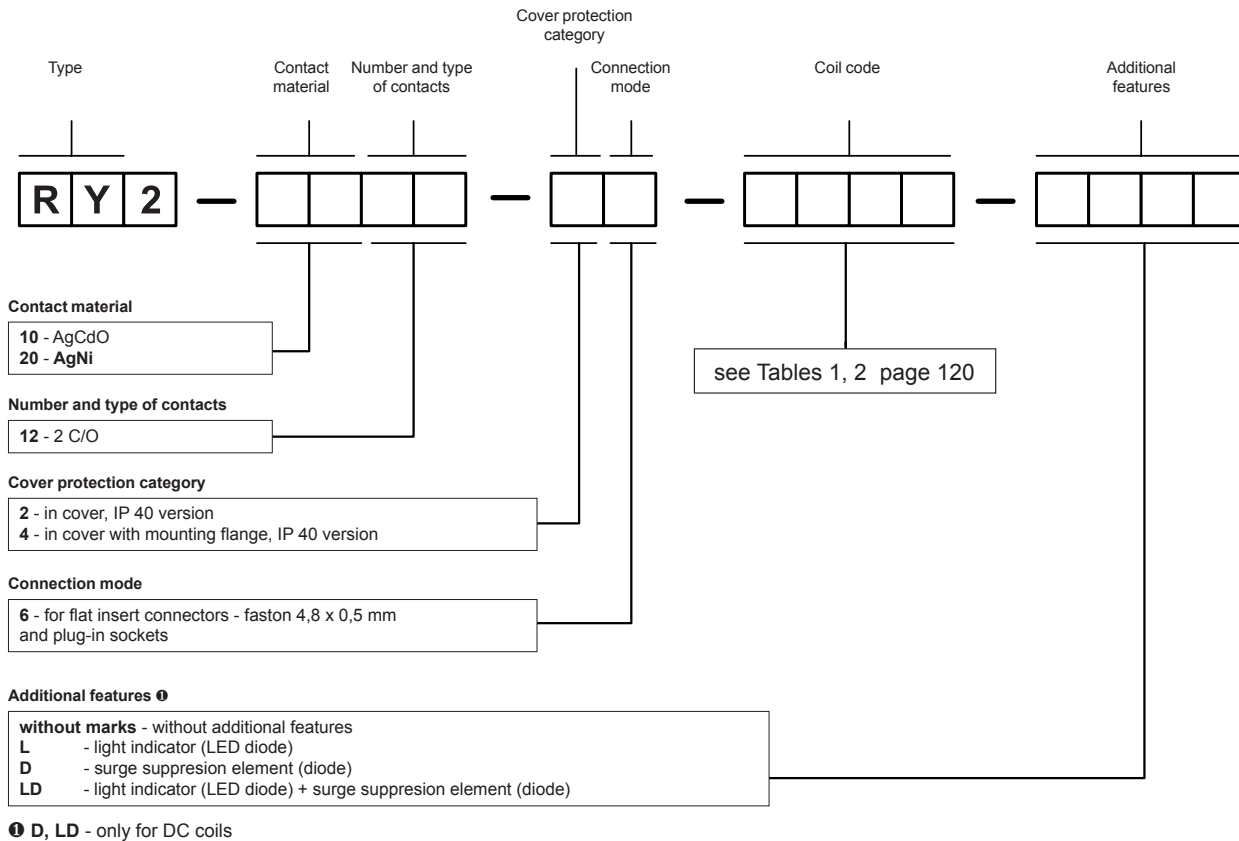


## Mounting

Relays **R<sub>Y</sub>2** are offered in versions: • standard, for plug-in sockets • with mounting flange in the upper wall of the cover.

Relays **R<sub>Y</sub>2** are designed for: • screw terminals plug-in sockets **GZY2** with clip **GZY 2000** and spring clamp **GZ2 1111**, 35 mm DIN rail mount, EN 50022 or on panel mounting • flat insert connectors - faston 4,8 x 0,5 mm.

## Ordering codes



Examples of ordering codes:

- RY2-2012-26-1024** relay **R<sub>Y</sub>2**, contact material AgNi, with two changeover contacts, in cover IP 40, for flat insert connectors - faston 4,8 x 0,5 mm and plug-in sockets, voltage version 24 V DC
- RY2-2012-26-5230-L** relay **R<sub>Y</sub>2**, contact material AgNi, with two changeover contacts, in cover IP 40, for flat insert connectors - faston 4,8 x 0,5 mm and plug-in sockets, voltage version 230 V AC 50/60 Hz, with light indicator (LED diode)