

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443


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PLC logic standalone logic module, generation 2, with 16 I/Os, for plug-in connection to 8 digital or analog PLC-INTERFACE terminal blocks, cannot be extended, integrated realtime clock, micro USB socket, accommodates memory block and Bluetooth adapter, push-in connection

RoHS

Key Commercial Data

Packing unit	1 STK
GTIN	 4 055626 218182
GTIN	4055626218182
Weight per Piece (excluding packing)	130.000 g
Custom tariff number	85371098
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Power supply

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 26.4 V DC
Typical input current at U _N	40 mA
Maximum input current at U _N	160 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
Input voltage	24 V DC
Signal level "0" signal	< 5 V
Signal level "1" signal	> 11 V

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Technical data

Input data (digital)

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

Realtime clock accuracy	±2 s/d
Realtime clock buffer time	96 h (Capacitor)
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	Push-in connection
Stripping length	9 mm
Conductor cross section solid	0.14 mm² ... 1.5 mm²
Conductor cross section flexible	0.14 mm² ... 1.5 mm²
	0.25 mm² ... 0.5 mm² (Ferrule with plastic sleeve)
	0.25 mm² ... 1.5 mm² (Ferrules without plastic sleeve)
Conductor cross section AWG	26 ... 16
Number of connections	1
Number of positions	10
Note	Device supply and 8 x inputs

Connection data (programming interface)

Connection method	Micro USB type B
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Technical data

Connection data (programming interface)

Number of connections	1
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Connection data (memory)

Connection method	S-PORT (socket)
Number of connections	1
Number of positions	12
Note	For connecting the memory module

Ambient conditions

Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Max. permissible relative humidity (operation)	95 %

Dimensions

Width	50 mm
Height	111 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

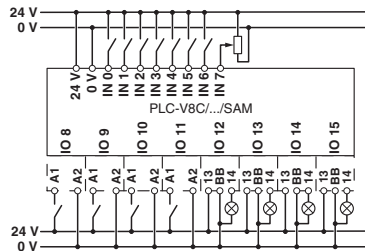
Environmental Product Compliance

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

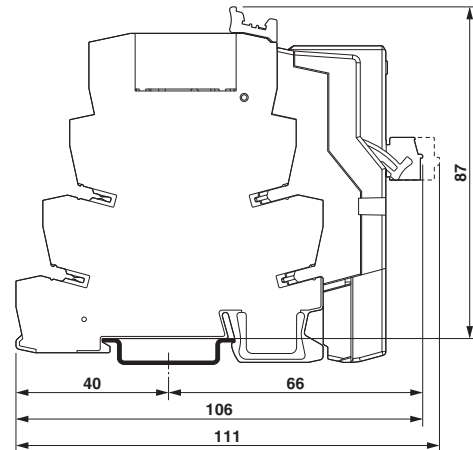
Drawings

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Connection diagram

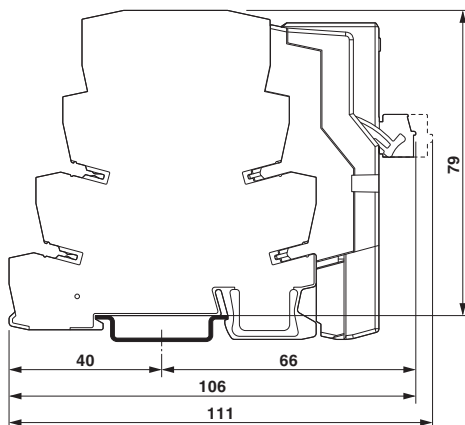


Dimensional drawing

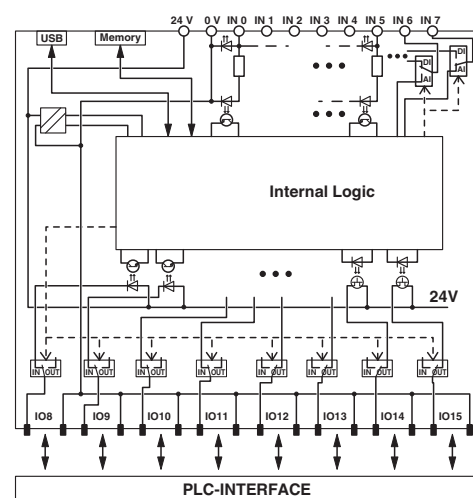


PLC logic with relay

Dimensional drawing



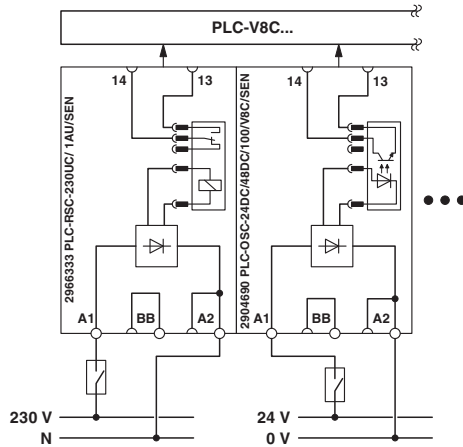
Circuit diagram



PLC logic with analogue terminals

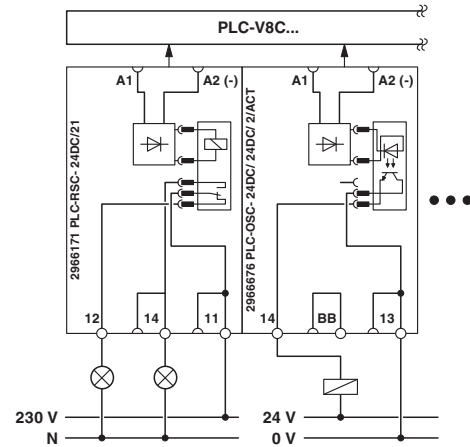
Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Circuit diagram



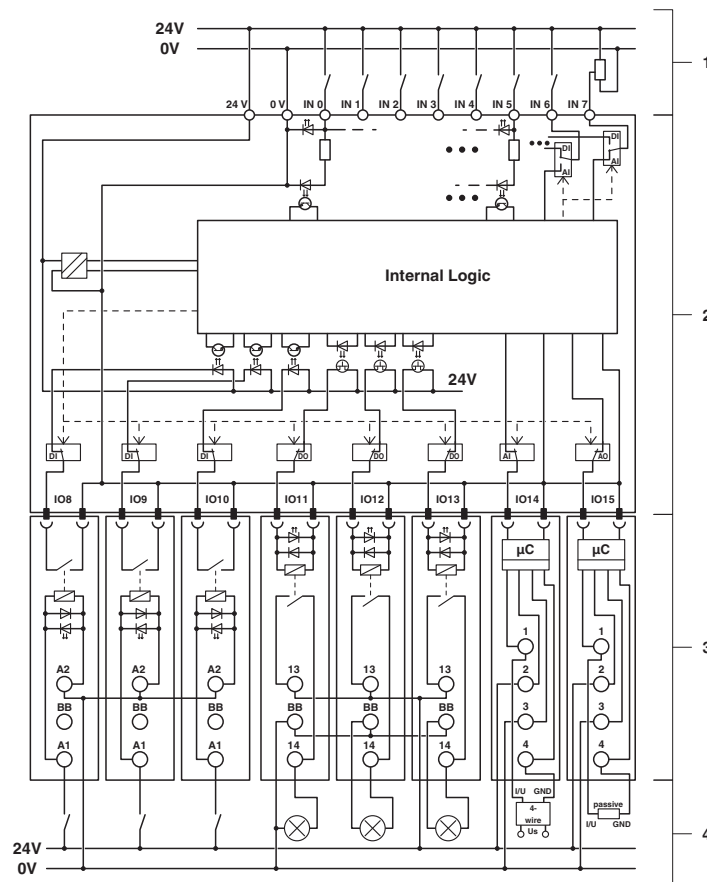
Basic circuit diagram: inputs via PLC-INTERFACE with the example of one input terminal block with relay (230 V AC) and one input terminal block with solid-state relay (24 V DC).

Circuit diagram



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.

Circuit diagram



1 Field connection via COMBICON connector
2 PLC -V8C/#

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3 PLC-INTERFACE terminal blocks

4 Field connection via PLC-INTERFACE terminal blocks

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

UNSPSC

UNSPSC 13.2	39122329
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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
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cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
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Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Approvals

cULus Listed



Accessories

Accessories

Extension module

Extension module - PLC-ASC-UI-IN - 2906916



Analog input module for PLC logic logic modules (Generation 2 only), single-channel, signal type (4 ... 20 mA, 0 ... 20 mA, 0 ... 10 V, 2 ... 10 V) can be configured via DIP switch, screw connection

Extension module - PLC-APT-UI-IN - 2906917



Analog input module for PLC logic logic modules (Generation 2 only), single-channel, signal type (4 ... 20 mA, 0 ... 20 mA, 0 ... 10 V, 2 ... 10 V) can be configured via DIP switch, Push-in connection

Extension module - PLC-ASC-PT100-IN - 2906918



Pt 100/Pt1000 temperature transducer for PLC logic logic modules (Generation 2 only), single-channel, signal type (Pt 100, Pt 1000) can be configured via DIP switch, screw connection

Extension module - PLC-APT-PT100-IN - 2906919



Pt 100/Pt1000 temperature transducer for PLC logic logic modules (Generation 2 only), single-channel, signal type (Pt 100, Pt 1000) can be configured via DIP switch, Push-in connection

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Accessories

Extension module - PLC-ASC-UI-OUT - 2906920



Analog output module for PLC logic modules (Generation 2 only), single-channel, signal type (4 ... 20 mA, 0 ... 20 mA, 0 ... 10 V, 2 ... 10 V) can be configured via DIP switch, screw connection

Extension module - PLC-APT-UI-OUT - 2906921



Analog output module for PLC logic modules (Generation 2 only), single-channel, signal type (4 ... 20 mA, 0 ... 20 mA, 0 ... 10 V, 2 ... 10 V) can be configured via DIP switch, Push-in connection

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 size: 5.15 x 19.7 mm

Memory block

Memory block - IFS-CONFSTICK - 2986122



Multi-functional memory block for the INTERFACE systemf for easy storage and backup of the configuration.

Programming adapter

Adapter - IFS-BT-PROG-ADAPTER - 2905872



Bluetooth adapter with micro USB and S-PORT interface for wireless communication with the MINI Analog, MINI Analog Pro, MACX Analog, INTERFACE system gateways, and PLC logic device series.

Programming cable

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Accessories

Connecting cable - CAB-USB A/MICRO USB B/2,0M - 2701626



Connecting cable, for connecting the controller to a PC for PC Worx and LOGIC+, USB A to micro USB B, 2 m in length.

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

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Accessories

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

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

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Accessories

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

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

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Accessories

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

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

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Accessories

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

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

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Accessories

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

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

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Accessories

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

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

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Accessories

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

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

Controller - PLC-V8C/PT-24DC/SAM2 - 2907443

Accessories

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

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 size: 19.7 x 5.2 mm