

# RIF-0-OPT-24DC/230AC/1 - Solid-state relay module



2905295

<https://www.phoenixcontact.com/us/products/2905295>

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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: 24 - 253 V AC/0.75 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	2905295
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C465
Product key	DK652J
GTIN	4046356945431
Weight per piece (including packing)	24.4 g
Weight per piece (excluding packing)	22.008 g
Customs tariff number	85364110
Country of origin	JP

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## Set consists of

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

2901873

<https://www.phoenixcontact.com/us/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/230AC/ 1 - Miniature solid-state relay

2967950

<https://www.phoenixcontact.com/us/products/2967950>



Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 V DC, output: 24 - 253 V AC/0.75 A

## 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	0.19 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 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	10 ms
Typical turn-off time	10 ms
Status display	LED (yellow)
Protective circuit	Freewheeling diode
Transmission frequency	10 Hz

### Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
Output voltage range	24 V AC ... 253 V AC (50/60 Hz)
Limiting continuous current	750 mA (see derating curve)
Maximum inrush current	30 A (10 ms)
Min. load current	10 mA
Leakage current	1 mA (in off state)

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Surge current	30 A AC (tp = 20 ms, at 25 °C)
Phase angle cos phi min	0.5
Max. load value	4.5 A <sup>2</sup> s (tp = 10 ms, at 25 °C)
Surge voltage protection	> 275 V
Voltage drop at max. limiting continuous current	< 1 V
Output circuit	2-conductor, zero voltage switch
Protective circuit	RCV circuit
Utilization category CB Scheme (IEC 60947-5-1)	AC12, 0.75 A/250 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
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## Standards and regulations

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

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

# RIF-0-OPT-24DC/230AC/1 - Solid-state relay module



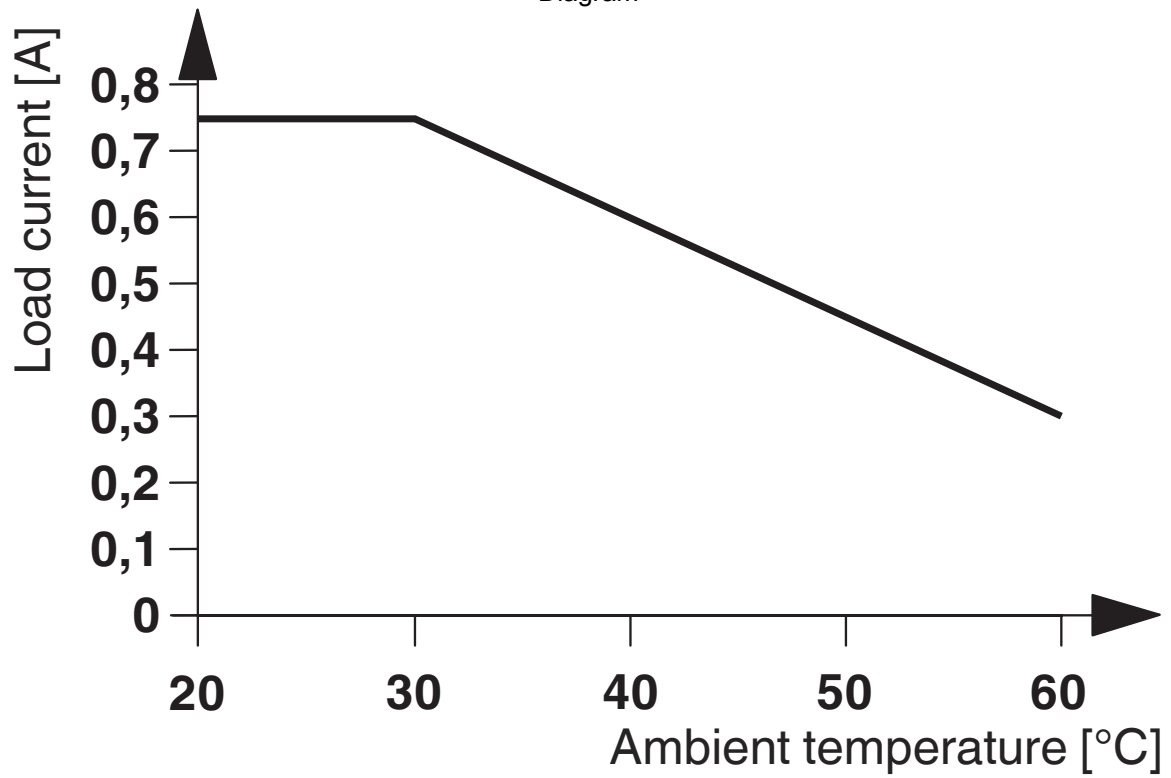
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Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

Drawings

Diagram



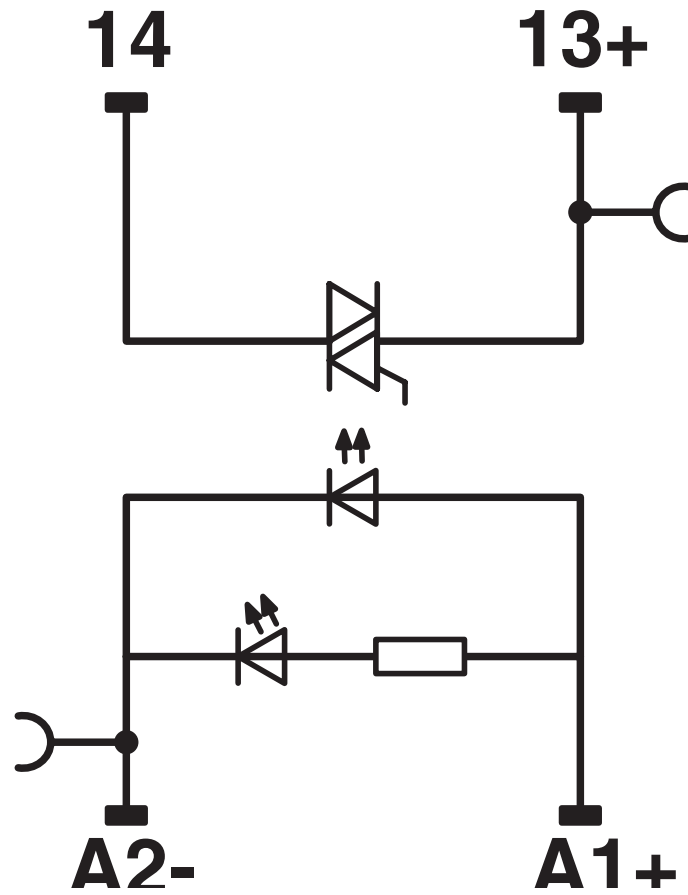
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Circuit diagram



# RIF-0-OPT-24DC/230AC/1 - Solid-state relay module



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2905295>



**EAC**

Approval ID: RU\*C-DE.\*08.B.00010

**DNV**

Approval ID: TAA000018V

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## Classifications

### ECLASS

ECLASS-13.0	27371604
ECLASS-15.0	27371604

### ETIM

ETIM 10.0	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	53cea619-e684-4b6a-a284-ed53fabbbfcf

### EF3.1 Climate Change

CO2e kg	1.588 kg CO2e
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