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PLC-INTERFACE, consisting of PLC-BPT.../21 basic terminal block with Push-in connection and plug-in miniature relay with power contact and manual operation, 1 changeover contact, 230 V AC/220 V DC input voltage

The figure shows the 24 V DC version

## Why buy this product

- Slim design
- Efficient connection to system cabling using V8 adapter
- ☑ RT III sealed relay
- Safe isolation according to DIN EN 50178 between coil and contact
- ☑ Integrated input circuit and interference suppression circuit



# **Key Commercial Data**

| Packing unit         | 1               |
|----------------------|-----------------|
| GTIN                 | 4 055626 378039 |
| GTIN                 | 4055626378039   |
| Custom tariff number | 85364900        |

## Technical data

## Note

| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---|

#### **Dimensions**

| Width  | 6.2 mm |
|--------|--------|
| Height | 80 mm  |



# Technical data

## **Dimensions**

|   | Depth | 94 mm |
|---|-------|-------|
| _ |       |       |

## Ambient conditions

| Ambient temperature (operation)         | -40 °C 55 °C |
|---|--------------|
| Ambient temperature (storage/transport) | -40 °C 85 °C |

## Coil side

| Nominal input voltage U <sub>N</sub>    | 230 V AC                                     |
|---|--|
|   | 220 V DC                                     |
| Typical input current at U <sub>N</sub> | $3.2 \text{ mA} (at U_N = 230 \text{ V AC})$ |
|   | 3 mA (at U <sub>N</sub> = 220 V DC)          |
| Typical response time                   | 7 ms   |
| Typical release time                    | 15 ms  |
| Protective circuit                      | Bridge rectifier Bridge rectifier            |
| Operating voltage display               | Yellow LED                                   |
| Power dissipation for nominal condition | 0.74 W                                       |

# Contact side

| Contact type   | 1 PDT   |
|--|---|
| Type of switch contact                                 | Single contact  |
| Contact material                                       | AgSnO   |
| Maximum switching voltage                              | 250 V AC/DC (The separating plate PLC-ATP should be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC orFBST 500) |
| Minimum switching voltage                              | 5 V (at 100 mA)   |
| Min. switching current                                 | 10 mA (at 12 V)   |
| Maximum inrush current                                 | 10 A (4 s)  |
| Limiting continuous current                            | 6 A   |
| Interrupting rating (ohmic load) max.                  | 140 W (at 24 V DC)  |
|  | 20 W (at 48 V DC)   |
|  | 18 W (at 60 V DC)   |
|  | 23 W (at 110 V DC)  |
|  | 40 W (at 220 V DC)  |
|  | 1500 VA (for 250 V AC)  |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2 A (at 24 V, DC13)   |
|  | 0.2 A (at 110 V, DC13)  |
|  | 0.1 A (at 220 V, DC13)  |
|  | 3 A (at 24 V, AC15)   |
|  | 3 A (at 120 V, AC15)  |



# Technical data

## Contact side

|                            | 3 A (at 230 V, AC15) |
|----------------------------|----------------------|
| Connection data input side |                      |

| Connection name                  | Coil side          |
|----------------------------------|--------------------|
| Connection method                | Push-in connection |
| Stripping length                 | 8 mm               |
| Conductor cross section solid    | 0.14 mm² 2.5 mm²   |
| Conductor cross section flexible | 0.14 mm² 2.5 mm²   |
| Conductor cross section AWG      | 26 14              |

# Connection data output side

| Connection name                  | Contact side       |
|----------------------------------|--------------------|
| Connection method                | Push-in connection |
| Stripping length                 | 8 mm               |
| Conductor cross section solid    | 0.14 mm² 2.5 mm²   |
| Conductor cross section flexible | 0.14 mm² 2.5 mm²   |
| Conductor cross section AWG      | 26 14              |

## General

| Note                                     | Separating plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC or FBST 500 |
|--|--|
| Test voltage relay winding/relay contact | 4 kV AC (50 Hz, 1 min.)  |
| Operating mode                           | 100% operating factor  |
| Degree of protection                     | RT II (flux-proof) (Relay)   |
|  | IP20 (Relay socket)  |
| Mechanical service life                  | 1 x 10 <sup>7</sup> cycles   |
| Mounting position                        | any  |
| Assembly instructions                    | In rows with zero spacing  |

# Standards and Regulations

| Designation           | Standards/regulations                         |
|-----------------------|---|
| Standards/regulations | IEC 60664                                     |
|                       | IEC 60664A                                    |
|                       | DIN VDE 0110                                  |
|                       | DIN EN 50178/DIN VDE 0160 (in relevant parts) |
|                       | DIN EN 50178/VDE 0160                         |
|                       | IEC 60255/DIN VDE 0435 (in relevant parts)    |
| Degree of pollution   | 3   |
| Overvoltage category  | III   |



## Technical data

## Standards and Regulations

| Flammability rating according to UL 94 | V0           |
|--|--------------|
| Conformance                            | CE-compliant |

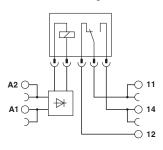
## **Environmental Product Compliance**

| China RoHS | Environmentally Friendly Use Period = 50  |
|------------|---|
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

# **Drawings**

# 

# Circuit diagram



## Interrupting rating

# Articles in set

Relay socket - PLC-BPT-230UC/21 - 2900281



6.2 mm PLC basic terminal block with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 230 V AC/DC

## Single relay - REL-MR- 60DC/21/MS - 2909643



Plug-in miniature power relay, with power contact, 1 changeover contact, manual operation, 60 V DC input voltage



# Classifications

# eCl@ss

| eCl@ss 5.0 | 27371601 |
|------------|----------|
| eCl@ss 5.1 | 27371601 |
| eCl@ss 6.0 | 27371601 |
| eCl@ss 7.0 | 27371601 |
| eCl@ss 8.0 | 27371601 |
| eCl@ss 9.0 | 27371601 |

## **ETIM**

| ETIM 2.0 | EC001437 |
|----------|----------|
| ETIM 3.0 | EC001437 |
| ETIM 4.0 | EC001437 |
| ETIM 5.0 | EC001437 |
| ETIM 6.0 | EC001437 |

## **UNSPSC**

| UNSPSC 13.2 | 39122334 |
|-------------|----------|

## Accessories

Accessories

Bridge

Continuous plug-in bridge - FBST 500-PLC RD - 2966786



Continuous plug-in bridge, length: 500 mm, color: red

Continuous plug-in bridge - FBST 500-PLC BU - 2966692



Continuous plug-in bridge, length: 500 mm, color: blue



## Accessories

Continuous plug-in bridge - FBST 500-PLC GY - 2966838



Continuous plug-in bridge, length: 500 mm, color: gray

Single plug-in bridge - FBST 6-PLC RD - 2966236



Single plug-in bridge, length: 6 mm, number of positions: 2, color: red

Single plug-in bridge - FBST 6-PLC BU - 2966812



Single plug-in bridge, length: 6 mm, number of positions: 2, color: blue

Single plug-in bridge - FBST 6-PLC GY - 2966825



Single plug-in bridge, length: 6 mm, number of positions: 2, color: gray

Single plug-in bridge - FBST 8-PLC GY - 2967688



Single plug-in bridge, length: 8 mm, number of positions: 2, color: gray

Controller board



### Accessories

System connection - PLC-V8/FLK14/OUT - 2295554



V8 adapter for 8 x PLC-INTERFACE (6.2 mm); Controller: PLC system cabling of output cards; connection 1: Plug connection; connection 2: 1x IDC/FLK pin strip (14-position); number of channels: 8; control logic: positive switching

### System connection - PLC-V8/FLK14/OUT/M - 2304102



V8 adapter for 8 x PLC-INTERFACE (6.2 mm); Controller: PLC system cabling of output cards; connection 1: Plug connection; connection 2: 1x IDC/FLK pin strip (14-position); number of channels: 8; control logic: negative switching

### System connection - PLC-V8/D15S/OUT - 2296058



V8 adapter for 8 x PLC-INTERFACE (6.2 mm); Controller: PLC system cabling of output cards; connection 1: Plug connection; connection 2: 1x D-SUB pin strip (15-position); number of channels: 8; control logic: positive switching

#### System connection - PLC-V8/D15B/OUT - 2296061



V8 adapter for 8 x PLC-INTERFACE (6.2 mm); Controller: PLC system cabling of output cards; connection 1: Plug connection; connection 2: 1x D-SUB socket strip (15-position); number of channels: 8; control logic: positive switching

#### DIN rail

DIN rail, unperforated - NS 35/ 7,5 V2A UNPERF 2000MM - 0801377

DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

## DIN rail perforated - NS 35/7,5 PERF 2000MM - 0801733

DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm



## Accessories

DIN rail, unperforated - NS 35/7,5 CU UNPERF 2000MM - 0801762



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, unperforated, Width: 35 mm, Height: 15 mm, Length: 2000 mm, Color: silver

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm



## Accessories

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm

DIN rail, unperforated - NS 35/7,5 UNPERF 2000MM - 0801681

DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

#### Labeled terminal marker

Zack marker strip - ZB 6,LGS:FORTL.ZAHLEN - 1051016



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

### Partition plate

Separating plate - PLC-ATP BK - 2966841



Separating plate, 2 mm thick, required at the start and end of a PLC terminal strip. Furthermore, it is used for: visual separation of groups, safe isolation of different voltages of neighboring PLC relays in acc. with DIN VDE 0106-101, isolation

#### Power module

Power terminal block - PLC-ESK GY - 2966508



Power terminal block, for the input of up to four potentials, for mounting on NS 35/7.5



### Accessories

Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

## Terminal marking

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

Zack marker strip - ZB 6/WH-100:UNBEDRUCKT - 5060935



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

Marker for terminal blocks - UC-TM 6 - 0818085



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 5.6 x 10.5 mm

Marker for terminal blocks - UCT-TM 6 - 0828736



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 5.6 x 10.5 mm



## Accessories

## Spare parts

Relay socket - PLC-BPT-230UC/21 - 2900281



6.2 mm PLC basic terminal block with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 230 V AC/DC

Single relay - REL-MR- 60DC/21/MS - 2909643



Plug-in miniature power relay, with power contact, 1 changeover contact, manual operation, 60 V DC input voltage

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