

PIR6WB-1PS

Subminiature Electromagnetic and Solid State Modules



- Spring Clamp Terminals
- Electronic **spring** terminals socket (PI6W-1PS)
- Electromagnetic relay (RM699BV) or solid state relay (RSR30)
- Width 6.2 mm
- Equipped with green LED



PIR6WB-1PS

Electromagnetic Relay (RM699BV)

contact information

| Number and type of contacts (code of output) | SPDT (R) | SPDT (R-01) |
|--|----------------------------------|----------------------------|
| Contact material | AgSnO ₂ | AgSnO ₂ / Au3µm |
| Max. switching voltage | 400 V AC / 250 V DC | 30 V AC / 36 V DC |
| Min. switching voltage | 10 V | 5 V |
| Rated load | 6 A / 250 V AC | 0.05 A / 30 V AC |
| | 6 A / 24 V DC; 0.15 A / 250 V DC | 0.05 A / 36 V DC |
| Min. switching current | 100 mA | 10 mA |
| Max. inrush current | 10 A 20 ms | 0.1 A 20 ms |
| Rated current | 6A | 0.05A |
| Max. / Min. breaking capacity | 1500 VA / 1 W | 1.2 VA / 0.05 W |
| Contact resistance | ≤ 100 mΩ 100 mA, 24 V | ≤ 30 mΩ 10 mA, 5 V |
| Max. operating frequency | 360 cycles/hour | 360 cycles/hour |
| • at rated load | | |
| • no load | 72 000 cycles/hour | 72 000 cycles/hour |

Solid State (RSR30)

output information

| Type of output (code of output) | Triac (T) max. 2 A | Transistor (C) max. 1 A | Transistor (O) max. 2 A |
|--|-----------------------|----------------------------|----------------------------|
| Number and type of outputs | SPST (1 NO) | SPST (1 NO) | SPST (1 NO) |
| Rated voltage | 240 V AC | 48 V DC | 24 V DC |
| Max./ Min. output voltage | 280 V AC / 12 V AC | 60 V DC / 1,5 V DC | 32 V DC / 1,5 V DC |
| Rated continuous output current | 1A | 1A | 2A |
| | | | |
| Min. making capacity current | 50 mA | 1 mA | 1 mA |
| Max. off-state leakage current (rest condition) | 1,5 mA | 1 mA | 1 mA |
| 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 Circuit

| | | |
|-----------------------------------|--------------------|---|
| Rated voltage | DC | 6 ... 60 V |
| | AC: 50/60 Hz AC/DC | 24 ... 230 V |
| Must release voltage | | AC: ≥ 0.2 U _n ; 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 |
| Rated power consumption | DC | 0.2 ... 0.5 W |
| | AC/DC | 0.5 ... 1.2 VA / 0.4 ... 1.2 W |

Insulation

| | |
|---|--|
| Insulation rated voltage | 250 V AC |
| Rated surge voltage | 4000 V 1.2 / 50 µs |
| Overvoltage category | III |
| Insulation pollution degree | 3 |
| Dielectric strength: input - output | 4000 V AC 50/60 Hz, 1 min., type of insulation: reinforced |
| Dielectric strength: input - output | 6000 V 1.2 / 50 µs |
| Dielectric strength: contact clearance | 1000 V AC 50/60 Hz, 1 min., output R and R-01 |
| Input - output distance: clearance / creepage | ≥ 6 mm / ≥ 8 mm |

General data

| | |
|---------------------------------|--|
| Operating time (typical value) | PIR6W-1PS-...-R/-R01: DC: 8 ms AC/DC: 20 ms |
| | PIR6W-1PS-...-T: DC: 100 µs AC/DC: 10 ms |
| | PIR6W-1PS-...-C/-O: DC: 50 µs AC/DC: 10 ms |
| Release time (typical value) | PIR6W-1PS-...-R/-R01: DC: 10 ms AC/DC: 25 ms |
| | PIR6W-1PS-...-T: DC: 1/2 cycle + 1 ms AC/DC: 30 ms |
| | PIR6W-1PS-...-C/-O: DC: 600 µs AC/DC: 20 ms |
| | PIR6W-1PS-...-R: > 0.5 x 10 ⁶ 6 A, 250 V AC |
| Electrical life (resistive AC1) | PIR6W-1PS-...-R/-R01: > 10 ⁷ |
| Mechanical life (cycles) | |
| Dimensions (L x W x H) | 98.5 x 6.2 x 84.6 mm |
| Weight | 55 g |
| Ambient temperature: storage | PIR6W-1PS-...-R/-R01-T: -40...+70 °C ...-C/-O: -25...+70 °C |
| Ambient temperature: operating | PIR6W-1PS-...-R/-R01: -40...+55 °C ...-T/-C/-O: -20...+55 °C |
| Protection category | IP 20 PN-EN 60529 |
| Environmental protection | RTI PN-EN 116000-3 |
| Shock resistance | 10 g |
| Vibration resistance | 5 g 10...500 Hz |

T - triac; C - transistor; O - transistor.

PIR6WB-1PS

Subminiature Electromagnetic and Solid State Modules

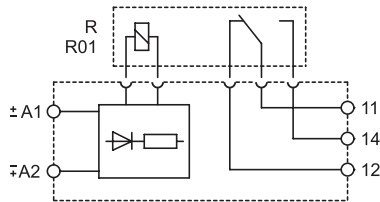


PIR6WB-1PS

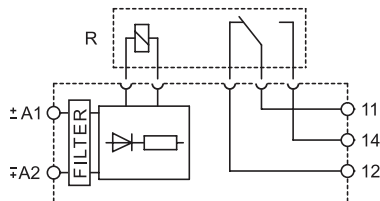


CONNECTION DIAGRAMS

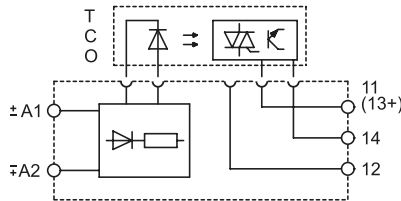
PIR6WB-1PS-...-R, PIR6WB-1PS-...-R01



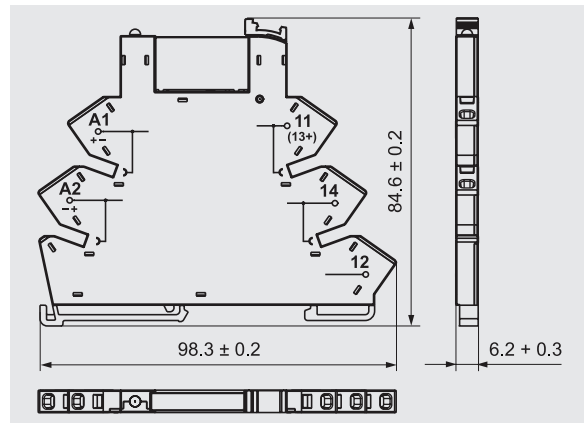
PIR6WB-1P-230VAC/DC-10



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



DIMENSIONS



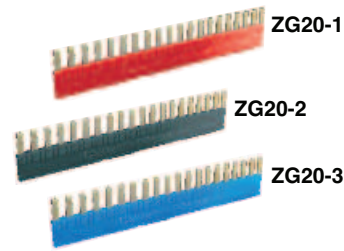
PI6WB-1PS-...



RM699BV



RSR30



ZG20-1

ZG20-2

ZG20-3



PI6W-1246



Green LED:
signalling the operation status of the relay.



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



Movable ejector: protection and easy replacement of the operational relay.

All accessories are sold separately.

PIR6WB-1PS

Subminiature Electromagnetic and Solid State Modules

Electromagnetic Relays

Featuring Electromagnetic relay RM699BV / 6A; 250VAC / 24VDC

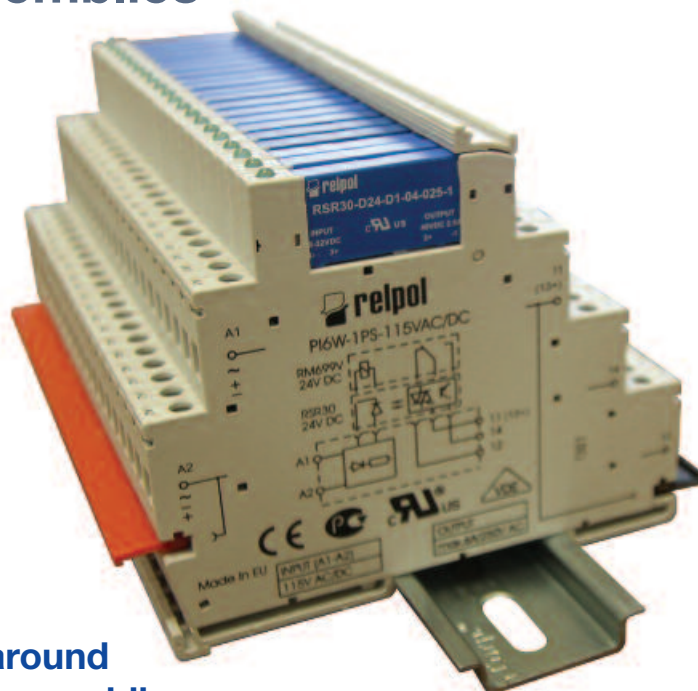
| Part Number | Rated input voltage U_N | Power of input circuit | Socket code | Operational relay code | Rated voltage of operational relay U_S |
|--------------------------|---------------------------|------------------------|---------------------|------------------------|--|
| PIR6WB-1PS-6VDC-R | 6 V DC | 0.3 W | PI6WB-1PS-6VDC | RM699BV-3011-85-1005 | 5 V DC |
| PIR6WB-1PS-12VDC-R | 12 V DC | 0.2 W | PI6WB-1PS-12/24VDC | RM699BV-3011-85-1012 | 12 V DC |
| ▶ PIR6WB-1PS-24VDC-R | 24 V DC | 0.3 W | PI6WB-1PS-12/24VDC | RM699BV-3011-85-1024 | 24 V DC |
| PIR6WB-1PS-36VDC-R | 36 V DC | 0.3 W | PI6WB-1PS-36VDC | RM699BV-3011-85-1024 | 24 V DC |
| PIR6WB-1PS-48VDC-R | 48 V DC | 0.4 W | PI6WB-1PS-48VDC | RM699BV-3011-85-1024 | 24 V DC |
| PIR6WB-1PS-60VDC-R | 60 V DC | 0.5 W | PI6WB-1PS-60VDC | RM699BV-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 | RM699BV-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 | RM699BV-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 | RM699BV-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 | RM699BV-3011-85-1048 | 48 V DC |

Featuring Electromagnetic relay RM699BV / 0.05A; 30VAC / 36VDC. gold plated contacts

| Part Number | Rated input voltage U_N | Power of input circuit | Socket code | Operational relay code | Rated voltage of operational relay U_S |
|---------------------------|---------------------------|------------------------|---------------------|------------------------|--|
| PIR6WB-1PS-6VDC-R01 | 6 V DC | 0.3 W | PI6WB-1PS-6VDC | RM699BV-3011-85-1005 | 5 V DC |
| PIR6WB-1PS-12VDC-R01 | 12 V DC | 0.2 W | PI6WB-1PS-12/24VDC | RM699BV-3011-85-1012 | 12 V DC |
| PIR6WB-1PS-24VDC-R01 | 24 V DC | 0.3 W | PI6WB-1PS-12/24VDC | RM699BV-3011-85-1024 | 24 V DC |
| PIR6WB-1PS-36VDC-R01 | 36 V DC | 0.3 W | PI6WB-1PS-36VDC | RM699BV-3011-85-1024 | 24 V DC |
| PIR6WB-1PS-48VDC-R01 | 48 V DC | 0.4 W | PI6WB-1PS-48VDC | RM699BV-3011-85-1024 | 24 V DC |
| PIR6WB-1PS-60VDC-R01 | 60 V DC | 0.5 W | PI6WB-1PS-60VDC | RM699BV-3011-85-1024 | 24 V DC |
| ▶ PIR6WB-1PS-24VAC/DC-R01 | 24 V AC/DC | 0.5 VA / 0.4 W | PI6WB-1PS-24VAC/DC | RM699BV-3011-85-1012 | 12 V DC |
| PIR6WB-1PS-42VAC/DC-R01 | 42 V AC/DC | 0.5 VA / 0.4 W | PI6WB-1PS-42VAC/DC | RM699BV-3011-85-1024 | 24 V DC |
| PIR6WB-1PS-115VAC/DC-R01 | 115 V AC/DC | 1.2 VA / 1.2 W | PI6WB-1PS-115VAC/DC | RM699BV-3011-85-1024 | 24 V DC |
| PIR6WB-1PS-230VAC/DC-R01 | 230 V AC/DC | 1.2 VA / 1.2 W | PI6WB-1PS-230VAC/DC | RM699BV-3011-85-1048 | 48 V DC |

The 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). For versions of the input voltage $U_N = 230$ V AC/DC keep the distance between the mounting relays min. 5 mm under maximum load and at continuous operation.

Altech Custom Assemblies



Altech provides quick turnaround and competitive prices on assemblies.

For complete assemblies contact Altech.

▶ BOLD - Regular stocked items.

Solid State Relays

Featuring Solid State Triac (T) relay RSR30 / 2A; 240VAC output

| Part Number | Rated input voltage U_N | Power of input circuit | Socket code | Operational relay code | Rated voltage of operational relay U_S |
|--------------------------------|---------------------------|------------------------|---------------------|------------------------|--|
| PIR6WB-1PS-6VDC-T | 6 V DC | 0.2 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 |

Featuring Solid State transistor (C) relay RSR30 / 1A; 48VDC output

| Part Number | Rated input voltage U_N | Power of input circuit | Socket code | Operational relay code | Rated voltage of operational relay U_S |
|--------------------------------|---------------------------|------------------------|---------------------|------------------------|--|
| PIR6WB-1PS-6VDC-C | 6 V DC | 0.2 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 |

Featuring Solid State transistor (O) relay RSR30 / 2A; 24VDC output

| Part Number | Rated input voltage U_N | Power of input circuit | Socket code | Operational relay code | Rated voltage of operational relay U_S |
|--------------------------------|---------------------------|------------------------|---------------------|------------------------|--|
| PIR6WB-1PS-6VDC-O | 6 V DC | 0.2 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 |

It should be noted that the rated input voltage of the operational relay (U_S) is not always the same as the rated input voltage of the relay and socket combination (U_N) (This is important when ordering operational relays for sockets). For versions of the input voltage $U_N = 230$ V AC/DC keep the distance between the mounting relays min. 5 mm under maximum load and at continuous operation.

► **BOLD** - Regular stocked items.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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Факс: 8 (812) 320-02-42

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