

2982728

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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)

Your advantages

- 6.2 mm narrow design width
- Screw and spring-cage connection
- Resistant to vibrations and shocks
- Status indicator
- Bridging options
- Integrated protection circuit
- Switching power TTL (5 V), fan out = 1

Commercial data

Item number	2982728
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	DK6223
GTIN	4046356170604
Weight per piece (including packing)	34.51 g
Weight per piece (excluding packing)	30 g
Customs tariff number	85364190
Country of origin	DE

# PLC-OSC- 24DC/TTL - Solid-state relay module



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## Technical data

### Product properties

Product type	Solid-state relay module
Product family	PLC-INTERFACE
Application	TTL signal at output
Operating mode	100% operating factor

Insulation characteristics: Air clearances and creepage distances between the power circuits

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	15.09.2025
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### Electrical properties

Maximum power dissipation for nominal condition	0.08 W
Test voltage (Input/output)	2.5 kV <sub>rms</sub> (50 Hz, 1 min., input/output)

Air clearances and creepage distances between the power circuits

Rated insulation voltage	250 V DC
Rated surge voltage	4 kV

### Input data

Rated actuating voltage $U_C$	24 V DC
Voltage range with reference to $U_C$	0.8 ... 1.2
Rated actuating current $I_C$	3.4 mA
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 $U_N$	3.4 mA
Typical response time	35 $\mu$ s
Typical turn-off time	35 $\mu$ s
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection; Parallel polarity protection diode
	Surge protection
Surge voltage protection	> 33 V
Transmission frequency	1 kHz

### Output data

Designation	Output data
Contact switching type	1 N/O contact
Design of digital output	electronic
Contact connection type	Signal contact
Rated control circuit supply voltage $U_S$	5 V DC

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Voltage range with reference to $U_S$	0.9 ... 1.2
Output voltage range	4.5 V DC ... 6 V DC
Limiting continuous current	50 mA (a TTL load (Fan out = 1))
Fan out	1
Surge voltage protection	> 8 V
Voltage drop at max. limiting continuous current	< 80 mV
Output circuit	3-conductor, ground-referenced
Protective circuit	Reverse polarity protection; Parallel polarity protection diode Surge protection

## Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule) 2x 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (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

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

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

## Approvals

### Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group EN 60068-2-60
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## Standards and regulations

# PLC-OSC- 24DC/TTL - Solid-state relay module



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Air clearances and creepage distances between the power circuits

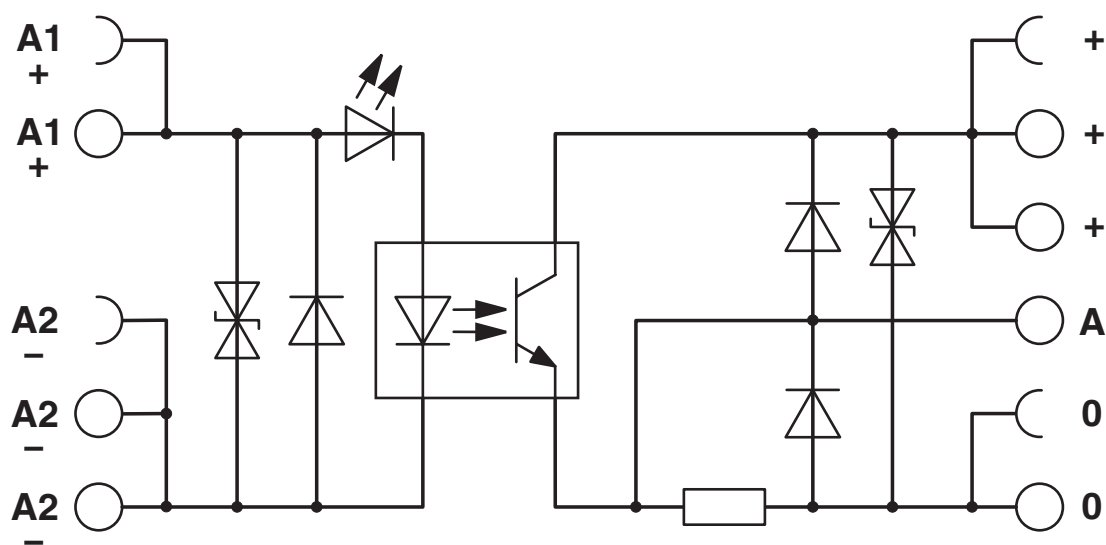
Standards/regulations	IEC 60947-5-1
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### Mounting

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

## Drawings

Circuit diagram



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## Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2982728>



**cULus Listed**

Approval ID: E140324

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## Classifications

### ECLASS

ECLASS-13.0	27371604
ECLASS-15.0	27371604

### ETIM

ETIM 9.0	EC001504
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### UNSPSC

UNSPSC 21.0	39122300
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## 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	ab4f4702-1e37-43e4-8dde-45a9720c9169

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