Solid-state relay module - PLC-OPT- 24DC/110DC/3RW - 2900391

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PLC-INTERFACE for railway applications, consisting of basic terminal block with push-in connection and integrated miniature solid-state relay, range: 0.7 x U_N to 1.25 x U_N, temperature range: -25°C to +70°C, 1 N/O contact, input: 24 V DC, output: 12 - 140 V DC/3 A

Your advantages

- Shock resistance according to DIN 50155 (requirements according to EN 61373)
- Input voltage range of 0.7 - 1.25 x UN
- Temperature range of -25°C to +70°C

Key Commercial Data

Packing unit	10 pc
GTIN	4 046356 508964
GTIN	4046356508964
Weight per Piece (excluding packing)	31.200 g
Weight per piece (including packing)	35.160 g
Custom tariff number	85364190
Country of origin	Germany
Sales Key	G1 - Relay

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

Ambient temperature (operation)	-25 °C ... 70 °C

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Ambient conditions

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	0.7 ... 1.25 (t < 1 s = 0.6 ... 1.4 x U_N)
Input voltage range	16.8 V DC ... 30 V DC
Switching threshold "0" signal in reference to U_N	< 0.4
Switching threshold "1" signal in reference to U_N	> 0.6
Typical input current at U_N	12 mA
Typical response time	400 µs
Typical turn-off time	200 µs
Operating voltage display	Yellow LED
Type of protection	Reverse polarity protection
	Surge protection
Protective circuit/component	Series polarity protection diode
Surge voltage protection	> 150 V
Transmission frequency	50 Hz
Power dissipation for nominal condition	0.29 W

Output data

Output nominal voltage	110 V DC
Output voltage range	12 V DC ... 140 V DC (t < 1 s = 1.40 x U_N)
Limiting continuous current	3 A (see derating curve)
Surge voltage protection	> 150 V
Voltage drop at max. limiting continuous current	< 150 mV
Output circuit	2-wire, floating
Type of protection	Reverse polarity protection
	Surge protection
Protective circuit/component	Parallel polarity protection diode

General

Test voltage input/output	2.5 kV_{rms}
Mounting position	any
Assembly instructions	In rows with zero spacing
Operating mode	100% operating factor

Connection data

Connection name	Input side
Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	0.14 mm² ... 2.5 mm²
Conductor cross section flexible	0.14 mm² ... 2.5 mm²

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Technical data

Connection data

Conductor cross section AWG	26 ... 14

Connection data 2

Connection name	Output side
Connection method	Push-in connection
Stripping length	8 mm
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

Standards and Regulations

Connection in acc. with standard	CUL
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	IEC 60664
	EN 50178
Rated insulation voltage	160 V DC
Rated surge voltage	4 kV
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	III

Environmental Product Compliance

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

Drawings

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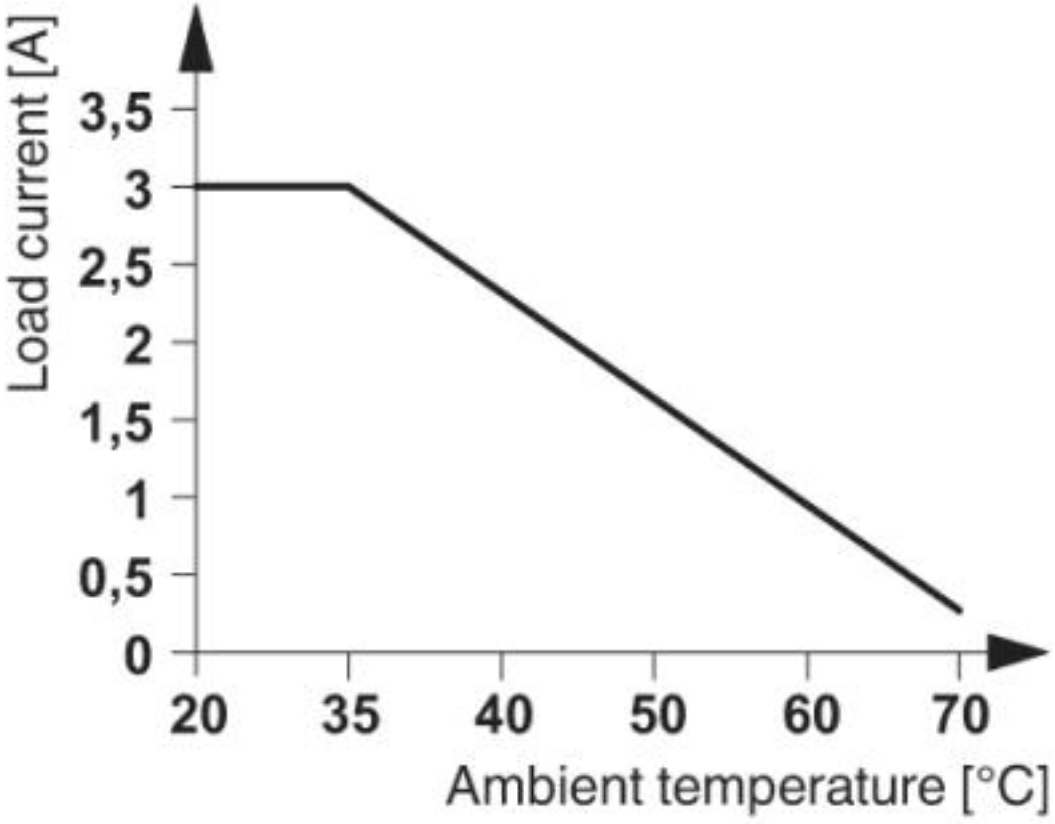
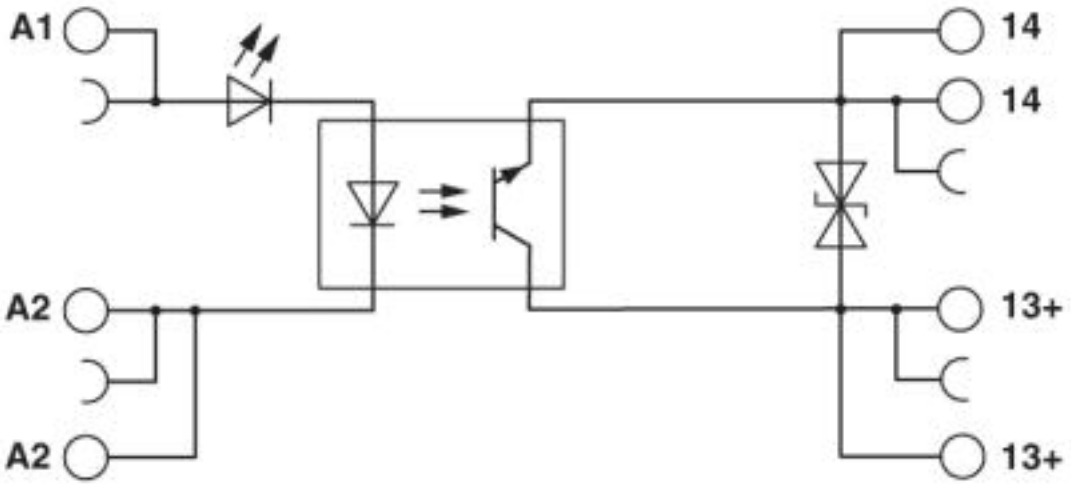
Diagram



Circuit diagram



Classifications

eCl@ss

eCl@ss 4.0	27371100

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Classifications

eCl@ss

eCl@ss 4.1	27371100
eCl@ss 5.0	27371000
eCl@ss 5.1	27371000
eCl@ss 6.0	27371600
eCl@ss 7.0	27371604
eCl@ss 8.0	27371604
eCl@ss 9.0	27371604

ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 5.0	EC001504
ETIM 6.0	EC001504
ETIM 7.0	EC001504

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39122326
UNSPSC 18.0	39122326
UNSPSC 19.0	39122326
UNSPSC 20.0	39122326
UNSPSC 21.0	39122326

Approvals

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

Ex Approvals

Approval details

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Approvals

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
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
cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
EAC			TR_TS_D_00573_c
EAC			TR_TS_S_00010_c
cULus Recognized			
cULus Listed			