

with adaptor (V) with adaptor (H)

- General purpose relays, designed for continuous operation*
- For plug-in sockets: on 35 mm rail mount acc. to EN 60715; on panel mounting; with terminals for soldering
- AC and DC coils, insulation class F: 155 °C • Versions: PCB; faston 187 (4,8 x 0,5 mm); faston 250 (6,3 x 0,8 mm) • Contact gap: 3 mm (option - only in versions with normally open contacts)
- Additional equipment: K - test button; L - light indicator (LED)
- Applications: control of electromagnets; systems of heating, cooling, ventillation, air conditioning; control with single-phase and three-phase motors; catering industry machines and equipment; automation systems; photoelectric systems; etc.
- Recognitions, certifications, directives: RoHS,

Contact data

Number and type of contacts		2 CO, 3 CO, 2 NO, 3 NO 2 NO, 3 NO with contact gap ≥ 3 mm	
Contact material		AgNi, **$AgSnO_2$**	
Rated / max. switching voltage	AC	250 V / 440 V	230 V / 250 V ❶
Min. switching voltage		5 V AgNi, 10 V $AgSnO_2$	
Rated load	AC1	16 A / 250 V AC or 10 A / 400 V AC	16 A / 250 V AC ❶
	DC1	16 A / 24 V DC (see Fig. 3)	
Motor load	acc. to UL 508	1/3 HP 120 V AC, 7,2 FLA, single-phase motor 3/4 HP 240 V AC, 6,9 FLA, single-phase motor 1 HP 400 V AC, 2,3 FLA, three-phase motor, (only 3 NO)	
Min. switching current		5 mA AgNi, 10 mA $AgSnO_2$	
Max. make current		40 A	
Rated current		16 A	
Max. breaking capacity	AC1	4 000 VA	
Min. breaking capacity		0,3 W AgNi, 1 W $AgSnO_2$	
Contact resistance		≤ 100 mΩ	
Max. operating frequency			
• at rated load	AC1	1 200 cycles/hour	
• no load		12 000 cycles/hour	

Coil data

Rated voltage	50/60 Hz AC	6, 12, 24, 115, 120, 220, 230, 240 V	
	50 Hz AC	400 V ❶	
	DC	6, **12**, 24, 42, 48, 60, 110, 120, 220 V	standard coil
	DC	12, 24, 48, 110, 220 V	reinforced coil
Must release voltage		AC: ≥ 0,15 U_n	DC: ≥ 0,1 U_n
Operating range of supply voltage		see Tables 1, 2, 3, 4	
Rated power consumption	AC	2,8 VA 50 Hz	2,5 VA 60 Hz
	DC	1,5 W	1,7 W with contact gap ≥ 3 mm

Insulation according to EN 60664-1

Insulation rated voltage	400 V AC	
Rated surge voltage	4 000 V 1,2 / 50 µs	
Overvoltage category	III	
Insulation pollution degree	2	
Dielectric strength		
• between coil and contacts	2 500 V AC	type of insulation: basic
• contact clearance	1 500 V AC	type of clearance: micro-disconnection, with contact gap ≥ 0,4 mm
	2 500 V AC	type of clearance: full-disconnection, with contact gap ≥ 3 mm
• pole - pole	2 500 V AC	type of insulation: basic
Contact - coil distance		
• clearance	≥ 5 mm 2 CO, 2 NO	≥ 4 mm 3 CO, 3 NO
• creepage	≥ 8 mm 2 CO, 2 NO	≥ 5 mm 3 CO, 3 NO
Pole - pole distance		
• clearance	≥ 15,6 mm 2 CO, 2 NO	≥ 6,3 mm 3 CO, 3 NO
• creepage	≥ 22 mm 2 CO, 2 NO	≥ 8 mm 3 CO, 3 NO

The data in bold type relate to the standard versions of the relays. *The relays are designed for continuous operation while maintaining the parameters declared in the data sheet. ❶ For RUC faston 4,8 x 0,5 with GUC11S-V0 socket, max. switching voltages and coil voltages of relays are limited to 250 V AC / DC.

General data

Operating / release time (typical values)	20 ms / 15 ms	
Electrical life		
• resistive AC1	> 10^5	16 A, 250 V AC
	> 10^5	10 A, 400 V AC
• cosφ	see Fig. 2	
Mechanical life (cycles)	> 10^7	
Dimensions (L x W x H) / Weight		
• RUC faston 4,8 x 0,5	36,1 x 38,6 x 52,65 mm / 80 g	for plug-in sockets
	36,1 x 38,6 x 56,5 mm / 80 g	for PCB
	45,9 x 38,6 x 58,75 mm / 85 g	with adaptor (V)
	46,8 x 38,6 x 62,45 mm / 85 g	with adaptor (H)
	36,1 x 38,6 x 66,3 mm / 85 g	with mounting flange
Dimensions (L x W x H) / Weight		
• RUC faston 6,3 x 0,8	45,9 x 38,6 x 62,4 mm / 85 g	with adaptor (V)
	46,8 x 38,6 x 66,1 mm / 85 g	with adaptor (H)
	36,1 x 38,6 x 66,3 mm / 85 g	with mounting flange
Ambient temperature • storage	-40...+85 °C	
(non-condensation and/or icing) • operating	coil AC: -40...+55 °C	3 CO, 3 NO / 16 A
	coil AC: -40...+70 °C	2 CO, 2 NO / 16 A
	coil DC: -40...+55 °C	3 CO, 3 NO / 16 A
	coil DC: -40...+70 °C	3 CO, 3 NO / 10 A; 2 CO, 2 NO / 16 A
Cover protection category	IP 00	EN 60529
Environmental protection	RTI	EN 61810-1
Shock resistance	10 g	
Vibration resistance	5 g	10...150 Hz
Solder bath temperature	max. 270 °C	
Soldering time	max. 5 s	

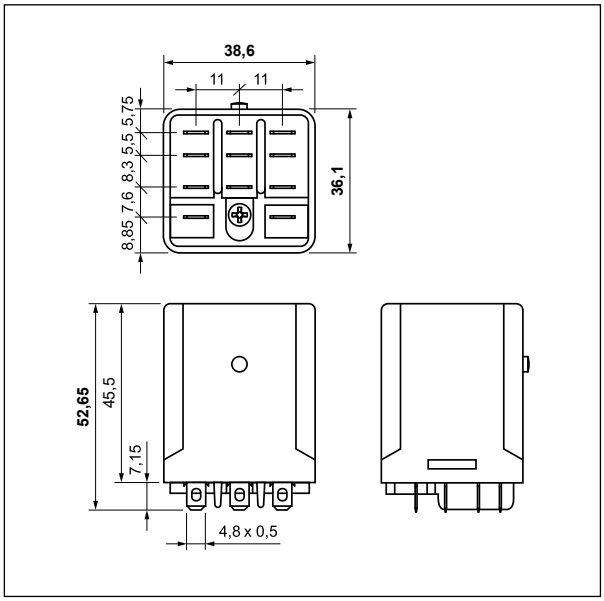
Mounting, sockets and accessories for relays

Relays **RUC** are offered in versions: • standard, for plug-in sockets • with mounting flange in the wall of the cover, on panel mounting with two M4 screws, flat insert connectors - faston 187 (4,8 x 0,5 mm) or faston 250 (6,3 x 0,8 mm) • with vertical (V) or horizontal (H) adaptors for direct mounting on 35 mm rail mount acc. to EN 60715, flat insert connectors - faston 187 (4,8 x 0,5 mm) or faston 250 (6,3 x 0,8 mm) • for direct PCB mounting or through socket ❶.

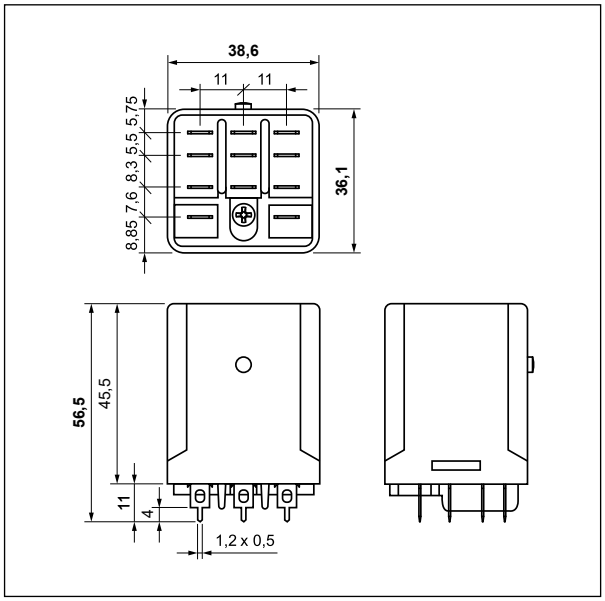
Sockets for RUC faston 4,8 x 0,5	**Accessories**
	Spring wire clips
Screw terminals sockets, 35 mm rail mount (acc. to EN 60715)	
GUC11S-V0 ❷	MBA
GUC11A-V0 ❷	MBC (socket is sold complete with clip)
Solder terminals sockets	
GUP11P	MBP

❶ Relays unavailable with (V) or (H) adaptor, and cover with mounting flange.
❷ For RUC faston 4,8 x 0,5 and RUC-M, with GUC11S-V0 or GUC11A-V0 socket, max. switching voltages and coil voltages of relays are limited to 250 V AC / DC.

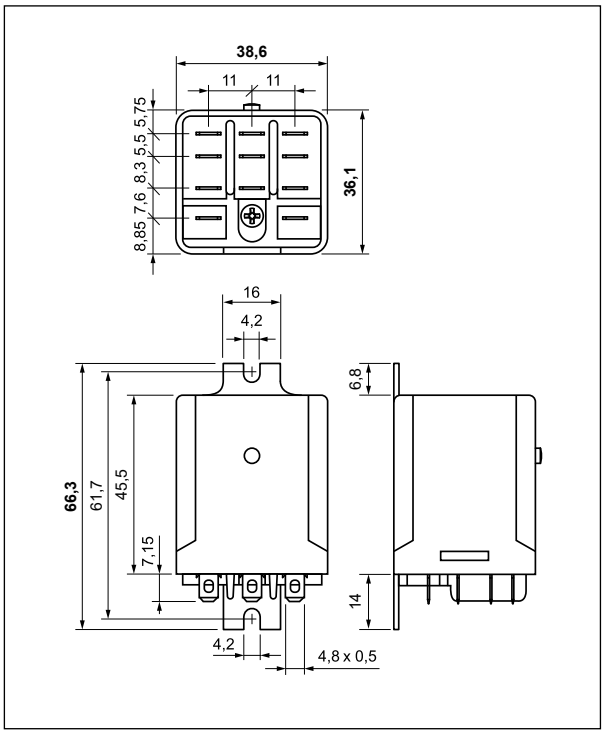
Dimensions - RUC faston 4,8 x 0,5
- plug-in version (standard)



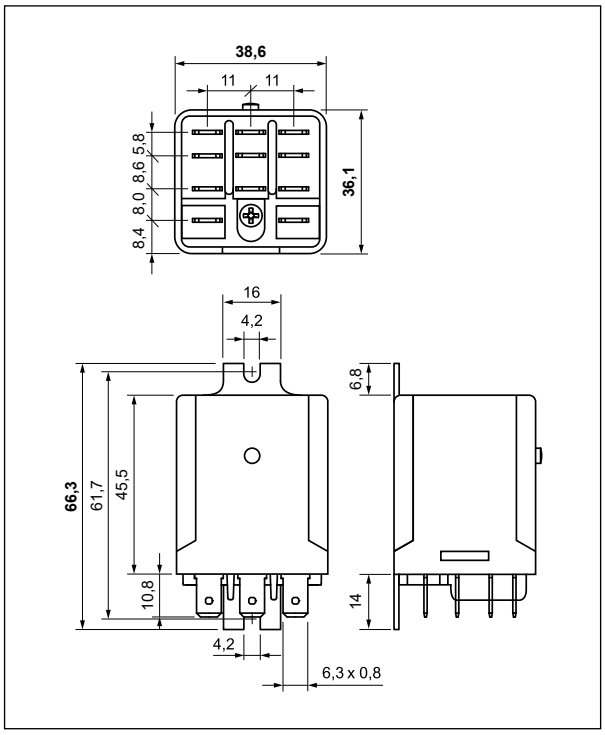
Dimensions - RUC faston 4,8 x 0,5
- PCB version



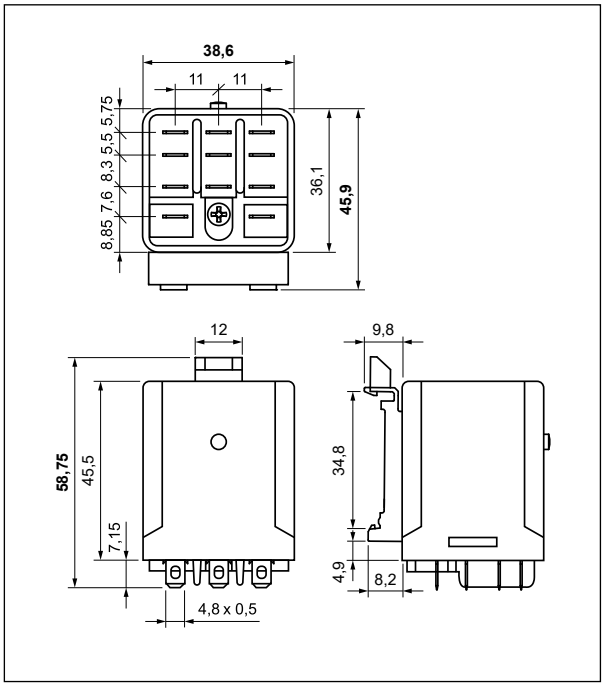
Dimensions - RUC faston 4,8 x 0,5
- version with mounting flange in the wall of the cover



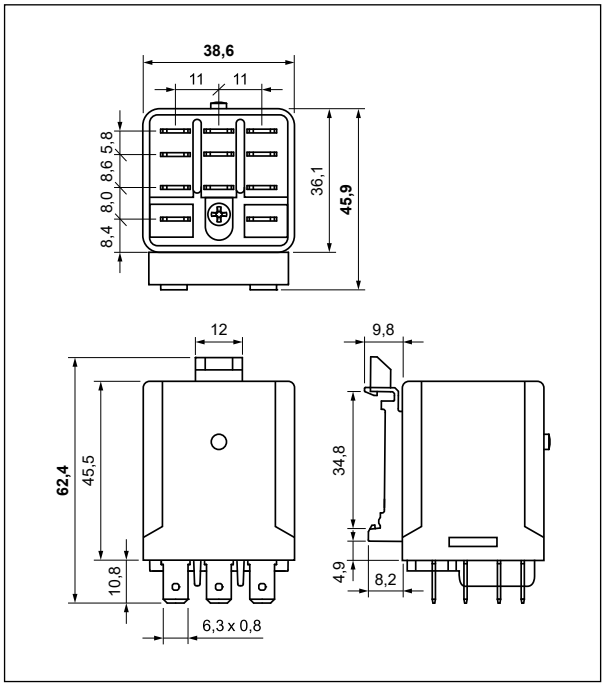
Dimensions - RUC faston 6,3 x 0,8
- version with mounting flange in the wall of the cover



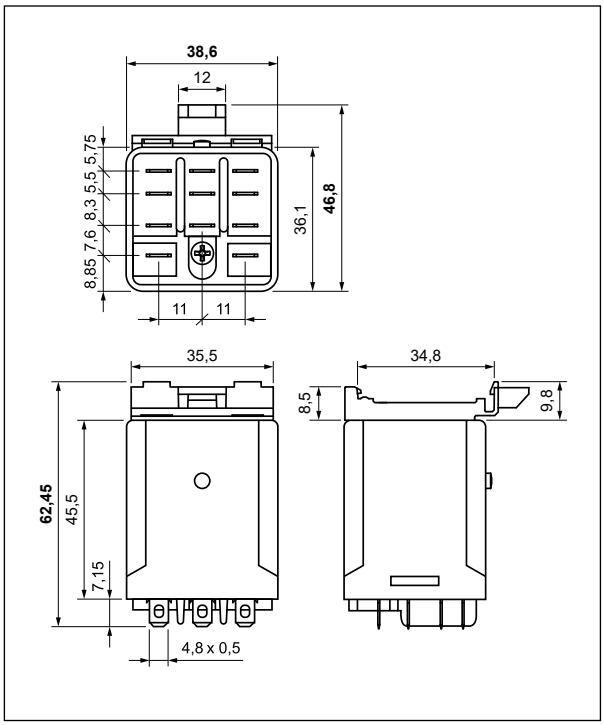
Dimensions - RUC faston 4,8 x 0,5
- version with vertical adaptor (V)



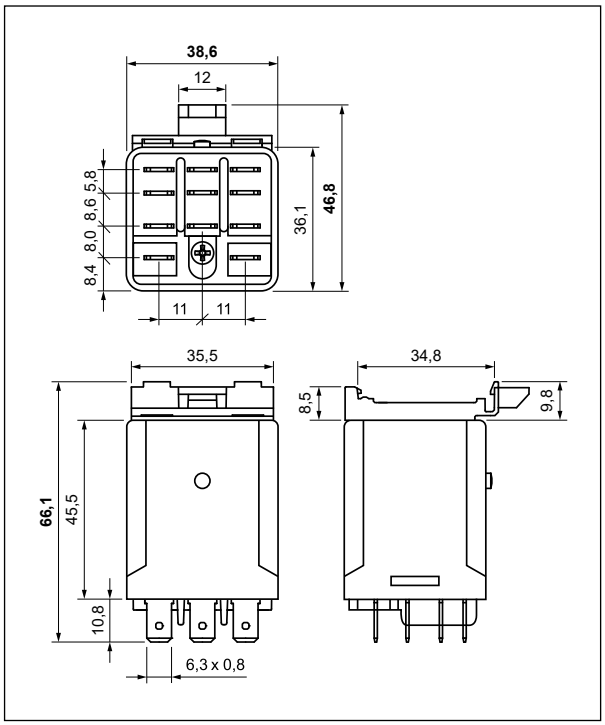
Dimensions - RUC faston 6,3 x 0,8
- version with vertical adaptor (V)



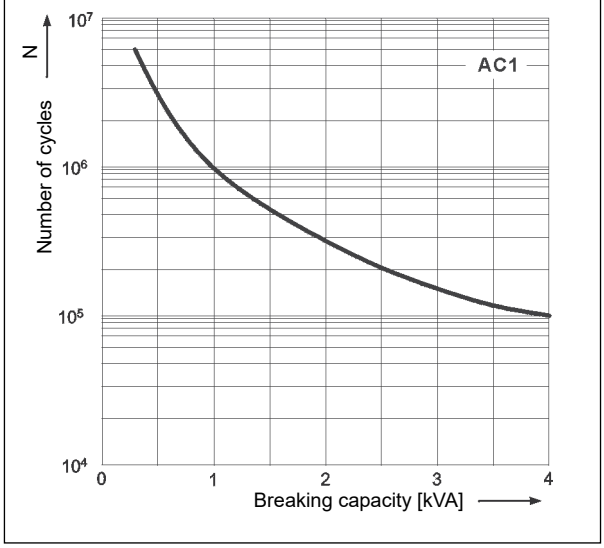
Dimensions - RUC faston 4,8 x 0,5
- version with horizontal adaptor (H)



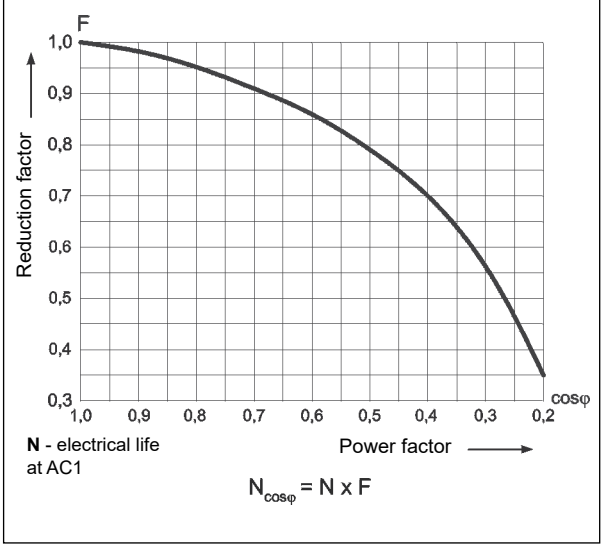
Dimensions - RUC faston 6,3 x 0,8
- version with horizontal adaptor (H)



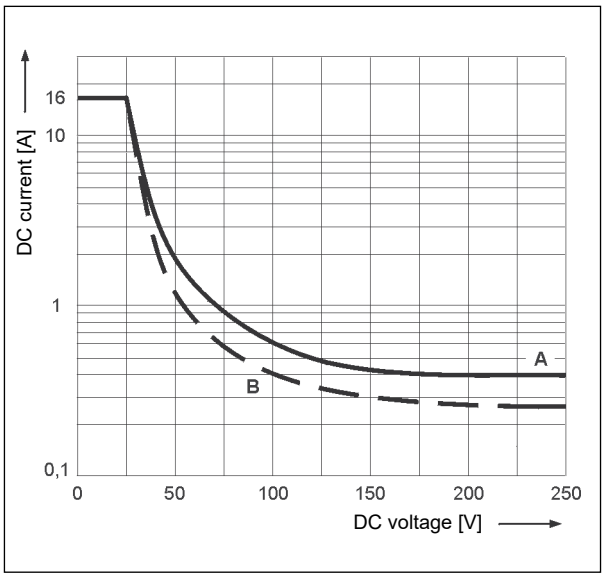
Electrical life at AC resistive load.
Switching frequency: 1 200 cycles/hour Fig. 1



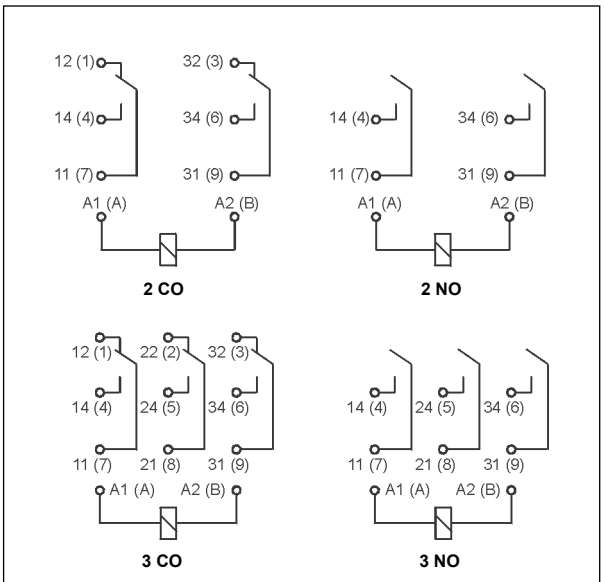
Electrical life reduction factor at AC inductive load Fig. 2



Max. DC breaking capacity
A - resistive load DC1
B - inductive load L/R = 40 ms Fig. 3



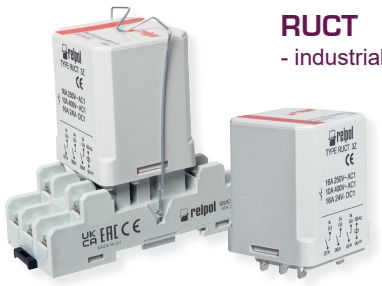
Connection diagrams (pin side view)



Relays for railroad industry

PRUCT
- interface

RUCT
- industrial



Coil data - DC voltage version, standard — 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) ❸
1006	6	28	± 10%	4,8	6,6
1012	**12**	**110**	**± 10%**	**9,6**	**13,2**
1024	24	430	± 10%	19,2	26,4
1042	42	1 340	± 10%	33,6	46,2
1048	48	1 750	± 10%	38,4	52,8
1060	60	2 700	± 10%	48,0	66,0
1110	110	9 200	± 10%	88,0	121,0
1120	120	11 000	± 10%	96,0	132,0
1220	220	37 000	± 10%	176,0	242,0

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

Coil data - DC voltage version, reinforced — Table 2

Coil code ❹	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) ❸
W012	12	85	± 10%	9,6	13,2
W024	24	345	± 10%	19,2	26,4
W048	48	1 370	± 10%	38,4	52,8
W110	110	7 300	± 10%	88,0	121,0
W220	220	30 000	± 10%	176,0	242,0

❸ Max. (at 70 °C) for versions: 3 CO, 3 NO / 10 A; 2 CO, 2 NO / 16 A
❹ For version with contact gap ≥ 3 mm.

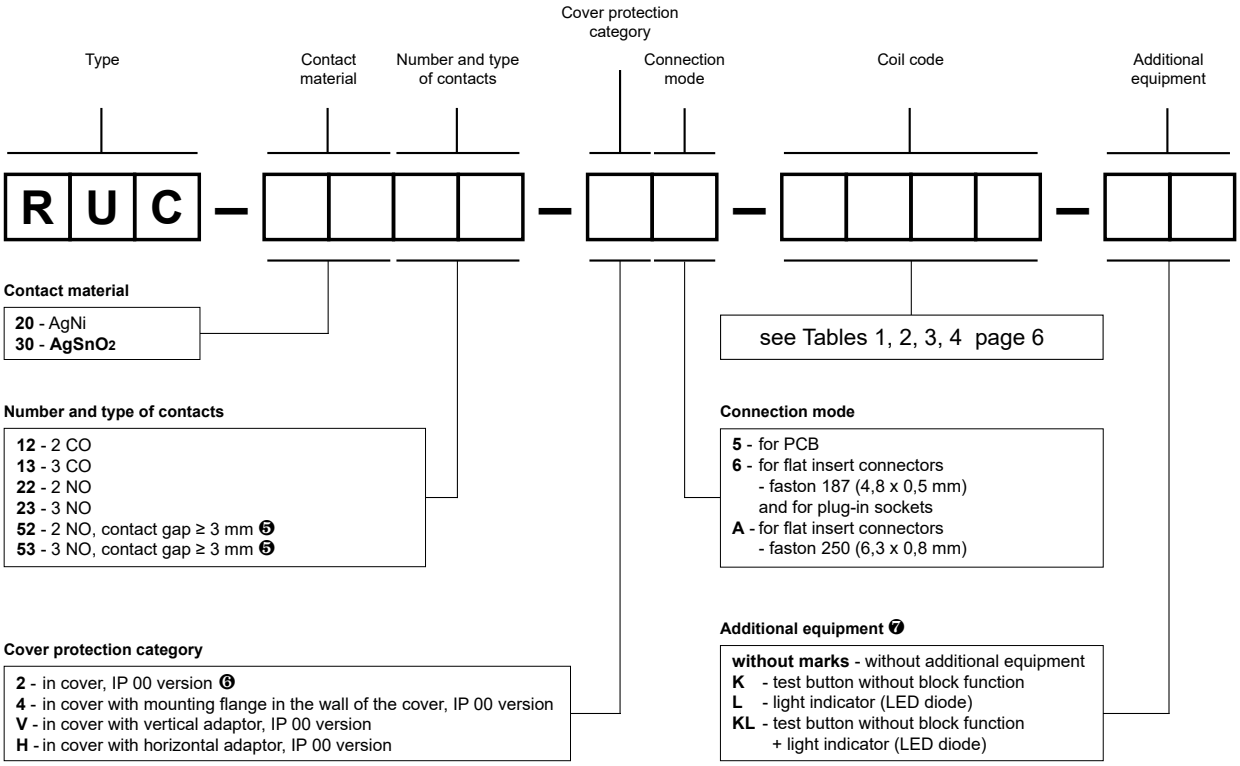
Coil data - AC 50/60 Hz voltage version — Table 3

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)
5006	6	4,3	± 15%	4,8	6,6
5012	12	18,5	± 15%	9,6	13,2
5024	24	75	± 15%	19,2	26,4
5115	115	1 840	± 15%	92,0	126,5
5120	120	1 910	± 15%	96,0	132,0
5220	220	6 980	± 15%	176,0	242,0
5230	230	7 080	± 15%	184,0	253,0
5240	240	7 760	± 15%	192,0	264,0

Coil data - AC 50 Hz voltage version — Table 4

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)
3400	400	21 500	± 15%	320,0	440,0

Ordering codes



❺ For versions with reinforced DC coils: W012, W024, W048, W110, W220 and with AC coils.
❻ For relays RUC: for plug-in sockets; for PCB. ❼ **K** - orange colour (AC coils), green (DC coils).

Examples of ordering codes:

RUC-3053-26-W024 relay **RUC**, faston 187 (4,8 x 0,5 mm), for plug-in sockets, three normally open contacts, with contact gap ≥ 3 mm, contact material $AgSnO_2$, reinforced coil voltage 24 V DC, in cover IP 00

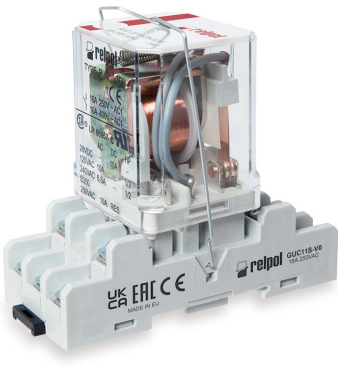
RUC-2013-V6-3400-KL relay **RUC**, faston 187 (4,8 x 0,5 mm), for flat insert connectors, with vertical adaptor (V), three changeover contacts, contact material AgNi, coil voltage 400 V AC 50 Hz, with test button without block function and light indicator (LED diode), in cover IP 00

RUC-2052-HA-W220-L relay **RUC**, faston 250 (6,3 x 0,8 mm), for flat insert connectors, with horizontal adaptor (H), two normally open contacts, with contact gap ≥ 3 mm, contact material AgNi, reinforced coil voltage 220 V DC, with light indicator (LED diode), in cover IP 00

RUC-3022-25-5024 relay **RUC**, for PCB, two normally open contacts, contact material $AgSnO_2$, coil voltage 24 V AC 50/60 Hz, in cover IP 00

GUC11S-V0

Screw terminals
plug-in sockets for
RUC faston 4,8 x 0,5,
RUC-M
- see page 8



03.06.2026

Export Sales Department phone +48 68 47 90 832, 951 • e-mail: export@relpol.com.pl

GUC11S-VO ❶

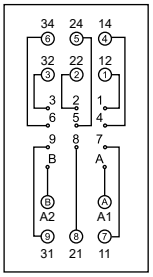
For RUC faston 4,8x0,5, RUC-M

Screw terminals
Cross section of the cables: max. 1 x 4 mm² / 2 x 2,5 mm² (1 x 12 / 2 x 14 AWG), min. 1 x 0,25 mm² (1 x 23 AWG)
Max. tightening moment for the terminal: 0,7 Nm

35 mm rail mount
acc. to EN 60715
84,5 x 35,5 x 26,5 mm
Three poles
16 A, 250 V AC



Connection diagram

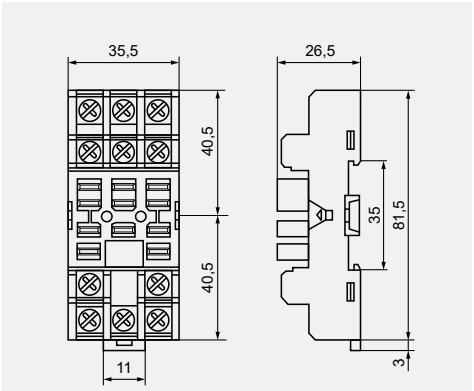


Accessories



MBA

Dimensions

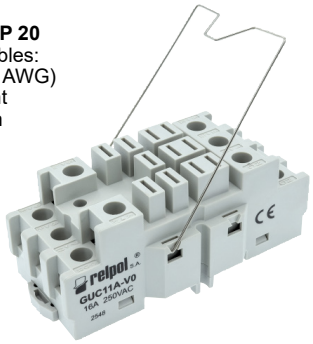


GUC11A-VO ❶

For RUC faston 4,8x0,5, RUC-M

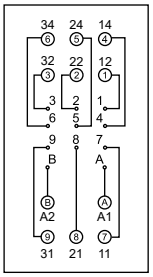
Screw terminals
Protection category: IP 20
Cross section of the cables: max. 1 x 4 mm² (1 x 12 AWG)
Max. tightening moment for the terminal: 0,7 Nm

35 mm rail mount
acc. to EN 60715
85,6 x 42,6 x 35,4 mm
Three poles
16 A, 250 V AC / 10 A, 400 V AC
Operating temperature: -40...+70 °C



(socket is sold complete with clip)

Connection diagram





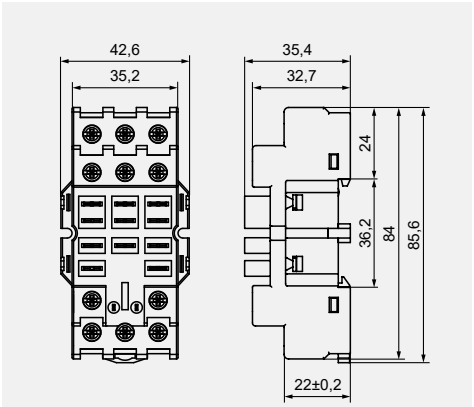
Module type M...

Accessories



MBC

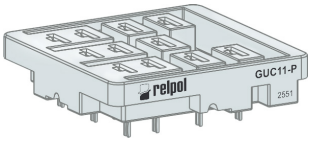
Dimensions



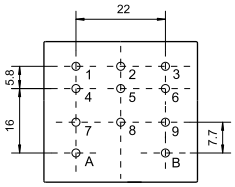
GUP11P

For RUC faston 4,8x0,5, RUC-M

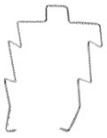
Solder terminals
38 x 38 x 12 mm
Three poles
16 A, 500 V AC
Operating temperature: -40...+75 °C
Dielectric strength: 2 500 V AC (1 min.)



Connection diagram

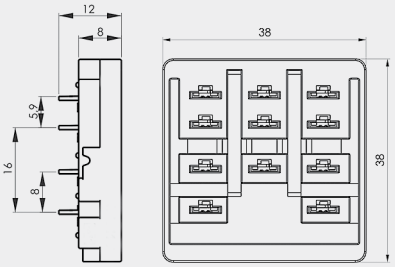


Accessories



MBP

Dimensions



❶ For RUC faston 4,8 x 0,5 and RUC-M, with GUC11S-V0 or GUC11A-V0 socket, max. switching voltages and coil voltages of relays are limited to 250 V AC / DC.

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.