RIF-1-RPT-LDP-12DC/1IC - Relay module

1078802

https://www.phoenixcontact.com/us/products/1078802

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 Push-in connection, consisting of: relay base, power contact relay, plug-in display/interference suppression module, retaining bracket. Contact switching type: 1 N/O contact, max. inrush current up to 130 A peak, 80 A (20 ms), 12 V DC input voltage

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	1078802
Packing unit	10 pc
Minimum order quantity	10 pc
Note	Made to order (non-returnable)
Product key	DK6529
GTIN	4055626796321
Weight per piece (including packing)	68.4 g
Weight per piece (excluding packing)	68.4 g
Country of origin	CN

Set consists of

RIF-1-BPT/2X21 - Relay base

2900931

https://www.phoenixcontact.com/us/products/2900931

Relay base RIF-1..., for miniature power relay with 1 or 2 changeover contacts or solid-state relays of the same design, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

REL-MR- 12DC/1IC - Single relay

2904475

https://www.phoenixcontact.com/us/products/2904475

Plug-in miniature power relay, with power contact for high switch-on currents, 1 N/O contact, input voltage 12 V DC

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 - Retaining bracket

2900953

https://www.phoenixcontact.com/us/products/2900953

Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-1 relay base, for 16 mm tall miniature power relay and solid-state relay

Technical data

Notes

Notes on operation	FBS 2-6... plug-in bridge for the input side (A2) and FBS-2-8... plug-in bridge for the output side (11/21)

Product properties

Product type	Relay Module
Product family	RIFLINE complete
Application	high inrush currents
Operating mode	100% operating factor
Mechanical service life	3x 10^7 cycles

Insulation characteristics: Standards/regulations

Insulation	Safe isolation, reinforced insulation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	12.09.2025

Electrical properties

Maximum power dissipation for nominal condition	0.41 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

Standards/regulations

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 ... 16.8 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	34 mA
Typical response time	8 ms
Typical release time	10 ms
Coil voltage	12 V DC
Protective circuit	Surge protection; Freewheeling diode
Operating voltage display	Yellow LED

Output data

Switching

Contact switching type	1 N/O contact
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC (The separating plate PLC-ATP should be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...)
Minimum switching voltage	12 V (100 mA)
Limiting continuous current	6 A
	10 A (Value is permissible if connections 11 and 21, as well as connections 14 and 24 are bridged.)
Maximum inrush current	80 A (20 ms)
	130 A (peak, at capacitive load, 230 V AC, 24 µF)
Min. switching current	100 mA (12 V DC)
Interrupting rating (ohmic load) max.	264 W (at 24 V DC, observe contact derating)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	2750 VA (at 250 V AC, observe contact derating)
Switching power min.	1200 mW
Utilization category CB Scheme (IEC 60947-5-1)	AC15, 6 A/250 V (N/O contact)
	DC13, 2 A/24 V (N/O contact)

Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross-section rigid	0.14 mm² ... 1.5 mm²
Conductor cross-section flexible	0.14 mm² ... 1.5 mm²
	0.14 mm² ... 1.5 mm² (Ferrule with plastic sleeve)
	0.14 mm² ... 1 mm² (Ferrule with plastic sleeve, two conductors on double terminal block)
Conductor cross-section AWG	26 ... 16 (solid)
	26 ... 16 (flexible)

Dimensions

Item dimensions

Width	16 mm
Height	96 mm
Depth	75 mm

Drill hole

Diameter	3.2 mm

Material specifications

Color	gray (RAL 7042)

Environmental and real-life conditions

Ambient conditions

Degree of protection (Relay)	RT II (Relay)
Degree of protection (Relay base)	IP20 (Relay base)
Degree of protection (Installation location)	≥ IP54 (Installation location)
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m

Approvals

Corrosive gas test

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

Standards and regulations

Standards/regulations

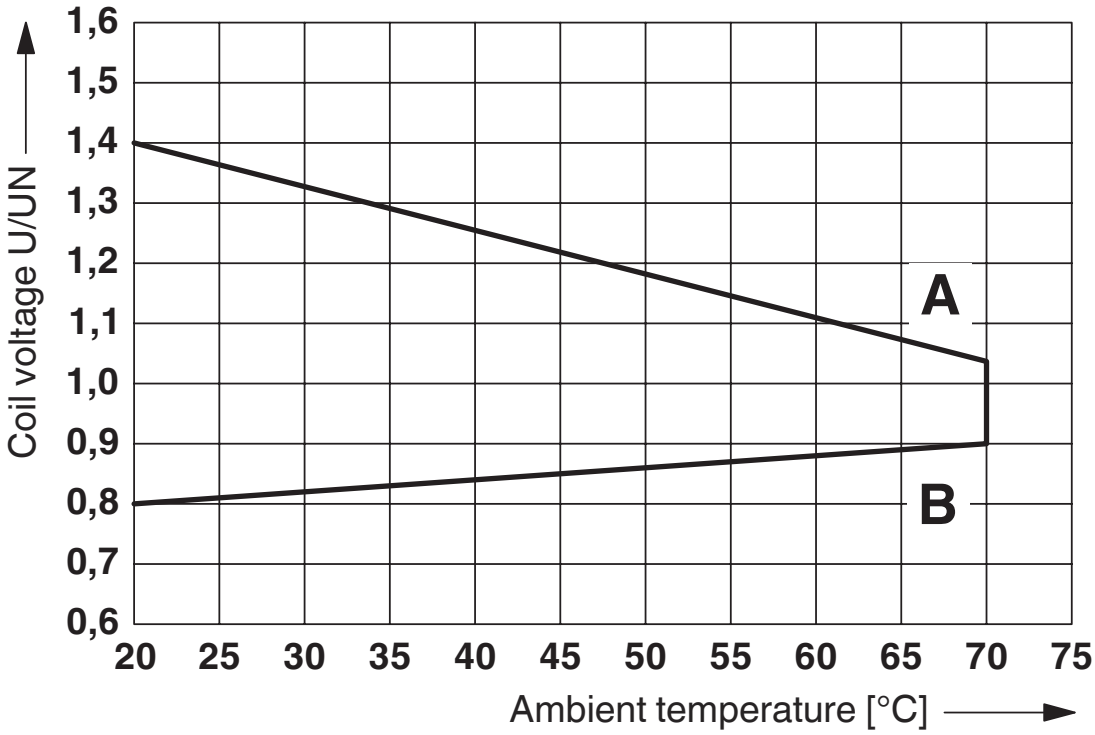
Standards/regulations	IEC 60947-5-1

Mounting

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

Drawings

Diagram



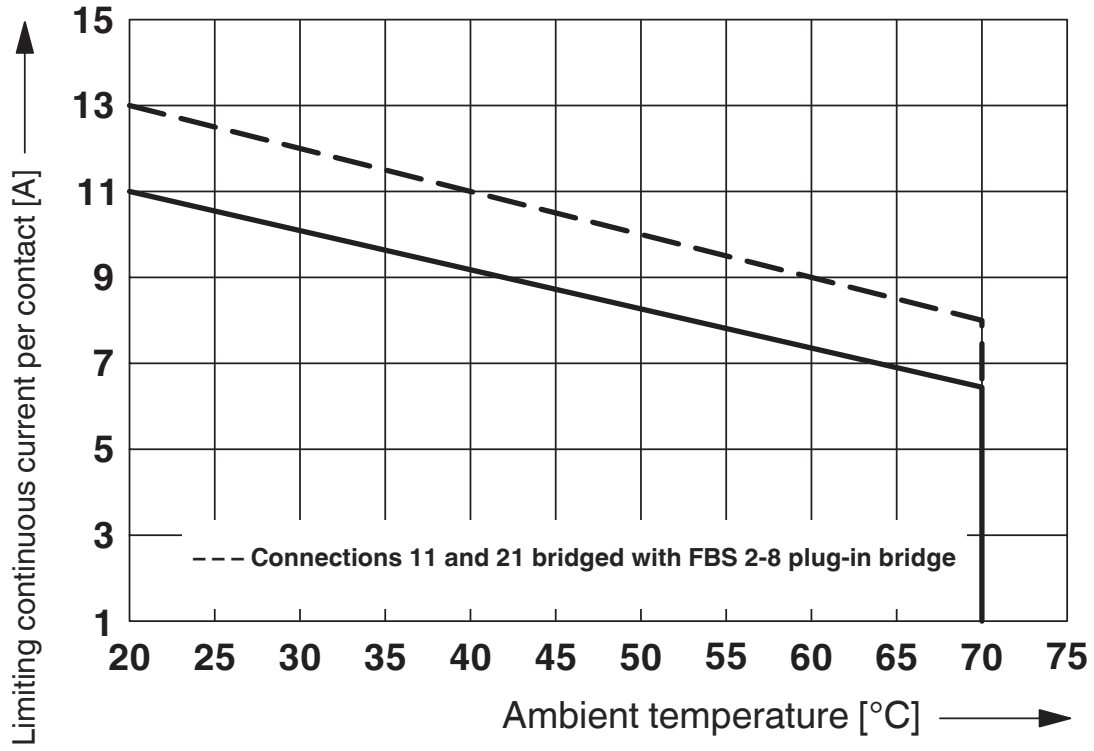
Curve A

Maximum permissible continuous voltage U_{max} with limiting continuous current on the contact side (see relevant technical data)

Curve B

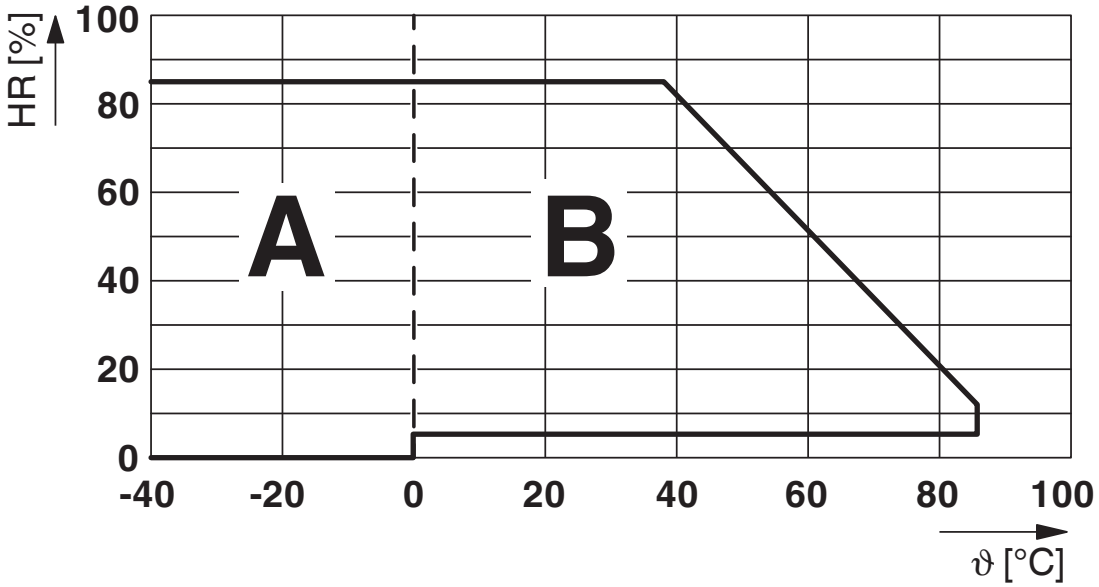
Minimum permissible operate voltage U_{op} after pre-excitation (see relevant technical data)

Diagram



Contact derating

Diagram

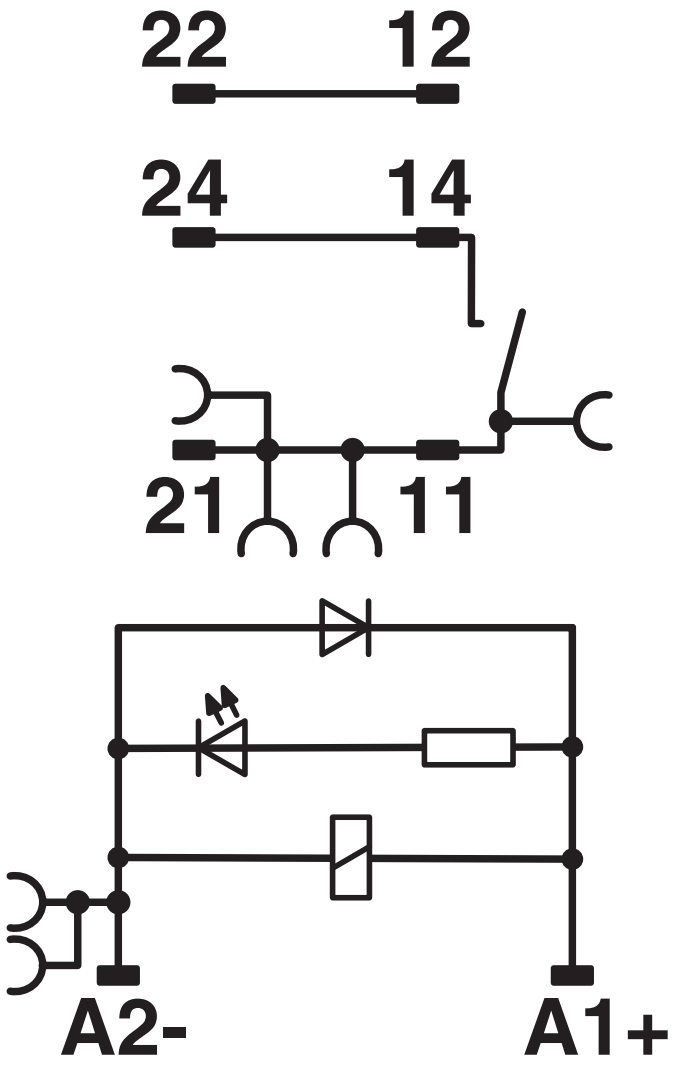


Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented
Area B: Condensation at ambient temperatures > 0°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 ≤ 25°C.

Circuit diagram



Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	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	144f00de-379d-46d1-8946-7ee03a6b1b71

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