






- Power relays of general application • AC and DC coils
- High breaking capacity: AC1 - 10 kVA; AC3 - 6 kVA
- 35 mm rail mount acc. to PN-EN 60715
- High insulation dielectric strength
- Applications: control of electromagnets; systems of heating, cooling, ventilation, air conditioning; control with single-phase motors; catering industry machines and equipment; automation systems; etc.
- Recognitions, certifications, directives: RoHS,   

### Contact data

Number and type of contacts		2 NO	
Contact material		<b>AgCdO</b>	
Rated / max. switching voltage	AC	400 V / 440 V	
Min. switching voltage		10 V	
Rated load (capacity)	AC1	25 A / 400 V AC	
	AC3	15 A / 400 V AC	
	DC1	25 A / 24 V DC (see Fig. 3)	
	DC13	0,30 A / 120 V      0,15 A / 250 V (R300)	
Min. switching current		10 mA	
Max. inrush current		40 A	
Rated current		25 A	
Max. breaking capacity	AC1	10 000 VA	
	AC3	6 000 VA	
Min. breaking capacity		1 W	
Contact resistance		≤ 100 mΩ	
Max. operating frequency	• at rated load	AC1	600 cycles/hour
		AC3	600 cycles/hour
	• no load		3 600 cycles/hour

### Coil data

Rated voltage	50 Hz AC	12 ... 400 V
	DC	12 ... 220 V
Must release voltage		≥ 0,1 U <sub>n</sub>
Operating range of supply voltage		see Tables 1, 2
Rated power consumption	AC	3,0 VA
	DC	1,7 W

### Insulation according to PN-EN 60664-1

Insulation rated voltage		400 V AC
Rated surge voltage		4 000 V    1,2 / 50 μs
Overtoltage category		III
Insulation pollution degree		3
Dielectric strength	• between coil and contacts	5 000 V AC    type of insulation: reinforced
	• contact clearance	1 500 V AC    type of clearance: full-disconnection
	• pole - pole	5 000 V AC    type of insulation: reinforced
Contact - coil distance	• clearance	≥ 6 mm
	• creepage	≥ 8 mm

### General data

Operating / release time (typical values)		20 ms / 20 ms
Electrical life	• resistive AC1	≥ 10 <sup>5</sup> 25 A, 400 V AC
	• cos φ	see Fig. 2
Mechanical life (cycles)		≥ 10 <sup>6</sup>
Dimensions (L x W x H)		26 x 49 x 72 mm
Weight		130 g
Ambient temperature	• storage	-25...+85 °C
	• operating	-25...+85 °C
Cover protection category		IP 20      PN-EN 60529
Shock resistance		10 g
Vibration resistance		5 g    10...150 Hz

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

**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)
1012	12	85	9,6	13,2
<b>1024</b>	<b>24</b>	<b>340</b>	<b>19,2</b>	<b>26,4</b>
1048	48	1 350	38,4	52,8
1110	110	7 600	88,0	121,0
1220	220	30 000	176,0	242,0

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

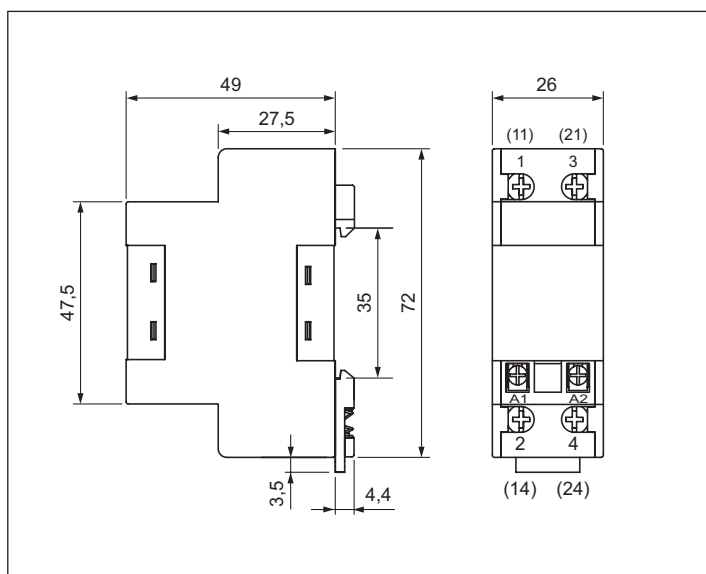
**Coil data - AC 50 Hz voltage version**

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)
3012	12	17	8,4	13,2
<b>3024</b>	<b>24</b>	<b>76</b>	<b>16,8</b>	<b>26,4</b>
3110	110	1 600	77,0	121,0
<b>3230</b>	<b>230</b>	<b>6 800</b>	<b>161,0</b>	<b>253,0</b>
3400	400	18 600	280,0	440,0

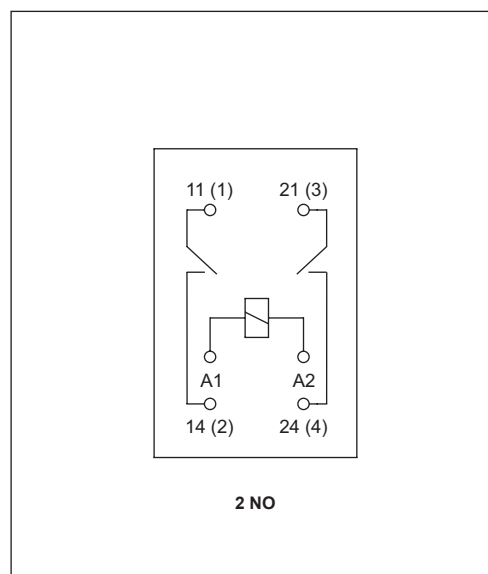
The data in bold type pertain to the standard versions of the relays.

### Dimensions



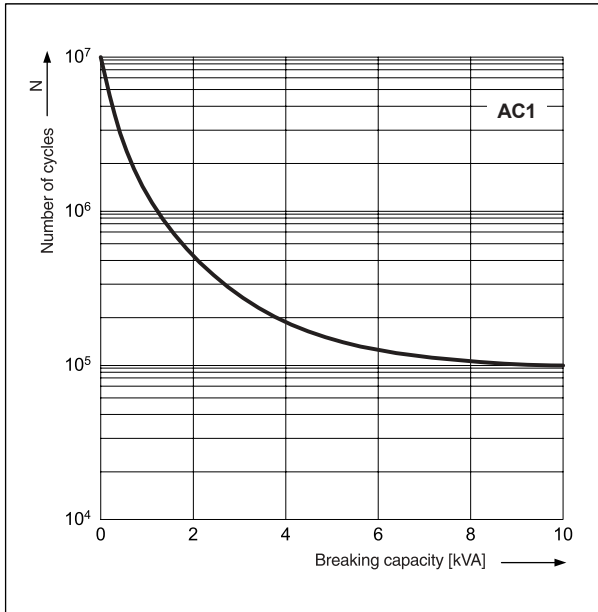
### Connection diagram

(screw terminals side view)



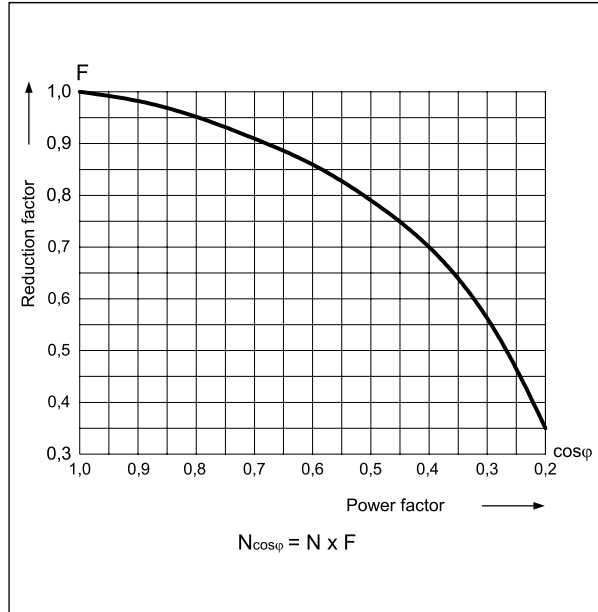
**Electrical life at AC resistive load.**  
Switching frequency: 600 cycles/hour

Fig. 1



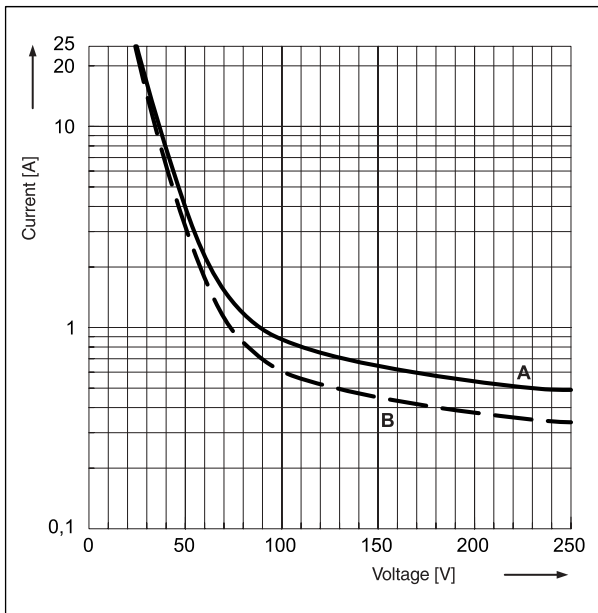
**Electrical life reduction factor at AC inductive load**

Fig. 2



**Max. DC breaking capacity**  
A - resistive load DC1  
B - inductive load L/R = 40 ms

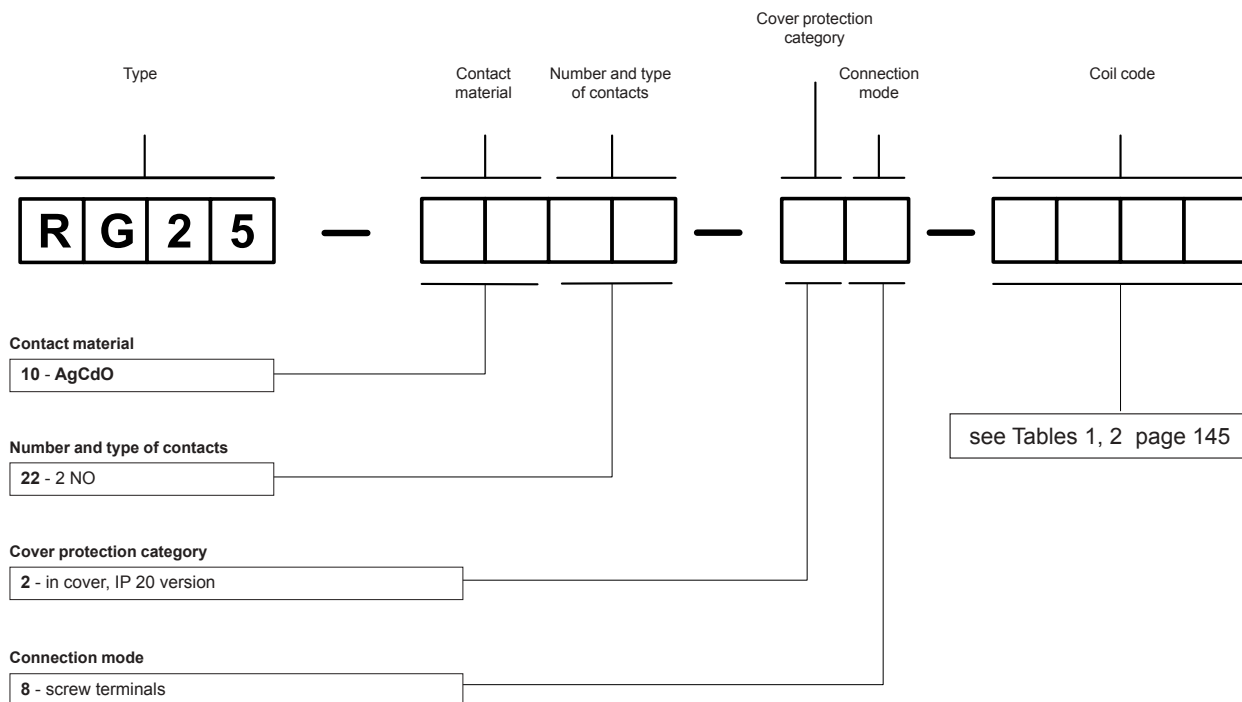
Fig. 3



### Mounting

Relays **RG25** are designed for direct mounting on 35 mm rail mount acc. to PN-EN 60715. Operational position - screw terminals of coil downwards. Maximum size of wires 2 x 2,5 mm<sup>2</sup> (2 x 14 AWG). Rated cross-sectional area of conductors 2 x 1,5 mm<sup>2</sup> (2 x 16 AWG). Maximum screw torque: 0,7 Nm.

### Ordering codes



Example of ordering code:

**RG25-1022-28-3230** relay **RG25**, contact material AgCdO, with two normally open contacts, in cover IP 20, screw terminals, voltage version 230 V AC 50 Hz