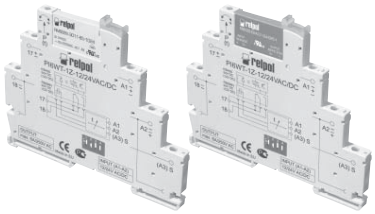


- 9-functions electronic time relays
- Time relay **PIR6WT-1Z** consists of:
  - universal socket with electronic **PI6WT-1Z** with screw terminals,
  - changeover relay **RM699V**, rated load 6 A / 230 V (AC1) ❶ or solid state relay **RSR30** ❶
- 35 mm DIN rail mount, EN 50022 • Adapted for the co-operation with interconnection strip type **ZG20** • Equipped in LED green
- Recognitions, certifications, directives: CE

Type of relay		**PIR6WT-1Z**		
Output circuit (RM699V) - contact data ❶				
Number and type of contacts (code of output)		1 NO - normally open (R)		
Contact material		**$AgSnO_2$**		
Max. switching voltage	AC/DC	250 V / 300 V		
Min. switching voltage	AC/DC	12 V		
Rated load	AC1 DC1	6 A / 230 V AC 6 A / 24 V DC		
Min. switching current		100 mA		
Max. inrush current		15 A 20 ms		
Rated current		6 A		
Max. breaking capacity	AC1	1 500 VA		
Min. breaking capacity		1 W		
Contact resistance		≤ 100 mΩ 100 mA, 24 V		
Max. operating frequency • at rated load • no load	 AC1	 360 cycles/hour 72 000 cycles/hour		
Output circuit (RSR30) - output data ❶				
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 - normally open	1 NO - normally open	1 NO - normally open
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 DC1	1 A / 240 V AC	 1 A / 48 V DC	 2 A / 24 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	AC: 50/60 Hz AC/DC	12-**24** V		
Operating range of supply voltage		0,9...1,2 U_n 12 V AC/DC 0,85...1,2 U_n 24 V AC/DC		
Rated power consumption	AC/DC	0,5 VA / 0,5 W 12 V AC/DC 1,0 VA / 1,0 W 24 V AC/DC		
Range of supply frequency		AC: 48...100 Hz		
Control contact (A3) S ❷ • control voltage • min. voltage ❸ • min. time of pulse duration ❸		 between terminals (A3) S and A1 ≥ 8 V ≥ 15 ms		
Insulation				
Insulation category		B250		
Insulation rated voltage		250 V AC		
Rated surge voltage		2 500 V AC		
Overvoltage category		II PN-EN 60664-1		
Insulation pollution degree		2		
Flammability degree		contact plate: V-0 cover: V-1 UL94		
Dielectric strength	• input - output • contact clearance	2 500 V AC 50/60 Hz, 1 min. 1 000 V AC 50/60 Hz, 1 min., output R		

The data in bold type pertain to the standard versions of the relays. ❶ Characteristics of the contact capacity of relays **PIR6WT-1Z with RM699V** - see catalogue Relpol S.A. "Electromagnetic relays ", pages 47-49; **PIR6WT-1Z with RSR30** - see catalogue Relpol S.A. "Solid state relays", pages 10-14. ❷ Control contact (A3) S is activated by connecting it to A1 terminal. ❸ Where the control signal is recognizable.

General data

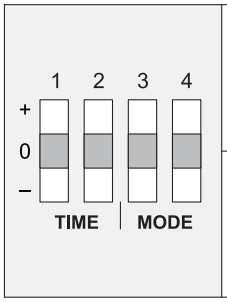
Dimensions (L x W x H) \ Weight	98,5 x 6,2 x 85,5 mm \ 50 g
Ambient temperature • storage \ operating	-40...+70 ºC \ -20...+55 ºC
Protection category	IP 20
Environmental protection	RTI PN-EN 116000-3
Shock resistance	10 g
Vibration resistance	5 g 10...55 Hz
Relative humidity	up to 85%

Time module data

Functions ❹	E, Wu, Bp, Bi, R, Ws, Wa, Esa, B OFF - OFF mode
Function adjustment ❺	selection with microswitches
Time intervals	1 s ❻; 10 s; 1 min.; 10 min.; 1 h; 10 h; 1 d; 10 d
Timing adjustment ❺	smooth - (0,1...1) x time interval
Repeatability	± 0,5% ❻
Temperature influence	± 0,01% / °C
Humidity influence	± 0,05% / %HR
Recovery time	max. 80 ms
LED indicator	green LED - indication of time period T and the status of outputs after the time T has been measured ❼

❹ Descriptions of time functions - see pages 20-21. ❺ Settings of switches - see page 18. ❻ For the first range (1 s) repeatability is smaller than the given one in technical parameters (significant influence of the operational relay operating time, processor start-time, and the moment of supply switching as referred to the AC supply course). ❼ The green LED - T time measurement (flashing); excited operational relay, time not measured (steady light); de-excited operational relay, time not measured (no light).

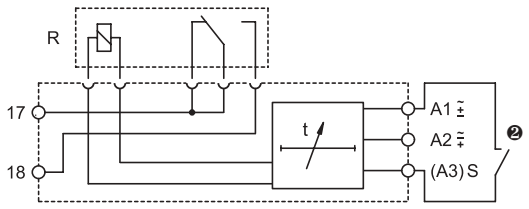
Settings of switches



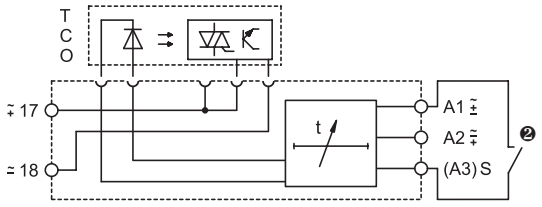
	E	Wu	Bp	Bi	R	Ws	Wa	Esa	B
Function adjustment (MODE) switches 3, 4									
Timing adjustment (TIME) switches 1, 2	1 s	10 s	1 min.	10 min.	1 h	10 h	1 d	10 d	OFF

Connections diagrams

PIR6WT-1Z-...-R

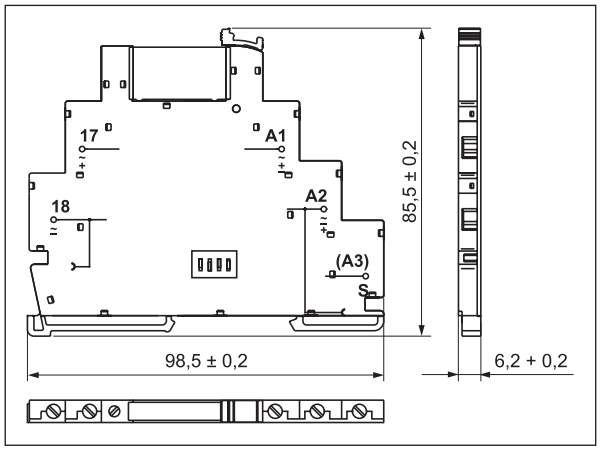


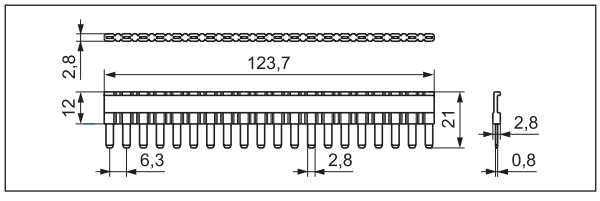
PIR6WT-1Z-...-T, PIR6WT-1Z-...-C, PIR6WT-1Z-...-O



❷ Control contact (A3) S is activated by connecting it to A1 terminal.

Dimensions



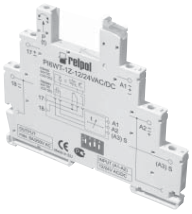


Ordering codes

Ordering codes **PIR6WT-1Z** are specified in Table 1, "Time relay code" column.

Mounting

Relays **PIR6WT-1Z** are designed for 35 mm DIN rail mount, EN 50022. Maximum size of wires 1 x 2,5 mm^2 (1 x 14 AWG). Rated contactability 2 x 1,5 mm^2 (2 x 16 AWG). Maximum screw torgue: 0,3 Nm. Time relay **PIR6WT-1Z** consists of: universal socket with electronic **PI6WT-1Z** and electromagnetic relay **RM699V** or solid state relay **RSR30**. **PIR6WT-1Z** are adapted for the co-operation with interconnection strip type **ZG20**. Strip **ZG20** bridges common input or output signals, maximum permissible current is 36 A / 250 V AC. Colours of strips: **ZG20-1** red, **ZG20-2** black, **ZG20-3** blue.



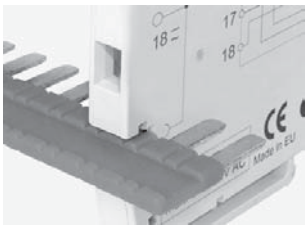
PIR6WT-1Z

RM699V

RSR30

ZG20

Potentiometer P (t):
smooth regulation of time within the range.
It is recommended to use a screwdriver of max. 2,5 mm.



Interconnection strip ZG20:
bridging of common input or output signals.

Transparent, movable ejector:
protection and easy replacement of the operational relay,
it plays the role of light indicator (optical wave-guide of LED diode).

Table of codes

Table 1

Time relay code	Rated input voltage U_n ❽	Power of input control circuit	Socket code	Operational relay code	Rated voltage of operational relay U_s ❽
PIR6WT-1Z-12VAC/DC-R	12 V AC/DC	0,5 VA / 0,5 W	PI6WT-1Z-12/24VAC/DC	RM699V-3011-85-1012	12 V DC
PIR6WT-1Z-24VAC/DC-R	**24 V AC/DC**	**1,0 VA / 1,0 W**	**PI6WT-1Z-12/24VAC/DC**	**RM699V-3011-85-1024**	**24 V DC**
PIR6WT-1Z-12VAC/DC-T	12 V AC/DC	0,5 VA / 0,5 W	PI6WT-1Z-12/24VAC/DC	RSR30-D12-A1-24-020-1	12 V DC
PIR6WT-1Z-24VAC/DC-T	**24 V AC/DC**	**1,0 VA / 1,0 W**	**PI6WT-1Z-12/24VAC/DC**	**RSR30-D24-A1-24-020-1**	**24 V DC**
PIR6WT-1Z-12VAC/DC-C	12 V AC/DC	0,5 VA / 0,5 W	PI6WT-1Z-12/24VAC/DC	RSR30-D12-D1-04-025-1	12 V DC
PIR6WT-1Z-24VAC/DC-C	**24 V AC/DC**	**1,0 VA / 1,0 W**	**PI6WT-1Z-12/24VAC/DC**	**RSR30-D24-D1-04-025-1**	**24 V DC**
PIR6WT-1Z-12VAC/DC-O	12 V AC/DC	0,5 VA / 0,5 W	PI6WT-1Z-12/24VAC/DC	RSR30-D12-D1-02-040-1	12 V DC
PIR6WT-1Z-24VAC/DC-O	**24 V AC/DC**	**1,0 VA / 1,0 W**	**PI6WT-1Z-12/24VAC/DC**	**RSR30-D24-D1-02-040-1**	**24 V DC**

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