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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, screw connection



Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 218175
GTIN	4055626218175

Technical data

Dimensions

Width	50 mm
Height	44 mm
	106 mm (with relay)
Depth	82.5 mm
	87 mm (with relay)

Ambient conditions

Ambient temperature (operation)	-20 °C 50 °C
Ambient temperature (storage/transport)	-20 °C 70 °C
Max. permissible relative humidity (operation)	95 %
Degree of protection	IP20

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



Technical data

Power supply

	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
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	gray
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

Connection name	COMBICON connection
Connection method	Screw connection
Stripping length	7 mm
Screw thread	M2



Technical data

Connection data

Number of connections	1
Number of positions	10
Note	Device supply and 8 x inputs
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	28 16

Connection data 2

Connection name	Programming connection
Connection method	Micro USB type B
Number of connections	1

Connection data 3

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

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
Pollution degree	2
Overvoltage category	III

Conformance/approvals

Designation	CE
Certificate	CE-compliant
Designation	UL, USA / Canada
Identification	Class I, Div. 2, Groups A, B, C, D T4
Designation	UL, Canada
Identification	Class I, Zone 2, Ex nA IIC Gc T4 X
Designation	UL, USA
Identification	Class I, Zone 2, AEx nA IIC T4

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years



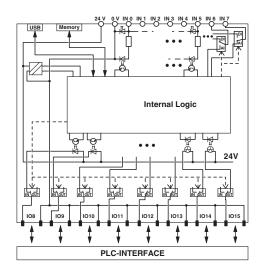
Technical data

Environmental Product Compliance

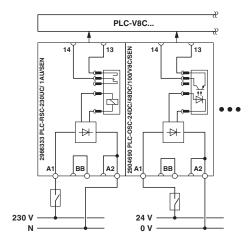
For details about hazardous substances go to tab "Downloads",
Category "Manufacturer's declaration"

Drawings

Circuit diagram

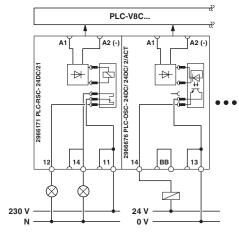


Circuit diagram



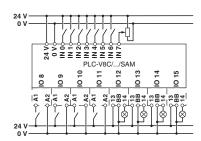
Basic circuit diagram: inputs via PLC-INTERFACE with the example of one input terminal block with relay (230 V AC) and one input terminal block with solid-state relay (24 V DC).

Circuit diagram



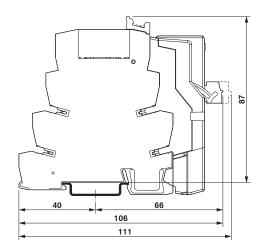
Basic circuit diagram: outputs via PLC-INTERFACE with the example of an output terminal block with relay, 1 changeover contact, and an output terminal block with solid-state relay.

Connection diagram

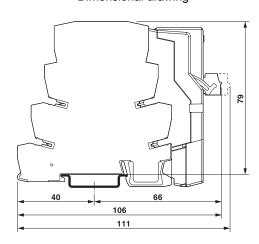




Dimensional drawing



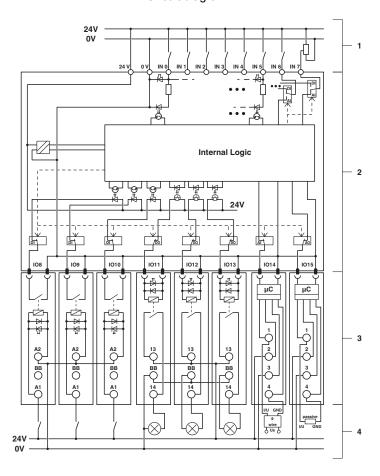
Dimensional drawing



PLC logic with analogue terminals

PLC logic with relay

Circuit diagram



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



3 PLC-INTERFACE terminal blocks 4 Field connection via PLC-INTERFACE terminal blocks

Classifications

eCl@ss

eCl@ss 10.0.1	27242216
eCl@ss 11.0	27242216
eCl@ss 4.0	27242216
eCl@ss 4.1	27242216
eCl@ss 5.0	27242700
eCl@ss 5.1	27242700
eCl@ss 6.0	27242200
eCl@ss 7.0	27242216
eCl@ss 9.0	27242216

ETIM

ETIM 2.0	EC001417
ETIM 3.0	EC001417
ETIM 4.0	EC001417
ETIM 6.0	EC001417
ETIM 7.0	EC001417

UNSPSC

UNSPSC 13.2	39122329
UNSPSC 18.0	39122329
UNSPSC 19.0	39122329
UNSPSC 20.0	39122329
UNSPSC 21.0	39122329

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed



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

FILE E 172140



Approvals

cUL Listed



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

FILE E 172140

EAC



RU*DE.*08.B.01517/19

cULus Listed



Accessories

Accessories

Data cable preassembled

Cable - IFS-V8C-RS232-DATCABLE - 1076342



Data cable for RS-232 communication between the PLC logic logic modules and the BTP 2000 device series touch panels. Cable length: 2 m

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 \dots 20 mA, 0 \dots 20 mA, 0 \dots 10 V, 2 \dots 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 \dots 20 mA, 0 \dots 20 mA, 0 \dots 10 V, 2 \dots 10 V) can be configured via DIP switch, Push-in connection



Accessories

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

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



Analog output 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-OUT - 2906921



Analog output 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

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, Number of individual labels: 5

Memory block



Accessories

Memory block - IFS-CONFSTICK - 2986122



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

Operator panel

Touch panel - BTP 2043W - 1050387



Touch panel with 10,92 cm / 4,3"-TFT-display (analog resistive (polyester)), 480 x 272 pixel(s) (WQVGA), 262144 colors, Arm9™ i.MX28, 454 MHz, 2x COM (RS-232/422/485), 1x USB 2.0, Typ A, 1x USB 2.0, Typ B, 1 x Ethernet (10/100 Mbps), RJ45, Windows® CE 6.0 and user software: Visu+. (bus system: without)

Touch panel - BTP 2070W - 1046666



Touch panel with 17.8 cm/7" TFT-display (analog resistive (polyester)), 800 x 480 pixel(s) (WVGA), 262144 colors, Arm9™ i.MX28, 454 MHz, 2x COM (RS-232/422/485), 1x USB 2.0, Typ A, 1x USB 2.0, Typ B, 1 x Ethernet (10/100 Mbps), RJ45, Windows® CE 6.0 and user software: Visu+. (bus system: without)

Touch panel - BTP 2102W - 1046667



Touch panel with 25.9 cm / 10.2" TFT-display (analog resistive (polyester)), 800 x 480 pixel(s) (WVGA), 262144 colors, Arm9™ i.MX28, 454 MHz, 2x COM (RS-232/422/485), 1x USB 2.0, Typ A, 1x USB 2.0, Typ B, 1 x Ethernet (10/100 Mbps), RJ45, Windows® CE 6.0 and user software: Visu+. (bus system: without)

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



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 connection and plug-in miniature relay with power contact, for mounting on NS 35/7,5 DIN rail, 1 changeover contact, input voltage 24 V DC

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



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



Accessories

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

Relay Module - PLC-RSC- 24DC/ 1/ACT - 2966210



PLC-INTERFACE for output functions, consisting of PLC-BSC.../ACT basic terminal block with screw 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

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



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-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-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-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-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



Accessories

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 changeover contact, input voltage 24 V DC

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



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, 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/ 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



Accessories

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

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-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-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



Accessories

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-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-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-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



Accessories

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-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-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-OSC- 24DC/ 24DC/ 10/R - 2982702



PLC-INTERFACE with checkback contact, consisting of basic terminal block with screw 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 changeover 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 changeover contact, input: 24 V DC, output: 3-48 V DC/500 mA



Accessories

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



PLC electronic changeover contact 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-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/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/V8C/SEN - 2908172



PLC-INTERFACE for input functions with PLC logic, with Push-in connection and plug-in miniature solid-state relay, for mounting on a DIN rail, 1 N/O contact, input: 24 V DC

Solid-state relay module - PLC-OSC-24DC/V8C/SEN - 2908173



PLC-INTERFACE for input functions with PLC logic, with screw connection and plug-in miniature solid-state relay, for mounting on a DIN rail, 1 N/O contact, input: 24 V DC



Accessories

Solid-state relay module - PLC-OPT-120UC/V8C/SEN - 2908174



PLC-INTERFACE for input functions with PLC logic, with Push-in connection and plug-in miniature solid-state relay, for mounting on a DIN rail, 1 N/O contact, input: 120 V AC/110 V DC

Solid-state relay module - PLC-OSC-120UC/V8C/SEN - 2908175



PLC-INTERFACE for input functions with PLC logic, with screw connection and plug-in miniature solid-state relay, for mounting on a DIN rail, 1 N/O contact, input: 120 V AC/110 V DC

Solid-state relay module - PLC-OPT-230UC/V8C/SEN - 2908176



PLC-INTERFACE for input functions with PLC logic, with Push-in connection and plug-in miniature solid-state relay, for mounting on a DIN rail, 1 N/O contact, input: 230 V AC/220 V DC

Solid-state relay module - PLC-OSC-230UC/V8C/SEN - 2908177



PLC-INTERFACE for input functions with PLC logic, with screw connection and plug-in miniature solid-state relay, for mounting on a DIN rail, 1 N/O contact, input: 230 V AC/220 V DC

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: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 19.7 mm, lettering field size: 19.7 x 5.2 mm, Number of individual labels: 5



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