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

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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

Why buy this product

☑ Resistant to vibrations and shocks

☑ Wear-free switching with no contact bounce

☑ Protective circuit in input and output

☑ Status indicator

☑ DC voltage outputs of up to 300 V DC/1 A or up to 24 V DC/10 A

☑ Electronic PDT output of up to 48 V DC/500 mA

☑ Option of bridging adjacent modules

Key Commercial Data

Packing unit	10 pc
GTIN	4 046356 155748
Weight per Piece (excluding packing)	38.02 g
Custom tariff number	85364190
Country of origin	Germany

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
Depth	86 mm

Ambient conditions

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Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	IP20

Input data

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	0.8 ... 1.2
Switching threshold "0" signal in reference to U_N	≤ 0.4
Switching threshold "1" signal in reference to U_N	≥ 0.8
Typical input current at U_N	3 mA
Typical response time	0.15 ms
Typical turn-off time	1 ms
Operating voltage display	Yellow LED
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode
Transmission frequency	100 Hz

Output data

Designation	short-circuit-proof DC voltage output
Output voltage range	5 V DC ... 33 V DC
Limiting continuous current	10 A (see derating curve)
Maximum inrush current	100 A (t = 20 ms)
Voltage drop at max. limiting continuous current	≤ 50 mV
Output circuit	3-conductor, ground-referenced
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode
Designation	Alarm output
Output voltage range	3 V DC ... 33 V DC (High active)
Limiting continuous current	100 mA
Voltage drop at max. limiting continuous current	< 1.2 V
Indication	Red LED
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode
	Suppressor diode

Connection data, input side

Connection name	Input side
Connection method	Screw connection
Stripping length	8 mm

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Connection data, input side

Screw thread	M3
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	Output side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
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

Mounting position	any
Assembly instructions	In rows with zero spacing
Operating mode	100% operating factor
Flammability rating according to UL 94	V0
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage/insulation	4 kV / basic insulation
Rated insulation voltage	300 V
Degree of pollution	2
Overvoltage category	III

Standards and Regulations

Connection in acc. with standard	CUL
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated insulation voltage	300 V
Rated surge voltage/insulation	4 kV / basic insulation
Degree of pollution	2
Overvoltage category	III
Flammability rating according to UL 94	V0

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Classifications

eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371001
eCl@ss 7.0	27371001
eCl@ss 8.0	27371604

ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 5.0	EC001504

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39121542

Approvals

Approvals

Approvals

UL Listed / cUL Listed / GL / UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized / cULus Listed

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Ex Approvals

Approvals submitted

Approval details

UL Listed Ⓤ

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Approvals

cUL Listed

GL

UL Recognized

cUL Recognized

EAC

EAC

cULus Recognized

cULus Listed

Accessories

Accessories

Bridge

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

Continuous plug-in bridge, Length: 500 mm, Color: red

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Accessories

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

Continuous plug-in bridge, Length: 500 mm, Color: blue

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

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Accessories

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

Single plug-in bridge, Length: 8 mm, Number of positions: 2, Color: gray

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Controller board

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

V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Supplementary Products"). 14-pos. flat-ribbon cable connection for the PLC system cabling, control logic: Plus switching

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

V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Supplementary Products"). 14-pos. flat-ribbon cable connection for the PLC system cabling, control logic: Minus switching

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

V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Additional Products"). 15-pin D-SUB male connector, control logic: Positive switching

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

V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Additional Products"). 15-pin D-SUB female connector, control logic: Positive switching

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DIN rail

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Accessories

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

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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

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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

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

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

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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

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Accessories

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

DIN rail, material: Steel, unperforated, 2.3 mm thick, height 15 mm, width 35 mm, length: 2 m

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

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

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

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Accessories

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
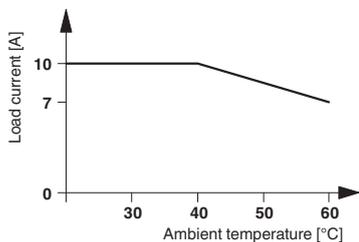

Screwdriver tools

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

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Drawings

Diagram

Circuit diagram