- General purpose relays
- Plug-in version - rail mount TH35, EN 50022

Contacts

Contact number & arrangement		2C/O
Contact material		AgCdO
Voltage		
Max. switching voltage AC/DC		250 V / 250 V
Min. switching voltage AC/DC		10 V
Current		
Rated load	AC1	12 A / 250 V AC
	DC1	12 A / 30 V DC
Max. switching current		20 A
Min. inrush current		10 mA
Rated current		12 A
Max. breaking capacity	AC1	3 000 VA
Min. breaking capacity		0,5 W
Resistance		≤ 100 mΩ at 100 mA, 24 V
Max. operating frequency		
• at rated load		1 200 cycles/hour
• no load		18 000 cycles/hour

Coil

Voltage	
Rated voltage	5...220 V DC 6...230 V AC 50 Hz, 6...240 V AC 50/60 Hz
Must release voltage	≥ 0,1 U_n DC; ≥ 0,2 U_n AC
Operating range of supply voltage	see Tables 1, 2, 3
Rated power consumption	0,9 W DC 1,6 VA AC 50 Hz; 1,9 VA AC 50/60 Hz

Insulation

Insulation category	B250
Voltage	
Insulation rated voltage	250 V AC
Dielectric strength:	
• coil-contact	2 500 V AC
• contact-contact	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	≥ 10^5 at 12 A 250 V AC
• cos φ	see Fig. 2
Mechanical life (cycles)	≥ 10^7
Dimensions (L x W x H)	27,5 x 21,1 x 34,5 mm
Weight	35 g
Ambient temperature	
• storing	-40...+70 °C
• operating	-40...+55 °C
Cover protection category	IP 40
Shock resistance	10 g
Vibration resistance	5 g for 15...150 Hz

Coil data - DC version

Table 1

Coil code	Rated voltage V DC	Coil resistance (±10%) at 20 °C Ω	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 Hz version

Table 2

Coil code	Rated voltage V AC	Coil resistance (±10%) at 20 °C Ω	Coil operating range V DC	
			min. (at 20°C)	max. (at 55°C)
3006	6	5	4,8	6,6
3012	12	50	9,6	13,2
3024	24	190	19,2	26,4
3036	36	400	28,8	39,6
3042	42	565	33,6	46,2
3048	48	785	38,4	52,8
3060	60	1 240	48,0	66,0
3080	80	2 190	64,0	88,0
3110	110	3 880	88,0	121,0
3120	120	4 150	96,0	132,0
3127	127	4 940	102,0	140,0
3220	220	16 300	176,0	242,0
3230	230/240	17 400	184,0	253,0

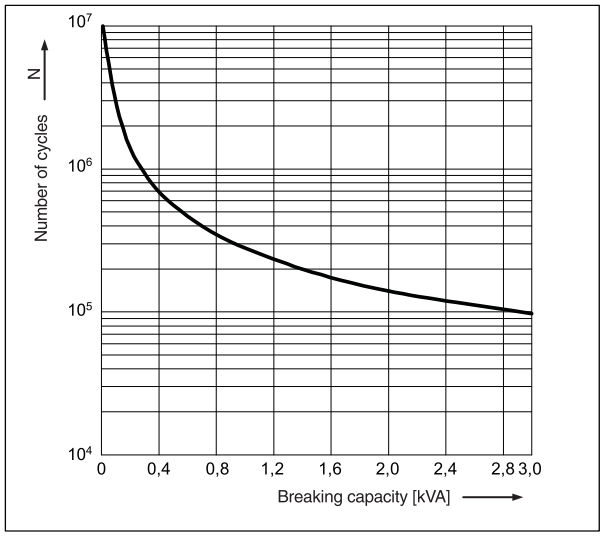
Coil data - AC 50/60 Hz version

Table 3

Coil code	Rated voltage V AC	Coil resistance (±10%) at 20 °C Ω	Coil operating range V DC	
			min. (at 20°C)	max. (at 55°C)
5006	6	10	4,8	6,6
5012	12	38	9,6	13,2
5024	24	150	19,2	26,4
5042	42	470	33,6	48,2
5048	48	680	38,4	52,8
5060	60	930	48,0	66,0
5080	80	1 680	64,0	88,0
5110	110	3 100	88,0	121,0
5120	120	3 950	96,0	132,0
5127	127	4 200	101,6	139,0
5220	220	14 100	176,0	242,0
5230	230	15 400	184,0	253,0
5240	240	17 600	192,0	264,0

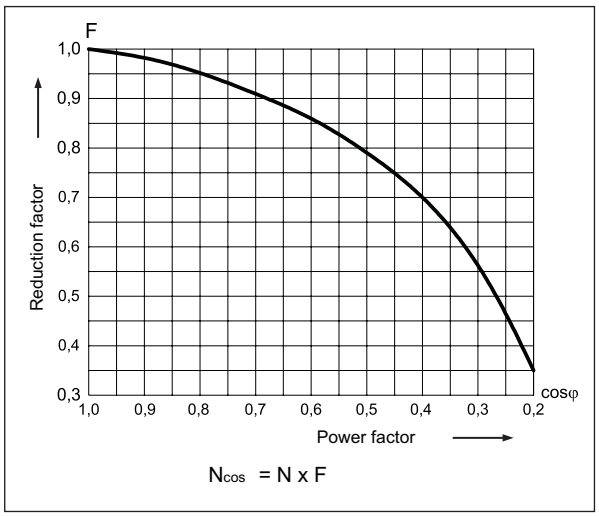
Electrical life at AC resistive load

Fig. 1

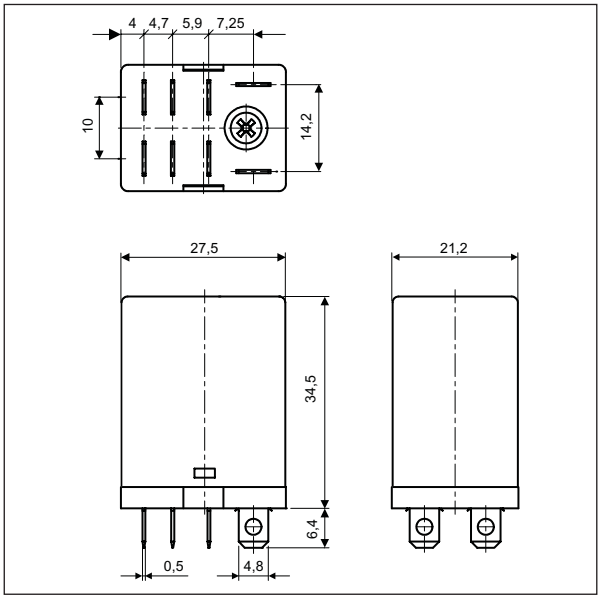


Electrical life reduction factor at AC inductive load

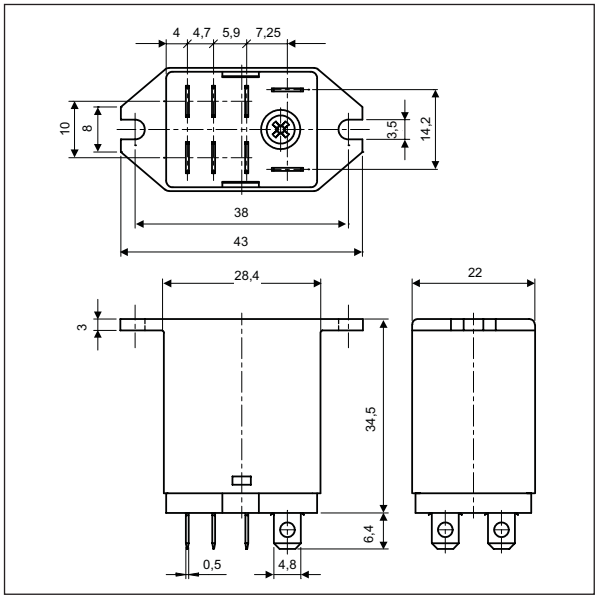
Fig. 2



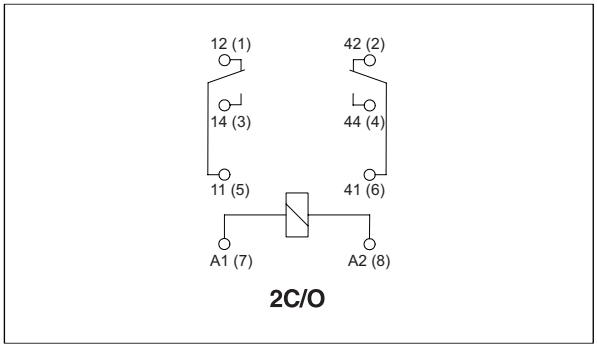
Dimensions - standard version



Dimensions - cover with mounting flange



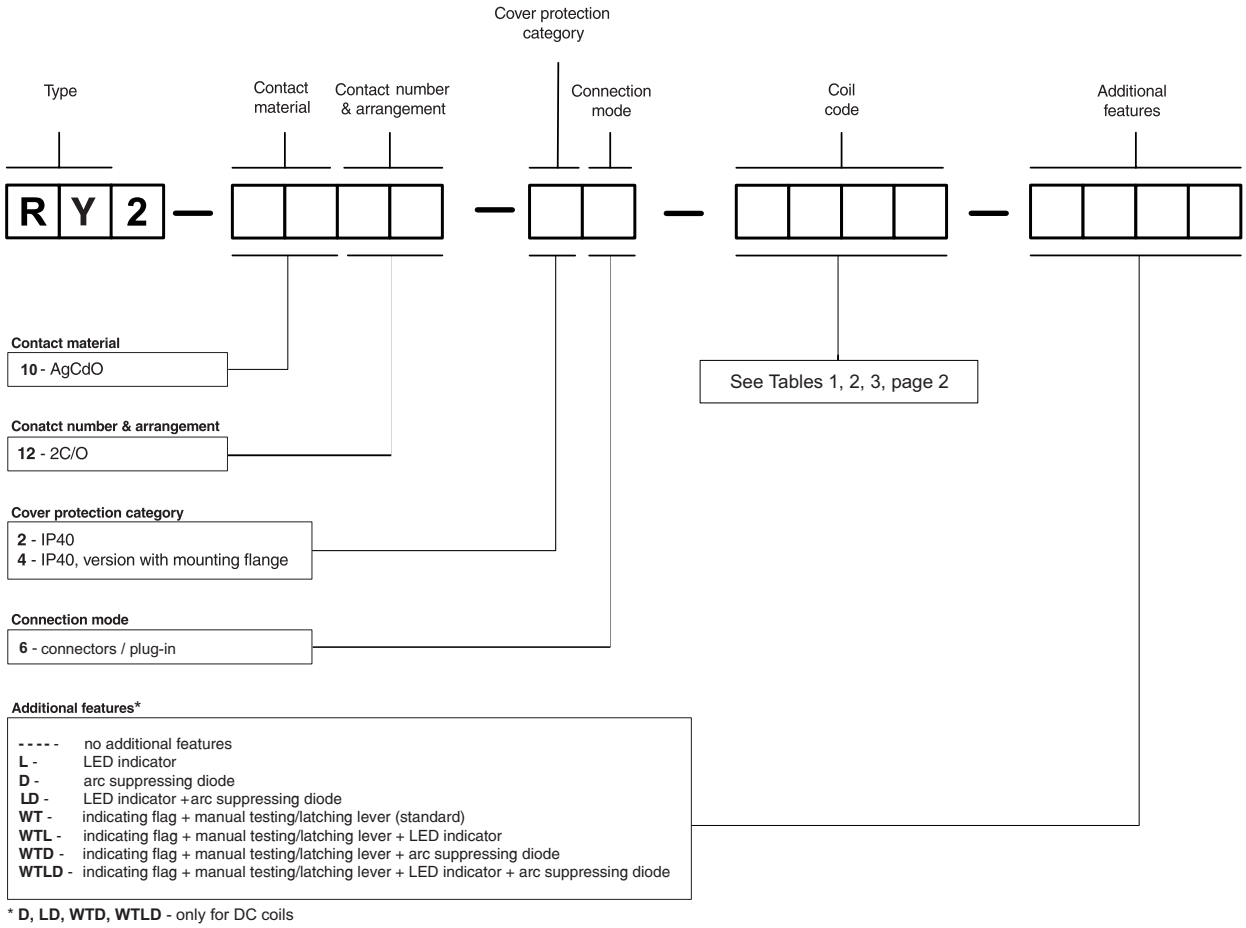
Connections diagram (pin side view)



Mounting

Relays **RY2** are designed for:
- screw terminals sockets **GZY2**
(modules and clips available) - for DIN rail mounting,
- fast-on connector.

Ordering codes



* **D, LD, WTD, WTLD** - only for DC coils