RIF-1-RSC-LDP-24DC/2X21/FG - Relay module

2909848

https://www.phoenixcontact.com/us/products/2909848

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, safety relay with force-guided contacts in accordance with DIN EN 61810-3, plug-in display/interference suppression module, and retaining bracket, contact switching type: 2 changeover contacts, input voltage: 24 V DC

Commercial data

Item number	2909848
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C465
Product key	DK651D
GTIN	4055626394596
Weight per piece (including packing)	75 g
Weight per piece (excluding packing)	72 g
Customs tariff number	85364110
Country of origin	CN

Set consists of

REL-SR- 24DC/2X21/FG X - Safety relays

1473564

https://www.phoenixcontact.com/us/products/1473564



Safety relay with force-guided contacts in accordance with DIN EN 61810-3, contact switching type: 2 changeover contacts. The requirements for type A in accordance with DIN EN 61810-3 are satisfied if the circuit is designed as 1 N/O contact / 1 N/C contact.

RIF-LDP-12-24 DC - Plug-in module

2900939

https://www.phoenixcontact.com/us/products/2900939



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with freewheeling diode and yellow LED, polarity: A1+, A2-, input voltage: 12 V DC ... 24 V DC ±30 %

RIF-RH-1-H - Retaining bracket

2904468

https://www.phoenixcontact.com/us/products/2904468



Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-1 relay base, for 25 mm tall miniature power relay and solid-state relay

Technical data

Product properties

Product type	Relay Module
Product family	RIFLINE complete
Application	Forcibly guided contacts
Operating mode	100% operating factor
Mechanical service life	approx. 10^7 cycles
B_{10d}	600000 Cycles (AC1; 250 V / 6 A; 1 NO)
	900000 Cycles (AC1; 250 V / 3 A; 1 NO)
	1800000 Cycles (AC1; 250 V / 1,5 A; 1 NO)
	300000 Cycles (DC13; 24 V / 3 A; 1 NO)
	1000000 Cycles (DC13; 24 V / 1,5 A; 1 NO)
	3000000 Cycles (DC13; 24 V / 0,75 A; 1 NO)

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

Insulation	Safe isolation between input and output
	Basic insulation between the changeover contacts
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	06.07.2025

Electrical properties

Maximum power dissipation for nominal condition	0.72 W
Test voltage (Winding/contact)	4 kV_{rms} (50 Hz, 60 s)
Test voltage (open contact)	1.5 kV_{rms} (50 Hz, 60 s)
Test voltage (Changeover contact/changeover contact)	2.5 kV_{rms} (50 Hz, 60 s)

Air clearances and creepage distances between the power circuits

Rated insulation voltage	250 V AC (Input/output)
Rated surge voltage	6 kV (Input/output)
	4 kV (between the changeover contacts)

Short-circuit protection device

Current	10 A (RT28-32)
Voltage	500 V (SCPD)
Short-circuit current	1 kA (conditional short-circuit current)

Input data

Coil side

Nominal operating voltage U_N	24 V DC
Input voltage range	20.4 V DC ... 28.8 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	30 mA
Typical response time	15 ms
Typical release time	10 ms
Coil voltage	24 V DC
Protective circuit	Freewheeling diode
Operating voltage display	Yellow LED

Output data

Switching

Contact switching type	2 changeover contacts, forcibly actuated
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	144 W (24 V DC)
	58 W (48 V DC)
	54 W (60 V DC)
	55 W (110 V DC)
	55 W (220 V DC)
	1500 VA (250 V AC)
Utilization category CB Scheme (IEC 60947-5-1)	AC15, 3 A/240 V (N/O contact)

Connection data

Connection method	Screw connection
Stripping length	8 mm
Conductor cross-section rigid	0.5 mm² ... 4 mm²
Conductor cross-section rigid (2 conductors with same cross section)	0.5 mm² ... 2.5 mm²
Conductor cross-section flexible	0.5 mm² ... 4 mm²
	0.5 mm² ... 4 mm² (Ferrule with plastic sleeve)
Conductor cross-section flexible (2 conductors with same cross section)	0.5 mm² ... 2.5 mm²
	0.5 mm² ... 1.5 mm² (TWIN ferrule with plastic sleeve)
Conductor cross-section AWG	20 ... 10 (solid)
	20 ... 12 (flexible)
Tightening torque	0.5 Nm ... 0.6 Nm

Dimensions

Item dimensions

Width	16 mm
Height	90 mm
Depth	75 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)
Degree of protection (Relay)	RT I (Relay)
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Altitude	≤ 2000 m

Approvals

CE

Certificate	CE-compliant

UKCA

Certificate	UKCA-compliant

Corrosive gas test

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

Standards and regulations

All specifications in accordance with the standard

Standards/regulations	IEC 60947-5-1
	IEC 61810-3

Air clearances and creepage distances between the power circuits

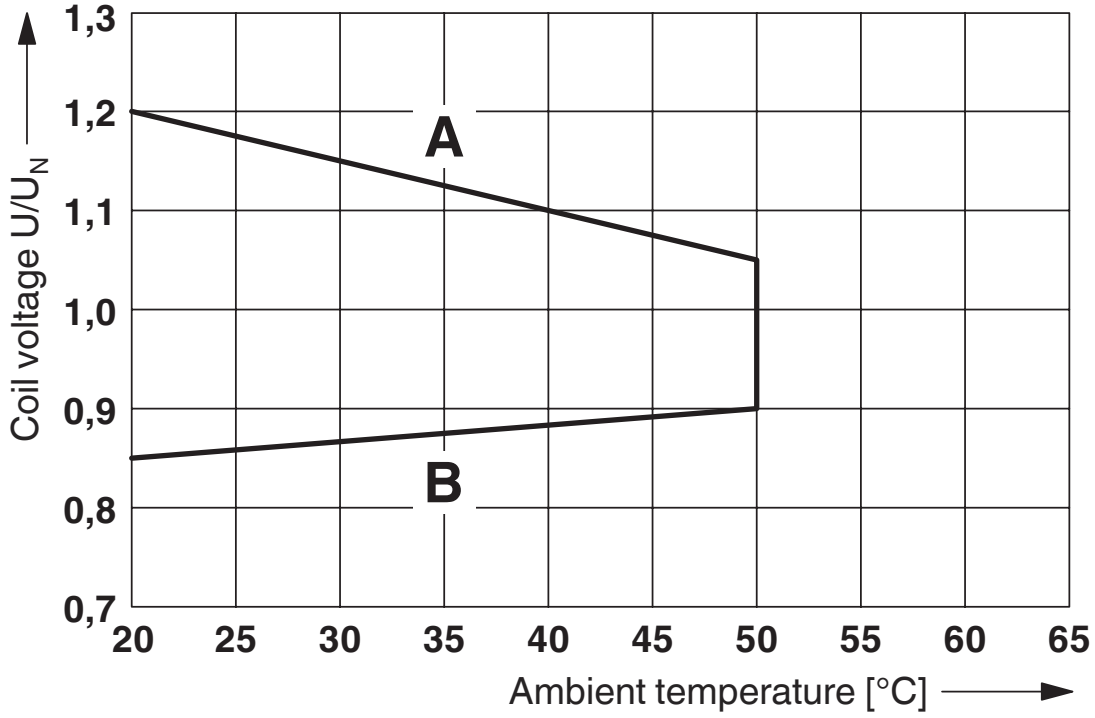
Standards/regulations	DIN EN 60947-5-1

Mounting

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

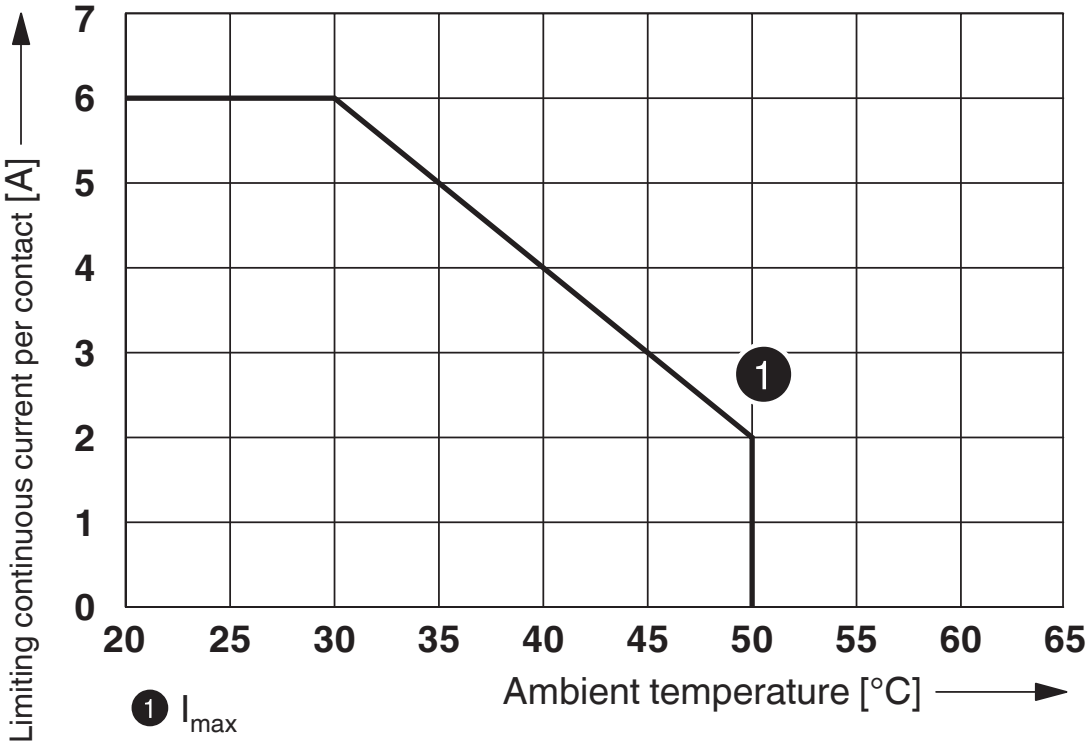
Drawings

Diagram



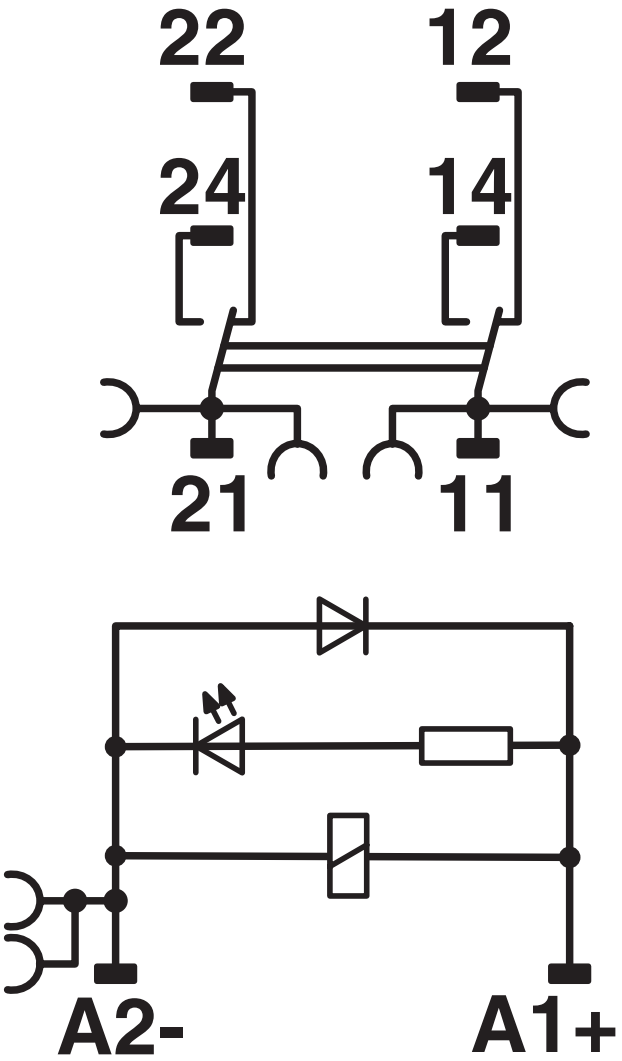
Operating voltage range

Diagram



Contact derating

Circuit diagram



Classifications

ECLASS

ECLASS-13.0	27371601

ETIM

ETIM 9.0	EC001437

UNSPSC

UNSPSC 21.0	39122300

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	39d28aeb-bbcb-4df7-b521-b02a42981407

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