







**NEW**  
product

- Interface relay **PIR6W** consists of:
  - socket **PI6W**,
  - changeover relay, rated load 6 A / 230 V (AC1)
- 35 mm DIN rail mount, EN 50022, wires connection with screw terminals - 0,2...4 mm<sup>2</sup>
- Adapted for the co-operation with interconnection strip type **ZG20**
- Equipped in LED green • Accessories: description plates **PI6W-1246**
- Recognitions, certificates, directives:    



## Contacts

Contact number & arrangement	1C/O		
Contact material	<b>AgSnO<sub>2</sub></b> , AgSnO <sub>2</sub> /Au 3 μm		
Max. switching voltage	AC/DC	AgSnO <sub>2</sub> : 250 V / 300 V	AgSnO <sub>2</sub> /Au 3 μm: 30 V / 36 V
Min. switching voltage	AC/DC	AgSnO <sub>2</sub> : 12 V	AgSnO <sub>2</sub> /Au 3 μm: 100 mV
Rated load	AC1	AgSnO <sub>2</sub> : 6 A / 230 V AC	AgSnO <sub>2</sub> /Au 3 μm: 50 mA / 30 V AC
	DC1	AgSnO <sub>2</sub> : 6 A / 24 V DC	AgSnO <sub>2</sub> /Au 3 μm: 50 mA / 36 V DC
Min. switching current	AgSnO <sub>2</sub> : 8 mA / 24 V		AgSnO <sub>2</sub> /Au 3 μm: 2 mA / 24 V
Max. inrush current (20 ms)	AgSnO <sub>2</sub> : 15 A		AgSnO <sub>2</sub> /Au 3 μm: 100 mA
Rated current	6 A		
Max. breaking capacity	AC1	AgSnO <sub>2</sub> : 1 500 VA	AgSnO <sub>2</sub> /Au 3 μm: 1,2 VA
Min. breaking capacity	AgSnO <sub>2</sub> : 0,3 W		AgSnO <sub>2</sub> /Au 3 μm: 0,01 W
Resistance - initially	AgSnO <sub>2</sub> : ≤ 50 mΩ 100 mA, 24 V		AgSnO <sub>2</sub> /Au 3 μm: ≤ 25 mΩ 100 mA, 5 V
Max. operating frequency	AC1	• at rated load	360 cycles/hour
		• no load	72 000 cycles/hour

## Input control circuit

Rated voltage	DC	12- <b>24</b> -36 V	
	AC/DC	24-42-115- <b>230</b> V	AC: 50/60 Hz
Must release voltage	AC: ≥ 0,2 U <sub>n</sub>		AC: ≥ 0,5 U <sub>n</sub> ①
	DC: ≥ 0,1 U <sub>n</sub>		
Operating range of supply voltage	see Table 1		
Must operate voltage	AC and DC: ≤ 0,8 U <sub>n</sub>		
	AC: 0,6...0,85 U <sub>n</sub> ① DC: ≤ 0,8 U <sub>n</sub> ①		
Rated power consumption	AC	0,4...2,2 VA	
	DC	0,35...2,2 W	

## Insulation

Insulation category	C250		
Rated surge voltage	4 000 V AC		
Overvoltage category	III IEC 61810-5 (PN-IEC 664-1)		
Insulation pollution degree	3		
Dielectric strength	• coil - contact	4 000 V AC 50/60 Hz, 1 min.	
	• coil - contact (inrush voltage)	6 000 V 1,2 / 50 μs	
	• contact - contact	1 000 V AC 50/60 Hz, 1 min.	
Contact - coil distance	• clearance	≥ 6 mm	
	• creepage	≥ 8 mm	

## General data

Operating time (typical value)	AC: 7 ms	DC: 6 ms	
Release time (typical value)	AC: 15 ms	DC: 10 ms	
Electrical life	360 cycles/hour	• resistive AC1	> 0,6 x 10 <sup>5</sup> 6 A, 250 V AC
		• cos φ = 0,4	> 2 x 10 <sup>5</sup> 2 A, 250 V AC
Mechanical life (cycles)	> 2 x 10 <sup>7</sup>		
Dimensions (L x W x H)	85,5 x 6,2 x 98,8 mm		
Weight	45 g		
Ambient temperature	• storage	-40...+70 °C	
	• operating	-40...+55 °C	-40...+60 °C 12, 24 V DC
Protection category	IP 20		
Environmental protection	RTI IEC 61810-7		
Shock resistance	10 g		
Vibration resistance	5 g 10...500 Hz		

Standard contact materials and coil rated voltages are marked with bold type.

① Refer version PIR6W-1C/O-230VAC/DC-10 - relay with anti-disturbance circuit

**Input data**

Table 1

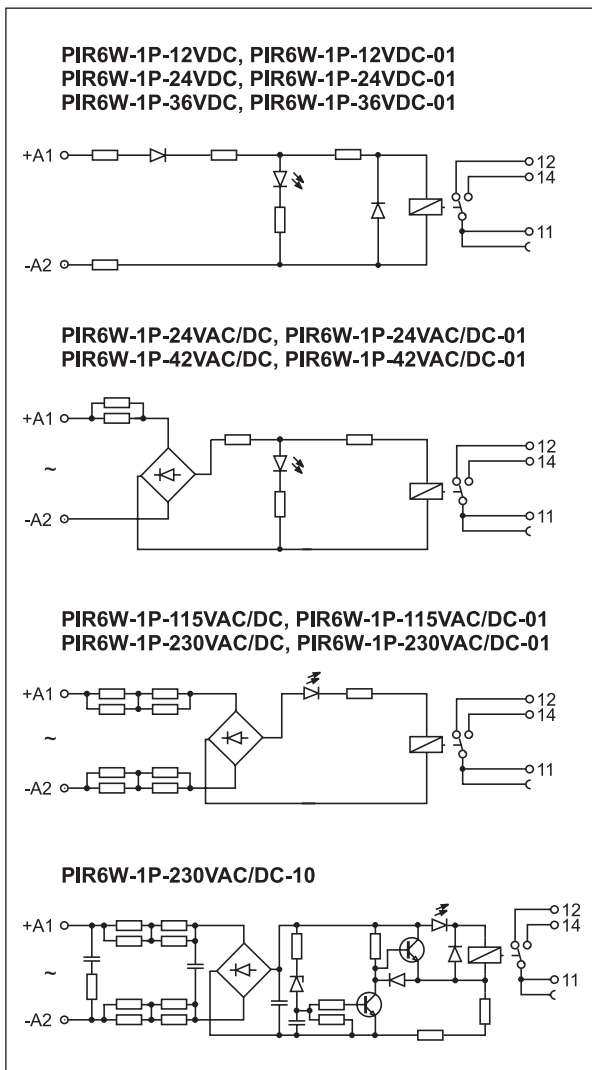
Relay code	Nominal input voltage $U_n$	Input power - control circuit ( $U_n$ )	Input - voltage range V	
			min.	max.
PIR6W-1P-12VDC	12 V DC	0,35 W	9,6	14,4
PIR6W-1P-12VDC-01 *	12 V DC	0,35 W	9,6	14,4
<b>PIR6W-1P-24VDC</b>	<b>24 V DC</b>	<b>0,35 W</b>	<b>19,2</b>	<b>28,0</b>
PIR6W-1P-24VDC-01 *	24 V DC	0,35 W	19,2	28,0
PIR6W-1P-36VDC	36 V DC	0,35 W	28,8	40,0
PIR6W-1P-36VDC-01 *	36 V DC	0,35 W	28,8	40,0
PIR6W-1P-24VAC/DC	24 V AC/DC	0,4 VA / 0,4 W	19,2	26,4
PIR6W-1P-24VAC/DC-01 *	24 V AC/DC	0,4 VA / 0,4 W	19,2	26,4
PIR6W-1P-42VAC/DC	42 V AC/DC	0,45 VA / 0,45 W	33,6	50,0
PIR6W-1P-42VAC/DC-01 *	42 V AC/DC	0,45 VA / 0,45 W	33,6	50,0
PIR6W-1P-115VAC/DC	115 V AC/DC	1,0 VA / 1,0 W	92,0	130,0
PIR6W-1P-115VAC/DC-01 *	115 V AC/DC	1,0 VA / 1,0 W	92,0	130,0
<b>PIR6W-1P-230VAC/DC</b>	<b>230 V AC/DC</b>	<b>1,0 VA / 1,0 W</b>	<b>184,0</b>	<b>253,0</b>
PIR6W-1P-230VAC/DC-01 *	230 V AC/DC	1,0 VA / 1,0 W	184,0	253,0
PIR6W-1P-230VAC/DC-10 **	230 V AC/DC	2,2 VA / 2,2 W	196,0 ***	253,0

Standard versions of relays are marked with bold type.

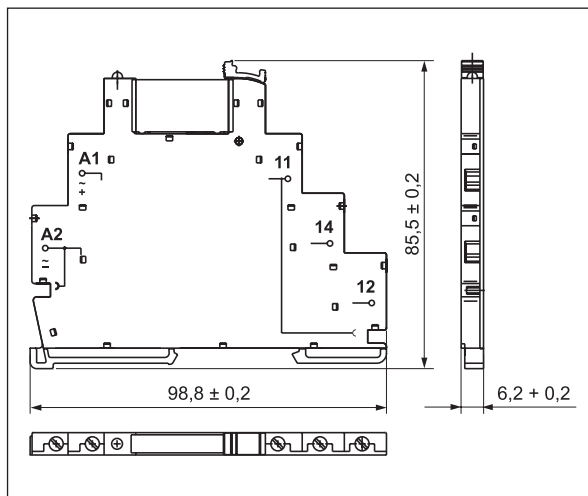
\* - relay with gold plated contacts    \*\* - relay with anti-disturbance circuit

\*\*\* - 196,0 V at supply voltage AC  
184,0 V at supply voltage DC

**Connection diagrams**



**Dimensions**



**Mounting**

Relays **PIR6W** are designed for 35 mm DIN rail mount, EN 50022.

For relays **PIR6W** are offered description plates type **PI6W-1246** (see page 218).

**PIR6W** are adapted for the co-operation with interconnection strip type **ZG20**. Interconnection strip **ZG20** allows to common bridging outputs or inputs. Colours of strips: **ZG20-1** red, **ZG20-2** black, **ZG20-3** blue (see page 218).

**Ordering codes**

Ordering codes **PIR6W** are specified in Table 1, "Relay code" column.