

Accessories Industrial Power Relay RT

- For Industrial Power Relay RT
pinnings 3.5mm / 5mm; relay height 15.7 mm
- New retainer clip with ejection function
- Easy replacement of relays on a densely packed DIN rail
- No reduction of protection class or creepage/clearance with plastic retainer
- Simple plug-in indicator- and protection modules
- White snap-on marking tags
- RoHS compliant (Directive 2002/95/EC)



F0228-F

Premium socket with screwless terminals for DIN rail mounting

RT 78 72P Premium socket, logical terminal arrangement

- Screwless Clamps
- Mounting of solid wires without tool
- Double Clamps per terminal
- Jumper links for interconnection
- Open coil circuit for active modules
- Logical terminal arrangement



Approvals

VDE REG.-Nr. 6106, cULus E135149

*) For 1 pole relays (16 A) the relay terminals 11-21, 12-22 and 14-24 have to be bridged.

Technical data

| | |
|---|-----------------|
| Rated current | 2 x 8 A, 16 A*) |
| Rated voltage / max. switching voltage AC | 240/400 VAC |
| Dielectric strength coil-contact circuit | 5000 Vrms |
| open contact circuit | 1000 Vrms |
| adjacent contact circuits | 2500 Vrms |
| Clearance / creepage coil-contact circuit | ≥ 10 / 10 mm |
| Material group of insulation parts | ≥ IIIa |
| Insulation to IEC 60664-1 | |
| Type of insulation coil-contact circuit | reinforced |
| open contact circuit | functional |
| adjacent contact circuits | functional |
| Rated insulation voltage | 250 V |
| Pollution degree | 2 |
| Rated voltage system | 230/400 V |
| Overvoltage category | III |
| RoHS - Directive 2002/95/EC | compliant |
| Degree of protection DIN 40050 | IP20 |

- Not suitable for bistable relays with 2 coils!



Accessories Industrial Power Relay RT (Continued)

Technical data (Continued)

| | |
|---|--|
| Ambient temperature range | |
| for mounting/handling | -20...+70°C |
| in operation | -40...+70°C |
| Terminals | screwless |
| Wire strip length | 12 mm |
| Wire cross section | |
| solid wire | 1 x 0.75/1.5 mm ² 2 x 0.75/1 mm ² |
| with standard isolation (no oversize isolation) | 2 x 1.5 mm ² |
| stranded wire | |
| without bootlace crimp | 1 x 0.75/1.5 mm ² 2 x 0.75/1 mm ² |
| without bootlace crimp with standard isolation | 2 x 1.5 mm ² |
| with bootlace crimp | 1 x 0.75/1 mm ² 2 x 0.75 mm ² |
| with bootlace crimp without isolation or isolation min 18 mm long | 1 x 1.5 mm ² |
| For stranded wires with braids 0.05 mm or smaller the use of bootlace crimps is recommended. When using stranded wires without bootlace crimp the clamp must be opened during insertion. | |
| Insertion cycles | A (10) |
| Max. Insertion Force total | 100 N |
| Mounting distance | 0, dense packing |
| Weight | 36 g |
| Packaging unit | 10 pcs |

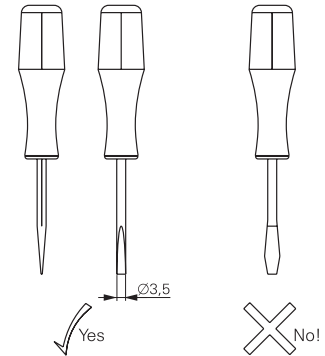
Socket with screwless terminals for DIN rail mounting

| Type | | Part Number |
|------------------|--|-------------|
| RT 78 72P | Premium socket, logical terminal arrangement Socket with screwless terminals, pinning 5 mm for DIN rail mounting | 1860200-1 |

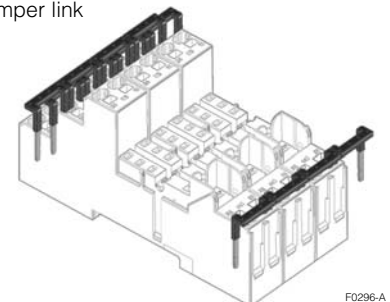
Accessories for RT 78 72P

| Type | | Part Number |
|------------------|---|-------------|
| RT 17 017 | Plastic retaining clip, relay height 15.7 | 2022103-1 |
| RT 17 040 | Marking tag | 2-1415038-1 |
| RT 17 0P1 | Jumper link, max load 12 A | 1860211-1 |

How to use, Precautions



Jumper link



Accessories Industrial Power Relay RT (Continued)

Socket with screw-type terminals for DIN rail mounting

RT 78 724 Socket with screw-type terminals, pinning 3.5 mm for DIN rail mounting

RT 78 726 Socket with screw-type terminals, pinning 5 mm for DIN rail mounting, logical terminal arrangement

- Din-rail socket with logical setup of connections (input/output)
- High quality rising clamp terminals
- Captive combination terminal screws
- Jumper bars for interconnection



RT 78 725 Socket with screw-type terminals, pinning 5 mm for DIN rail mounting, conventional terminal arrangement

- Conventional terminal arrangement



Approvals

VDE REG.-Nr. 6106 in preparation, **UL** US E135149

*) For 1 pole relays (16 A) the relay terminals 11-21, 12-22 and 14-24 have to be bridged.
For 1 pole relays (12 A) the relay terminals 11-12-14 have to be connected to the socket terminals 21-12-24

| Technical data | RT 78 724 / RT 78 726 | RT 78 725 |
|--|-----------------------|----------------|
| Rated current | 12 A, 2 x 8 A, 16 A*) | |
| Rated voltage / max.switching voltage AC | 240/400 VAC | |
| Dielectric strength coil-contact circuit | 5000 Vrms | 4000 Vrms |
| open contact circuit | 1000 Vrms | 1000 Vrms |
| adjacent contact circuits | 2500 Vrms | 2500 Vrms |
| Clearance / creepage coil-contact circuit | ≥ 10 / 10 mm | ≥ 4.7 / 4.7 mm |
| Material group of insulation parts | ≥ IIIa | |
| Insulation to IEC 60664-1 | | |
| Type of insulation coil-contact circuit | reinforced | basic |
| open contact circuit | functional | functional |
| adjacent contact circuits | functional | functional |
| Rated insulation voltage | 250 V | |
| Pollution degree | 2 | |
| Rated voltage system | 230/400 V | |
| Overvoltage category | III | |
| RoHS - Directive 2002/95/EC | compliant | |
| Degree of protection DIN 40050 | IP20 | |
| Ambient temperature range for mounting/handling in operation | -20...+70°C | |
| | -40...+70°C | |

- Not suitable for bistable relays with 2 coils!



Accessories Industrial Power Relay RT (Continued)

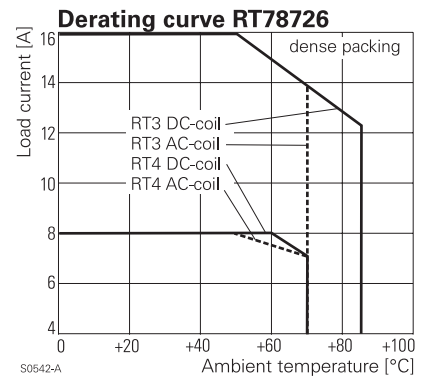
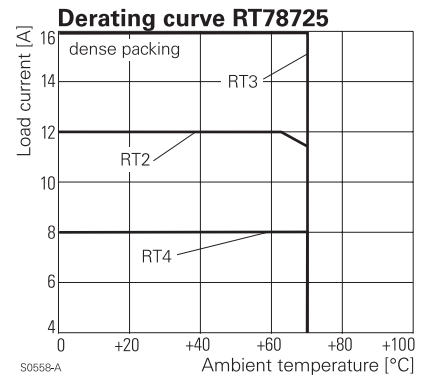
| Technical data (Continued) | RT 78 724 / RT 78 726 | RT 78 725 |
|---|-----------------------|-------------------------|
| Terminals | | screw |
| Terminal screw torque acc. IEC 61984 max. | | 0.5 Nm 0.7 Nm |
| Wire cross section | | |
| single wire | | 2 x 2.5 mm ² |
| fine wire | | 2 x 2.5 mm ² |
| with bootlace crimp (DIN 46228/1) | | 2 x 1.5 mm ² |
| Insertion cycles | | A (10) |
| Max. Insertion Force total | | 100 N |
| Mounting distance | | 0, dense packing |
| Weight | | 36 g |
| Packaging unit | | 10 pcs |

Socket with screw-type terminals for DIN rail mounting

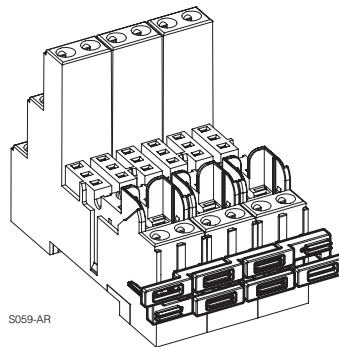
| Type | | Part Number |
|------------------|---|-------------|
| RT 78 724 | Socket with screw-type terminals, pinning 3.5 mm for DIN rail mounting, logical terminal arrangement | 8-1415035-1 |
| RT 78 726 | Socket with screw-type terminals, pinning 5 mm for DIN rail mounting, logical terminal arrangement | 6-1415035-1 |
| RT 78 725 | Socket with screw-type terminals, pinning 5 mm for DIN rail mounting, conventional terminal arrangement | 1860306-1 |

Accessories for RT 78 724, RT 78 725, RT 78 726

| Type | | Part Number |
|------------------|--|-------------|
| RT 17 017 | Plastic retaining clip, relay height 15.7 | 2022103-1 |
| RT 17 040 | Marking tag | 2-1415038-1 |
| RT 17 0R8 | Jumper bar, max load 12 A for connection of up to 8 RT sockets | 1860517-8 |



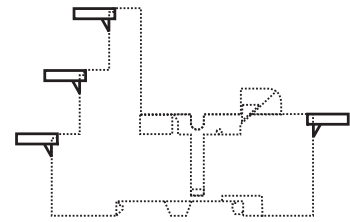
Jumper bar



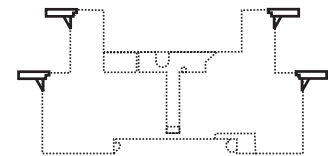
S059-AR

Marking tags

- White marking area 15.5 x 6 mm
- Snaps on socket in up to 4 positions



S0416-BC



S0540-AC

Accessories Industrial Power Relay RT (Continued)

LED- and Protection Modules for RT 78 72P, RT 78 724, RT 78 725, RT 78 726

Easy insertion of module into the socket
Wiring in parallel to the coil

| Type | Part Number |
|--|-------------|
| PTM TO 0A0 EM09 Protection diode (standard, A1+, A2-) | 9-1415036-1 |
| PTM TO 0L0 EM01 Protection diode (A1-, A2+) | 1415037-1 |
| PTM U0 524 EM02 RC-network 6...60 VAC | 1-1415037-1 |
| PTM U0 730 EM03 RC-network 110...230 VAC | 2-1415037-1 |
| PTM V0 524 EM04 Varistor 24 VAC | 3-1415037-1 |
| PTM V0 615 EM13 Varistor 115 VAC | 6-1415365-1 |
| PTM V0 730 EM05 Varistor 230 VAC | 4-1415037-1 |
| PTM R0 730 EM29 Bleeder Resistor 110...230 VAC | 1-1415539-2 |



LED

| | |
|--|-------------|
| PTM LO 024 EM18 red LED 6...24 VDC w. prot.diode (std, A1+, A2-) | 5-1415036-1 |
| PTM GO 024 EM12 green LED 6...24 VDC w. prot.diode (std, A1+, A2-) | 2-1415036-1 |
| PTM L1 024 EM08 red LED 6...24 VDC w. prot. diode (A1-, A2+) | 8-1415036-1 |
| PTM LO 060 EM16 red LED 24...60 VDC w. prot.diode (std, A1+, A2-) | 5-1415539-3 |
| PTM GO 060 EM25 green LED 24...60 VDC w. prot.diode (std, A1+, A2-) | 7-1415539-7 |
| PTM LO 110 EM19 red LED 60...110 VDC w. prot. diode (A1+, A2-) | 2-1415392-1 |
| PTM GO 110 EM26 green LED 60...110 VDC w. prot diode (A1+, A2-) | 1-1415539-7 |
| PTM LO 220 EM27 red LED 110...220 VDC w. prot. diode (A1+, A2-) | 1-1415539-4 |
| PTM GO 220 EM28 green LED 110...220 VDC w. prot diode (A1+, A2-) | 1-1415539-6 |
| PTM LO 524 EM07 red LED 6...24 VDC/VAC | 6-1415036-1 |
| PTM GO 524 EM11 green LED 6...24 VDC/VAC | 3-1415036-1 |
| PTM LO 560 EM14 red LED 24...60 VDC/VAC | 1-1415539-3 |
| PTM GO 560 EM30 green LED 24...60 VDC/VAC | 1-1415539-5 |
| PTM LO 730 EM06 red LED 110...230 VAC | 7-1415036-1 |
| PTM GO 730 EM10 green LED 110...230 VAC | 4-1415036-1 |

Relay Packages

Complete packages consisting of a relay mounted on a socket: see Relay Package RT

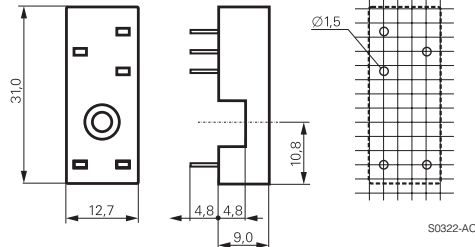
Accessories Industrial Power Relay RT (Continued)

Sockets for PCB mount

RP 78 601 Socket with PCB terminals, pinning 3.5 mm



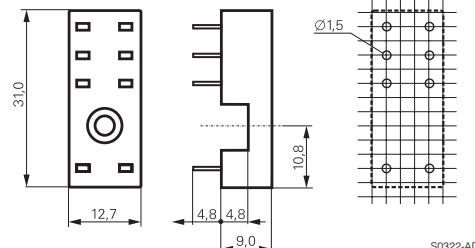
F0116-A



RP 78 602 Socket with PCB terminals, pinning 5 mm



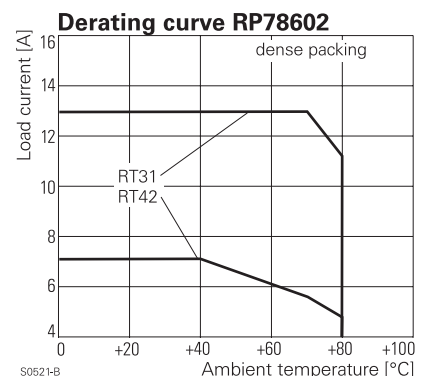
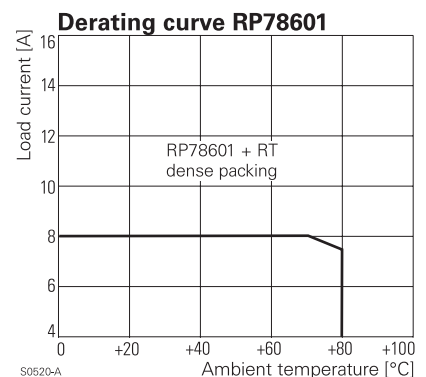
F0117-A



Approvals



| Technical data | | RP 78 601 / RP 78 602 |
|---|---|-----------------------|
| Rated current | | 12 A *) |
| Limiting continuous current | | see derating curve |
| Rated voltage / max. switching voltage AC | | 240/400 |
| Dielectric strength coil-contact circuit | open contact circuit | 4000 V _{rms} |
| | adjacent contact circuits | 1000 V _{rms} |
| | | 2500 V _{rms} |
| Clearance / creepage coil-contact circuit | | ≥ 10 / 10 mm |
| Material group of insulation parts | | ≥ IIIa |
| Insulation to IEC 60664-1 | Type of insulation coil-contact circuit | reinforced |
| | open contact circuit | functional |
| | adjacent contact circuits | functional |
| Rated insulation voltage | | 250 V |
| Pollution degree | | 2 |
| Rated voltage system | | 230/400 V |
| Overvoltage category | | III |
| RoHS - Directive 2002/95/EC | | compliant |
| Degree of protection DIN 40050 | | IP20 |
| Ambient temperature range | | -40...+80°C |
| Terminals | | pcb |
| Insertion cycles | | A (10) |
| Max. Insertion Force total | | 100 N |
| Mounting distance | | 0, dense packing |
| Resistance to soldering heat | | 270°C / 10 s |
| Weight | | 3 g |
| Packaging unit | | 100 pcs |



Socket with PCB terminals

| Type | Part Number |
|--|-------------|
| RP 78 601 Socket with PCB terminals, pinning 3.5 mm | 8-1393234-4 |
| RP 78 602 Socket with PCB terminals, pinning 5 mm | 8-1393234-5 |

Accessories for RP 78 601, RP 78 602

| Type | Part Number |
|--|-------------|
| RT 16 041 Plastic retaining clip RT, relay height 15.7 mm | 3-1393161-4 |
| RT 28 516 Metal retaining clip RT, relay height 15.7 mm | 1419108-7 |

*) For 1 pole relays (16 A) the relay terminals 11-21, 12-22 and 14-24 have to be bridged on the PCB.