PLC-OSC- 24DC/ 24DC/ 3RW - Solid-state relay module

2980610

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PLC-INTERFACE for railway applications, consisting of basic terminal block with screw 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: 3 - 33 V DC/3 A

Commercial data

Item number	2980610
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	C461
Product key	DK622L
GTIN	4046356094542
Weight per piece (including packing)	34.81 g
Weight per piece (excluding packing)	32.97 g
Customs tariff number	85364190
Country of origin	DE

Technical data

Product properties

Product type	Solid-state relay module
Product family	PLC-INTERFACE
Application	Railway applications

Insulation characteristics: Standards/regulations

Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	01.04.2026

Electrical properties

Maximum power dissipation for nominal condition	0.2 W

Input data

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	0.7 ... 1.25
Input voltage range	16.8 V DC ... 30 V DC
Switching threshold "0" signal in reference to U_N	≤ 0.3
Switching threshold "1" signal in reference to U_N	≥ 0.6
Typical input current at U_N	8.5 mA
Typical response time	40 µs
Typical turn-off time	200 µs
Status display	LED (yellow)
Protective circuit	Reverse polarity protection; Polarity protection diode
Transmission frequency	300 Hz

Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
Output voltage range	3 V DC ... 33 V DC
Limiting continuous current	3 A
Voltage drop at max. limiting continuous current	≤ 200 mV
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection; Polarity protection diode
	Surge protection

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.14 mm² ... 2.5 mm²

Conductor cross-section flexible	0.14 mm² ... 2.5 mm²
	0.2 mm² ... 2.5 mm² (Single ferrule)
	2x 0.5 mm² ... 1.5 mm² (TWIN ferrule)
Conductor cross-section AWG	26 ... 14
Tightening torque	0.45 Nm ... 0.55 Nm (Usually these terminal blocks must be supported during conductor connection (held by one hand, supported on the housing))

Dimensions

Item dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94 (Housing)	V0 (Housing)

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

CE

Certificate	CE-compliant

UKCA

Certificate	UKCA-compliant

Shipbuilding approval

Certificate	TAE0000196

Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Shipbuilding data

Temperature	D
Humidity	A
Vibration	B/C
EMC	B
Enclosure	Required protection according to the Rules shall be provided upon installation on board

EMC data

Electromagnetic compatibility	Conformance with EMC directive
Low Voltage Directive	Conformance with Low Voltage Directive

Standards and regulations

Standards/regulations

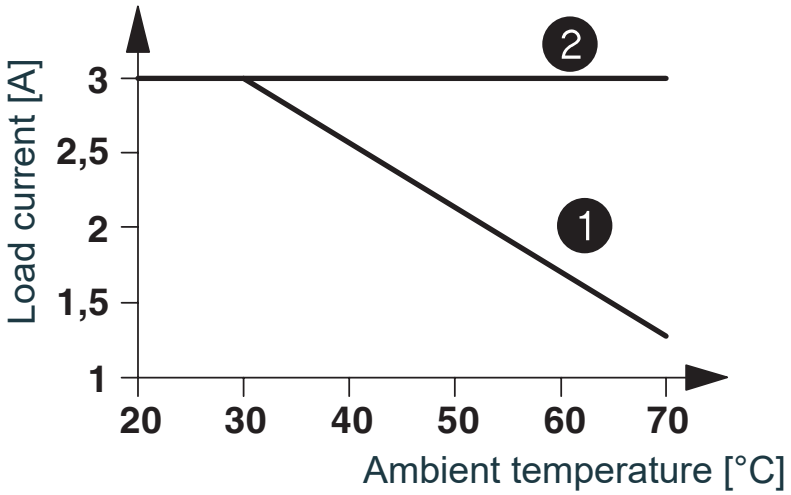
Standards/regulations	IEC 60947-5-1
	DIN EN 50155/VDE 0115-200 (in relevant parts)

Mounting

Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

Drawings

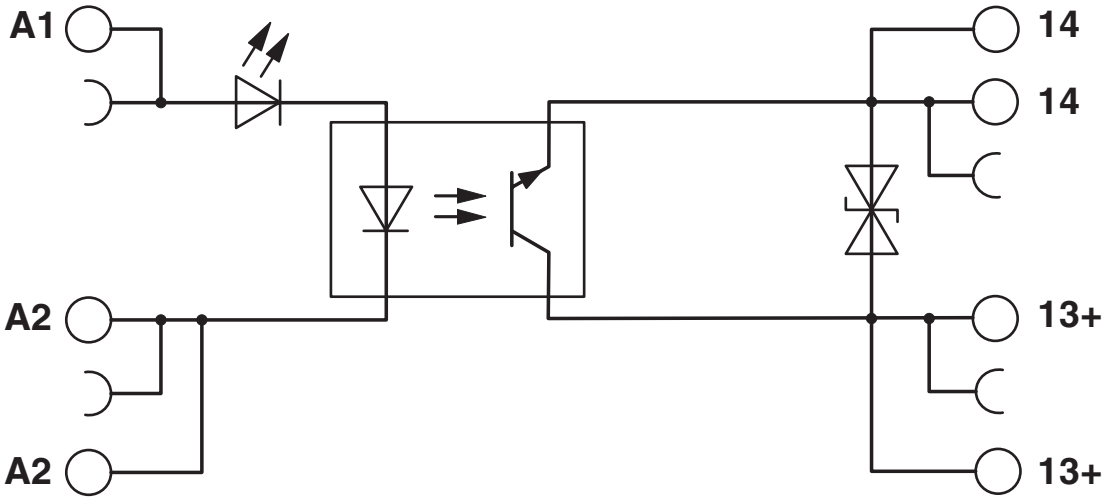
Diagram



1 In rows with zero spacing
2 in rows with > 20 mm spacing

The figure shows the load current as function of the ambient temperature range PLC-OSP-.../24DC/3RW. Duty cycle: 100% operating factor

Circuit diagram



Approvals

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cULus Listed
Approval ID: E140324

cULus Listed
Approval ID: E140324

cULus Listed
Approval ID: E140324

DNV
Approval ID: TAE0000196

Classifications

ECLASS

ECLASS-13.0	27371604
ECLASS-15.0	27371604

ETIM

ETIM 10.0	EC001504

UNSPSC

UNSPSC 21.0	39122300

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	e3937c73-52b4-4b5e-ab40-b1be526e0113

EF3.1 Climate Change

CO2e kg	0.981 kg CO2e

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https://www.phoenixcontact.com

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com