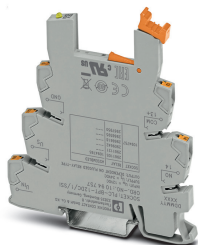


Relay base - PLC-BPT-12DC/1/SSI - 1094757


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6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, internal amplifier circuit, and an appropriate auxiliary supply for weak signal sources, 12 V DC nominal input voltage



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| GTIN |  4 055626 918884 |
| GTIN | 4055626918884 |
| Weight per Piece (excluding packing) | 32.120 g |
| Custom tariff number | 85366990 |
| Country of origin | Germany |
| Sales Key | CK6231 |

Technical data

Note

| | |
|--------------|---|
| Type of note | Notes on operation |
| Note | Do not connect adjacent channels to SELV/ PELV and voltages dangerous to the touch. |
| Type of note | Notes on operation |
| Note | The outputs are not suitable for switching different outer conductors with appropriate switching output (applies to the AC optocoupler variants and relays). |
| Type of note | Notes on operation |
| Note | The system installer must ensure the touch protection of the product (at voltages > 25 V AC/60 V DC). The product is a built-in device without protection against direct contact. |
| Type of note | Notes on operation |
| Note | At least one functional insulation against adjacent modules is complied with in the support rail direction. |

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Technical data

Note

| | |
|--------------|---|
| | If the application has higher requirements on the insulation (basic or reinforced insulation), then these must be realized through suitable measures (e. g., partition plates). |
| Type of note | Notes on operation |
| Note | Do not use to separate SELV/PELV circuits from other circuits, because safe isolation is not guaranteed. (applies to the optocoupler variants) |

Dimensions

| | |
|--------|--------|
| Width | 6.2 mm |
| Height | 80 mm |
| Depth | 94 mm |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -25 °C ... 60 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Maximum altitude | ≤ 2000 m |
| Degree of protection | IP20 |

Input data

| | |
|--|--------------------------|
| Rated control circuit supply voltage U_S | 24 V DC |
| Voltage range with reference to U_S | 0.8 ... 1.2 |
| Rated control supply current I_S | 9 mA |
| Rated actuating current I_C | 1 mA |
| Rated control circuit supply voltage U_S | 24 V DC |
| Voltage range with reference to U_S | 0.8 ... 1.2 |
| Rated control supply current I_S | ≥ 8 mA (depends on type) |
| Nominal input voltage U_N | 12 V DC |
| Input voltage range in reference to U_N | 0.8 ... 1.2 |
| Status display | Yellow LED |
| Surge voltage protection | > 33 V |

Output data

| | |
|---------------------------------------|-------------------------------|
| Fitting of components | REL-MR-24DC/21 |
| Contact type | Single contact, 1 N/O contact |
| Contact material | AgSnO |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 12 V AC/DC |
| Limiting continuous current | 6 A |
| Maximum inrush current | on request |
| Min. switching current | 10 mA |
| 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) |

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Technical data

Output data

| | |
|--|--|
| | 40 W (at 220 V DC) |
| | 1500 VA (for 250 V AC) |
| Switching capacity min. | 120 mW |
| Fitting of components | REL-MR-24DC/21AU |
| Contact type | Single contact, 1 N/O contact |
| Contact material | AgSnO, hard gold-plated |
| Note | If the specified maximum values are exceeded, the gold plating is destroyed. The maximum values of the power contact relay are then valid. This can result in a shorter service life than with a pure power contact. |
| Maximum switching voltage | 30 V AC |
| | 36 V DC |
| Minimum switching voltage | 100 mV |
| Limiting continuous current | 50 mA |
| Maximum inrush current | 50 mA |
| Min. switching current | 1 mA |
| Interrupting rating (ohmic load) max. | 1.2 W (at 24 V DC) |
| Switching capacity min. | 100 µW |
| Fitting of components | REL-MR-24DC/21MS |
| Contact type | Single contact, 1 N/O contact |
| Contact material | AgSnO |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 12 V AC/DC |
| Limiting continuous current | 6 A |
| Maximum inrush current | on request |
| Min. switching current | 10 mA |
| 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 min. | 120 mW |
| Fitting of components | OPT-24DC/48DC/100 |
| Maximum switching voltage | 48 V DC |
| Minimum switching voltage | 3 V DC |
| Limiting continuous current | 100 mA |
| Output circuit | 2-conductor, floating |
| Protective circuit | Reverse polarity protection |
| | Surge protection |
| Voltage drop at max. limiting continuous current | < 1 V |
| Fitting of components | OPT-24DC/24DC/2 |

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Technical data

Output data

| | |
|--|---|
| Maximum switching voltage | 33 V DC |
| Minimum switching voltage | 3 V DC |
| Limiting continuous current | 3 A |
| Output circuit | 2-conductor, floating |
| Protective circuit | Reverse polarity protection |
| | Surge protection |
| Voltage drop at max. limiting continuous current | < 200 mV |
| Fitting of components | OPT-24DC/230AC/1 |
| Maximum switching voltage | 253 V AC (Partition plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal points in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...) |
| Minimum switching voltage | 24 V AC |
| Limiting continuous current | 0.75 A |
| Maximum inrush current | 30 A (10 ms) |
| Output circuit | 2-conductor, floating |
| Protective circuit | RCV circuit |
| | Surge protection |
| Voltage drop at max. limiting continuous current | < 1 V |
| Leakage current | < 1 mA |
| Max. load value | 4.5 A ² s |

General

| | |
|-----------------------|---------------------------|
| Operating mode | 100% operating factor |
| Color | gray |
| Mounting position | any |
| Assembly instructions | In rows with zero spacing |

Connection data

| | |
|----------------------------------|--|
| Connection name | Input side |
| Connection method | Push-in connection |
| Stripping length | 10 mm |
| Conductor cross section solid | 0.14 mm ² ... 2.5 mm ² |
| Conductor cross section flexible | 0.14 mm ² ... 2.5 mm ² |
| | 0.2 mm ² ... 2.5 mm ² (Single ferrule) |
| | 2x 0.5 mm ² ... 1 mm ² (TWIN ferrule) |
| Conductor cross section AWG | 26 ... 14 |

Connection data 2

| | |
|-------------------------------|--|
| Connection name | Output side |
| Connection method | Push-in connection |
| Stripping length | 10 mm |
| Conductor cross section solid | 0.14 mm ² ... 2.5 mm ² |

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Technical data

Connection data 2

| | |
|----------------------------------|--------------------------------------|
| Conductor cross section flexible | 0.14 mm² ... 2.5 mm² |
| | 0.2 mm² ... 2.5 mm² (Single ferrule) |
| | 2x 0.5 mm² ... 1 mm² (TWIN ferrule) |
| Conductor cross section AWG | 26 ... 14 |

Standards and Regulations

| | |
|--------------------------|--|
| Designation | Air clearances and creepage distances between the power circuits |
| Standards/regulations | DIN EN 50178 |
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 6 kV |
| Insulation | Safe isolation, reinforced insulation |
| Pollution degree | 2 |
| Overvoltage category | III |

Conformance/approvals

| | |
|----------------|----------------------------|
| Designation | Corrosive gas test |
| Identification | ISA-S71.04. G3 Harsh Group |
| | EN 60068-2-60 |

Environmental Product Compliance

| | |
|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 years |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27371603 |
| eCl@ss 11.0 | 27371603 |
| eCl@ss 8.0 | 27371603 |
| eCl@ss 9.0 | 27371603 |

ETIM

| | |
|----------|----------|
| ETIM 5.0 | EC001456 |
|----------|----------|

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Approvals

Ex Approvals

Approval details

UL Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

FILE E 238705

cUL Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

FILE E 238705

EAC



RU*C-
DE.*08.B.00010

EAC



RU D-
DE.B*00573/18

cULus Recognized



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

Relay base - PLC-BPT-12DC/1/SSI - 1094757

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

DIN rail

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Accessories

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



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Accessories

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

End cap - NS 35/ 7,5 CAP - 1206560



DIN rail end piece, for DIN rail NS 35/7.5

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



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Accessories

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Accessories

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

End cap - NS 35/15 CAP - 1206573



DIN rail end piece, for DIN rail NS 35/15

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



DIN rail, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

Labeled terminal marker

Zack marker strip - ZB 6 CUS - 0824992



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Accessories

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 size: 6.15 x 10.5 mm, Number of individual labels: 10

Zack marker strip - ZB 6,QR:FORTL.ZAHLEN - 1051029



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: 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 size: 6.15 x 10.5 mm, Number of individual labels: 10

Zack marker strip - ZB 6,LGS:GLEICHE ZAHLEN - 1051032



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: Identical numbers 1 or 2, etc. up to 100, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Marker for terminal blocks - ZB 6,LGS:L1-N,PE - 1051414



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Marker for terminal blocks - ZB 6,LGS:U-N - 1051430



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: U, V, W, N, GND, U, V, W, N, GND, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Accessories

Marker for terminal blocks - UC-TM 6 CUS - 0824589



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 80

Marker for terminal blocks - UCT-TM 6 CUS - 0829602



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 60

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

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

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Accessories

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Marker for terminal blocks - UC-TM 6 - 0818085



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 80

Marker for terminal blocks - UCT-TM 6 - 0828736



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 60

Necessary add-on products

Single relay - REL-MR- 24DC/21 - 2961105



Plug-in miniature power relay, with power contact, 1 PDT, input voltage 24 V DC

Single relay - REL-MR- 24DC/21AU - 2961121



Plug-in miniature power relay, with multi-layer gold contact, 1 PDT, input voltage 24 V DC

Relay base - PLC-BPT-12DC/1/SSI - 1094757

Accessories

Single relay - REL-MR- 24DC/21/MS - 2909642



Plug-in miniature power relay, with power contact, 1 changeover contact, manual operation, 24 V DC input voltage

Miniature solid-state relay - OPT-24DC/ 48DC/100 - 2966618



Plug-in miniature solid-state relay, input solid-state relay, 1 N/O contact, input: 24 V DC, output: 3 - 48 V DC/100 mA

Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595



Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 V DC, output: 3 ... 33 V DC/3 A

Miniature solid-state relay - OPT-24DC/230AC/ 1 - 2967950



Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 V DC, output: 24 - 253 V AC/0.75 A
