

R4 + GZM4

- 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws.
- Interface relay **PIR4** consists of:
 - electromagnetic relay **R4**, plug-in socket **GZM4** grey,
 - signalling / protecting module **type M...** LED green:
 - version **LD** (polarization N: +A1/-A2) - M41G or M42G or M43G;
 - version **LV** - M91G or M92G or M93G,
 - retainer / retractor clip **GZT4-0040**, white description plate **GZT4-0035**.
- Recognitions, certifications, directives: recognitions R4, RoHS,

Contact data

Number and type of contacts		4 C/O	
Contact material		AgNi	
Rated / max. switching voltage	AC	250 V / 250 V	
Min. switching voltage		5 V	
Rated load (capacity)	AC1	6 A / 250 V AC	
	AC15	1,5 A / 120 V 0,75 A / 240 V (C300)	
	AC3	125 W (single-phase motor)	
	DC1	6 A / 24 V DC (see Fig. 3)	
	DC13	0,22 A / 120 V 0,1 A / 250 V (R300)	
Min. switching current		5 mA	
Max. inrush current		12 A	
Rated current		6 A	
Max. breaking capacity	AC1	1 500 VA	
Min. breaking capacity		0,3 W	
Contact resistance		≤ 100 mΩ	
Max. operating frequency	AC1	• at rated load	1 200 cycles/hour
		• no load	18 000 cycles/hour

Coil data

Rated voltage	50/60 Hz AC	12-24-48-120-230 V
	DC	12-24-48-110 V
Must release voltage		AC: ≥ 0,2 U _n DC: ≥ 0,1 U _n
Operating range of supply voltage		see Tables 1,2
Rated power consumption	AC	50 Hz: 1,6 VA 60 Hz: 1,3 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
Overtoltage category		II
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
	• pole - pole	2 000 V AC type of insulation: basic
Contact - coil distance	• clearance	≥ 1,6 mm
	• creepage	≥ 3,2 mm

General data

Operating / release time (typical values)		AC: 10 ms / 8 ms	DC: 13 ms / 3 ms
Electrical life	• resistive AC1	> 10 ⁵	6 A, 250 V AC
	• cos φ	see Fig. 2	
Mechanical life (cycles)		> 2 x 10 ⁷	
Dimensions (L x W x H)		75 x 27 x 82 mm	
Weight		108 g	
Ambient temperature	• storage	-40...+85 °C	
	• operating	AC: -40...+55 °C	DC: -40...+70 °C
Cover protection category		IP 20	PN-EN 60529
Environmental protection		R4: RTI	GZM4: RT0 PN-EN 116000-3
Shock resistance	(NO/NC)	10 g / 5 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 (±10%) at 20 °C Ω	Coil operating range V DC	
			min. (at 20 °C)	max. (at 55 °C)
012DC	12	160	9,6	13,2
024DC	24	640	19,2	26,4
048DC	48	2 600	38,4	52,8
110DC	110	13 600	88,0	121,0

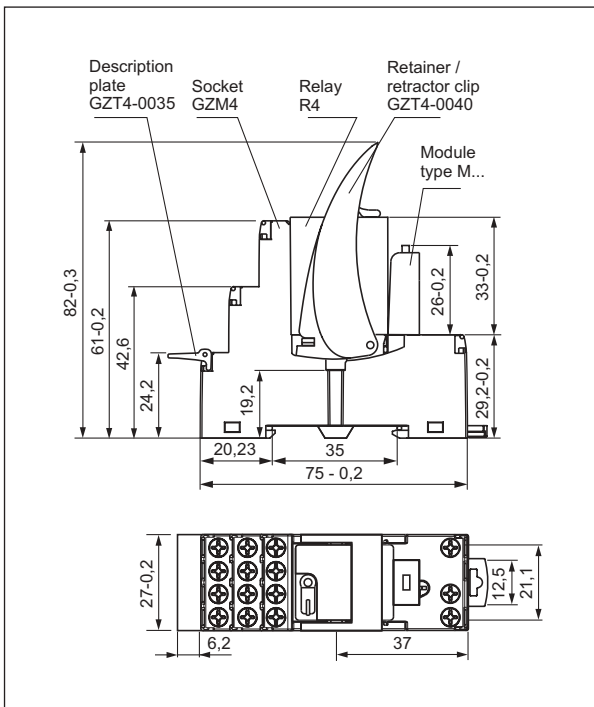
The data in bold type pertain to the standard versions of the relays.

Coil data - AC 50/60 Hz voltage version

Coil code	Rated voltage V AC	Coil resistance (±10%) at 20 °C Ω	Coil operating range V AC	
			min. (at 20 °C)	max. (at 55 °C)
012AC	12	39,5	9,6	13,2
024AC	24	158,0	19,2	26,4
048AC	48	640,0	38,4	52,8
120AC	120	3 770,0	96,0	132,0
230AC	230	16 100,0	184,0	253,0

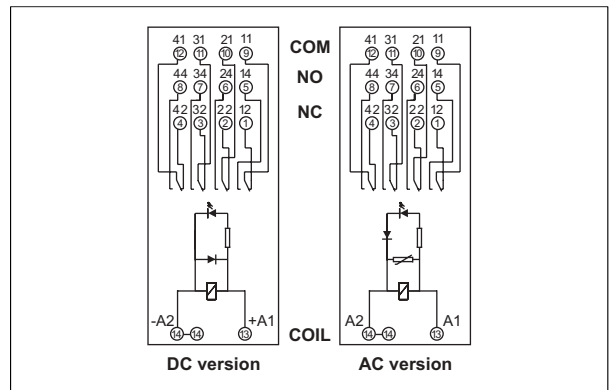
The data in bold type pertain to the standard versions of the relays.

Dimensions



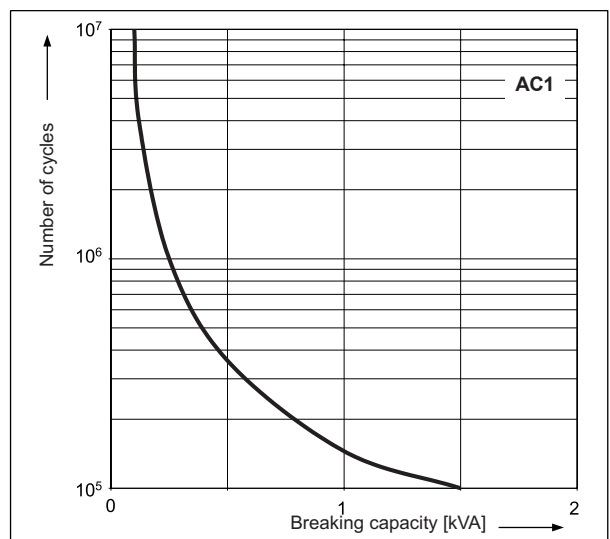
Connection diagrams

(screw terminals side view)



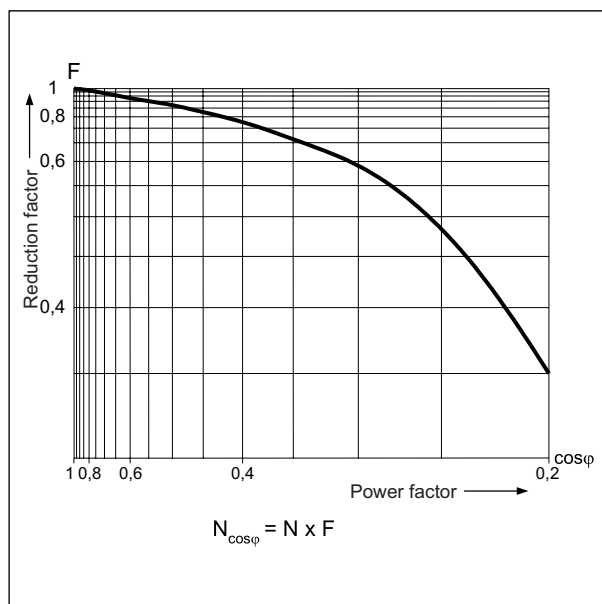
Electrical life at AC resistive load.

Maximum switching frequency at rated load Fig. 1



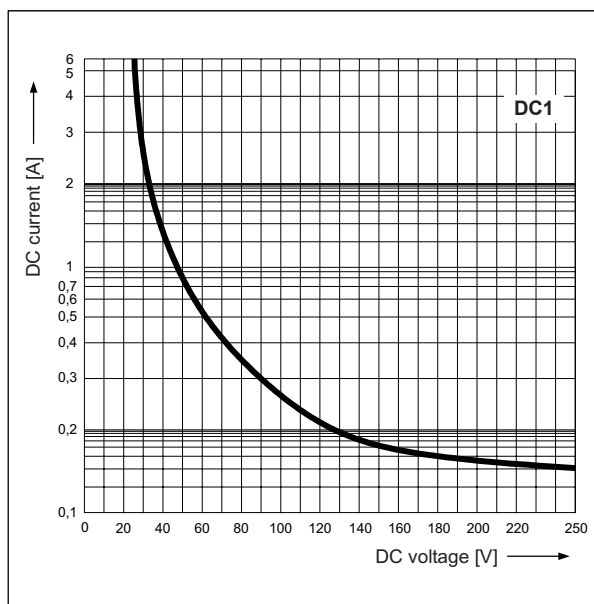
Electrical life reduction factor at AC inductive load

Fig. 2



Max. DC resistive load breaking capacity

Fig. 3

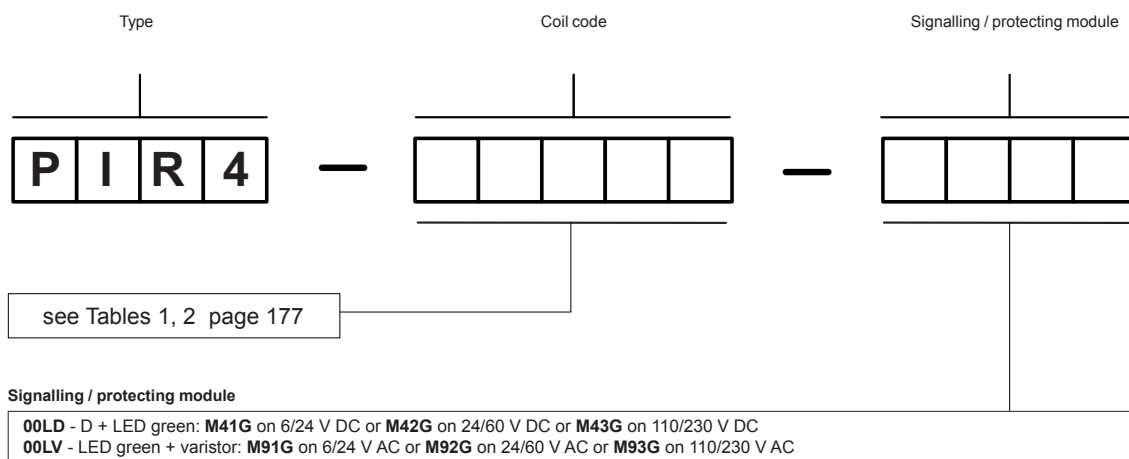


Mounting

Relays **PIR4 with socket GZM4** are designed for direct mounting on 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws.

Plug-in sockets **GZM4** may be linked with interconnection strip type **ZGGZ4** (see page 252).

Ordering codes



Examples of ordering codes:

PIR4-012DC-00LD interface relay **PIR4**, which consists of: relay **R4**, voltage version 12 V DC, plug-in socket **GZM4** grey (screw terminals), signalling / protecting module **M41G** (version **LD**, polarization N: +A1/-A2, LED green), retainer / retractor clip **GZT4-0040**, white description plate **GZT4-0035**

PIR4-230AC-00LV interface relay **PIR4**, which consists of: relay **R4**, voltage version 230 V AC 50/60 Hz, plug-in socket **GZM4** grey (screw terminals), signalling / protecting module **M93G** (version **LV**, LED green), retainer / retractor clip **GZT4-0040**, white description plate **GZT4-0035**