

Relay Module - RIF-1-RPT-LDP-24DC/1ICT - 1078686

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Pre-assembled relay module with Push-in connection, consisting of: relay base, power contact relay, plug-in display/interference suppression module, retaining bracket. Contact type: 1 N/O contact, max. switch-on current up to 800 A, 24 V DC input voltage

Product Description

The relay module is particularly suitable for switching strong capacitive loads, such as LED lights. The ballasts installed in the LED lights often have extremely high switch-on peaks which cause standard relay contacts to fuse. The leading tungsten pre-contact ensures that switch-on currents of up to 800 A can be switched safely. 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.



Key Commercial Data

Packing unit	10 pc
GTIN	
GTIN	4055626792170
Weight per Piece (excluding packing)	69.600 g
Custom tariff number	85364110
Country of origin	China
Note	Made to Order (non-returnable)

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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)
	At least a basic level of insulation is maintained against adjacent modules in the DIN rail direction. If the application has higher requirements on the insulation (reinforced insulation), then these must be realized through suitable measures (e.g. partition plates).

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Note

	The system installer must ensure the touch protection of the product (at voltages > 25 V AC/60 V DC). The product is a built-in device without protection against direct contact.
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Dimensions

Width	16 mm
Height	96 mm
Depth	75 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Maximum altitude	≤ 2000 m
Degree of protection	RT II (Relay)
	IP20 (Relay base)
	≥ IP54 (Installation location)

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	see diagram
Typical input current at U_N	18 mA
Typical response time	8 ms
Typical release time	10 ms
Coil voltage	24 V DC
Protective circuit	Reverse polarity protection Polarity protection diode
	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
Note regarding the switch contact	With tungsten leading contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 100 mA)
Min. switching current	100 mA (at 12 V DC)
Maximum inrush current	165 A (20 ms)
	800 A (200 μs)
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.	264 W (at 24 V DC, observe contact derating)
	58 W (at 48 V DC)

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Contact side

	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	2750 VA (at 250 V AC, observe contact derating)
Switching capacity min.	1200 mW
Switching capacity	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)

General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

Connection data

Connection name	Coil side
Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
	0.14 mm ² ... 1.5 mm ² (Ferrule with plastic sleeve)
	0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve, two conductors on double terminal block)
Conductor cross section AWG	26 ... 16 (solid)
	26 ... 16 (flexible)

Connection data 2

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Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
	0.14 mm ² ... 1.5 mm ² (Ferrule with plastic sleeve)
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Technical data

Standards and Regulations

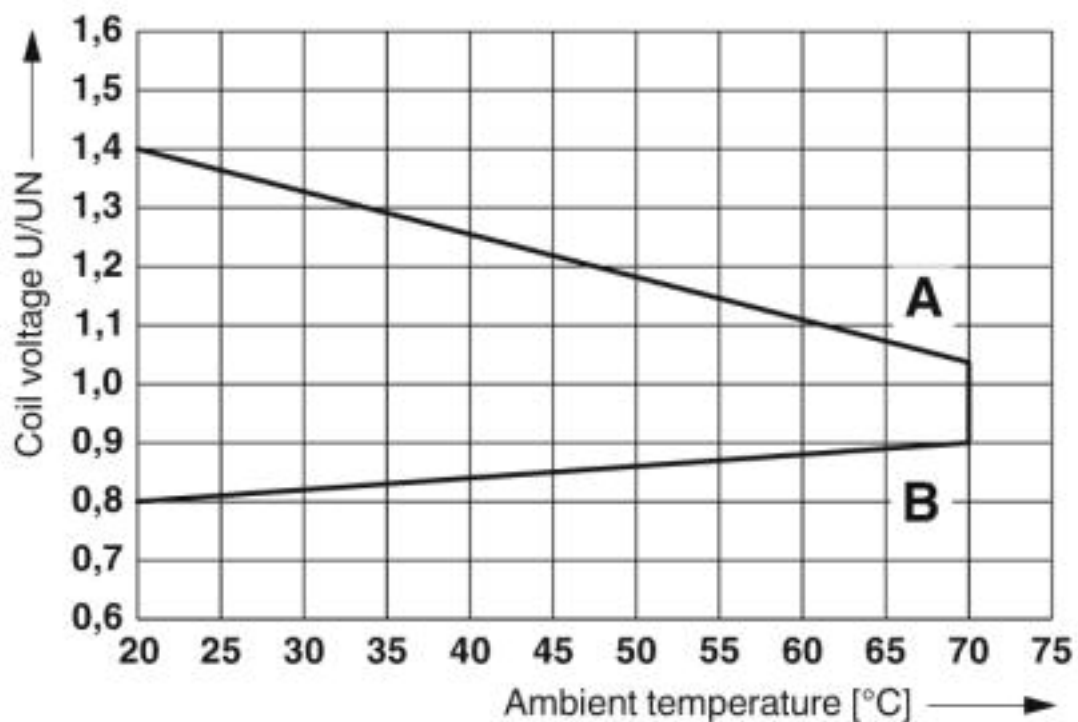
Designation	Standards/regulations
Standards/regulations	EN 50178
	EN 61810-1
Rated surge voltage	6 kV
Insulation	Safe isolation, reinforced insulation
Pollution degree	2
Overvoltage category	III

Environmental Product Compliance

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

Drawings

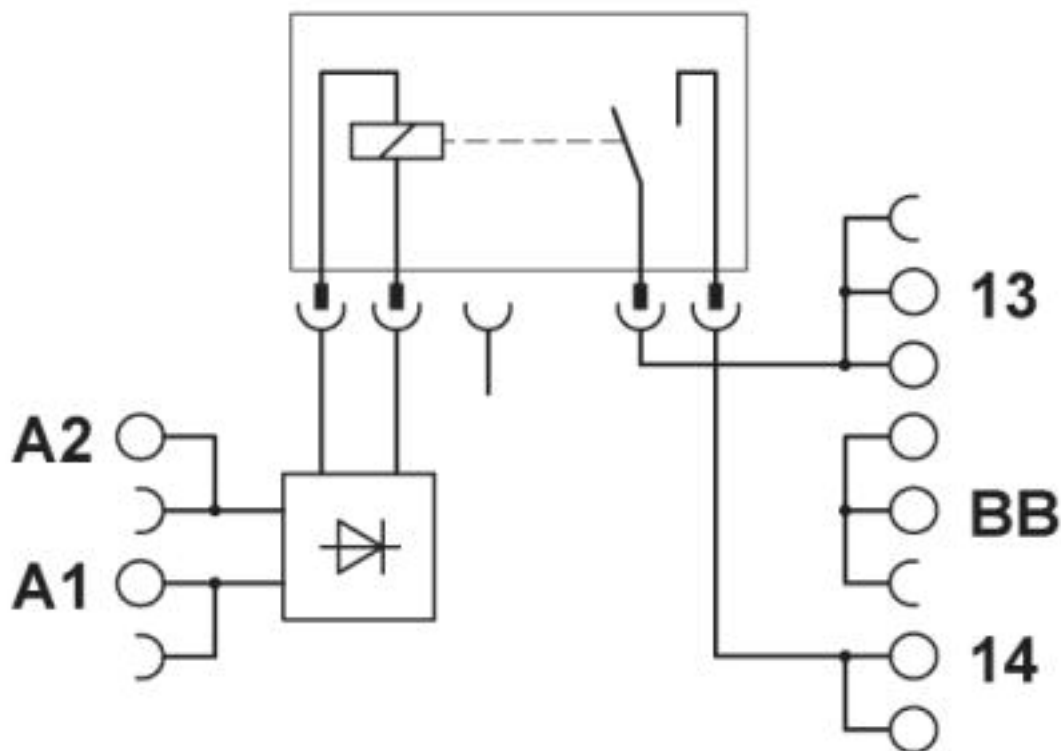
Diagram



Curve A
 Maximum permissible continuous voltage U_{max} with limiting continuous current on the contact side (see relevant technical data)
 Curve B
 Minimum permissible operate voltage U_{op} after pre-excitation (see relevant technical data)

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Circuit diagram



Articles in set

Relay base - RIF-1-BPT/2X21 - 2900931



RIF-1... relay base, for miniature power relay with 1 or 2 PDTs or solid-state relays of the same design, push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

Single relay - REL-MR- 24DC/ 1ICT - 2987338



Pluggable miniature power relay, with tungsten pre-contact for high switch-on currents up to 800 A peaks, 1 N/O contact, input voltage: 24 V DC

Relay Module - RIF-1-RPT-LDP-24DC/1ICT - 1078686

Articles in set

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 ... 24 V DC $\pm 20\%$

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

Classifications

eCl@ss

eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371601
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

ETIM

ETIM 5.0	EC001437
ETIM 6.0	EC001437
ETIM 7.0	EC001437

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

Relay Module - RIF-1-RPT-LDP-24DC/1ICT - 1078686

Approvals

EAC



TR_TS_D_00573_c

Accessories

Accessories

Marker carriers

Marker carriers - STP 5-2 - 0800967



Double marker carrier, snaps onto the double-level spring-cage terminal block STTB 2,5, STTB 4, PTTB 2,5, PTTB 4 can be marked with UC-TM 5, ZB 5 or UC-TMF 5, ZBF 5

Spare parts

Relay base - RIF-1-BPT/2X21 - 2900931



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