RG25

industrial relays of small dimensions



Contact data

- 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, ventillation, air conditioning; control with single-phase motors; catering industry machines and equipment; automation systems; photoelectric systems; etc.

Number and type of contacts		2 NO			
Contact material		AgCdO			
Rated / max. switching voltage	AC	400 V / 440 V			
Min. switching voltage		10 V			
Rated load (capacity)	AC1	25 A / 400 V A	.C		
	AC3	15 A / 400 V A			
	DC1	25 A / 24 V DC			
	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/hou	ır		
	AC3	600 cycles/hou	ur		
• no load		3 600 cycles/h	our		
Coil data		-			
Rated voltage	50 Hz AC	12 400 V			
rated voltage	DC	12 220 V			
Must release voltage		≥ 0,1 U _n			
Operating range of supply voltage		see Tables 1, 2	2		
Rated power consumption	AC	3,0 VA	2		
reaced power consumption	DC	1,7 W			
Inculation		1,7 **			
Insulation according to PN-EN 60664	-	400 \/ 40			
	Insulation rated voltage		400 V AC		
Rated surge voltage		4 000 V 1,2 / 50 μs			
Overvoltage category		3			
Insulation pollution degree		3			
Dielectric strength		5 000 \ / 4 0			
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			
General data					
Operating / release time (typical values)		20 ms / 20 ms			
Electrical life					
resistive AC1		> 10 ⁵	25 A, 400 V AC		
• cos <i>φ</i>		see Fig. 2			
Mechanical life (cycles)		> 10 ⁶			
Dimensions (L x W x H)		26 x 49 x 72 m	nm		
Weight		130 g			
Ambient temperature • s	torage	-25+85 °C			
• 0	perating	-25+85 °C			
Cover protection category		IP 20	PN-EN 60529		
Shock resistance		10 g			
Vibration resistance		5 g 10150 Hz	2		
		•			

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 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
1024	24	340	± 10%	19,2	26,4
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
3024	24	76	± 10%	16,8	26,4
3110	110	1 600	± 10%	77,0	121,0
3230	230	6 800	± 10%	161,0	253,0
3400	400	18 600	± 10%	280,0	440,0

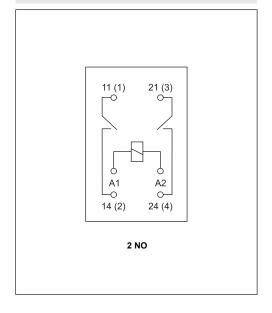
The data in bold type pertain to the standard versions of the relays.

Dimensions

27,5 (11) (21) 1 3 1 3 1 4,1 (14) (24)

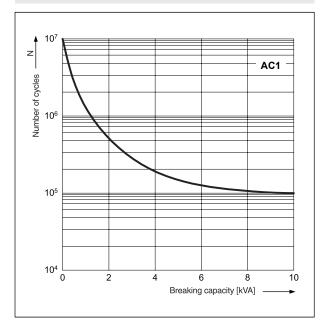
Connection diagram

(screw terminals side view)



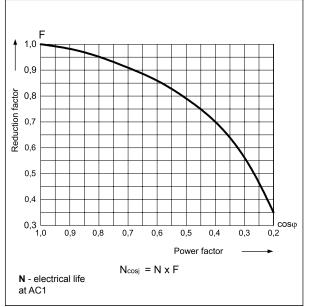
Electrical life at AC resistive load. Switching frequency: 600 cycles/hour





Electrical life reduction factor at AC inductive load

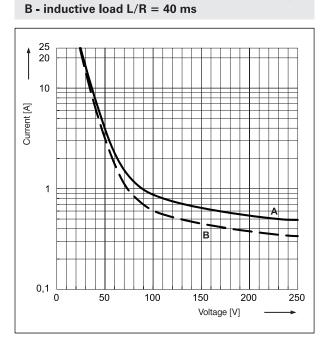
Fig. 2



Max. DC breaking capacity

A - resistive load DC1

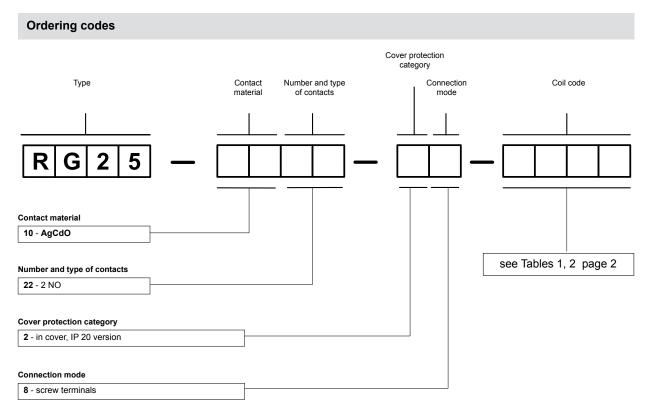
Fig. 3



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 mm² (2 x 14 AWG), length of the cable deinsulation: 9 mm, max. tightening moment for the terminal: 0,7 Nm.



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.