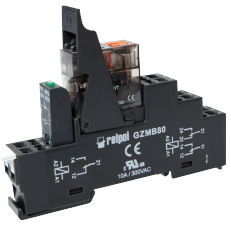
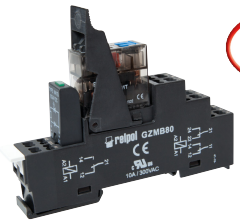
RMP85 (AC) + GZMB80



RMP85 (DC) + GZMB80



NEW

- Interface relay **PI85P with socket GZMB80** consists of: electromagnetic relay **RMP85**, black plug-in socket **GZMB80**, signalling / protecting module **type M...**, retainer / retractor clip **GZMB80-0025** (plastic), white description plate **TR**
- 35 mm rail mount acc. to EN 60715
- Recognitions, certifications, directives: recognitions RMP85, RoHS, CE

Contact data

Number and type of contacts		1 CO
Contact material		**AgNi**
Rated / max. switching voltage	AC	250 V / 300 V
Min. switching voltage		12 V 10 mA
Rated load	AC1	16 A / 250 V AC ❶
Min. switching current		10 mA 12 V
Max. inrush current		32 A 20 ms
Rated current		16 A
Max. breaking capacity	AC1	4 000 VA
Min. breaking capacity		0,12 W 10 mA / 12 V
Contact resistance		≤ 100 mΩ 1 A / 6 V DC
Max. operating frequency		
• at rated load	AC1	360 cycles/hour
• no load		18 000 cycles/hour

Coil data

Rated voltage	50 Hz AC	**24**, 115, **230** V
	DC	**12**, **24**, 48, 110 V
Must release voltage		AC: ≥ 0,15 U_n DC: ≥ 0,1 U_n
Operating range of supply voltage		see Tables 1, 2
Rated power consumption	AC	0,75 VA
	DC	0,4 ... 0,48 W

Insulation according to EN 60664-1

Insulation rated voltage		300 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		4 000 V AC type of insulation: reinforced
• contact clearance		1 000 V AC type of clearance: micro-disconnection
Contact - coil distance		
• clearance		≥ 8 mm
• creepage		≥ 8 mm

General data

Operating / release time (typical values)		15 ms / 8 ms
Electrical life (number of cycles)		
• resistive AC1		> 3 x 10^4 AC coils, 16 A, 250 V AC, ON for 5 s / OFF for 5 s
		> 10^4 DC coils, 16 A, 250 V AC, ON for 5 s / OFF for 5 s
		> 3 x 10^4 16 A, 250 V AC, 70 °C, ON for 1 s / OFF for 9 s
Mechanical life (cycles)		> 10^6 AC coils
		> 5 x 10^6 DC coils
Dimensions (L x W x H)		97 x 16 x 78 mm
Weight		60 g
Ambient temperature	• storage	-40...+70 °C
(non-condensation and/or icing)	• operating	-40...+55 °C
Cover protection category		IP 20 EN 60529
Environmental protection		RMP85: RTII GZMB80: RT0 EN 61810-7
Shock resistance		10 g
Vibration resistance	(NO/NC)	10 g / 5 g length direction: 10 g / 2 g 10...150 Hz

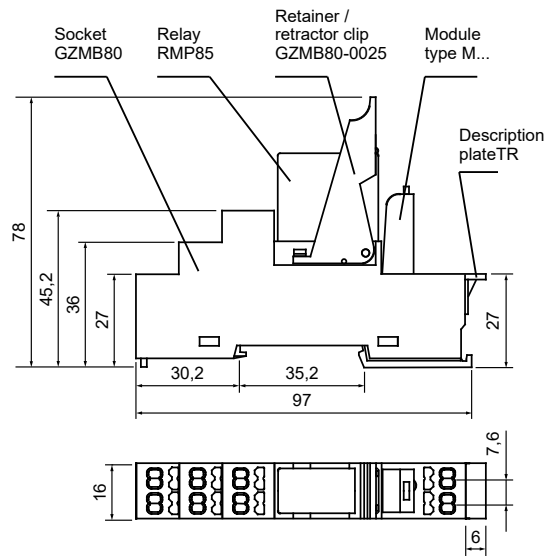
The data in bold type relate to the standard versions of the relays. ❶ Loads above 10 A require bridging pairs of spring terminals: 11 with 21, 12 with 22, 14 with 24 - see page 2.

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.

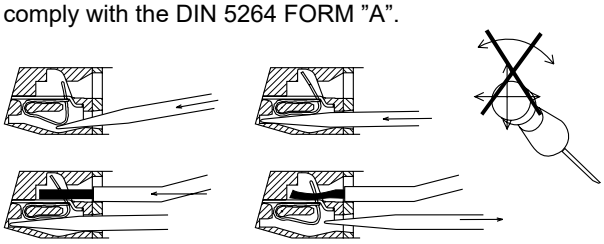
Export Sales Department phone +48 68 47 90 832, 951 • e-mail: export@relpol.com.pl

Dimensions

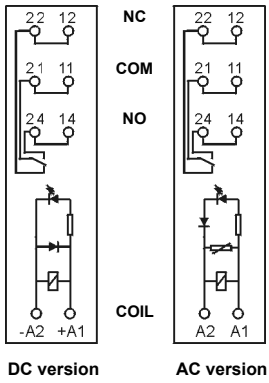


Wire connection

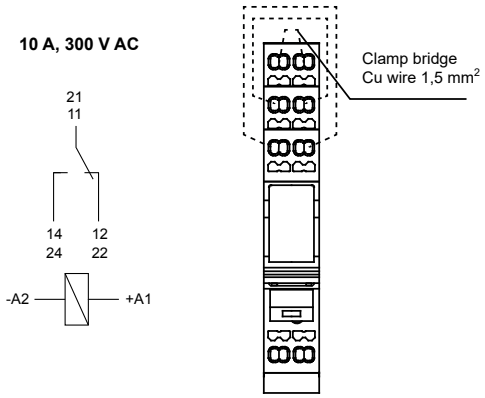
The drawings present the sequence of operations in course of inserting wires to the spring terminal, and the recommended screwdriver to be used for opening of case springs, comply with the DIN 5264 FORM ”A”.



Connection diagrams
(spring terminals side view)



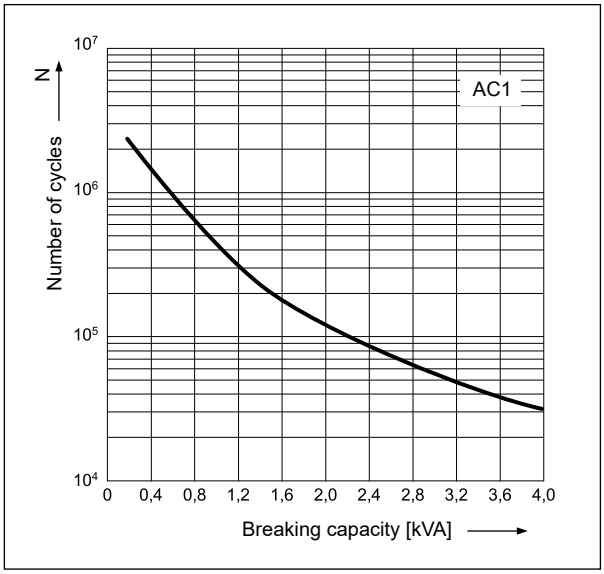
Connection of GZMB80 socket



Note: Loads above 10 A require bridging pairs of spring terminals: 11 with 21, 12 with 22, 14 with 24. Loads up to 10 A do not require bridging of common terminals (such bridges may be fixed, however).

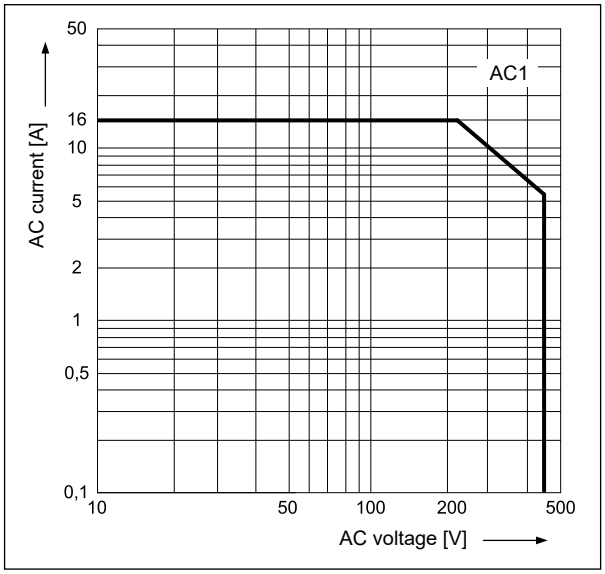
Electrical life at AC resistive load. Switching frequency: 360 cycles/hour

Fig. 1



Max. AC 50 Hz resistive load breaking capacity

Fig. 2



22.02.2018

Mounting

Relays **PI85P with socket GZMB80** are designed for direct mounting on 35 mm rail mount acc. to EN 60715. **Connections:** max. cross section of the cables: 1 x 0,2...1,5 mm² (1 x 24...16 AWG), stripping length: 9...11 mm.

Coil data - DC voltage version — Table 1

Coil code	Rated voltage V DC	Coil resistance at 23 °C Ω	Acceptable resistance	Coil operating range V DC ❷	
				min. (0...+70 °C)	max. (0...+70 °C)
012DC	**12**	**360**	**± 10%**	**8,4**	**18,0**
024DC	**24**	**1 440**	**± 10%**	**16,8**	**36,0**
048DC	48	5 760	± 15%	33,6	72,0
110DC	110	25 200	± 15%	77,0	165,0

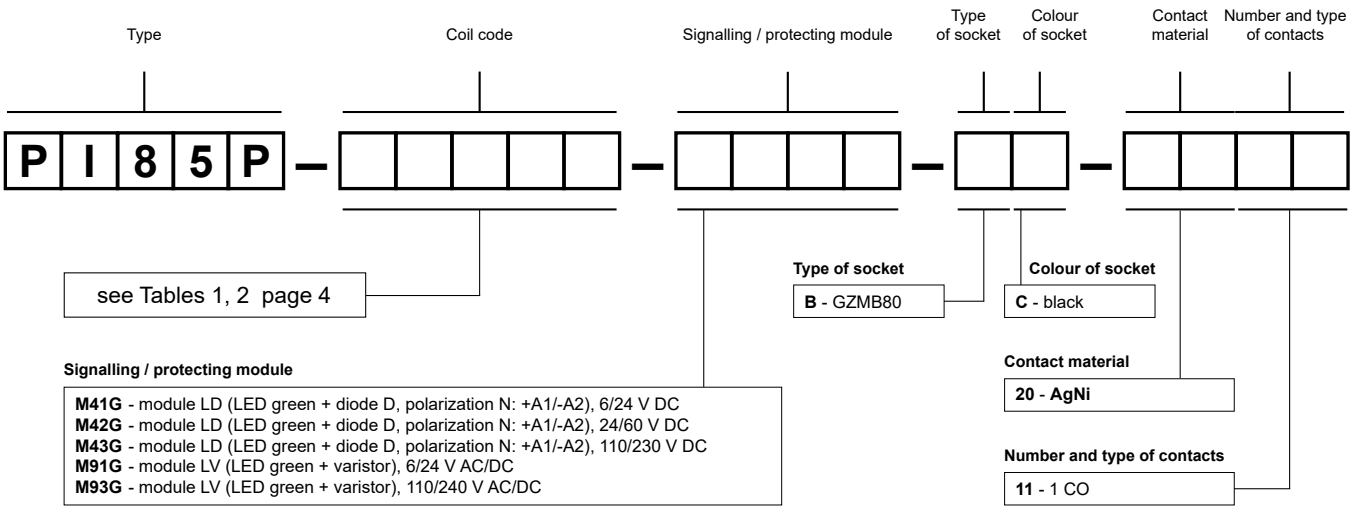
The data in bold type relate to the standard versions of the relays. ❷ The max. allowable voltage is coil overdrive voltage, it is the instantaneous max. voltage which the relay coil could endure in very short time. Relays with 48 V DC and 110 V DC coils shall be absolutely protected against any possibility of operation at voltages higher than the rated voltage.

Coil data - AC 50 Hz voltage version — Table 2

Coil code	Rated voltage V AC	Coil resistance at 23 °C Ω	Acceptable resistance	Coil operating range V AC 50 Hz	
				min. (0...+70 °C)	max. (0...+70 °C)
024AC	**24**	**350**	**± 10%**	**18,0**	**26,4**
115AC	115	8 100	± 15%	86,3	126,5
230AC	**230**	**32 500**	**± 15%**	**172,5**	**253,0**

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

Ordering codes



Examples of ordering codes:

PI85P-012DC-M41G-BC-2011 interface relay **PI85P** consists of: relay **RMP85** (one changeover contact, contact material AgNi, coil voltage 12 V DC), socket **GZMB80** (black, spring terminals), signalling / protecting module **M41G** (version LD), retainer / retractor clip **GZMB80-0025** (plastic), description plate **TR** (white)

PI85P-230AC-M93G-BC-2011 interface relay **PI85P** consists of: relay **RMP85** (one changeover contact, contact material AgNi, coil voltage 230 V AC 50 Hz), socket **GZMB80** (black, spring terminals), signalling / protecting module **M93G** (version LV), retainer / retractor clip **GZMB80-0025** (plastic), description plate **TR** (white)