

Relay Module - RIF-0-RSC-12DC/21AU - 2903373


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Pre-assembled relay module with screw connection, consisting of: relay base with ejector and multi-layer gold contact relay. Contact type: 1 changeover contact. Input voltage: 12 V DC



Key Commercial Data

Packing unit	10 STK
GTIN	 4 046356 732031
GTIN	4046356732031

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	6.2 mm
Height	84 mm
Depth	82 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Coil side

Nominal input voltage U_N	12 V DC
Input voltage range in reference to U_N	see diagram
Typical input current at U_N	16 mA
Typical response time	5 ms
Typical release time	8 ms
Coil voltage	12 V DC

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Coil side

Protective circuit	Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.19 W

Contact side

Contact type	1 PDT
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 (at 10 mA)
Min. switching current	1 mA (at 12 V)
Maximum inrush current	50 mA
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	1 A (24 V (DC13))
	3 A (230 V (AC 15))

Contact side (with destroyed gold layer)

Contact material	AgSnO
Note	the following values are applicable if a gold layer is destroyed
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 in acc. with DIN VDE 0660/IEC 60947	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 input side

Connection name	Coil side
Connection method	Screw connection
Stripping length	7 mm

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Connection data input side

Conductor cross section solid	0.5 mm ² ... 4 mm ²
Conductor cross-section solid (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 (Ferrules 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)
Torque	0.5 Nm ... 0.6 Nm

Connection data output side

Connection name	Contact side
Connection method	Screw connection
Stripping length	7 mm
Conductor cross section solid	0.5 mm ² ... 4 mm ²
Conductor cross-section solid (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 (Ferrules 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)
Torque	0.5 Nm ... 0.6 Nm

General

Test voltage relay winding/relay contact	4 kV _{rms} (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay base)
	RT III (Relay)
Mechanical service life	approx. 2x 10 ⁷ cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

Standards and Regulations

Standards/regulations	DIN EN 50178
Rated insulation voltage	250 V AC
Rated surge voltage	6 kV
Insulation	safe isolation
Degree of pollution	2
Overvoltage category	III

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Standards and Regulations

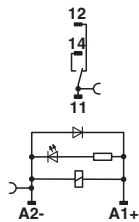
Flammability rating according to UL 94	V2
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

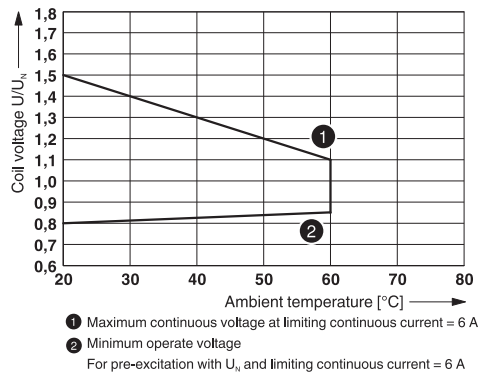
Drawings

Circuit diagram



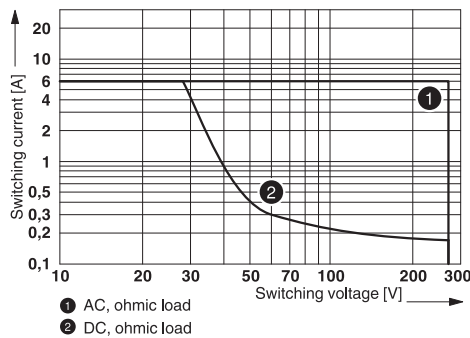
DC coils

Diagram



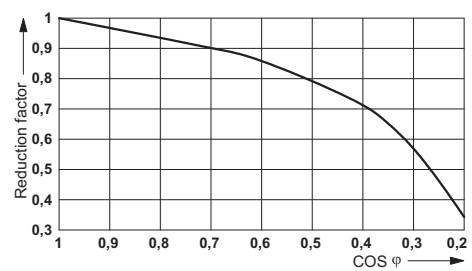
Operating voltage range

Diagram



Interrupting rating

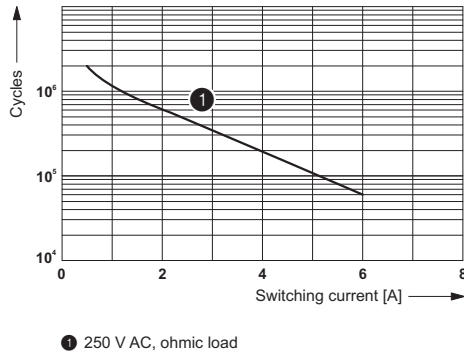
Diagram



Service life reduction factor with various cos phi

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Diagram



Electrical service life

Articles in set

Single relay - REL-MR- 12DC/21AU - 2961163



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

Relay base - RIF-0-BSC/21 - 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

Approvals

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DNV GL / EAC

Ex Approvals

Approval details

DNV GL

<http://exchange.dnv.com/tari/>

TAA000018V

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Approvals

EAC



RU C-
DE.A*30.B.01082

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