


Extension module - PLC-V8C/SC-24DC/EM - 2903095

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PLC logic extension logic module with 16 I/Os for plug-in connection to 8 PLC-INTERFACE terminal blocks for extending the basic module (a maximum of two extension modules can be connected to a basic module), screw connection

Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 STK |
| GTIN |  4 046356 712835 |
| GTIN | 4046356712835 |
| Weight per Piece (excluding packing) | 120.000 g |
| Weight per piece (including packing) | 120.000 g |
| Custom tariff number | 85389099 |
| Country of origin | Germany |
| Note | Made to Order (non-returnable) |

Technical data

Note

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

Power supply

| | |
|--------------------------------|-----------------------------|
| Supply voltage | 24 V DC |
| Supply voltage range | 19.2 V DC ... 26.4 V DC |
| Maximum input current at U_N | 65 mA |
| Protective circuit | Reverse polarity protection |
| | Surge protection |
| Status display | Green LED |

Input data (digital)

| | |
|--------------------------|------------------------------|
| Number of inputs | 8 (2 configurable as analog) |
| Description of the input | EN 61131-2, type 3 |

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Technical data

Input data (digital)

| | |
|--------------------------|-------------|
| Input voltage | 24 V DC |
| Signal level "0" signal | < 5 V |
| Signal level "1" signal | > 11 V |
| Input current "0" signal | < 1 mA |
| Input current "1" signal | typ. 2.5 mA |
| Status display | Yellow LED |

Input data (analog)

| | |
|---------------------|--|
| Number of inputs | 2 (IN6 and IN7 are configurable as analog) |
| Input voltage range | 0 V ... 10 V |
| Input resistance | > 3.5 kΩ |

Input data (PLC-INTERFACE)

| | |
|-----------------------------|---|
| Number of inputs | ≤ 8 |
| Description of the input | technical data depends on the PLC-INTERFACE terminal block used |
| Input voltage | 19 V DC |
| Typical current consumption | 4 mA |
| Input resistance | < 100 mΩ |

Output data

| | |
|------------------------|---------|
| Number of outputs | ≤ 8 |
| Nominal output voltage | 24 V DC |
| Nominal current | 9 mA |

General

| | |
|-----------------------|---|
| Color | green |
| Mounting position | any |
| Assembly instructions | can be plugged onto 8 x PLC-INTERFACE terminal blocks |
| Operating mode | 100% operating factor |
| Degree of protection | IP20 |

Connection data (supply and digital inputs)

| | |
|----------------------------------|--|
| Connection method | Screw connection |
| Stripping length | 7 mm |
| Screw thread | M2 |
| Conductor cross section solid | 0.14 mm ² ... 1.5 mm ² |
| Conductor cross section flexible | 0.14 mm ² ... 1.5 mm ² |
| | 0.25 mm ² ... 0.5 mm ² (Ferrule with plastic sleeve) |
| | 0.25 mm ² ... 1.5 mm ² (Ferrules without plastic sleeve) |
| Conductor cross section AWG | 28 ... 16 |
| Number of connections | 1 |
| Number of positions | 10 |
| Note | Device supply and 8 x inputs |

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Technical data

Connection data (PLC V8C bus)

| | |
|-----------------------|------------------------------------|
| Connection method | Insulation displacement connection |
| Number of connections | 1 |
| Number of positions | 4 |

Ambient conditions

| | |
|--|------------------|
| Ambient temperature (operation) | -20 °C ... 45 °C |
| Ambient temperature (storage/transport) | -20 °C ... 70 °C |
| Max. permissible relative humidity (operation) | 95 % |

Dimensions

| | |
|--------|--------|
| Width | 50 mm |
| Height | 106 mm |
| Depth | 87 mm |

Standards and Regulations

| | |
|--------------------------|--|
| Designation | Air clearances and creepage distances between the power circuits |
| Standards/regulations | DIN EN 50178 |
| Rated insulation voltage | 50 V |
| Rated surge voltage | 0.8 kV |
| Insulation | Basic insulation |
| Degree of pollution | 2 |
| Overvoltage category | III |
| Conformance | CE-compliant |

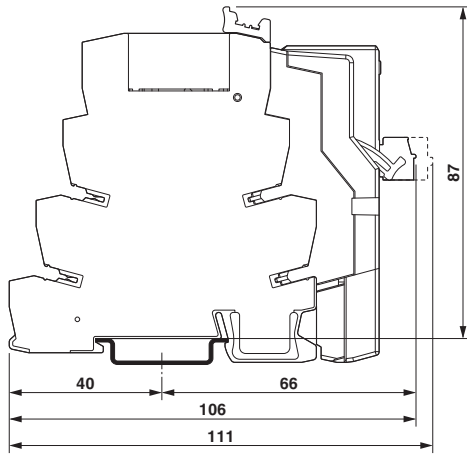
Environmental Product Compliance

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

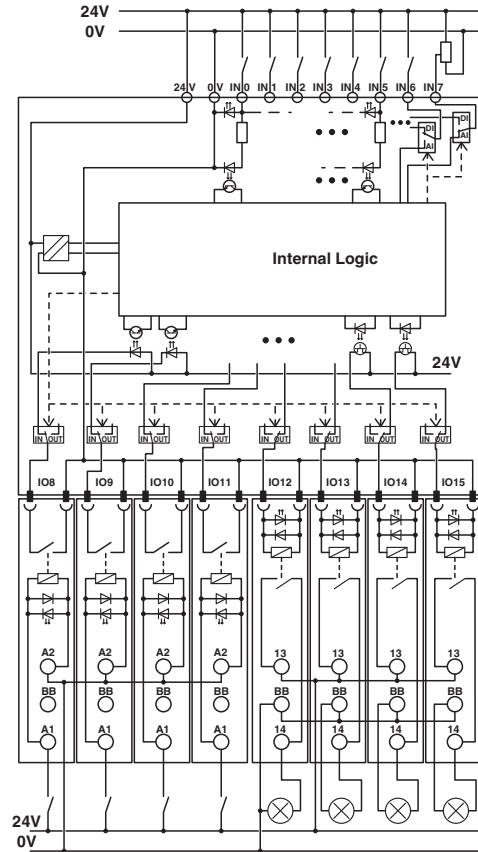
Drawings

Extension module - PLC-V8C/SC-24DC/EM - 2903095

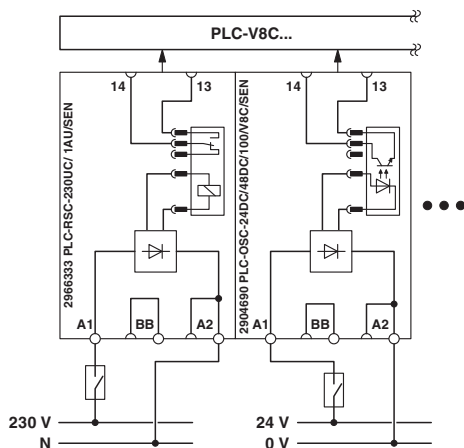
Dimensional drawing



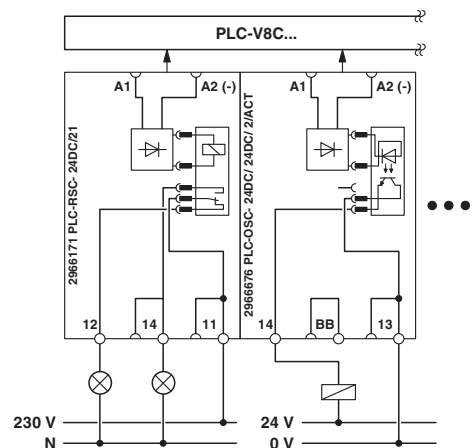
Circuit diagram



Circuit diagram



Circuit diagram

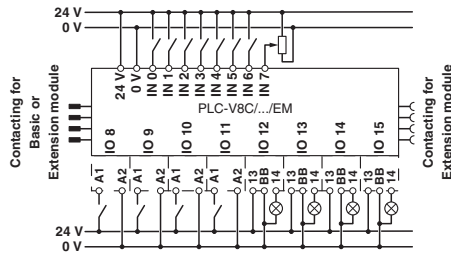


Basic circuit diagram: inputs via PLC-INTERFACE with the example of one input terminal block with relay (230 V AC) and one input terminal block with solid-state relay (24 V DC).

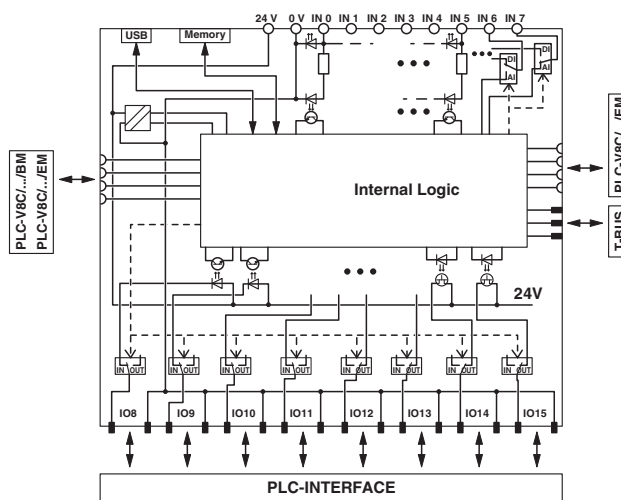
Basic circuit diagram: outputs via PLC-INTERFACE with the example of an output terminal block with relay, 1 PDT, and an output terminal block with solid-state relay.

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Connection diagram



Circuit diagram



Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27242216 |
| eCl@ss 4.1 | 27242216 |
| eCl@ss 5.0 | 27242216 |
| eCl@ss 5.1 | 27242216 |
| eCl@ss 6.0 | 27242216 |
| eCl@ss 7.0 | 27242216 |
| eCl@ss 8.0 | 27242216 |
| eCl@ss 9.0 | 27242216 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC001417 |
| ETIM 3.0 | EC001417 |
| ETIM 4.0 | EC001417 |
| ETIM 5.0 | EC001417 |
| ETIM 6.0 | EC001417 |

Extension module - PLC-V8C/SC-24DC/EM - 2903095

Classifications

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211916 |
| UNSPSC 7.0901 | 39121542 |
| UNSPSC 11 | 39121542 |
| UNSPSC 12.01 | 39121421 |
| UNSPSC 13.2 | 39122329 |

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approval details

| | | | |
|-----------|--|---|---------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
|-----------|--|---|---------------|

| | | | |
|------------|--|---|---------------|
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
|------------|--|---|---------------|

| | | | |
|--------------|--|--|--|
| cULus Listed | | | |
|--------------|--|--|--|

Accessories

Accessories

Labeled terminal marker

Zack Marker strip, flat - ZBF 19,7 CUS - 0825021



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: snap into flat marker groove, for terminal block width: 19.7 mm, Lettering field: 5.15 x 19.7 mm

Extension module - PLC-V8C/SC-24DC/EM - 2903095

Accessories

Relay Module

Relay Module - PLC-RPT- 24DC/21 - 2900299



PLC-INTERFACE, consisting of PLC-BPT.../21 basic terminal block with push-in technology and plug-in miniature relay with power contact, for mounting on NS 35/7,5 DIN rails, 1 PDT, input voltage: 24 V DC

Relay Module - PLC-RPT- 24DC/21AU - 2900306



PLC-INTERFACE, consisting of PLC-BPT.../21 basic terminal block with push-in connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

Relay Module - PLC-RPT- 24DC/ 1/ACT - 2900312



PLC-INTERFACE for output functions, consisting of PLC-BPT.../ACT basic terminal block with push-in connection and plug-in miniature relay with power contact, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input voltage 24 V DC

Switch - PLC-RPT- 24UC/ 1/S/H - 2900328



PLC-INTERFACE with switch (operation by hand) and integrated power contact relay for the "Manual, Zero and Automatic" functions, with push-in connection, for mounting on DIN rail NS 35/7.5, one N/O contact, input voltage 24 V AC/DC

Relay Module - PLC-RSC- 24DC/21 - 2966171



PLC relay, consisting of base terminal block PLC-BSC.../21 with screw connection and pluggable miniature relay with power contact, for assembly on DIN rail NS 35/7.5, 1 PDT, input voltage 24 V DC

Extension module - PLC-V8C/SC-24DC/EM - 2903095

Accessories

Relay Module - PLC-RSC- 24DC/21AU - 2966265



PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

Switch - PLC-RSC- 24UC/ 1/S/H - 2982236



PLC-INTERFACE with switch (operation by hand) for the "Manual, Zero, and Automatic" functions, with screw connection and integrated power contact relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input voltage 24 V AC/DC

Relay Module - PLC-RPT- 24DC/ 1AU/SEN - 2900313



PLC-INTERFACE for input functions, consisting of PLC-BPT.../SEN basic terminal block with push-in connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input voltage 24 V DC

Relay Module - PLC-RPT-120UC/ 1AU/SEN - 2900314



PLC-INTERFACE for input functions, consisting of PLC-BPT.../SEN basic terminal block with push-in connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input voltage 120 V AC/110 V DC

Relay Module - PLC-RPT-230UC/ 1AU/SEN - 2900315



PLC-INTERFACE for input functions, consisting of PLC-BPT.../SEN basic terminal block with push-in connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input voltage 230 V AC/220 V DC

Extension module - PLC-V8C/SC-24DC/EM - 2903095

Accessories

Relay Module - PLC-RSC- 24DC/ 1AU/SEN - 2966317



PLC-INTERFACE for input functions, consisting of PLC-BSC.../SEN basic terminal block with screw connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input voltage 24 V DC

Relay Module - PLC-RSC-120UC/ 1AU/SEN - 2966320



PLC-INTERFACE for input functions, consisting of PLC-BSC.../SEN basic terminal block with screw connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input voltage 120 V AC/110 V DC

Relay Module - PLC-RSC-230UC/ 1AU/SEN - 2966333



PLC-INTERFACE for input functions, consisting of PLC-BSC.../SEN basic terminal block with screw connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input voltage 230 V AC/220 V DC

Relay socket

Relay base - PLC-BSC- 5DC/ 1/SEN - 2980267



6.2 mm PLC basic terminal block for output functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 5 V DC

Relay base - PLC-BPT- 24DC/21 - 2900445



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 24 V DC

Extension module - PLC-V8C/SC-24DC/EM - 2903095

Accessories

Relay base - PLC-BPT- 24DC/ 1/SEN - 2900262



6.2 mm PLC basic terminal block for input functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

Relay base - PLC-BSC- 24DC/21 - 2966016



6.2 mm PLC basic terminal block with screw connection, without relays or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

Relay base - PLC-BSC- 24DC/ 1/SEN - 2966061



6.2 mm PLC basic terminal block for input functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

Screwdriver tools

Screwdriver - SZS 0,4X2,5 VDE - 1205037



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

Solid-state relay module

Solid-state relay module - PLC-OPT- 24DC/ 48DC/100 - 2900352



PLC-INTERFACE, consisting of PLC-BPT.../21 basic terminal block with push-in connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 - 48 V DC/100 mA

Extension module - PLC-V8C/SC-24DC/EM - 2903095

Accessories

Solid-state relay module - PLC-OPT- 24DC/ 24DC/2 - 2900364



PLC-INTERFACE, consisting of PLC-BPT.../21 basic terminal block with push-in connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 - 33 V DC/3 A

Solid-state relay module - PLC-OPT- 24DC/230AC/1 - 2900369



PLC-INTERFACE, consisting of PLC-BPT.../21 basic terminal block with push-in connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 24 - 253 V AC/0.75 A

Solid-state relay module - PLC-OPT- 24DC/ 24DC/2/ACT - 2900376



PLC-INTERFACE for output functions, consisting of PLC-BPT.../ACT basic terminal block with push-in connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 - 33 V DC/3 A

Solid-state relay module - PLC-OPT- 24DC/300DC/1 - 2900383



PLC-INTERFACE, integrated solid-state relay, with push-in connection, for mounting on NS 35/7,5 DIN rails, input: 24 V DC, output: 12 - 300 V DC/1 A

Solid-state relay module - PLC-OPT- 24DC/ 24DC/10/R - 2900398



PLC-INTERFACE with confirmation contact, consisting of basic terminal block with push-in connection and integrated miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 - 33 V DC/10 A

Extension module - PLC-V8C/SC-24DC/EM - 2903095

Accessories

Solid-state relay module - PLC-OPT- 24DC/ 48DC/500/W - 2900378



PLC-INTERFACE with electronic PDT contact, consisting of PLC-BPT.../21 basic terminal block with push-in connection and integrated miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input: 24 V DC, output: 3 - 48 V DC/500 mA

Solid-state relay module - PLC-OPT- 24DC/TTL - 2900363



PLC-INTERFACE for TTL signal, consisting of PLC-O.../TTL basic terminal block with push-in connection and integrated solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: TTL (5 V DC)

Solid-state relay module - PLC-OSC- 24DC/ 48DC/100 - 2966728



PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 - 48 V DC/100 mA

Solid-state relay module - PLC-OSC- 24DC/ 24DC/ 2 - 2966634



PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 - 33 V DC/3 A

Solid-state relay module - PLC-OSC- 24DC/230AC/ 1 - 2967840



PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 24 - 253 V AC/0.75 A

Extension module - PLC-V8C/SC-24DC/EM - 2903095

Accessories

Solid-state relay module - PLC-OSC- 24DC/ 24DC/ 2/ACT - 2966676



PLC-INTERFACE for output functions, consisting of PLC-BSC.../ACT basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 - 33 V DC/3 A

Solid-state relay module - PLC-OSC- 24DC/230AC/ 1/ACT - 2967947



PLC-INTERFACE for output functions, consisting of PLC-BSC.../ACT basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 24 ... 253 V AC/0.75 A

Solid-state relay module - PLC-OSC- 24DC/300DC/ 1 - 2980678



PLC-INTERFACE, integrated solid-state relay, with screw connection, for mounting on NS 35/7,5 DIN rails, input: 24 V DC, output: 12 - 300 V DC/1 A

Solid-state relay module - PLC-OSC- 24DC/ 24DC/ 10/R - 2982702



PLC solid state relay with screw connection and short-circuit-proof DC voltage output, input: 24 V DC, output: 3-33 V DC/10 A

Solid-state relay module - PLC-OSC- 24DC/ 48DC/500/W - 2980636



PLC electronic PDT, integrated optocoupler, with screw connection, for mounting on DIN rail NS 35/7.5, input: 24 V DC, output: 3 - 48 V DC/500 mA

Extension module - PLC-V8C/SC-24DC/EM - 2903095

Accessories

Solid-state relay module - PLC-OSC- 24DC/TTL - 2982728



PLC solid-state relay with screw connection, for mounting on DIN rail NS 35/7.5, input: 24 V DC, output: TTL (5 V DC)

Solid-state relay module - PLC-OPT-24DC/48DC/100/V8C/SEN - 2904693



PLC-INTERFACE for input functions with PLC logic, with push-in connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7.5, 1 N/O contact, input: 24 V DC, output: 3 - 48 V DC/100 mA

Solid-state relay module - PLC-OPT-120UC/48DC/100/V8C/SEN - 2904694



PLC-INTERFACE for input functions with PLC logic, with push-in connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7.5, 1 N/O contact, input: 120 V AC/110 V DC, output: 3 - 48 V DC/100 mA

Solid-state relay module - PLC-OPT-230UC/48DC/100/V8C/SEN - 2904695



PLC-INTERFACE for input functions with PLC logic, with push-in connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7.5, 1 N/O contact, input: 230 V AC/220 V DC, output: 3 - 48 V DC/100 mA

Solid-state relay module - PLC-OSC- 24DC/48DC/100/V8C/SEN - 2904690



PLC-INTERFACE for input functions with PLC logic, with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7.5, 1 N/O contact, input: 24 V DC, output: 3 - 48 V DC/100 mA

Extension module - PLC-V8C/SC-24DC/EM - 2903095

Accessories

Solid-state relay module - PLC-OSC-120UC/48DC/100/V8C/SEN - 2904691



PLC-INTERFACE for input functions with PLC logic, with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 120 V AC/110 V DC, output: 3 - 48 V DC/100 mA

Solid-state relay module - PLC-OSC-230UC/48DC/100/V8C/SEN - 2904692



PLC-INTERFACE for input functions with PLC logic, with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 230 V AC/220 V DC, output: 3 - 48 V DC/100 mA

Terminal marking

Zack marker strips off the roll, flat - ZBF 19,7:UNBEDRUCKT - 0810627



Zack marker strips off the roll, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, Mounting type: snap into flat marker groove, for terminal block width: 19.7 mm, Lettering field: 19.7 x 5.2 mm