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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: 1 N/O contact, max. inrush current up to 130 A peak, 80 A (20 ms), 24 V DC input voltage

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



## **Key Commercial Data**

Packing unit	10 STK
GTIN	4 055626 405223
GTIN	4055626405223

#### Technical data

Utilization restriction

#### Note

Dimensions	
Width	16 mm
Height	93 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
Protective circuit	Reverse polarity protection Polarity protection diode



## Technical data

## Coil side

	Free-wheeling diode Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.43 W

## Contact side

Contact 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 orFBST 500)
Minimum switching voltage	12 V AC/DC (at 100 mA)
Min. switching current	100 mA (at 12 V DC)
Maximum inrush current	80 A (for 20 ms)
	130 A (peak, at capacitive load, 230 V AC, 24 μF)
Limiting continuous current	6 A
	10 A (Value is permissible if connections 11 and 21, as well as connections 14 and 24 are bridged.)
Interrupting rating (ohmic load) max.	144 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	85 W (for 250 V DC)
	1500 VA (for 250 V AC)
Interrupting rating (ohmic load) max. bridged	240 W (for 24 V DC. The value is permissible if both connections 13, both connections 14 and both connections BB are bridged.)
	2500 VA (for 250 V AC. The value is permissible if both connections 13, both connections 14 and both connections BB are bridged.)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	6 A (at 24 V, AC15)
	6 A (at 120 V, AC15)
	6 A (at 250 V, AC15)
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## 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



## Technical data

## Connection data input side

	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 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
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 AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay base)
	RT III (Relay)
Mechanical service life	3x 10 <sup>7</sup> cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

## Standards and Regulations

Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
Rated surge voltage	6 kV
Insulation	Safe isolation, reinforced insulation
Degree of pollution	2
Overvoltage category	III
Flammability rating according to UL 94	V2



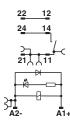
## Technical data

#### **Environmental Product Compliance**

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

### **Drawings**

#### Circuit diagram



#### 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/1IC - 2961341



Plug-in miniature power relay, with power contact for high switch-on currents, 1 N/O contact, 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:  $12 \dots 24 \text{ V DC } \pm 20 \text{ \%}$ 



## Articles in set

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

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