Relay Module - RIF-3-RSC-LV-120AC/3X21 - 2903299

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Pre-assembled relay module with screw connection, consisting of: relay base, power contact relay, plug-in display/interference suppression module, and retaining bracket. Contact type: 3 changeover contacts. Input voltage: 120 V AC

RoHS

Key Commercial Data

Packing unit	5 pc
GTIN	4 046356 732055
GTIN	4046356732055

Technical data

Note

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

Dimensions

Width	40 mm
Height	96 mm
Depth	90 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Coil side

Nominal input voltage U_N	120 V AC
Input voltage range in reference to U_N	see diagram
Mains frequency	50/60 Hz
Typical input current at U_N	23 mA
Typical response time	5 ms ... 15 ms
Typical release time range	5 ms ... 20 ms

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Coil side

Coil voltage	120 V AC
Protective circuit	Varistor
Operating voltage display	Yellow LED

Contact side

Contact type	3 PDTs
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	10 V (At 24 mA)
Min. switching current	10 mA (at 24 V)
Maximum inrush current	30 A (20 ms, N/O contact)
Limiting continuous current	6 A (see diagram)
Interrupting rating (ohmic load) max.	144 W (at 24 V DC)
	124 W (at 48 V DC)
	108 W (at 60 V DC)
	52 W (at 110 V DC)
	48 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	0.22 A (at 120 V, DC13)
	0.11 A (at 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	1.5 A (at 240 V, AC15)

Connection data input side

Connection name	Input side
Connection method	Screw connection
Stripping length	8 mm
Conductor cross section solid	0.5 mm² ... 4 mm²
Conductor cross-section solid (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)
Torque	0.5 Nm ... 0.6 Nm

Connection data output side

Connection name	Contact side

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Connection data output side

Connection method	Screw connection
Stripping length	8 mm
Conductor cross section solid	0.5 mm² ... 4 mm²
Conductor cross-section solid (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)
Torque	0.5 Nm ... 0.6 Nm

General

Test voltage relay winding/relay contact	2.5 kV_{rms} (50 Hz, 1 min.)
Test voltage relay contact/relay contact	2 kV_{rms} (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay base)
	RT I (Relay)
Mechanical service life	approx. 2x 10^7 cycles
Mounting position	any
Assembly instructions	In rows with zero spacing
Net weight (SAP)	99.99 g

Standards and Regulations

Standards/regulations	DIN EN 50178
Rated insulation voltage	250 V AC
Rated surge voltage	4 kV
Insulation	Basic insulation
Degree of pollution	2
Overvoltage category	III
Flammability rating according to UL 94	V2

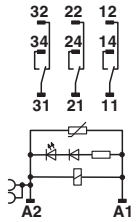
Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

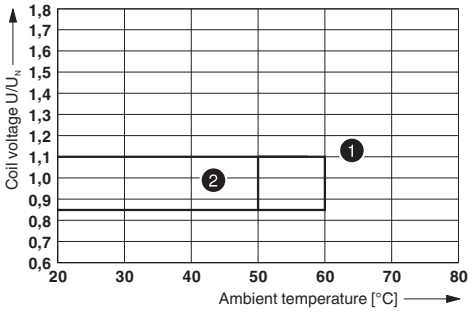
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Circuit diagram



AC coils

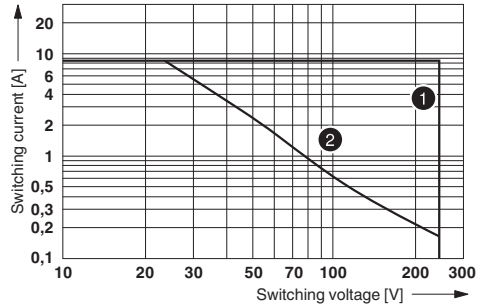
Diagram



1 DC coil (observe contact derating)
2 AC coil (observe contact derating)

Operating voltage range

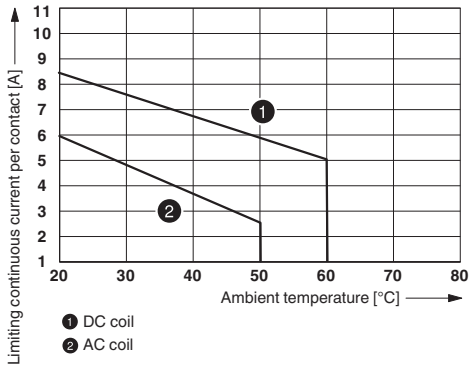
Diagram



1 AC, ohmic load
2 DC, ohmic load

Interrupting rating

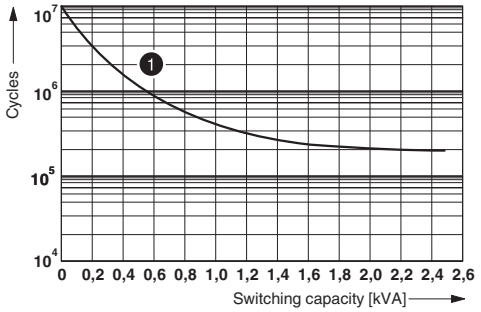
Diagram



1 DC coil
2 AC coil

Contact derating

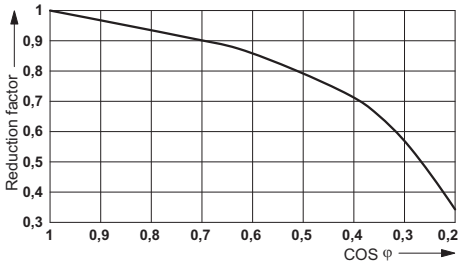
Diagram



1 250 V AC, ohmic load

Electrical service life

Diagram



Service life reduction factor

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Articles in set

Relay base - RIF-3-BSC/3X21 - 2900936



RIF-3... relay base, for octal relay with 3 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Single relay - REL-OR3/L-120AC/3X21 - 2903695



Pluggable octal relay with power contacts, 3 PDT, test button, mechanical switching position indication, coil voltage 120 V AC

Plug-in module - RIF-V-120-230 UC - 2900948



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor, input voltage: 120 ... 230 V AC/DC ±20 %

Retaining bracket - RIF-RH-3 - 2900955



Relay retaining bracket, with holder for marking material, suitable for RIF-3 relay base, for octal relay

Approvals

Approvals

Approvals

DNV GL / CSA / EAC

Ex Approvals

Approval details

Relay Module - RIF-3-RSC-LV-120AC/3X21 - 2903299

Approvals

DNV GL		http://exchange.dnv.com/tari/	TAA000018V
CSA		http://www.csagroup.org/services-industries/product-listing/	2607057
EAC			RU C-DE.A*30.B.01082

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