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# Solid-state relay module - PLC-OPT- 5DC/ 24DC/100KHZ - 2902969

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Input solid-state relay, transmission frequency: 100 kHz, with LED and protective circuit in input and output circuits, input: 5 V DC, output: 4 - 30 V DC/50 mA

The figure shows a version with a screw connection

## Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 702010

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

Width	6.2 mm
Height	80 mm
Depth	86 mm

### Ambient conditions

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

### Input data

Nominal input voltage $U_N$	5 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 $U_N$	7 mA
Typical response time	1.5 $\mu$ s
Typical turn-off time	2 $\mu$ s
Operating voltage display	Yellow LED
Type of protection	Protection against polarity reversal

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## Technical data

### Input data

	Surge protection
Surge voltage protection	> 14 V
Transmission frequency	100 kHz

### Output data

Designation	Output data
Output voltage range	4 V DC ... 30 V DC
Limiting continuous current	50 mA
Quiescent current	4.3 mA
Surge voltage protection	> 35 V
Voltage drop at max. limiting continuous current	< 0.5 V
Output circuit	3-conductor, ground-referenced
Type of protection	Protection against polarity reversal
	Surge protection

### Connection data, input side

Connection name	Input side
Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	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>
Conductor cross section AWG	26 ... 14

### Connection data, output side

Connection name	Output side
Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	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>
Conductor cross section AWG	26 ... 14

### General

Test voltage input/output	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Mounting position	any
Assembly instructions	In rows with zero spacing
Operating mode	100% operating factor
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178
Rated surge voltage/insulation	0.5 kV / basic insulation
Rated insulation voltage	50 V DC
Degree of pollution	2
Overvoltage category	II

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## Technical data

### Standards and Regulations

Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178
Rated insulation voltage	50 V DC
Rated surge voltage/insulation	0.5 kV / basic insulation
Degree of pollution	2
Overvoltage category	II

## 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 3.0	EC001504
ETIM 4.0	EC000196
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

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Approvals

EAC

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Ex Approvals

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## Approvals

Approvals submitted

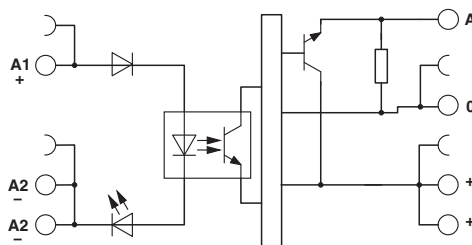
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## Approval details

EAC
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## Drawings

Circuit diagram



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Product	Code	Reference	Product link
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