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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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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: 2 changeover contacts. Input voltage: 24 V DC

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



### **Key Commercial Data**

Packing unit	10 STK
GTIN	4 046356 732130
GTIN	4046356732130

#### Technical data

Utilization restriction

#### Note

Dimensions	
Width	16 mm
Height	89 mm
Depth	75 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C 70 °C
Ambient temperature (storage/transport)	-40 °C 85 °C

#### Coil side

Nominal input voltage U <sub>N</sub>	24 V DC
Input voltage range in reference to U <sub>N</sub>	see diagram
Typical input current at U <sub>N</sub>	18 mA
Typical response time	8 ms
Typical release time	10 ms
Coil voltage	24 V DC



### Technical data

### Coil side

Protective circuit	Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.43 W

#### Contact side

Contact type	2 PDT
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Min. switching current	10 mA (At 5 V)
Maximum inrush current	25 A (20 ms, N/O contact)
Limiting continuous current	8 A (see diagram)
Interrupting rating (ohmic load) max.	192 W (at 24 V DC)
	96 W (at 48 V DC)
	60 W (at 60 V DC)
	44 W (at 110 V DC)
	57 W (at 220 V DC)
	2000 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 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 250 V, AC15)

### Connection data input side

Connection name	Coil 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 mm <sup>2</sup> 4 mm <sup>2</sup> (Ferrule with plastic sleeve)
Conductor cross section flexible (2 conductors with same cross section)	0.5 mm² 2.5 mm²
	0.5 mm <sup>2</sup> 1.5 mm <sup>2</sup> (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
Connection method	Screw connection



### Technical data

### Connection data output side

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 mm <sup>2</sup> 4 mm <sup>2</sup> (Ferrule with plastic sleeve)
Conductor cross section flexible (2 conductors with same cross section)	0.5 mm² 2.5 mm²
	0.5 mm <sup>2</sup> 1.5 mm <sup>2</sup> (TWIN ferrule with plastic sleeve)
Conductor cross section AWG	20 10 (solid)
	20 12 (flexible)
Torque	0.5 Nm 0.6 Nm

#### General

Type of note	Notes on operation
Note	FBS 2-6 plug-in bridge for the input side (A2) and FBS-2-8 plug-in bridge for the output side (11/21)
Test voltage relay winding/relay contact	4 kV <sub>rms</sub> (50 Hz, 1 min.)
Test voltage PDT/PDT	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay base)
	RT III (Relay)
Mechanical service life	approx. 3x 10 <sup>7</sup> cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

### Standards and Regulations

Standards/regulations	DIN EN 50178
Rated surge voltage	6 kV
Insulation	Safe isolation, basic insulation, and 4 kV rated surge voltage between all changeover contacts.
Degree of pollution	2
Overvoltage category	III
Flammability rating according to UL 94	V2

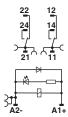
### **Environmental Product Compliance**

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

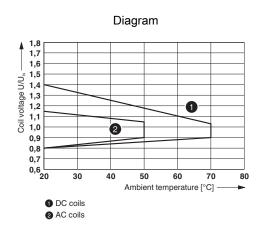
## **Drawings**







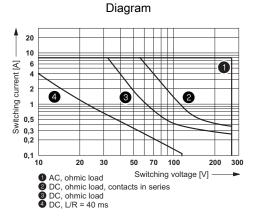
DC coils



11 10

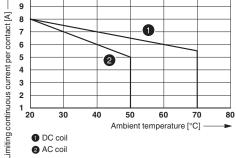
Contact derating

Operating voltage range



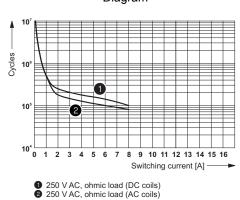
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Diagram

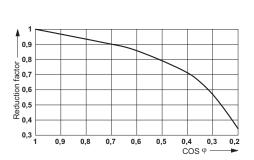


Interrupting rating

Diagram



Electrical service life



Diagram

Service life reduction factor



#### Articles in set

Relay base - RIF-1-BSC/2X21 - 2900930



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

Single relay - REL-MR- 24DC/21-21 - 2961192



Plug-in miniature power relay, with power contact, 2 PDTs, input voltage 24 V DC

Plug-in module - RIF-LDP-12-24 DC - 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:  $12 \dots 24 \text{ V DC} \pm 20 \text{ \%}$ 

Retaining bracket - RIF-RH-1 - 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

#### Approvals

Approvals

Approvals

DNV GL / EAC

Ex Approvals

Approval details



### Approvals

DNV GL		http://exchange.dnv.com/tari/	TAA000018V
EAC	EAC		RU C- DE.A*30.B.01082

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