

2902966

https://www.phoenixcontact.com/us/products/2902966

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Input solid-state relay, with DC voltage output push-pull, transmission frequency: 100 kHz, with light indicator and protective circuit in input and output circuits, input: 24 V DC, output: 4 - 18 V DC/50 mA

Commercial data

Item number	2902966
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C461
Product key	DK6223
GTIN	4046356702041
Weight per piece (including packing)	39.3 g
Weight per piece (excluding packing)	36.53 g
Customs tariff number	85364900
Country of origin	DE



2902966

https://www.phoenixcontact.com/us/products/2902966

Technical data

Product properties

Product type	Solid-state relay module
Product family	PLC-INTERFACE
Application	100 kHz input optocoupler
Operating mode	100% operating factor

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

Insulation	Basic insulation
Overvoltage category	II
Pollution degree	2

Data management status

Rated surge voltage

Date of last data management	15.09.2025
Date of last data management	13.03.2023

Electrical properties

Maximum power dissipation for nominal condition	0.19 W
Test voltage (Input/output)	2.5 kV _{rms} (50 Hz, 1 min., input/output)
Air clearances and creepage distances between the power circuits	

0.5 kV

Input data

Nominal input voltage U _N	24 V DC
Input voltage range in reference to U_N	0.8 1.2
Input voltage range	19.2 V DC 28.8 V DC
Switching threshold "0" signal in reference to \boldsymbol{U}_{N}	< 0.4
Switching threshold "1" signal in reference to U_N	> 0.8
Typical input current at U _N	8 mA
Typical response time	1 μs
Typical turn-off time	2 μs
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection
	Surge protection
Surge voltage protection	> 33 V
Transmission frequency	100 kHz

Output data

Designation	Output data
Contact switching type	1 N/O contact
Design of digital output	electronic
Output voltage range	4 V DC 18 V DC
Limiting continuous current	50 mA



2902966

https://www.phoenixcontact.com/us/products/2902966

Quiescent current	8.5 mA
Surge voltage protection	> 35 V
Voltage drop at max. limiting continuous current	< 1.2 V
Output circuit	3-conductor push-pull, ground referenced
Protective circuit	Reverse polarity protection
	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 mm ² 1.5 mm ² (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)
-------	-----------------

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C 60 °C
Ambient temperature (storage/transport)	-25 °C 75 °C

Approvals

Corrosive gas test

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

Standards and regulations

Air clearances and creepage distances between the power circuits

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

Mounting



2902966

https://www.phoenixcontact.com/us/products/2902966

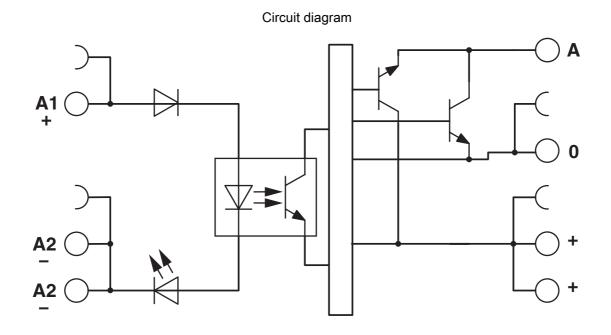
Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any



2902966

https://www.phoenixcontact.com/us/products/2902966

Drawings





2902966

https://www.phoenixcontact.com/us/products/2902966

Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2902966



cULus Listed
Approval ID: E140324



2902966

https://www.phoenixcontact.com/us/products/2902966

Classifications

ECLASS

	ECLASS-13.0	27371604	
	ECLASS-15.0	27371604	
ETIM			
	ETIM 9.0	EC001504	
UNSPSC			
UNSFSC			
	UNSPSC 21.0	39122300	



2902966

https://www.phoenixcontact.com/us/products/2902966

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-l
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	7118dc3c-f2d4-4cfc-a185-0d3b974258b3

Phoenix Contact 2025 © - all rights reserved https://www.phoenixcontact.com

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