R2M + GZ2

- Interface relay **PIR2M with socket GZ2** consists of: electromagnetic relay **R2M**, black plug-in socket **GZ2**, spring wire clip **GZ2 1060**, two spring clamps **GZ2 1111**
- 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws
- Recognitions, certifications, directives: recognitions R2M, RoHS, CE

Contact data

Number and type of contacts		2 CO
Contact material		**AgNi**
Rated / max. switching voltage	AC	250 V / 250 V
Min. switching voltage		5 V
Rated load (capacity)	AC1	5 A / 250 V AC
	DC1	5 A / 24 V DC (see Fig. 3)
Min. switching current		5 mA
Rated current		5 A
Max. breaking capacity	AC1	1 250 VA
Min. breaking capacity		0,3 W
Contact resistance		≤ 100 mΩ
Max. operating frequency		
• at rated load	AC1	1 200 cycles/hour
• no load		36 000 cycles/hour

Coil data

Rated voltage	50/60 Hz AC	6 ... 230 V
	DC	6 ... 110 V
Must release voltage		≥ 0,05 U_n
Operating range of supply voltage		see Tables 1, 2
Rated power consumption	AC	1,2 VA
	DC	0,9 W

Insulation according to PN-EN 60664-1

Insulation rated voltage		250 V AC
Rated surge voltage		2 500 V 1,2 / 50 µs
Overvoltage category		II
Insulation pollution degree		3
Dielectric strength		
• between coil and contacts		2 000 V AC type of insulation: basic
• contact clearance		1 000 V AC type of clearance: micro-disconnection
• pole - pole		2 000 V AC type of insulation: basic
Contact - coil distance		
• clearance		≥ 3 mm
• creepage		≥ 4 mm

General data

Operating / release time (typical values)		AC: 8 ms / 7 ms DC: 10 ms / 3 ms
Electrical life		
• resistive AC1		≥ 2 x 10^5 5 A, 250 V AC
• cosϕ		see Fig. 2
Mechanical life (cycles)		≥ 10^7
Dimensions (L x W x H)		65,2 x 20 x 60,6 mm
Weight		45 g
Ambient temperature	• storage	-40...+70 °C
	• operating	-40...+55 °C
Cover protection category		IP 00 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 at 20 °C Ω	Acceptable resistance	Coil operating range V DC	
				min. (at 20 °C)	max. (at 55 °C)
006DC	6	47	± 10%	4,8	6,6
012DC	**12**	**188**	**± 10%**	**9,6**	**13,2**
024DC	**24**	**750**	**± 10%**	**19,2**	**26,4**
048DC	48	2 660	± 10%	38,4	52,8
110DC	110	13 480	± 10%	88,0	121,0

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

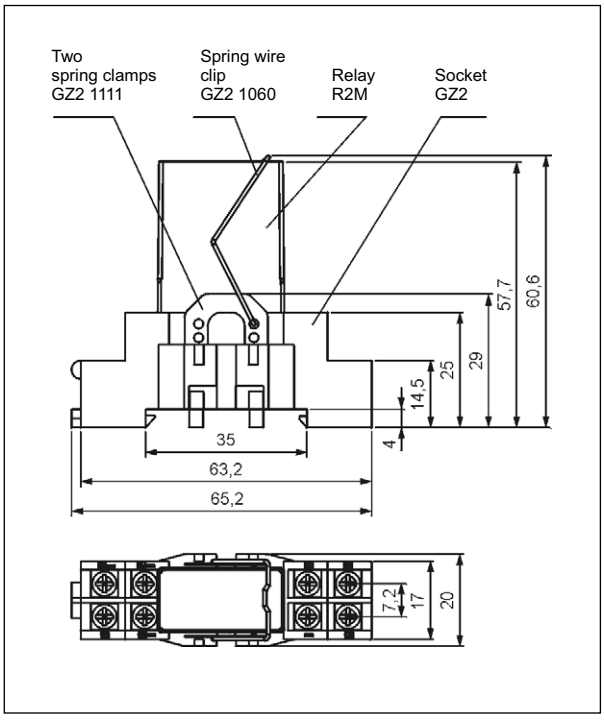
Coil data - AC 50/60 Hz voltage version

Table 2

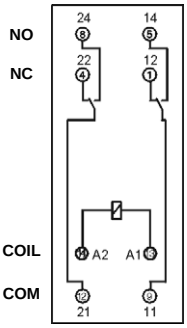
Coil code	Rated voltage V AC	Coil resistance at 20 °C Ω	Acceptable resistance	Coil operating range V AC	
				min. (at 20 °C)	max. (at 55 °C)
006AC	6	16	± 10%	4,8	6,6
012AC	12	68	± 10%	9,6	13,2
024AC	**24**	**270**	**± 10%**	**19,2**	**26,4**
115AC	115	5 990	± 10%	92,0	126,0
230AC	**230**	**21 470**	**± 10%**	**184,0**	**253,0**

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

Dimensions

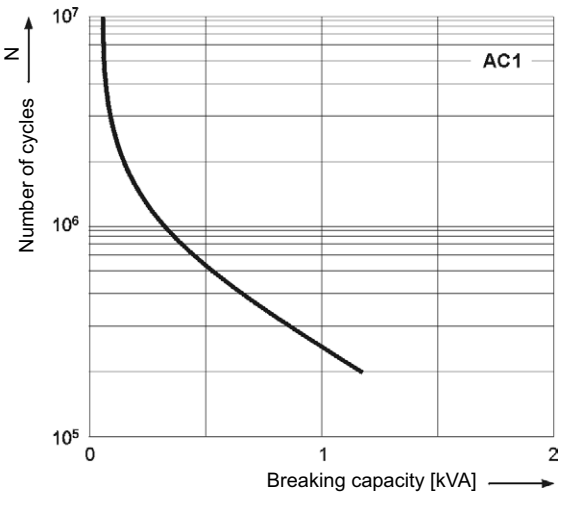


Connection diagrams
(screw terminals side view)



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

Fig. 1



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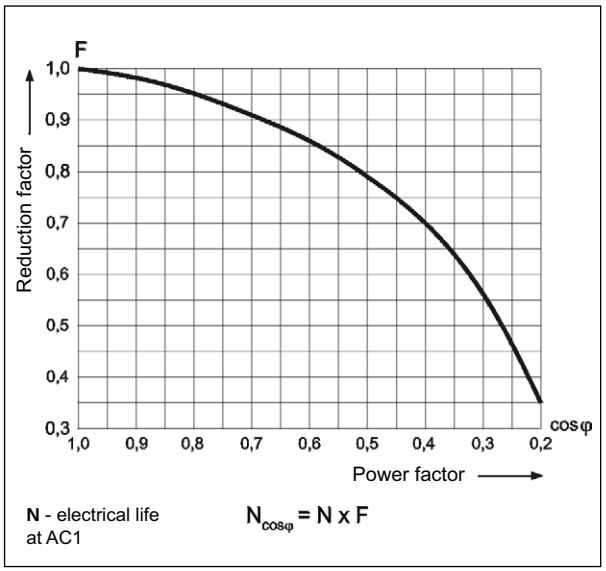
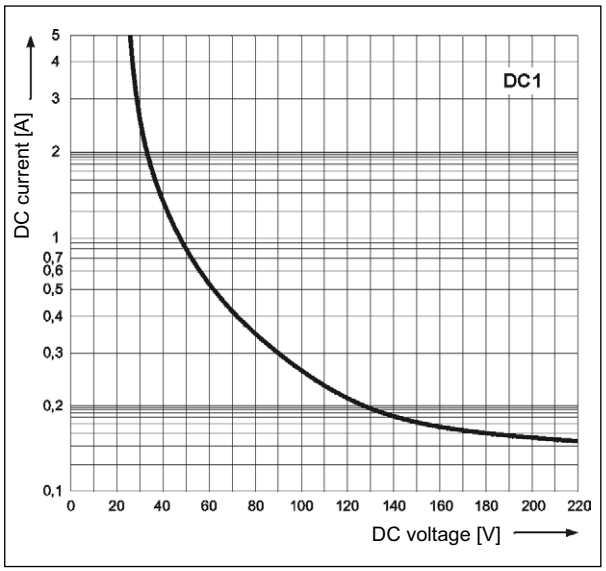
Electrical life reduction factor at AC inductive load Fig. 2



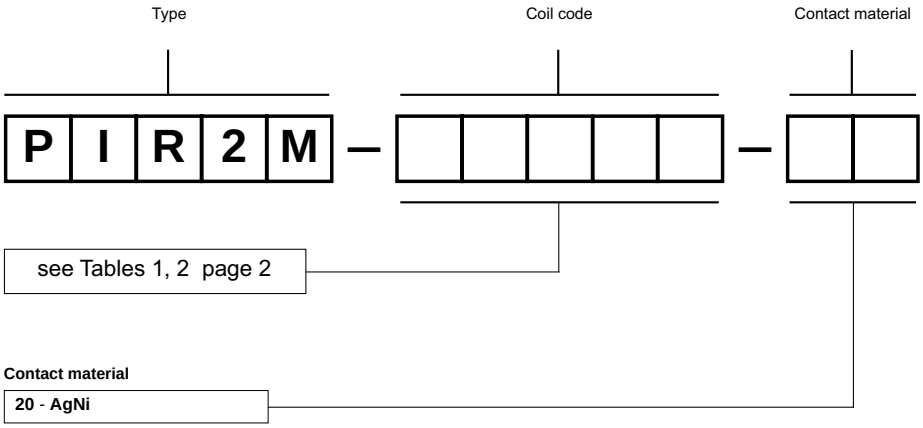
Max. DC resistive load breaking capacity Fig. 3



Mounting

Relays **PIR2M with socket GZ2** are designed for direct mounting on 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws. **Connections:** max. cross section of the cables (stranded): 2 x 2,5 mm^2 (2 x 14 AWG), length of the cable deinsulation: 6,5 mm, max. tightening moment for the terminal: 0,7 Nm.

Ordering codes



Examples of ordering codes:

PIR2M-012DC-20 interface relay **PIR2M**, which consists of: relay **R2M** with coil 12 V DC (contact material AgNi), black socket **GZ2** (screw terminals), spring wire clip **GZ2 1060**, two spring clamps **GZ2 1111**

PIR2M-230AC-20 interface relay **PIR2M**, which consists of: relay **R2M** with coil 230 V AC 50/60 Hz (contact material AgNi), black socket **GZ2** (screw terminals), spring wire clip **GZ2 1060**, two spring clamps **GZ2 1111**

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.

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