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

2903373

https://www.phoenixcontact.com/us/products/2903373

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Preassembled relay module with screw connection, consisting of: relay base with ejector and multi-layer gold 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

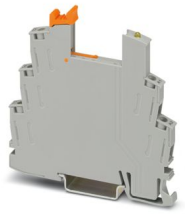
Item number	2903373
Packing unit	10 pc
Minimum order quantity	10 pc
Note	Made to order (non-returnable)
Sales key	C465
Product key	DK651G
GTIN	4046356732031
Weight per piece (including packing)	33.37 g
Weight per piece (excluding packing)	33.37 g
Customs tariff number	85364110
Country of origin	CZ

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/21AU - Single relay

2961163

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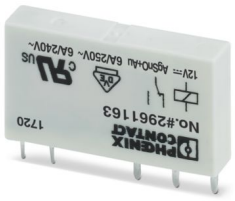


Plug-in miniature power relay, with multi-layer gold contact, 1 changeover contact, input voltage 12 V DC

Technical data

Product properties

Product type	Relay Module
Product family	RIFLINE complete
Application	Universal
Operating mode	100% operating factor
Mechanical service life	approx. 2x 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, hard gold-plated

Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV (10 mA)
Limiting continuous current	50 mA
Maximum inrush current	50 mA
Min. switching current	1 mA (12 V)
Interrupting rating (ohmic load) max.	1.2 W (24 V DC)
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)

Switching: when the gold layer is destroyed

Note	the following values are applicable if a gold layer is destroyed
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 W (at 48 V DC)
	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

Connection data

Connection method	Screw connection
Stripping length	7 mm
Conductor cross-section rigid	0.5 mm² ... 4 mm²
Conductor cross-section rigid (2 conductors with same cross section)	0.5 mm² ... 1.5 mm²
Conductor cross-section flexible	0.5 mm² ... 2.5 mm²
	0.5 mm² ... 2.5 mm² (Ferrule without plastic sleeve)
	0.5 mm² ... 1.5 mm² (Ferrule with plastic sleeve)
Conductor cross-section flexible (2 conductors with same cross section)	0.5 mm² ... 1.5 mm²

	0.5 mm² ... 1 mm² (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)
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

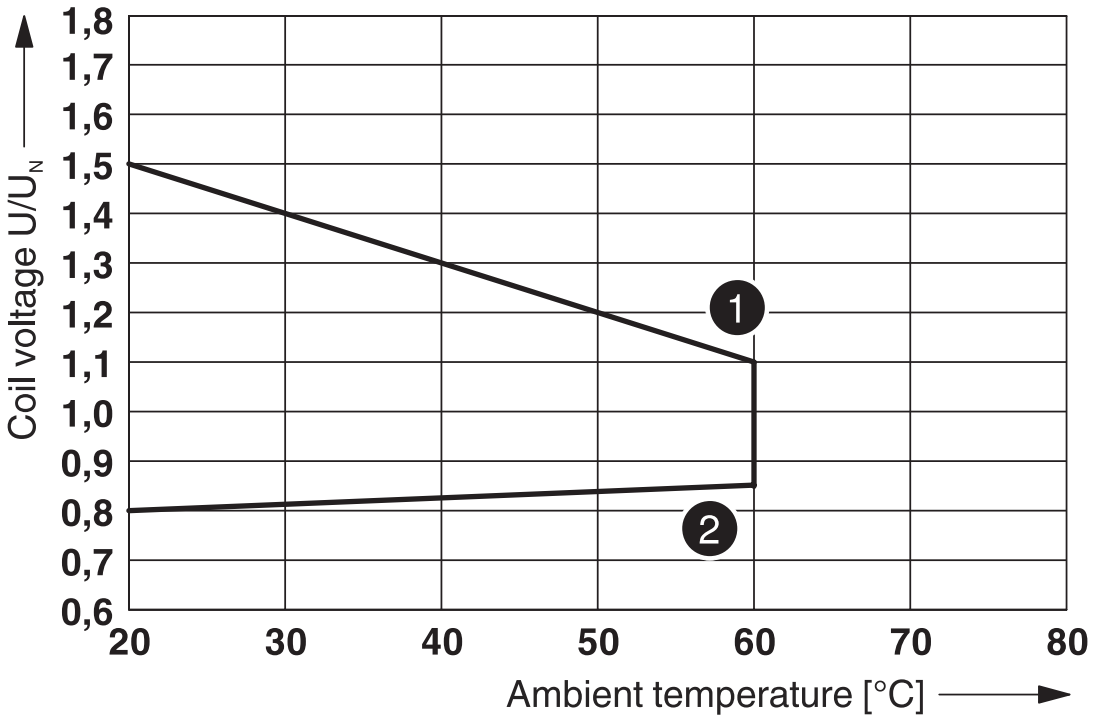
Standards/regulations	IEC 60947-5-1

Mounting

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

Drawings

Diagram



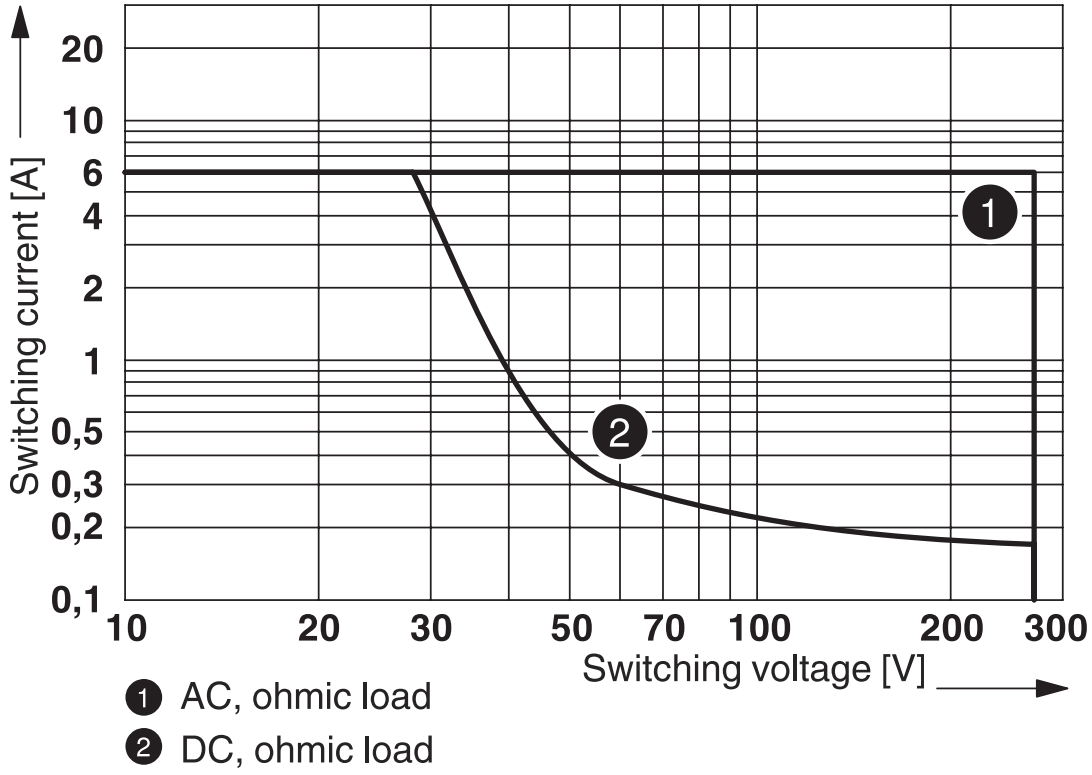
1 Maximum continuous voltage at limiting continuous current = 6 A

2 Minimum operate voltage

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

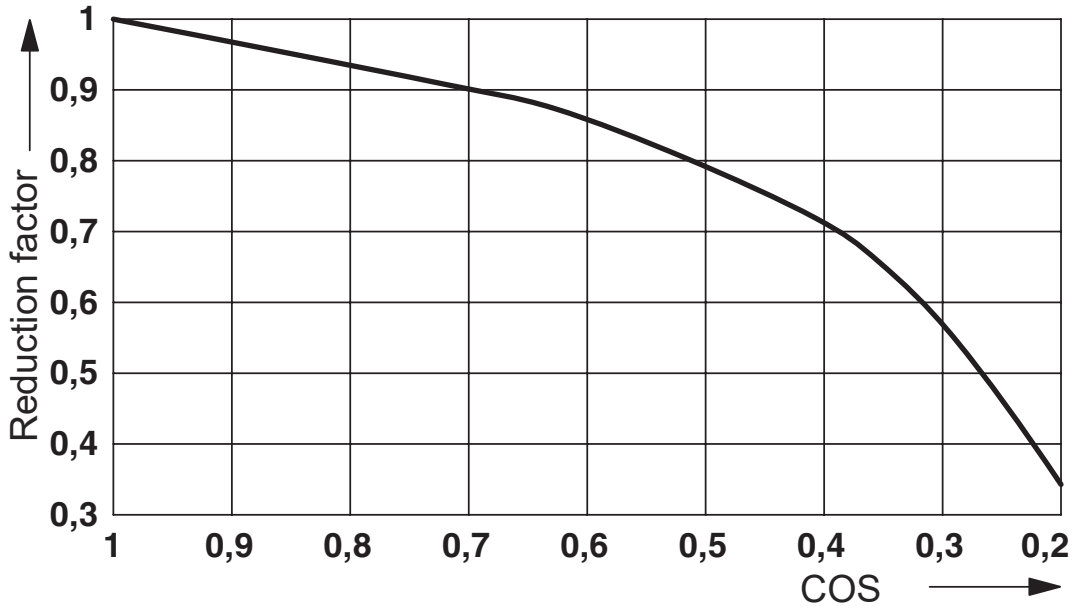
Operating voltage range

Diagram



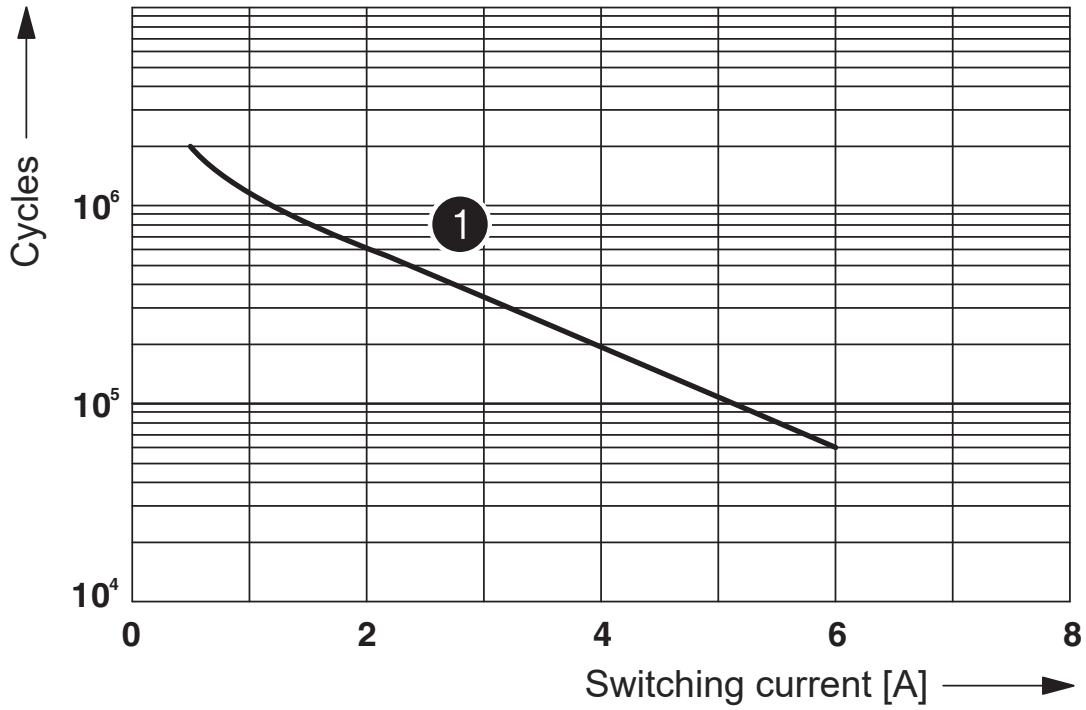
Interrupting rating

Diagram



Service life reduction factor with various cos phi

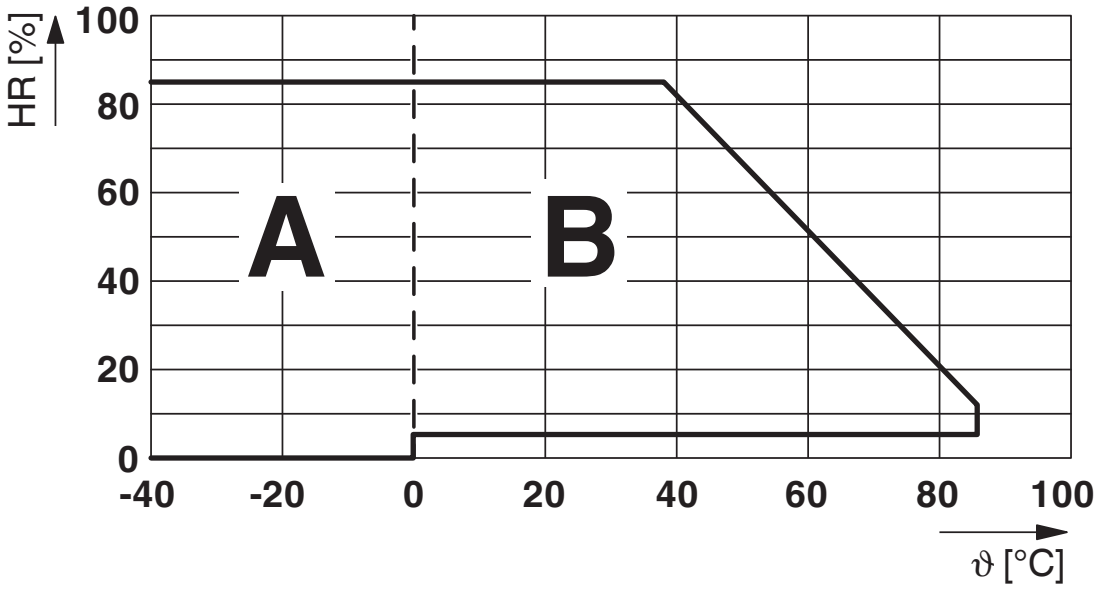
Diagram



1 250 V AC, ohmic load

Electrical service life

Diagram

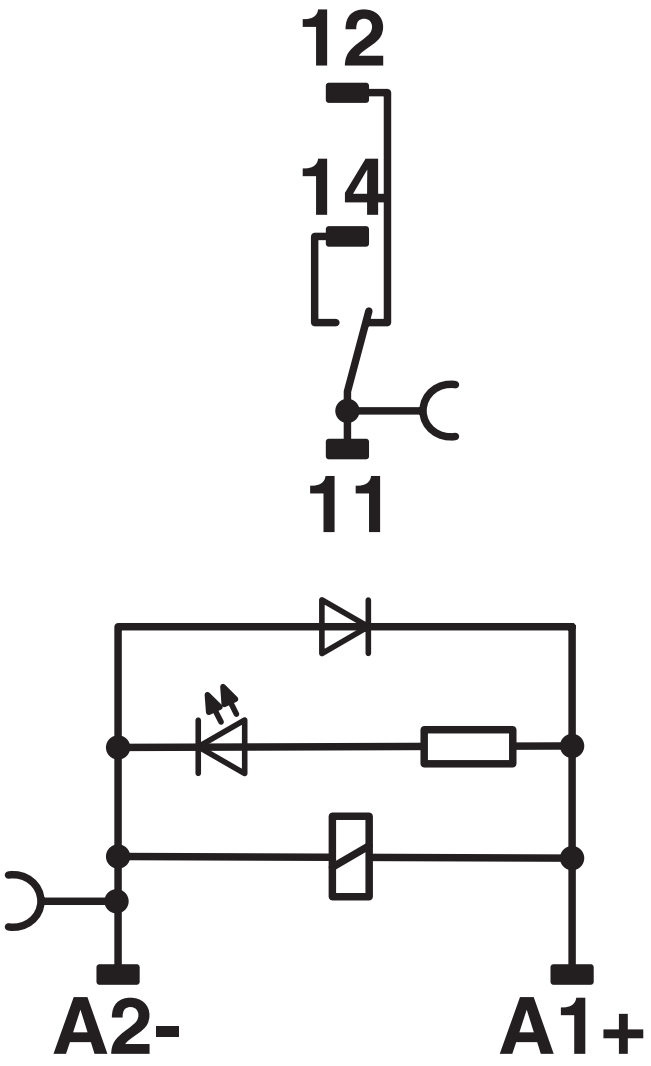


Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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



DC coils

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)

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	4996fe3c-8f71-493e-894e-ebc0ff3867a7

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