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Relay Module - RIF-4-RSC-LDP-24DC/3X1 - 2903284

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Pre-assembled relay module with screw connection, consisting of: relay base, power contact relay, and retaining bracket. Contact type: 3 N/O contacts. Input voltage: 24 V DC

RoHS

Key Commercial Data

Packing unit	5 pc
GTIN	
GTIN	4046356732833
Weight per Piece (excluding packing)	99.990 g
Custom tariff number	85364110
Country of origin	China

Technical data

Note

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

Dimensions

Width	44 mm
Height	96 mm
Depth	91 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 60 °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
Typical input current at U_N	70 mA

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Coil side

Typical response time	20 ms
Typical release time	20 ms
Coil voltage	24 V DC
Protective circuit	Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	1.68 W

Contact side

Contact type	3 N/O contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	440 V AC
	250 V DC
Minimum switching voltage	10 V (At 24 mA)
Min. switching current	10 mA (at 24 V)
Maximum inrush current	50 A (20 ms, N/O contact)
Limiting continuous current	10 A (see diagram)
Interrupting rating (ohmic load) max.	240 W (at 24 V DC)
	480 W (at 48 V DC)
	600 W (at 60 V DC)
	660 W (at 110 V DC)
	183 W (at 220 V DC)
	2500 VA (for 250 V AC)
	4000 VA (at 440 V AC)
Switching capacity	1 A (at 24 V, DC13)
	1 A (at 120 V, DC13)
	1 A (at 220 V, DC13)
	1.5 A (at 24 V, AC15)
	1.5 A (at 120 V, AC15)
	1.5 A (at 240 V, AC15)
Motor load according to UL 508	1/3 HP, 120 V AC (single-phase AC motor)
	1/2 HP, 240 V AC (single-phase AC motor)
	1/2 HP, 240 V AC (three-phase induction motor)

Connection data input side

Connection name	Input 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 mm² ... 4 mm² (Ferrule with plastic sleeve)

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Connection data input side

Conductor cross section flexible (2 conductors with same cross section)	0.5 mm² ... 2.5 mm²
	0.5 mm² ... 1.5 mm² (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 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 mm² ... 1.5 mm² (TWIN ferrule with plastic sleeve)
Conductor cross section AWG	20 ... 10 (solid)
	20 ... 12 (flexible)
Torque	0.5 Nm ... 0.6 Nm

General

Test voltage relay winding/relay contact	2.5 kV$_{rms}$ (50 Hz, 1 min.)
Test voltage relay contact/relay contact	2.5 kV$_{rms}$ (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay base)
	RT I (Relay)
Mechanical service life	approx. 10^7 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	4 kV
Insulation	Basic insulation
Degree of pollution	2
Overvoltage category	III
Flammability rating according to UL 94	V2

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50

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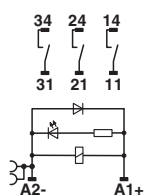# Relay Module - RIF-4-RSC-LDP-24DC/3X1 - 2903284

Technical data

Environmental Product Compliance

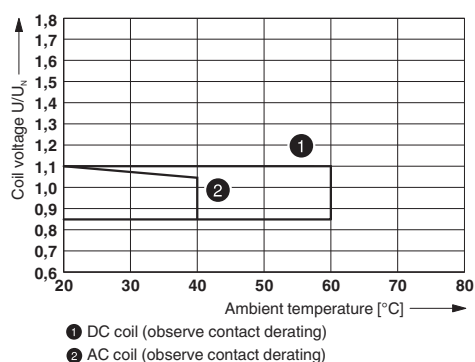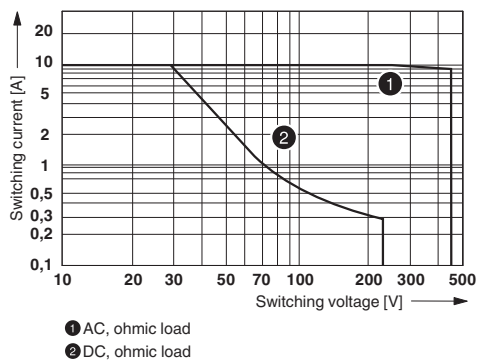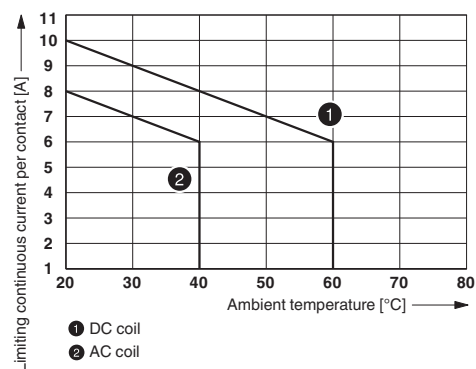|	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Circuit diagram

DC coils

Diagram

❶ DC coil (observe contact derating)
❷ AC coil (observe contact derating)

Operating voltage range

Diagram

❶ AC, ohmic load
❷ DC, ohmic load

Interrupting rating

Diagram

❶ DC coil
❷ AC coil

Contact derating

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Diagram

① 250 V AC, ohmic load
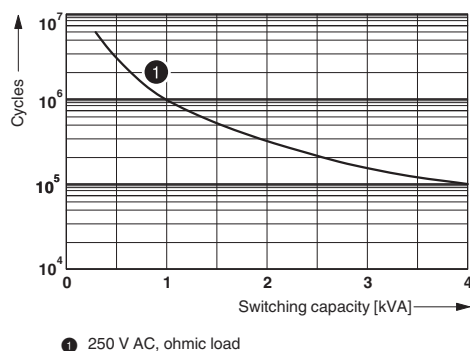
Diagram
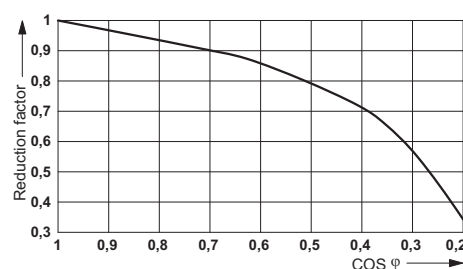
Electrical service life

Service life reduction factor

Articles in set

Relay base - RIF-4-BSC/3X21 - 2900960

RIF-4... relay base, for high-power relay with 2 or 3 changeover contacts or 3 N/O contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Single relay - REL-PR3- 24DC/3X1 - 2903706

Plug-in high-power relay with power contacts, 3 N/O contacts, coil 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 ±20 %

Retaining bracket - RIF-RH-4 - 2900956

Relay retaining bracket, with holder for marking material, suitable for RIF-4 relay base, for high-power relay

Relay Module - RIF-4-RSC-LDP-24DC/3X1 - 2903284

Articles in set

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
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

DNV GL / CSA / EAC

Ex Approvals

Approval details

DNV GL		http://exchange.dnv.com/tari/	TAA000018V

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Approvals

CSA		http://www.csagroup.org/services-industries/product-listing/	2607057

EAC			RU C-DE.A*30.B.01082

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

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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, width: 10.7 mm, number of positions: 2, color: red

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Accessories

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

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

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

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Accessories

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

Spare parts

Relay base - RIF-4-BSC/3X21 - 2900960

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