

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



2908215

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Preassembled relay module with Push-in 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	2908215
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C465
Product key	DK652D
GTIN	4055626289151
Weight per piece (including packing)	74.487 g
Weight per piece (excluding packing)	69.602 g
Customs tariff number	85364110
Country of origin	CZ

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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 $\pm 30\%$

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RIF-RH-1-H - Retaining bracket

2904468

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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	26.03.2025
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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

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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	Push-in connection
Stripping length	8 mm
Conductor cross section rigid	0.14 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ² 0.14 mm ² ... 1.5 mm ² (Ferrule with plastic sleeve) 0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve, two conductors on double terminal block)
Conductor cross section AWG	26 ... 16

Dimensions

Item dimensions

Width	16 mm
Height	96 mm
Depth	70 mm

Drill hole

Diameter	3.2 mm
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Material specifications

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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
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UKCA

Certificate	UKCA-compliant
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UL, USA/Canada

Identification	cULus Listed UL 508
Certificate	NRNT.E172140

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

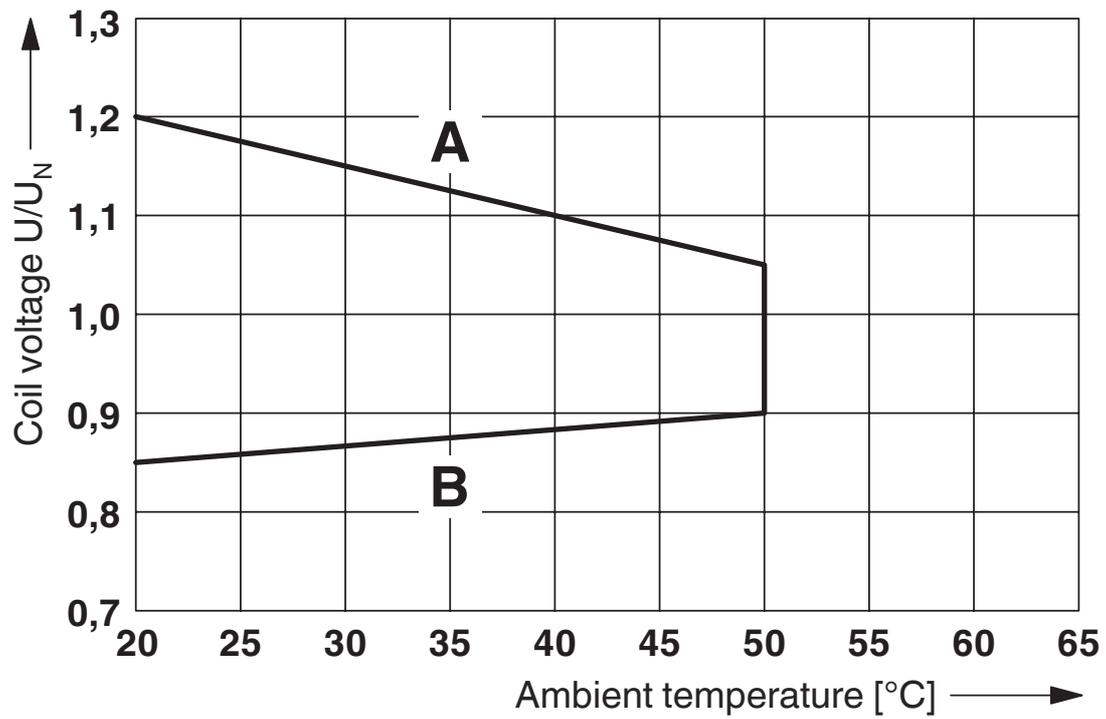
Standards/regulations	DIN EN 60947-5-1
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Mounting

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

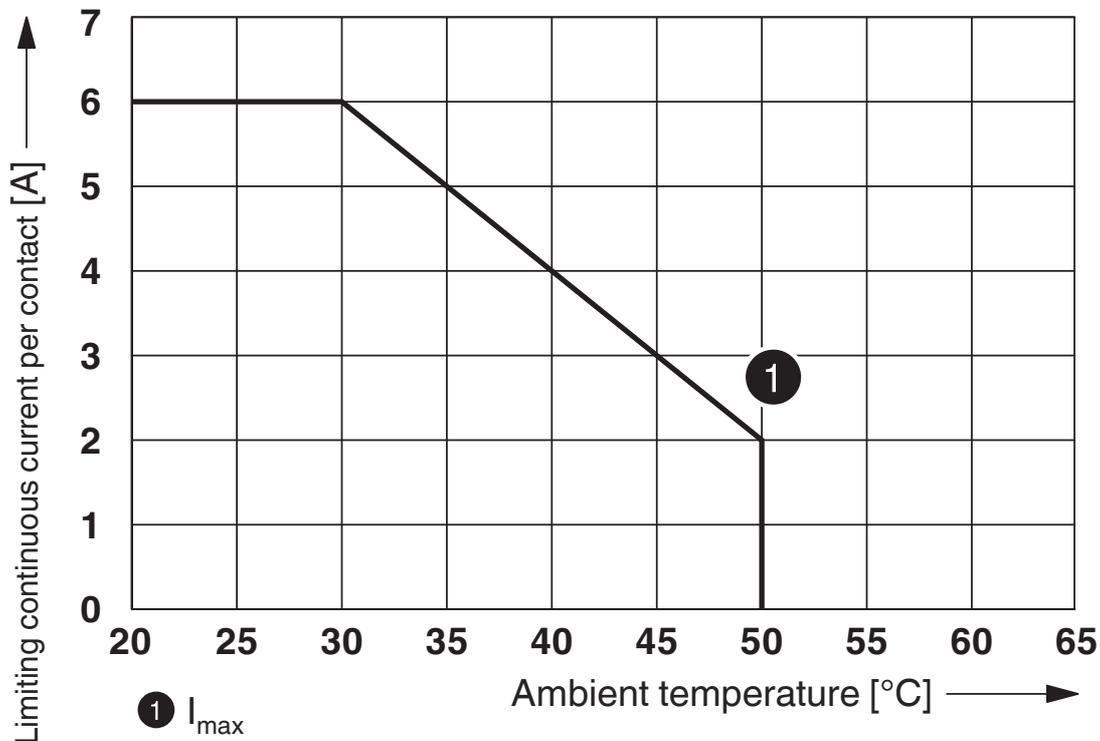
Drawings

Diagram



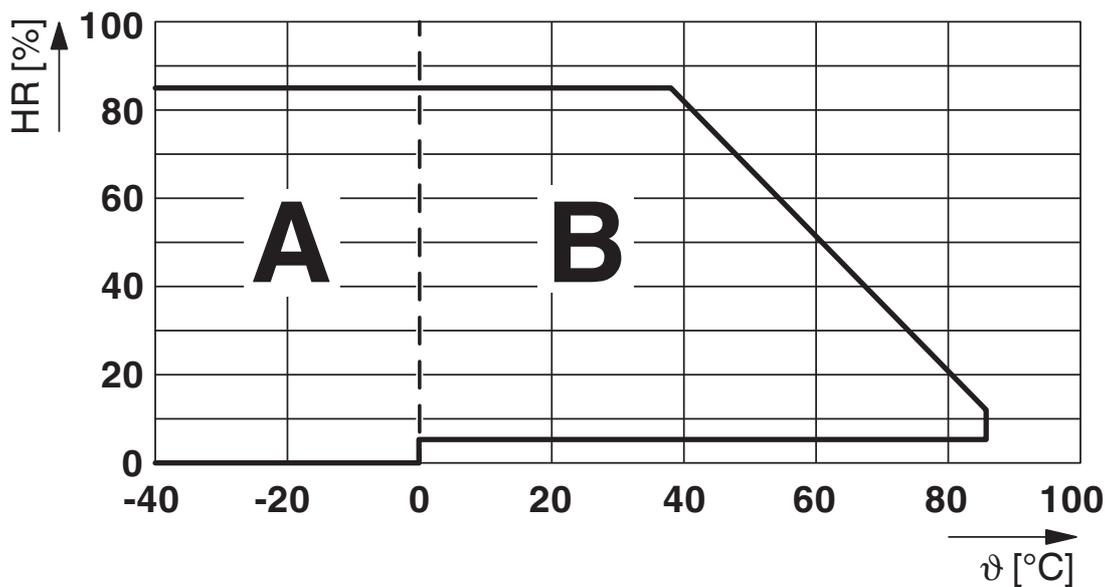
Operating voltage range

Diagram



Contact derating

Diagram



Permissible humidity for operation and storage.

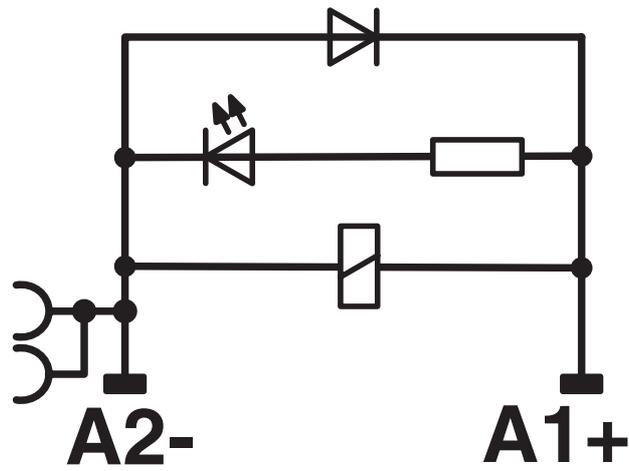
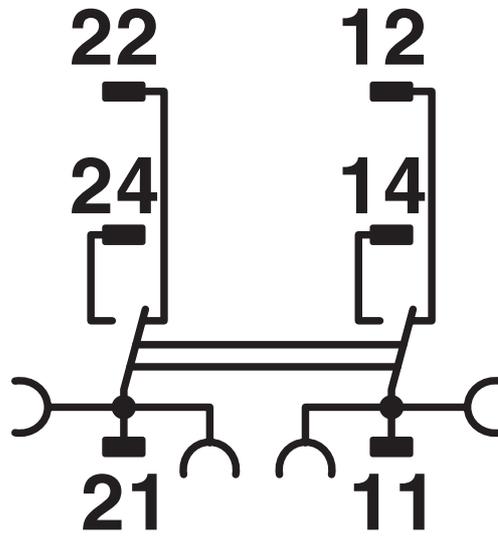
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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 $\leq 25^\circ\text{C}$.

Circuit diagram



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Approvals

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EAC

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



UL Listed

Approval ID: FILE E 172140



cUL Listed

Approval ID: FILE E 172140

DNV

Approval ID: TAA000018V

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Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

ETIM

ETIM 9.0	EC001437
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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	2f07a933-e75a-4d9a-aac6-da148b306deb

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Phoenix Contact USA
 586 Fulling Mill Road
 Middletown, PA 17057, United States
 (+717) 944-1300
info@phoenixcon.com