

Relay Module - RIF-1-RPT-LV-230AC/1X21MS - 2905290

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Pre-assembled relay module with push-in connection, consisting of: relay base, relay retaining bracket, plug-in suppressor module, and power contact relay with test button and integrated status LED. Contact type: 1 PDT. Input voltage: 230 V AC



Key Commercial Data

Packing unit	10 pc
GTIN	
GTIN	4046356944663
Weight per Piece (excluding packing)	70.420 g
Custom tariff number	85364900
Country of origin	China

Technical data

Note

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

Width	16 mm
Height	93 mm
Depth	75 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	230 V AC (50/60 Hz)
Input voltage range in reference to U_N	see diagram
Mains frequency	50/60 Hz

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Technical data

Coil side

Typical input current at U_N	3.5 mA
Typical response time	4 ms ... 10 ms
Typical release time range	3 ms ... 20 ms
Coil voltage	230 V AC
Protective circuit	Varistor
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.81 W

Contact side

Contact type	1 PDT
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	32 A (20 ms, N/O contact)
Limiting continuous current	see diagram
Interrupting rating (ohmic load) max.	264 W (at 24 V DC)
	62 W (at 48 V DC)
	48 W (at 60 V DC)
	52 W (at 110 V DC)
	66 W (at 220 V DC)
	2500 VA (for 250 V AC)
Switching capacity min.	120 mW
Switching capacity	2 A (at 24 V, DC13)
	3 A (at 240 V, AC15)

Connection data input side

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 output side

Connection name	Contact side
Connection method	Push-in connection
Stripping length	8 mm

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Connection data output side

Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
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Conductor cross section AWG	26 ... 16 (solid)
	26 ... 16 (flexible)

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 II (Relay)
Mechanical service life	approx. 5x 10 ⁶ 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
Flammability rating according to UL 94	V2

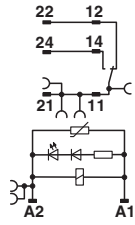
Environmental Product Compliance

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

Drawings

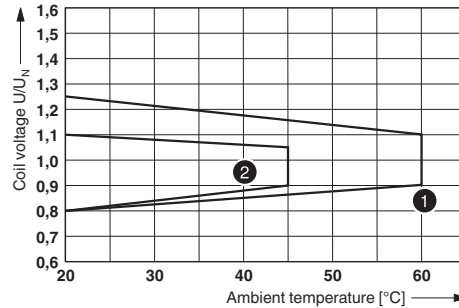
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Circuit diagram



AC coils

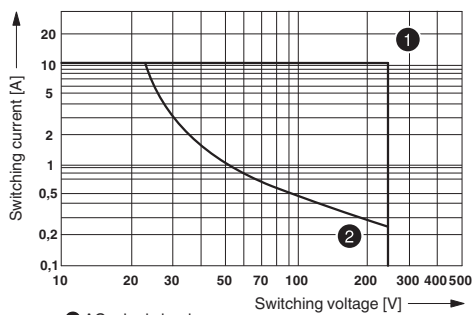
Diagram



- ① DC coils
- ② AC coils

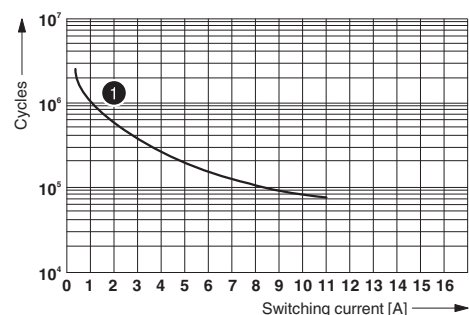
Operating voltage range

Diagram



- ① AC, ohmic load
- ② DC, ohmic load

Diagram

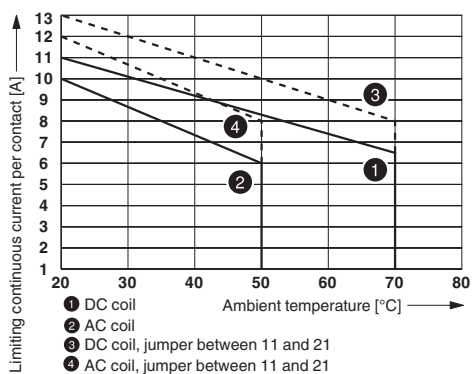


- ① = 250 V AC, ohmic load

Electrical service life

Interrupting rating

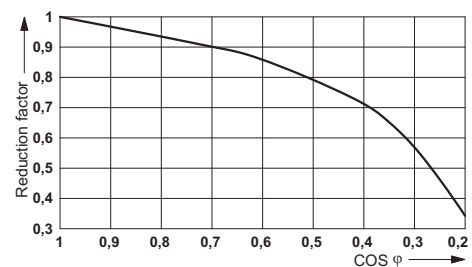
Diagram



- ① DC coil
- ② AC coil
- ③ DC coil, jumper between 11 and 21
- ④ AC coil, jumper between 11 and 21

Contact derating

Diagram



Service life reduction factor

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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-230AC/21HC/MS - 2987914



Plug-in miniature relay, with power contact, 1 PDT, test button, mechanical switch position indicator, status LED, input voltage 230 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-1-H - 2904468



Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-1 relay base, for 25 mm tall miniature power relay and solid-state relay

Classifications

eCl@ss

eCl@ss 5.0	27371601
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 2.0	EC001437
ETIM 3.0	EC001437

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Classifications

ETIM

ETIM 4.0	EC001437
ETIM 5.0	EC001437
ETIM 6.0	EC001437

UNSPSC

UNSPSC 13.2	39122334
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Approvals

Approvals


Approvals

DNV GL / EAC

Ex Approvals

Approval details

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

Accessories

End block

End clamp - CLIPFIX 35 - 3022218



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

Insulating sleeve

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Accessories

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white



Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, color: red



Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue



Insulating sleeve - MPS-IH YE - 0201692

Insulating sleeve, color: yellow



Insulating sleeve - MPS-IH GN - 0201702

Insulating sleeve, color: green



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Accessories

Insulating sleeve - MPS-IH GY - 0201728

Insulating sleeve, color: gray



Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



Jumper

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: red

Plug-in bridge - FBS 2-6 BU - 3036932



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: blue

Plug-in bridge - FBS 2-6 GY - 3032237



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: gray

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Accessories

Plug-in bridge - FBS 2-8 - 3030284



Plug-in bridge, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: red

Plug-in bridge - FBS 2-8 BU - 3032567



Plug-in bridge, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: blue

Plug-in bridge - FBS 2-8 GY 7042 - 3032541



Bridge for potential distribution

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

Terminal marking

Zack marker strip - ZB 5 :UNBEDRUCKT - 1050004



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.1 x 10.5 mm

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Accessories

Zack marker strip - ZB 15:UNBEDRUCKT - 0811972



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 15.2 mm, lettering field size: 10.5 x 15.1 mm

Marker for terminal blocks - UC-TM 16 - 0819217



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 16 mm, lettering field size: 15.45 x 10.5 mm

Marker for terminal blocks - UC-TMF 16 - 0819262



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 16 mm, lettering field size: 15.45 x 5.1 mm

Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm² conductor cross section, color: gray