

# RIF-0-OPT-24DC/24DC/2 - Solid-state relay module



2905293

<https://www.phoenixcontact.com/gb/products/2905293>

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Pre-assembled solid-state relay module with push-in connection, consisting of: relay base with ejector and plug-in miniature solid-state relay. Input voltage: 24 V DC. Output: 3 - 33 V DC/3 A

## Product description

The pluggable electromechanical and solid-state relays in the RIFLINE complete product range and the base are recognized and approved in accordance with UL 508. The relevant approvals can be called up at the individual components in question.

## Commercial data

Item number	2905293
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	DK652J
Product key	DK652J
GTIN	4046356945417
Weight per piece (including packing)	24.26 g
Weight per piece (excluding packing)	23 g
Customs tariff number	85364110
Country of origin	HU

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## Set consists of

### RIF-0-BPT/1 - Relay base

2901873

<https://www.phoenixcontact.com/gb/products/2901873>



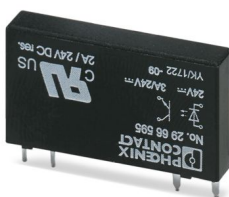
RIF-0... relay base, for miniature power relay with 1 N/O contact or solid-state relays of the same design, push-in connection, for mounting on NS 35/7,5

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### OPT-24DC/ 24DC/ 2 - Miniature solid-state relay

2966595

<https://www.phoenixcontact.com/gb/products/2966595>



Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 V DC, output: 3 ... 33 V DC/3 A

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## Technical data

### Product properties

Product type	Solid-state relay module
Product family	RIFLINE complete
Application	Universal
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	0.2 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 AC
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 $I_C$	8.5 mA
Input voltage range	19.2 V DC ... 28.8 V DC
"0" signal switching threshold in reference to $U_C$	< 0.4
"1" signal switching threshold in reference to $U_C$	> 0.8
Typical response time	20 $\mu$ s
Typical turn-off time	300 $\mu$ s
Status display	LED (yellow)
Protective circuit	Freewheeling 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 (see derating curve)
Maximum inrush current	15 A (10 ms)
Surge voltage protection	> 33 V
Voltage drop at max. limiting continuous current	< 200 mV

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Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection
	Surge protection
Utilization category CB Scheme (IEC 60947-5-1)	DC12, 3 A/24 V

## Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross-section rigid	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section flexible	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Ferrule with plastic sleeve)
Conductor cross-section AWG	24 ... 16

## Dimensions

### Item dimensions

Width	6.2 mm
Height	93 mm
Depth	66 mm

## Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94 (Housing)	V2 (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

## Standards and regulations

### Air clearances and creepage distances between the power circuits

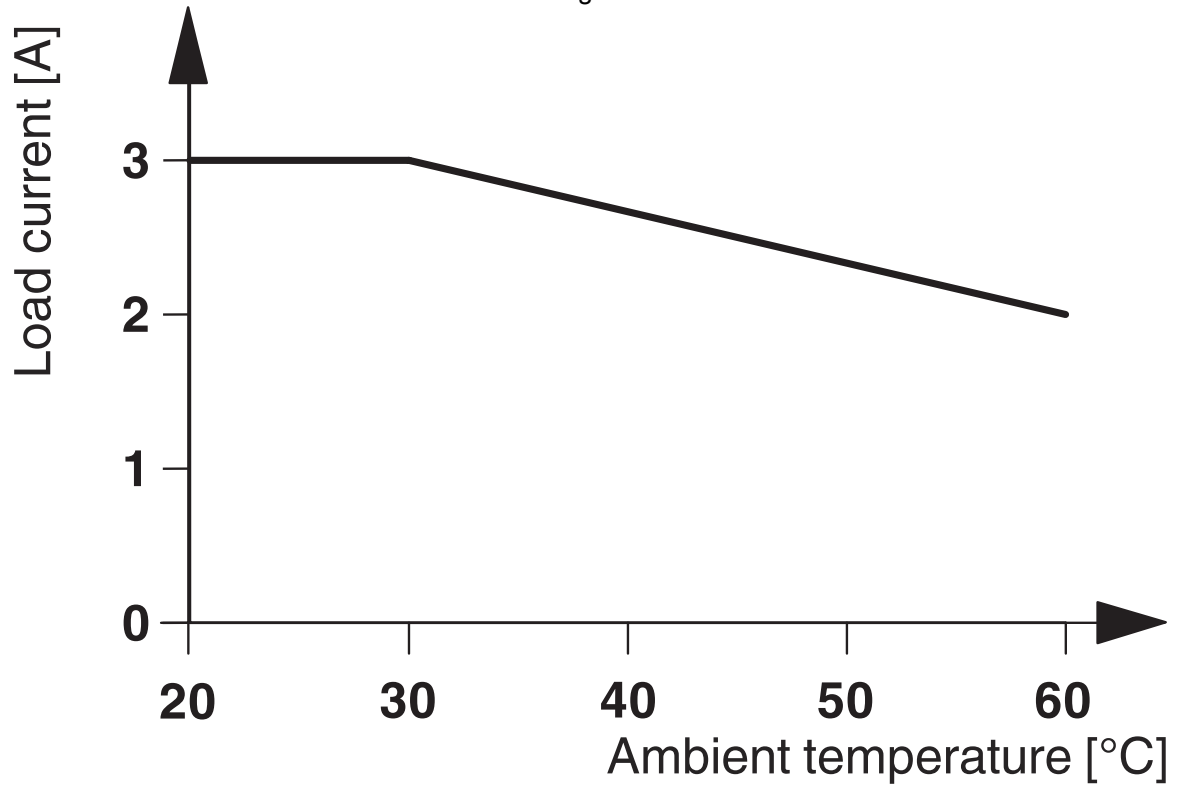
Standards/regulations	DIN EN 60947-5-1
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## Mounting

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

Drawings

Diagram

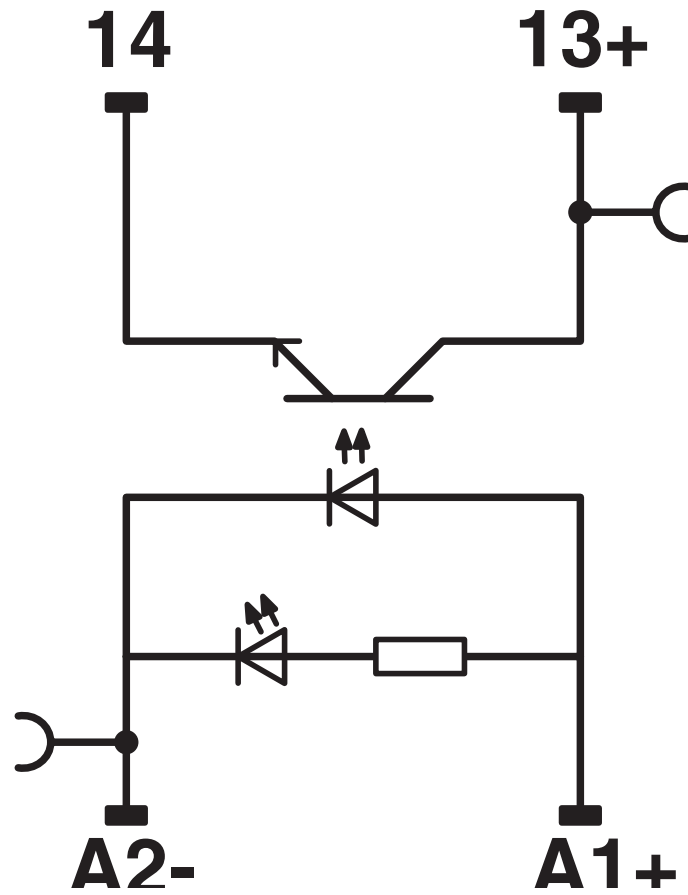


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Circuit diagram



# RIF-0-OPT-24DC/24DC/2 - Solid-state relay module



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/2905293>

**DNV**

Approval ID: TAA000018V

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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	7425184a-0222-459a-b557-cf7bf8a3b488

### EF3.0 Climate Change

CO2e kg	0.385 kg CO2e
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