



- 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, certificates, directives: RoHS,

Contacts

Contact number & arrangement		2C/O
Contact material		AgNi, AgCdO
Max. switching voltage	AC/DC	250 V / 250 V
Min. switching voltage		5 V AgNi, 10 V AgCdO
Rated load	AC1 DC1	12 A / 250 V AC 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
Resistance		≤ 100 mΩ
Max. operating frequency		
• at rated load	AC1	1 200 cycles/hour
• no load		18 000 cycles/hour

Coil

Rated voltage	50/60 Hz AC DC	6...240 V 5...220 V
Must release voltage		AC: ≥ 0.2 U _n , DC: ≥ 0.1 U _n
Operating range of supply voltage		see Tables 1, 2
Rated power consumption	AC DC	1.6 VA 0.9 W

Insulation

Insulation category	B250
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 AC1	≥ 10 ⁵ 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 ①
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

① For plug-in sockets version: standard

Coil data - DC voltage version

Table 1

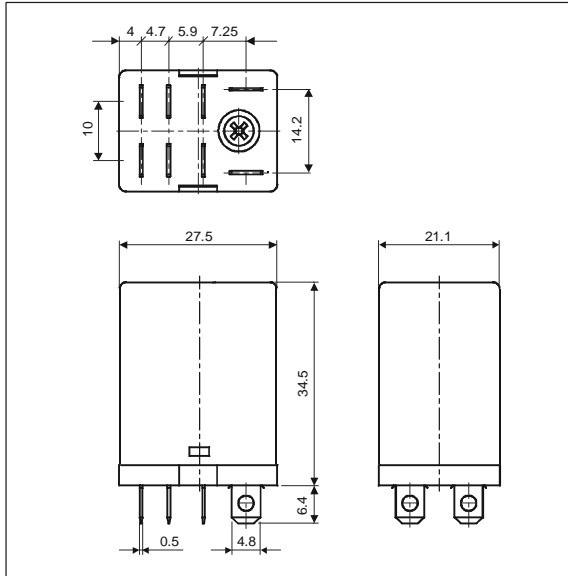
Coil code	Rated voltage V DC	Coil resistance ±10% at 20 °C Ω	Coil operating range V DC	
			min. (at 20°C)	max. (at 55°C)
1005	5	28	4.0	5.5
1006	6	40	4.8	6.6
1012	12	160	9.6	13.2
1024	24	640	19.2	26.4
1048	48	2 600	38.4	52.8
1060	60	4 000	48.0	66.0
1080	80	7 100	64.0	88.0
1110	110	13 600	88.0	121.0
1125	125	16 000	100.0	137.5
1220	220	54 000	176.0	242.0

Coil data - AC 50/60 Hz voltage version

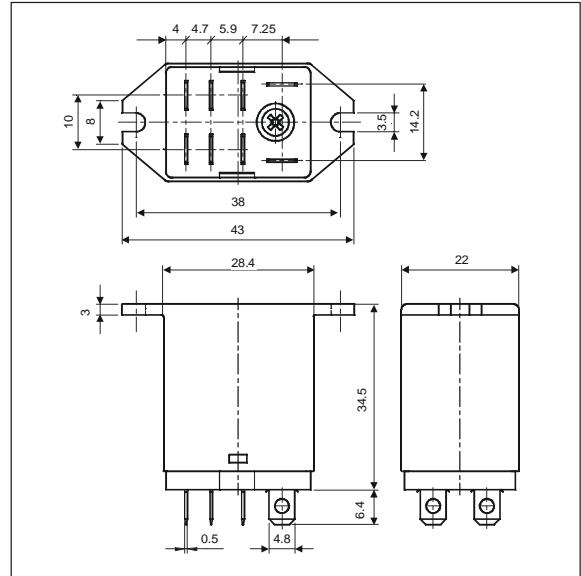
Table 2

Coil code	Rated voltage V AC	Coil resistance ±10% at 20 °C Ω	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 standard version
(without WT)

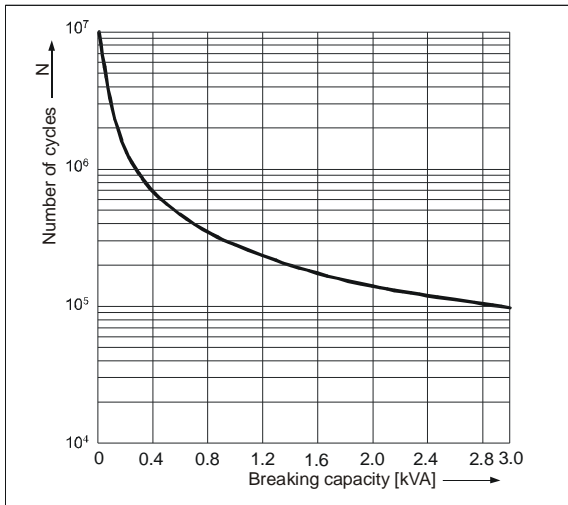


Dimensions - cover with mounting flange
(without WT)



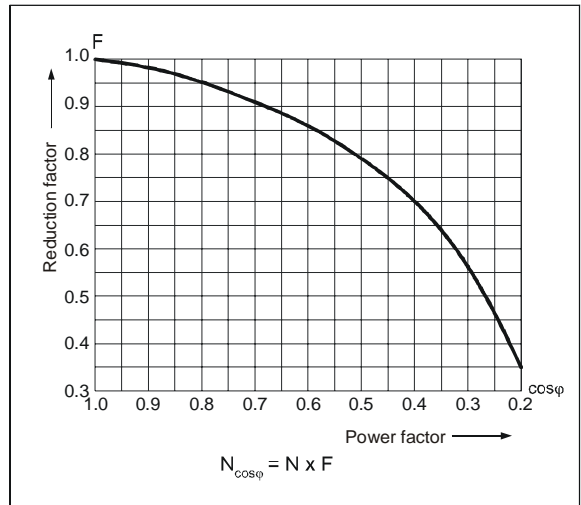
Electrical life at AC resistive load

Fig. 1

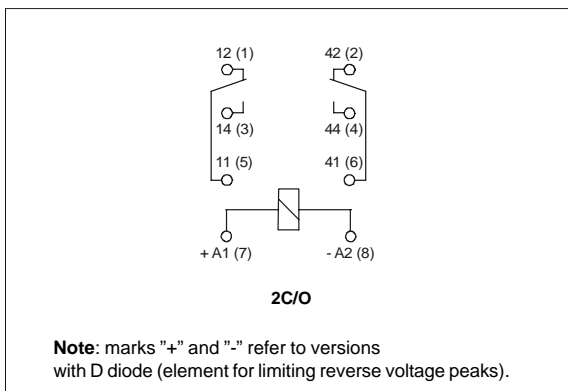


Electrical life reduction factor at AC inductive load

Fig. 2



Connections diagram (pin side view)

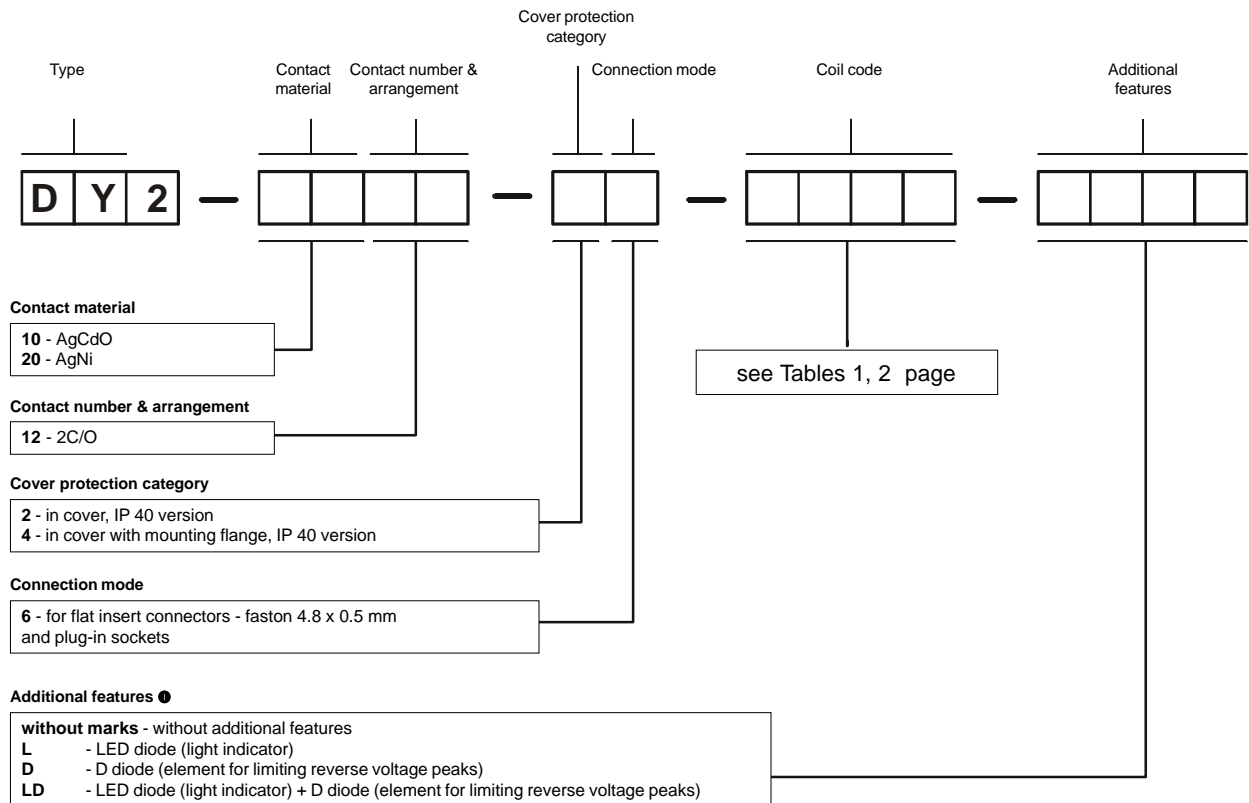


Mounting

Relays DY2 are offered in versions: • standard, for plug-in sockets • with mounting flange in the upper wall of the cover.

Relays **DY2** are designed for: • screw terminals plug-in sockets **DZY2** with clip **DZY 2000** and spring clamp **DZ2 1111**, 35 mm DIN rail mount, EN 50022 or on panel mounting • for flat insert connectors - faston 4.8 x 0.5 mm.

Ordering codes



❶ D, LD - only for DC coils

Examples of ordering codes:

DY2-2012-26-1024 relay **DY2**, 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

DY2-2012-26-5230-L relay **DY2**, 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 LED diode (light indicator)