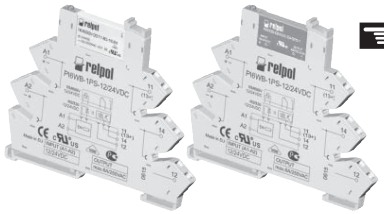


NEW product

- Interface relay **PIR6WB-1PS-...** consists of:
  - universal socket with electronic **PI6WB-1PS-...** with spring terminals ❶,
  - changeover relay **RM699V**, rated load 6 A / 230 V (AC1) ❷ or solid state relay **RSR30** ❷
- 35 mm DIN rail mount, EN 50022 • Adapted for the co-operation with interconnection strip type **ZG20** • Equipped in LED green • Accessories: description plates **PI6W-1246** • Recognitions, certifications, directives:

Output circuit (RM699V) - contact data ❷

Number and type of contacts (code of output)		1 C/O (R)	1 C/O (R-01)
Contact material		**$AgSnO_2$**	$AgSnO_2$/Au 3 µm ❸
Max. switching voltage	AC/DC	250 V / 300 V	30 V / 36 V
Min. switching voltage	AC/DC	12 V	0,1 V
Rated load	AC1	6 A / 230 V AC	0,05 A / 30 V AC
	DC1	6 A / 24 V DC	0,05 A / 36 V DC
Min. switching current		100 mA	10 mA
Max. inrush current		15 A 20 ms	0,1 A 20 ms
Rated current		6 A	0,05 A
Max. breaking capacity	AC1	1 500 VA	1,2 VA
Min. breaking capacity		1 W	0,05 W
Contact resistance		≤ 100 mΩ 100 mA, 24 V	≤ 30 mΩ 10 mA, 5 V
Max. operating frequency			
• at rated load	AC1	360 cycles/hour	
• no load		72 000 cycles/hour	

Output circuit (RSR30) - output data ❷

Type of output (code of output)		Triac (T) 240 V / 2 A	Transistor (C) 48 V / 1 A	Transistor (O) 24 V / 2 A
Number and type of outputs		1 NO	1 NO	1 NO
Rated voltage		240 V AC	48 V DC	24 V DC
Max. output voltage		280 V AC	60 V DC	32 V DC
Min. output voltage		12 V AC	1,5 V DC	1,5 V DC
Rated continuous output current	AC1	1 A / 240 V AC		
	DC1		1 A / 60 V DC	2 A / 60 V DC
Min. making capacity current		50 mA	1 mA	1 mA
Max. off-state leakage current (rest condition)		1,5 mA	1 mA	1 mA
Output rated current		1 A	1 A	2 A
Max. on-state voltage drop on the connection (operating state)		1,2 V	0,4 V	0,24 V
Operating switching frequency			10 Hz	10 Hz

Input control circuit

Rated voltage	DC	6-12-**24**-36-48-60 V		
	AC: 50/60 Hz AC/DC	**24**-42-115-**230** V		
Must release voltage		AC: ≥ 0,2 U_n	AC: ≥ 0,5 U_n ❹	
		DC: ≥ 0,1 U_n		
Operating range of supply voltage		0,8...1,2 U_n	0,85...1,2 U_n 6 V DC	
Must operate voltage		≤ 0,8 U_n	≤ 0,85 U_n 6 V DC	AC: 0,6...0,85 U_n ❹
Rated power consumption	DC	0,2...0,5 W		
	AC/DC	0,5...1,2 VA / 0,4...1,2 W		

Insulation

Insulation category		C250	
Rated surge voltage		4 000 V AC	
Overvoltage category		III PN-EN 60664-1	
Insulation pollution degree		3	
Dielectric strength	• input - output	4 000 V AC	50/60 Hz, 1 min.
	• input - output	6 000 V AC	1,2 / 50 µs, surge voltage
	• contact clearance	1 000 V AC	50/60 Hz, 1 min., output R and R-01
Input - output distance			
• clearance \ creepage		≥ 6 mm \ ≥ 8 mm	

The data in bold type pertain to the standard versions of the relays. ❶ Spring fixing terminals for electric wires (cage springs CAGE CLAMP® - is the registered trademark of WAGO Kontakttechnik GmbH & Co. KG, Germany). ❷ Characteristics of the contact capacity of relays **PIR6WB-1PS-... with RM699V** - see pages 49-51; **PIR6WB-1PS-... with RSR30** - see catalogue Relpol S.A. "Solid state relays", pages 10-14. ❸ For gold-plated contacts - when the maximum values given have been exceeded, the gold layer is destroyed. Then, the advantages of gold-plating disappear and the values are as for $AgSnO_2$ contacts (see beside). In consequence however, the life of the contact may be shorter than that of the normal power contact. ❹ Refers version **PIR6WB-1P-230VAC/DC-10** - relay which includes the socket **PI6WB-1P-230VAC/DC-10** with integrated anti-interference filter (desigend on the basis of appropriately selected elements R and C, and Zener diode), resistant to occurrence of induced voltages in long distances of control wires, designed exclusively for cooperation with operational relay **RM699V-3011-85-1060**.

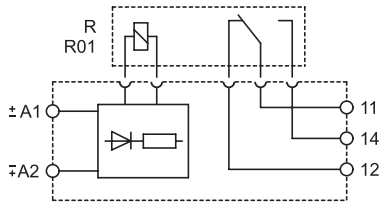
General data

❹ Version with integrated anti-interference filter.

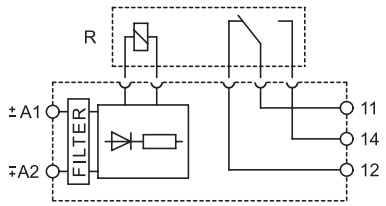
Operating time (typical value)	PIR6WB-...-R, PIR6WB-...-R01:	DC: 8 ms	AC/DC: 20 ms
	PIR6WB-...-T:	DC: 100 µs	AC/DC: 10 ms
	PIR6WB-...-C, PIR6WB-...-O:	DC: 50 µs	AC/DC: 10 ms
Release time (typical value)	PIR6WB-...-R, PIR6WB-...-R01:	DC: 10 ms	AC/DC: 25 ms (18 ms ❹)
	PIR6WB-...-T:	DC: 1/2 cycle + 1 ms	AC/DC: 30 ms
	PIR6WB-...-C, PIR6WB-...-O:	DC: 600 µs	AC/DC: 20 ms
Electrical life • resistive AC1	> 0,5 x 10^5 6 A, 250 V AC		
Mechanical life (cycles)	> 10^7		
Dimensions (L x W x H) \ Weight	98,3 x 6,2 x 84,6 mm \ 55 g		
Ambient temperature • storage \ operating	PIR6WB-...-R, PIR6WB-...-R01:	-40 (-25 ❹)...+70 °C \ -40 (-20 ❹)...+55 °C	
	PIR6WB-...-T:	-40...+70 °C \ -20...+55 °C	
	PIR6WB-...-C:	-25...+70 °C \ -25...+55 °C	
	PIR6WB-...-O:	-25...+70 °C \ -20...+55 °C	
Protection category	IP 20		
Environmental protection	RTI PN-EN 116000-3		
Shock \ vibration resistance	10 g \ 5 g 10...500 Hz		

Connections diagrams

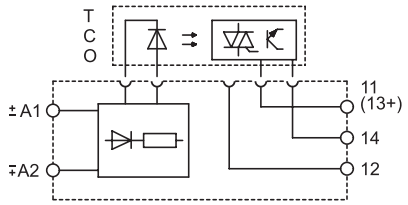
PIR6WB-1PS-...-R, PIR6WB-1PS-...-R01



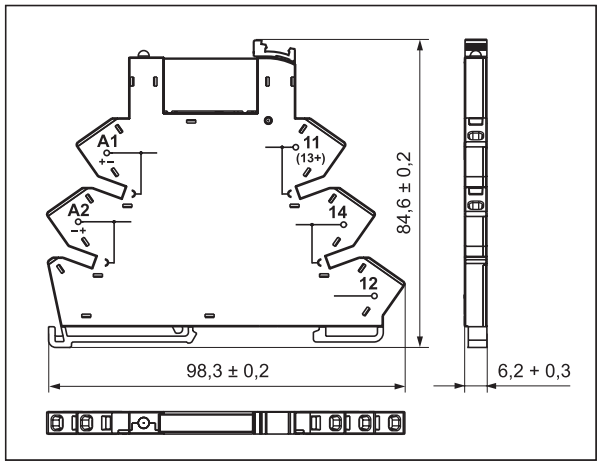
PIR6WB-1P-230VAC/DC-10



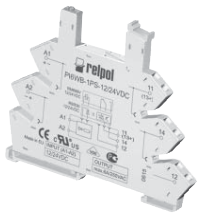
PIR6WB-1PS-...-T, PIR6WB-1PS-...-C, PIR6WB-1PS-...-O



Dimensions



Mounting



PI6WB-1PS-...

Relays **PIR6WB-1PS-...** are designed for 35 mm DIN rail mount, EN 50022. Range of wires 1 x 0,22...2,5 mm² (1 x 24...14 AWG). Rated contactability 1 x 1,5 mm² (1 x 16 AWG). Recommended length of the insulated cable 8...9 mm. Interface relay **PIR6WB-1PS-...** consists of: universal socket with electronic **PI6WB-1PS-...** and electromagnetic relay **RM699V** or solid state relay **RSR30** (see page 179). **PIR6WB-1PS-...** are adapted for the co-operation with interconnection strip type **ZG20**. Description plates of **PI6W-1246** type are offered for **PIR6WB-1PS-...** relays (see pages 176-177).

Ordering codes

Ordering codes **PIR6WB-1PS-...** are specified in Table 1, "Interface relay code" column.

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".

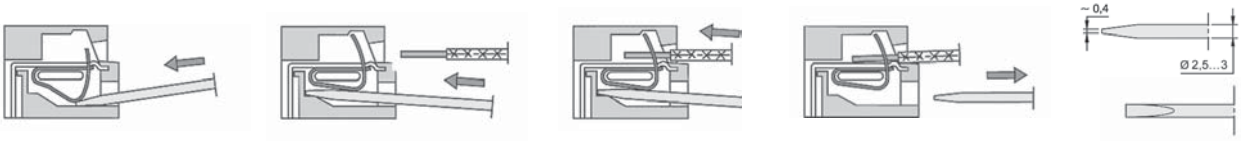


Table of codes Table 1

Interface relay code	Rated input voltage U_n ❺	Power of input control circuit	Socket code	Operational relay code	Rated voltage of operational relay U_s ❺
PIR6WB-1PS-6VDC-R	6 V DC	0,3 W	PI6WB-1PS-6VDC	RM699V-3011-85-1005	5 V DC
PIR6WB-1PS-12VDC-R	12 V DC	0,2 W	PI6WB-1PS-12/24VDC	RM699V-3011-85-1012	12 V DC
PIR6WB-1PS-24VDC-R	**24 V DC**	**0,3 W**	**PI6WB-1PS-12/24VDC**	**RM699V-3011-85-1024**	**24 V DC**
PIR6WB-1PS-36VDC-R	36 V DC	0,3 W	PI6WB-1PS-36VDC	RM699V-3011-85-1024	24 V DC
PIR6WB-1PS-48VDC-R	48 V DC	0,4 W	PI6WB-1PS-48VDC	RM699V-3011-85-1024	24 V DC
PIR6WB-1PS-60VDC-R	60 V DC	0,5 W	PI6WB-1PS-60VDC	RM699V-3011-85-1024	24 V DC
PIR6WB-1PS-24VAC/DC-R	**24 V AC/DC**	**0,5 VA / 0,4 W**	**PI6WB-1PS-24VAC/DC**	**RM699V-3011-85-1012**	**12 V DC**
PIR6WB-1PS-42VAC/DC-R	42 V AC/DC	0,5 VA / 0,4 W	PI6WB-1PS-42VAC/DC	RM699V-3011-85-1024	24 V DC
PIR6WB-1PS-115VAC/DC-R	115 V AC/DC	1,2 VA / 1,2 W	PI6WB-1PS-115VAC/DC	RM699V-3011-85-1024	24 V DC
PIR6WB-1PS-230VAC/DC-R	**230 V AC/DC**	**1,2 VA / 1,2 W**	**PI6WB-1PS-230VAC/DC**	**RM699V-3011-85-1048**	**48 V DC**
PIR6WB-1P-230VAC/DC-10 ❹	230 V AC/DC	2,1 VA / 1,0 W	PI6WB-1P-230VAC/DC-10	RM699V-3011-85-1060	60 V DC
PIR6WB-1PS-6VDC-R01 ❸	6 V DC	0,3 W	PI6WB-1PS-6VDC	RM699V-3211-85-1005	5 V DC
PIR6WB-1PS-12VDC-R01 ❸	12 V DC	0,2 W	PI6WB-1PS-12/24VDC	RM699V-3211-85-1012	12 V DC
PIR6WB-1PS-24VDC-R01 ❸	**24 V DC**	**0,3 W**	**PI6WB-1PS-12/24VDC**	**RM699V-3211-85-1024**	**24 V DC**
PIR6WB-1PS-36VDC-R01 ❸	36 V DC	0,3 W	PI6WB-1PS-36VDC	RM699V-3211-85-1024	24 V DC
PIR6WB-1PS-48VDC-R01 ❸	48 V DC	0,4 W	PI6WB-1PS-48VDC	RM699V-3211-85-1024	24 V DC
PIR6WB-1PS-60VDC-R01 ❸	60 V DC	0,5 W	PI6WB-1PS-60VDC	RM699V-3211-85-1024	24 V DC
PIR6WB-1PS-24VAC/DC-R01 ❸	**24 V AC/DC**	**0,5 VA / 0,4 W**	**PI6WB-1PS-24VAC/DC**	**RM699V-3211-85-1012**	**12 V DC**
PIR6WB-1PS-42VAC/DC-R01 ❸	42 V AC/DC	0,5 VA / 0,4 W	PI6WB-1PS-42VAC/DC	RM699V-3211-85-1024	24 V DC
PIR6WB-1PS-115VAC/DC-R01 ❸	115 V AC/DC	1,2 VA / 1,2 W	PI6WB-1PS-115VAC/DC	RM699V-3211-85-1024	24 V DC
PIR6WB-1PS-230VAC/DC-R01 ❸	**230 V AC/DC**	**1,2 VA / 1,2 W**	**PI6WB-1PS-230VAC/DC**	**RM699V-3211-85-1048**	**48 V DC**
PIR6WB-1PS-6VDC-T	6 V DC	0,1 W	PI6WB-1PS-6VDC	RSR30-D05-A1-24-020-1	5 V DC
PIR6WB-1PS-12VDC-T	12 V DC	0,2 W	PI6WB-1PS-12/24VDC	RSR30-D12-A1-24-020-1	12 V DC
PIR6WB-1PS-24VDC-T	**24 V DC**	**0,3 W**	**PI6WB-1PS-12/24VDC**	**RSR30-D24-A1-24-020-1**	**24 V DC**
PIR6WB-1PS-36VDC-T	36 V DC	0,3 W	PI6WB-1PS-36VDC	RSR30-D24-A1-24-020-1	24 V DC
PIR6WB-1PS-48VDC-T	48 V DC	0,4 W	PI6WB-1PS-48VDC	RSR30-D24-A1-24-020-1	24 V DC
PIR6WB-1PS-60VDC-T	60 V DC	0,5 W	PI6WB-1PS-60VDC	RSR30-D24-A1-24-020-1	24 V DC
PIR6WB-1PS-24VAC/DC-T	**24 V AC/DC**	**0,5 VA / 0,4 W**	**PI6WB-1PS-24VAC/DC**	**RSR30-D12-A1-24-020-1**	**12 V DC**
PIR6WB-1PS-42VAC/DC-T	42 V AC/DC	0,5 VA / 0,4 W	PI6WB-1PS-42VAC/DC	RSR30-D24-A1-24-020-1	24 V DC
PIR6WB-1PS-115VAC/DC-T	115 V AC/DC	1,0 VA / 1,0 W	PI6WB-1PS-115VAC/DC	RSR30-D24-A1-24-020-1	24 V DC
PIR6WB-1PS-6VDC-C	6 V DC	0,1 W	PI6WB-1PS-6VDC	RSR30-D05-D1-04-025-1	5 V DC
PIR6WB-1PS-12VDC-C	12 V DC	0,2 W	PI6WB-1PS-12/24VDC	RSR30-D12-D1-04-025-1	12 V DC
PIR6WB-1PS-24VDC-C	**24 V DC**	**0,3 W**	**PI6WB-1PS-12/24VDC**	**RSR30-D24-D1-04-025-1**	**24 V DC**
PIR6WB-1PS-36VDC-C	36 V DC	0,3 W	PI6WB-1PS-36VDC	RSR30-D24-D1-04-025-1	24 V DC
PIR6WB-1PS-48VDC-C	48 V DC	0,4 W	PI6WB-1PS-48VDC	RSR30-D24-D1-04-025-1	24 V DC
PIR6WB-1PS-60VDC-C	60 V DC	0,5 W	PI6WB-1PS-60VDC	RSR30-D24-D1-04-025-1	24 V DC
PIR6WB-1PS-24VAC/DC-C	**24 V AC/DC**	**0,5 VA / 0,4 W**	**PI6WB-1PS-24VAC/DC**	**RSR30-D12-D1-04-025-1**	**12 V DC**
PIR6WB-1PS-42VAC/DC-C	42 V AC/DC	0,5 VA / 0,4 W	PI6WB-1PS-42VAC/DC	RSR30-D24-D1-04-025-1	24 V DC
PIR6WB-1PS-115VAC/DC-C	115 V AC/DC	1,0 VA / 1,0 W	PI6WB-1PS-115VAC/DC	RSR30-D24-D1-04-025-1	24 V DC
PIR6WB-1PS-230VAC/DC-C	**230 V AC/DC**	**1,0 VA / 1,0 W**	**PI6WB-1PS-230VAC/DC**	**RSR30-D48-D1-04-025-1**	**48 V DC**
PIR6WB-1PS-6VDC-O	6 V DC	0,1 W	PI6WB-1PS-6VDC	RSR30-D05-D1-02-040-1	5 V DC
PIR6WB-1PS-12VDC-O	12 V DC	0,2 W	PI6WB-1PS-12/24VDC	RSR30-D12-D1-02-040-1	12 V DC
PIR6WB-1PS-24VDC-O	**24 V DC**	**0,3 W**	**PI6WB-1PS-12/24VDC**	**RSR30-D24-D1-02-040-1**	**24 V DC**
PIR6WB-1PS-36VDC-O	36 V DC	0,3 W	PI6WB-1PS-36VDC	RSR30-D24-D1-02-040-1	24 V DC
PIR6WB-1PS-48VDC-O	48 V DC	0,4 W	PI6WB-1PS-48VDC	RSR30-D24-D1-02-040-1	24 V DC
PIR6WB-1PS-60VDC-O	60 V DC	0,5 W	PI6WB-1PS-60VDC	RSR30-D24-D1-02-040-1	24 V DC
PIR6WB-1PS-24VAC/DC-O	**24 V AC/DC**	**0,5 VA / 0,4 W**	**PI6WB-1PS-24VAC/DC**	**RSR30-D12-D1-02-040-1**	**12 V DC**
PIR6WB-1PS-42VAC/DC-O	42 V AC/DC	0,5 VA / 0,4 W	PI6WB-1PS-42VAC/DC	RSR30-D24-D1-02-040-1	24 V DC
PIR6WB-1PS-115VAC/DC-O	115 V AC/DC	1,0 VA / 1,0 W	PI6WB-1PS-115VAC/DC	RSR30-D24-D1-02-040-1	24 V DC
PIR6WB-1PS-230VAC/DC-O	**230 V AC/DC**	**1,0 VA / 1,0 W**	**PI6WB-1PS-230VAC/DC**	**RSR30-D48-D1-02-040-1**	**48 V DC**

The data in bold type pertain to the standard versions of the relays. ❸ Version with gold plated contacts. ❹ Version with integrated anti-interference filter. ❺ It shall be remarked that rated input voltage of the operational relay U_s not always complies with the rated input voltage U_n (which is important on ordering operational relays for sockets).