



# RG25

## industrial relays of small dimensions



- 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; photoelectric 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
<b>Coil data</b>		
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
<b>Insulation according to PN-EN 60664-1</b>		
Insulation rated voltage		400 V AC
Rated surge voltage		4 000 V 1,2 / 50 μs
Overvoltage 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: micro-disconnection
• pole - pole	5 000 V AC	type of insulation: reinforced
Contact - coil distance		
• clearance		≥ 6 mm
• creepage		≥ 8 mm
<b>General data</b>		
Operating / release time (typical values)		20 ms / 20 ms
Electrical life		
• resistive AC1	> 10 <sup>5</sup>	25 A, 400 V AC
• cosφ	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.

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**Coil data - DC voltage version**

Table 1

Coil code	Rated voltage V DC	Coil resistance at 20 °C Ω	Acceptable resistance	Coil operating range V DC	
				min. (at 20 °C)	max. (at 55 °C)
1012	12	85	± 10%	9,6	13,2
<b>1024</b>	<b>24</b>	<b>340</b>	<b>± 10%</b>	<b>19,2</b>	<b>26,4</b>
1048	48	1 350	± 10%	38,4	52,8
1110	110	7 600	± 10%	88,0	121,0
1220	220	30 000	± 10%	176,0	242,0

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

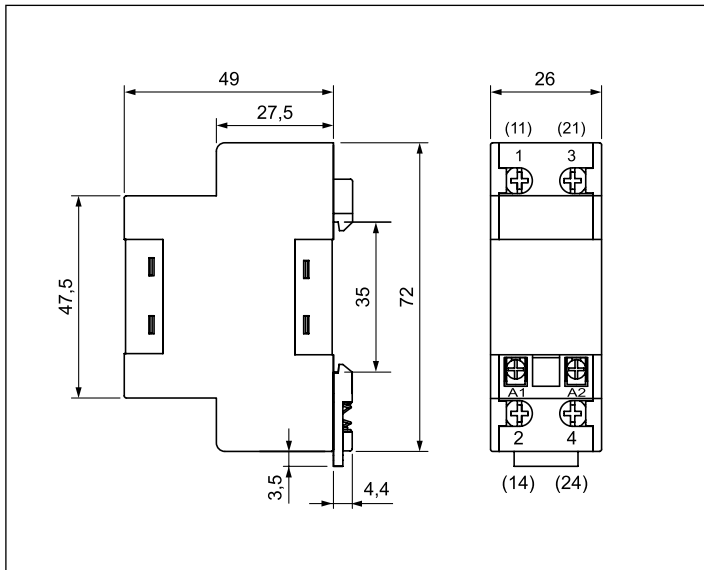
**Coil data - AC 50 Hz voltage version**

Table 2

Coil code	Rated voltage V AC	Coil resistance at 20 °C Ω	Acceptable resistance	Coil operating range V AC	
				min. (at 20 °C)	max. (at 55 °C)
3012	12	17	± 10%	8,4	13,2
<b>3024</b>	<b>24</b>	<b>76</b>	<b>± 10%</b>	<b>16,8</b>	<b>26,4</b>
3110	110	1 600	± 10%	77,0	121,0
<b>3230</b>	<b>230</b>	<b>6 800</b>	<b>± 10%</b>	<b>161,0</b>	<b>253,0</b>
3400	400	18 600	± 10%	280,0	440,0

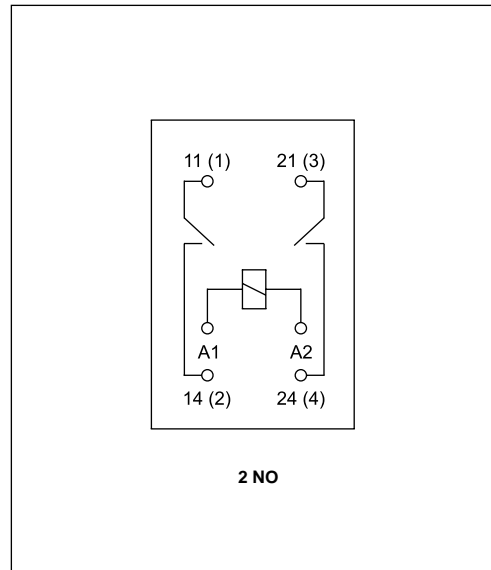
The data in bold type pertain to the standard versions of the relays.

## Dimensions



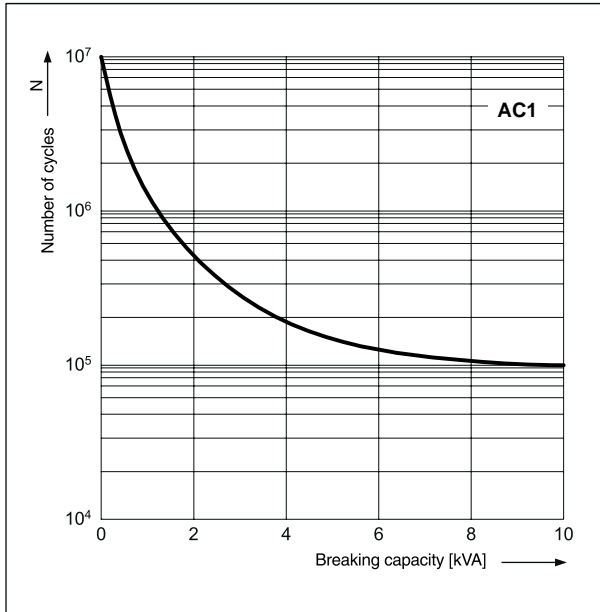
## Connection diagram

(screw terminals side view)



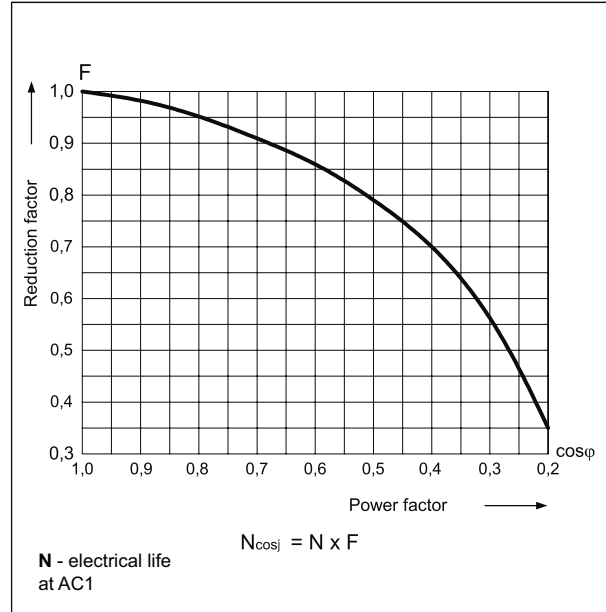
**Electrical life at AC resistive load.**  
Switching frequency: 600 cycles/hour

Fig. 1



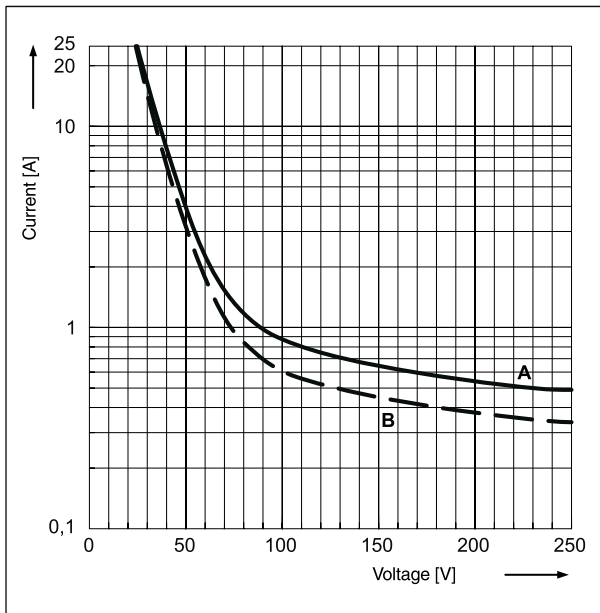
**Electrical life reduction factor at AC inductive load**

Fig. 2



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

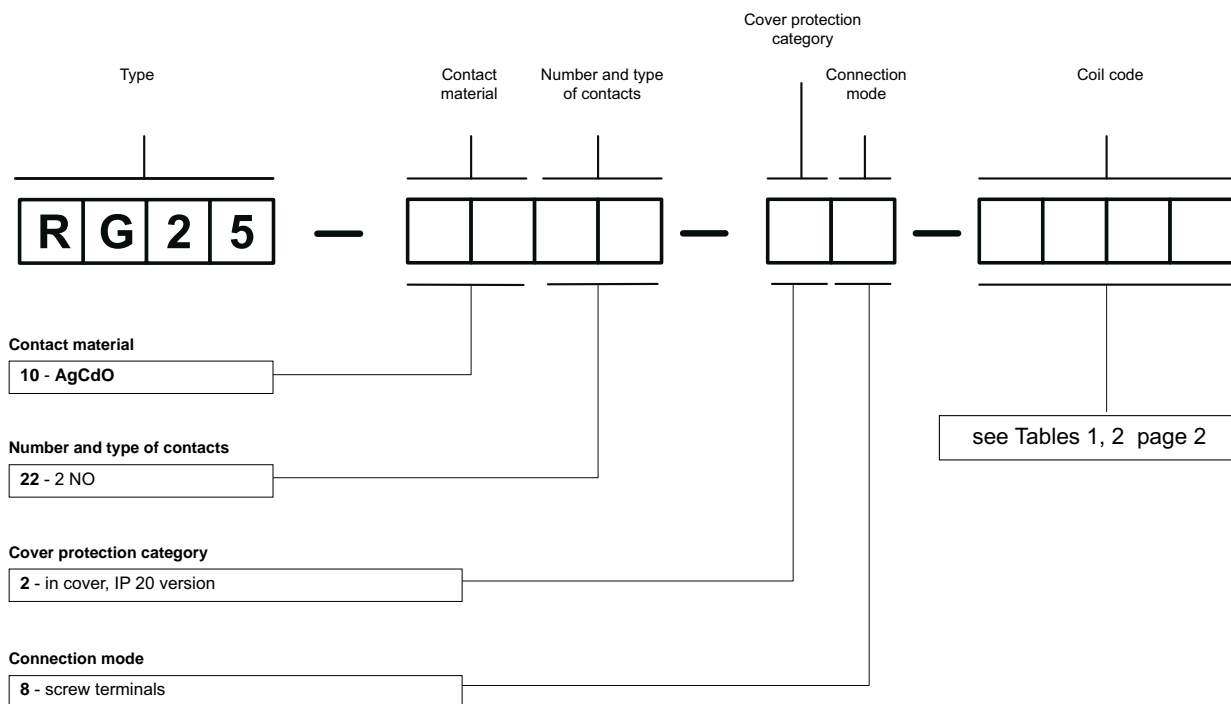
Fig. 3



## 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. **Connections:** max. cross section of the cables: 2 x 2,5 mm<sup>2</sup> (2 x 14 AWG), length of the cable deinsulation: 9 mm, max. tightening moment for the terminal: 0,7 Nm.

## Ordering codes



Example of ordering code:

**RG25-1022-28-3230**

relay **RG25**, screw terminals, two normally open contacts, contact material AgCdO, coil voltage 230 V AC 50 Hz, in cover IP 20

### PRECAUTIONS:

1. Ensure that the parameters of the product described in its specification provide a safety margin for the appropriate operation of the device or system and never use the product in circumstances which exceed the parameters of the product. 2. Never touch any live parts of the device. 3. Ensure that the product has been connected correctly. An incorrect connection may cause malfunction, excessive heating or risk of fire. 4. In case of any risk of any serious material loss or death or injuries of humans or animals, the devices or systems shall be designed so to equip them with double safety system to guarantee their reliable operation.