

Relay Module - RIF-1-RPT-LDP-24DC/2X21AU - 2903330

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Pre-assembled relay module with push-in connection, consisting of: relay base, multi-layer contact relay, plug-in display/suppressor module, and retaining bracket. Contact type: 2 PDTs. Input voltage: 24 V DC

RoHS

Key Commercial Data

Packing unit	10 STK
Minimum order quantity	10 STK
GTIN	 4 046356 732314
GTIN	4046356732314
Weight per Piece (excluding packing)	67.700 g
Custom tariff number	85364110
Country of origin	Germany

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

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	see diagram

Relay Module - RIF-1-RPT-LDP-24DC/2X21AU - 2903330

Technical data

Coil side

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	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, hard gold-plated
Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Min. switching current	1 mA (at 24 V)
Maximum inrush current	50 mA
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)

Contact side (with destroyed gold layer)

Contact material	AgNi
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Limiting continuous current	25 A (20 ms, N/O contact)
Min. switching current	10 mA (At 5 V)
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 110 V, DC13)
	0.2 A (at 250 V, DC13)
	2 A (at 24 V, AC15)
	2 A (at 120 V, AC15)
	2 A (at 250 V, AC15)

Connection data input side

Connection name	Coil side
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Relay Module - RIF-1-RPT-LDP-24DC/2X21AU - 2903330

Technical data

Connection data input 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 (with or without ferrule)
Conductor cross section flexible (2 conductors with same cross section)	0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve)
	0.14 mm ² ... 1.5 mm ² (Ferrules without plastic sleeve)
Conductor cross section AWG	26 ... 16

Connection data output side

Connection name	Contact 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 (with or without ferrule)
Conductor cross section AWG	26 ... 16

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 _{rms} (50 Hz, 1 min.)
Test voltage PDT/PDT	2.5 kV _{rms} (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay socket)
	RT III (Relay)
Mechanical service life	approx. 3x 10 ⁷ cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

Standards and Regulations

Standards/regulations	DIN EN 50178
	IEC 62103
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

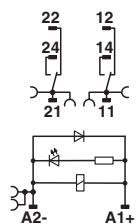
Environmental Product Compliance

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

Drawings

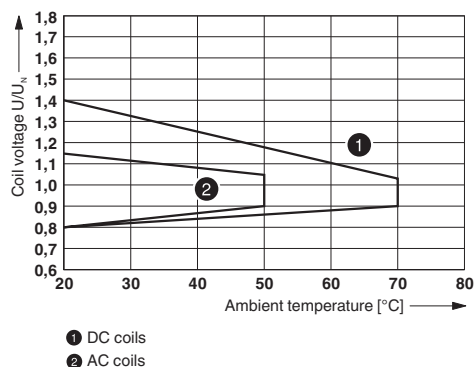
Relay Module - RIF-1-RPT-LDP-24DC/2X21AU - 2903330

Circuit diagram



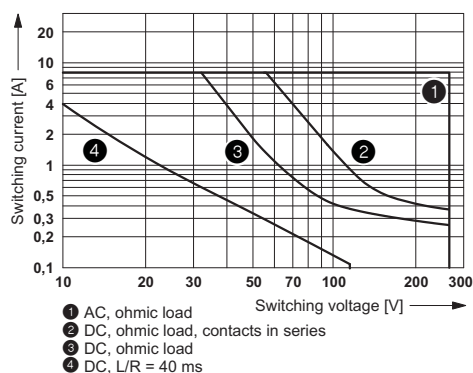
DC coils

Diagram

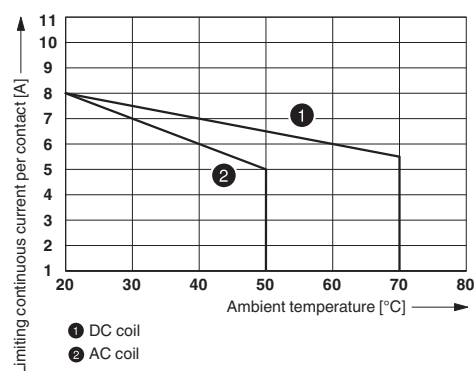


Operating voltage range

Diagram

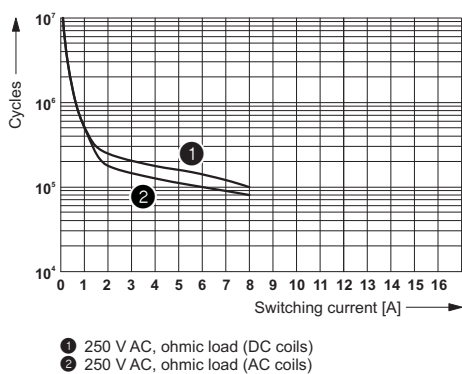


Diagram



Interrupting rating

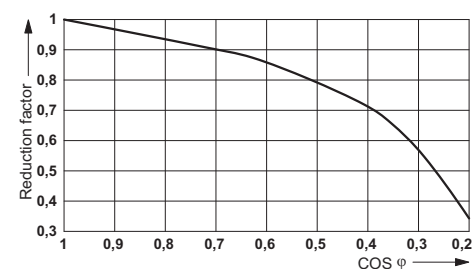
Diagram



Electrical service life

Contact derating

Diagram



Service life reduction factor

Relay Module - RIF-1-RPT-LDP-24DC/2X21AU - 2903330

Articles in set

Relay socket - 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/21-21AU - 2961215



Plug-in miniature power relay, with multi-layer gold 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 - 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	27371601
eCl@ss 5.1	27371601
eCl@ss 6.0	27371601
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 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39122334

Approvals

Approvals

Approvals

EAC / GL / LR / EAC / PRS

Ex Approvals

Approval details

EAC		EAC-Zulassung
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GL		http://www.gl-group.com/newbuilding/approvals/index.html	11247-14 HH
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LR		http://www.lr.org/en	15/20011
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EAC		RU C- DE.A*30.B.01082
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Relay Module - RIF-1-RPT-LDP-24DC/2X21AU - 2903330

Approvals

PRS



<http://www.prs.pl/>

TE/2108/880590/16

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

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

Relay Module - RIF-1-RPT-LDP-24DC/2X21AU - 2903330

Accessories

Insulating sleeve - MPS-IH YE - 0201692



Insulating sleeve, Color: yellow

Insulating sleeve - MPS-IH GN - 0201702



Insulating sleeve, Color: green

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, Length: 23 mm, Width: 10.7 mm, Number of positions: 2, Color: red

Relay Module - RIF-1-RPT-LDP-24DC/2X21AU - 2903330

Accessories

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



Plug-in bridge, Pitch: 6.2 mm, Number of positions: 2, Color: blue

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



Plug-in bridge, Pitch: 6.2 mm, Number of positions: 2, Color: gray

Plug-in bridge - FBS 2-8 - 3030284



Plug-in bridge, Pitch: 8.2 mm, Length: 3 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, Number of positions: 2, Color: blue

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



Bridge for potential distribution

Terminal marking

Relay Module - RIF-1-RPT-LDP-24DC/2X21AU - 2903330

Accessories

Zack marker strip - ZB 5 :UNBEDRUCKT - 1050004



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

Zack marker strip - ZB 15:UNBEDRUCKT - 0811972



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

Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm² conductor cross section, Color: silver

Spare parts

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



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