

RIF-0-RSC-12DC/21 - Relay module



2903375

<https://www.phoenixcontact.com/us/products/2903375>

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.



Preassembled relay module with screw connection, consisting of: relay base with ejector and power contact relay. Contact switching type: 1 changeover contact. Input voltage: 12 V DC

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	2903375
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C465
Product key	DK6518
GTIN	4046356731645
Weight per piece (including packing)	32.08 g
Weight per piece (excluding packing)	30 g
Customs tariff number	85364110
Country of origin	CZ

RIF-0-RSC-12DC/21 - Relay module



2903375

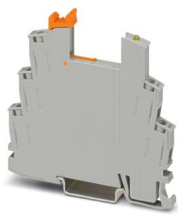
<https://www.phoenixcontact.com/us/products/2903375>

Set consists of

RIF-0-BSC/21 - Relay base

2900957

<https://www.phoenixcontact.com/us/products/2900957>

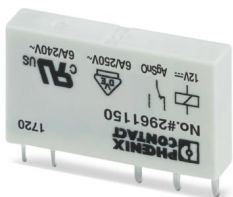


RIF-0... relay base, for miniature power relay with 1 changeover contact or identical solid-state relays, screw connection, for mounting on NS 35/7,5

REL-MR- 12DC/21 - Single relay

2961150

<https://www.phoenixcontact.com/us/products/2961150>



Plug-in miniature power relay, with power contact, 1 changeover contact, input voltage 12 V DC

RIF-0-RSC-12DC/21 - Relay module



2903375

<https://www.phoenixcontact.com/us/products/2903375>

Technical data

Product properties

Product type	Relay Module
Product family	RIFLINE complete
Application	Universal
Operating mode	100% operating factor
Mechanical service life	approx. 2×10^7 cycles

Insulation characteristics

Insulation	safe isolation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	12.09.2025
------------------------------	------------

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.19 W
Test voltage (Winding/contact)	4 kV _{rms} (50 Hz, 1 min., winding/contact)
Rated insulation voltage	250 V AC
Rated surge voltage	6 kV

Input data

Coil side

Nominal input voltage U_N	12 V DC
Input voltage range	9.6 V DC ... 18 V DC (20 °C)
Input voltage range in reference to U_N	see diagram
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	16 mA
Typical response time	5 ms
Typical release time	8 ms
Coil voltage	12 V DC
Protective circuit	Freewheeling diode
Operating voltage display	Yellow LED

Output data

Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO

RIF-0-RSC-12DC/21 - Relay module



2903375

<https://www.phoenixcontact.com/us/products/2903375>

Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (100 mA)
Limiting continuous current	6 A
Min. switching current	10 mA (12 V)
Interrupting rating (ohmic load) max.	140 W (24 V DC) 20 W (48 V DC) 18 W (60 V DC) 23 W (110 V DC) 40 W (220 V DC) 1500 VA (250 V AC)
Utilization category CB Scheme (IEC 60947-5-1)	AC15, 3 A/250 V (N/O contact) AC15, 1 A/250 V (N/C contact) DC13, 1.5 A/24 V (N/O contact) DC13, 0.2 A/110 V (N/O contact) DC13, 0.1 A/220 V (N/O contact)

Connection data

Connection method	Screw connection
Stripping length	7 mm
Conductor cross-section rigid	0.5 mm ² ... 4 mm ²
Conductor cross-section rigid (2 conductors with same cross section)	0.5 mm ² ... 1.5 mm ²
Conductor cross-section flexible	0.5 mm ² ... 2.5 mm ² 0.5 mm ² ... 2.5 mm ² (Ferrule without plastic sleeve) 0.5 mm ² ... 1.5 mm ² (Ferrule with plastic sleeve)
Conductor cross-section flexible (2 conductors with same cross section)	0.5 mm ² ... 1.5 mm ² 0.5 mm ² ... 1 mm ² (TWIN ferrule with plastic sleeve)
Conductor cross-section AWG	20 ... 12 (solid) 20 ... 14 (flexible)
Tightening torque	0.5 Nm ... 0.6 Nm

Dimensions

Item dimensions

Width	6.2 mm
Height	84 mm
Depth	82 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 (Relay base)	IP20 (Relay base)
-----------------------------------	-------------------

RIF-0-RSC-12DC/21 - Relay module



2903375

<https://www.phoenixcontact.com/us/products/2903375>

Degree of protection (Relay)	RT III (Relay)
Ambient temperature (operation)	-40 °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

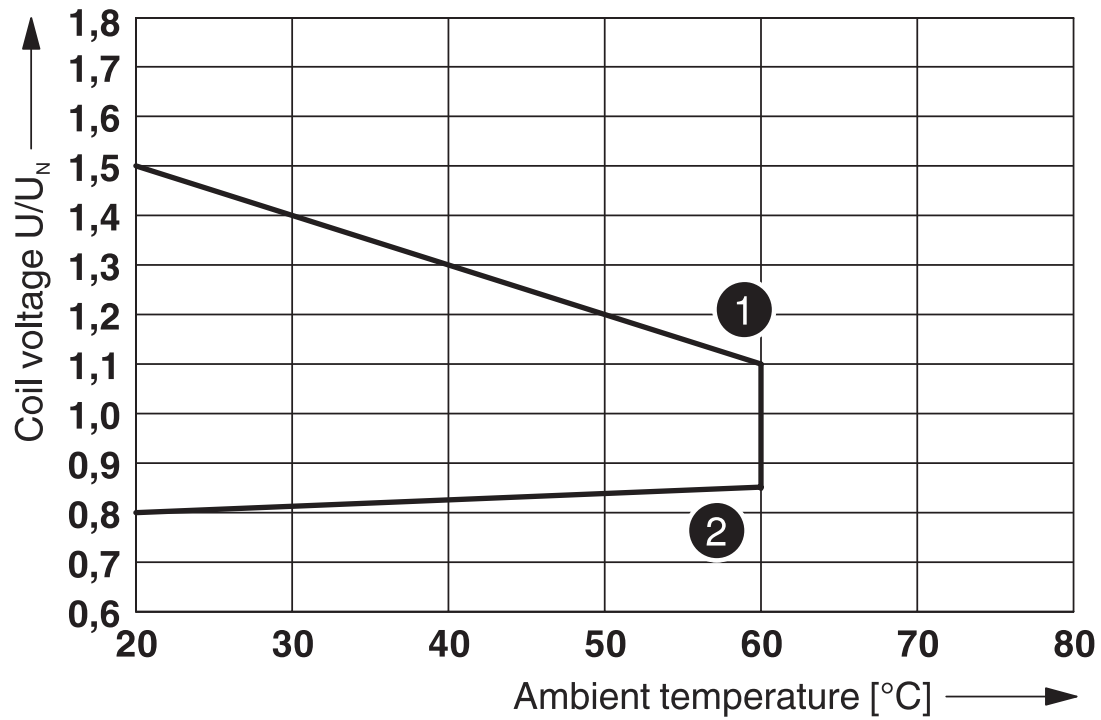
Standards/regulations	IEC 60947-5-1
-----------------------	---------------

Mounting

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

Drawings

Diagram



① Maximum continuous voltage at limiting continuous current = 6 A

② Minimum operate voltage

For pre-excitation with U_N and limiting continuous current = 6 A

Operating voltage range



Interrupting rating

Diagram



Service life reduction factor with various cos phi

Diagram



① 250 V AC, ohmic load

Electrical service life



Permissible humidity for operation and storage.

The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures $\leq 0^{\circ}\text{C}$ must be prevented

Area B: Condensation at ambient temperatures $> 0^{\circ}\text{C}$ must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^{\circ}\text{C}$.

RIF-0-RSC-12DC/21 - Relay module

2903375

<https://www.phoenixcontact.com/us/products/2903375>

Circuit diagram



DC coils

RIF-0-RSC-12DC/21 - Relay module



2903375

<https://www.phoenixcontact.com/us/products/2903375>

Classifications

ECLASS

ECLASS-13.0

27371601

ETIM

ETIM 9.0

EC001437

UNSPSC

UNSPSC 21.0

39122300

RIF-0-RSC-12DC/21 - Relay module



2903375

<https://www.phoenixcontact.com/us/products/2903375>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a)

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	8cde0ca5-33cf-4580-9d4c-e03ef033a0ae

Phoenix Contact 2026 © - 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