

Relay Module - RIF-4-RPT-LV-120AC/3X21 - 2903277

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The figure shows the 24 V DC version

Pre-assembled relay modules with push-in connection, consisting of: relay base, power contact relay, plug-in display/suppressor module, and retaining bracket. Input voltage: 120 V AC, 3 PDTs



Key commercial data

Packing unit	1 pc
Custom tariff number	85364900
Country of origin	Germany

Technical data

Dimensions

Width	43 mm
Height	111 mm
Depth	90 mm

Ambient conditions

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

Coil side

Nominal input voltage U_N	120 V AC
Input voltage range in reference to U_N	(see diagram)
Nominal input current at U_{IN}	24 mA
Typical response time	5 ms ... 25 ms
Typical release time range	5 ms ... 20 ms
Operating voltage display	Yellow LED
Protective circuit	Varistor

Relay Module - RIF-4-RPT-LV-120AC/3X21 - 2903277

Technical data

Contact side

Contact type	3 PDTs
Contact material	AgNi
Maximum switching voltage	440 V AC
	250 V DC
Minimum switching voltage	10 V (At 24 mA)
Maximum inrush current	50 A (20 ms, N/O contact)
Min. switching current	10 mA (at 24 V)
Limiting continuous current	8 A (see diagram)
Interrupting rating (ohmic load) max.	216 W (at 24 V DC)
	124 W (at 48 V DC)
	108 W (at 60 V DC)
	52 W (at 110 V DC)
	70 W (at 220 V DC)
	2250 VA (for 250 V AC)
	4000 VA (At 440 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (24 V (DC13))
	1.5 A (230 V (AC 15))
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

Connection method	Push-in connection
Connection name	Input
Connection method	Push-in connection
Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section stranded min.	0.14 mm ²
Conductor cross section stranded max.	1.5 mm ²
Conductor cross section stranded, with ferrule with plastic sleeve min.	0.14 mm ²
Conductor cross section stranded, with ferrule with plastic sleeve max.	1.5 mm ²
Conductor cross section stranded, with ferrule without plastic sleeve min.	0.14 mm ²
Conductor cross section stranded, with ferrule without plastic sleeve max.	1.5 mm ²
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	16
Stripping length	8 mm
Connection name	Output
Connection method	Push-in connection

Relay Module - RIF-4-RPT-LV-120AC/3X21 - 2903277

Technical data

Connection data

Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section stranded min.	0.14 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section stranded, with ferrule with plastic sleeve min.	0.14 mm ²
Conductor cross section stranded, with ferrule with plastic sleeve max.	2.5 mm ²
Conductor cross section stranded, with ferrule without plastic sleeve min.	0.14 mm ²
Conductor cross section stranded, with ferrule without plastic sleeve max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	14
Stripping length	10 mm

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 socket)
	RT I (Relay)
Mechanical service life	Approx. 10 ⁷ cycles
Standards/regulations	DIN EN 50178
	IEC 62103
Rated insulation voltage	250 V AC
Pollution degree	2
Surge voltage category	III
Mounting position	any
Assembly instructions	In rows with zero spacing

Articles in set

Relay socket - RIF-4-BPT/3X21 - 2900961



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

Relay Module - RIF-4-RPT-LV-120AC/3X21 - 2903277

Articles in set

Single relay - REL-PR3-120AC/3X21 - 2903704



Plug-in high-power relay with power contacts, 3 PDTs, coil voltage: 120 V AC

Plug-in module - RIF-LV-120-230 AC/110 DC - 2900944



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor and yellow LED, input voltage: 120 - 230 V AC/110 V DC $\pm 20\%$

Retaining bracket - RIF-RH-4 - 2900956



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

Classifications

eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371603
eCl@ss 5.1	27371603
eCl@ss 6.0	27371603
eCl@ss 7.0	27371603
eCl@ss 8.0	27371603

ETIM

ETIM 3.0	EC001456
ETIM 4.0	EC001456
ETIM 5.0	EC001437

Relay Module - RIF-4-RPT-LV-120AC/3X21 - 2903277

Classifications

UNSPSC

UNSPSC 6.01	30211917
UNSPSC 7.0901	39121516
UNSPSC 11	39121516
UNSPSC 12.01	39121516
UNSPSC 13.2	39121516

Approvals

Approvals

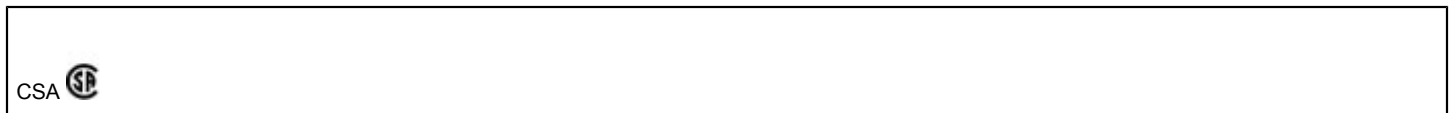
Approvals

CSA

Ex Approvals

Approvals submitted

Approval details



Accessories

Accessories

Bridge

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, Number of positions: 2, Color: red

Relay Module - RIF-4-RPT-LV-120AC/3X21 - 2903277

Accessories

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



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

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



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

Plug-in bridge - FBS 5-6 - 3030349



Plug-in bridge, Number of positions: 5, Color: red

Plug-in bridge - FBS 10-6 - 3030271



Plug-in bridge, Number of positions: 10, Color: red

Plug-in bridge - FBS 20-6 - 3030365



Plug-in bridge, Number of positions: 20, Color: red

Relay Module - RIF-4-RPT-LV-120AC/3X21 - 2903277

Accessories

Plug-in bridge - FBS 50-6 - 3032224



Plug-in bridge, Number of positions: 50, Color: red

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-4-RPT-LV-120AC/3X21 - 2903277

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

Terminal marking

Zack marker strip - ZB 5 :UNBEDRUCKT - 1050004



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 5.2 mm, Lettering field: 5.1 x 10.5 mm

Relay Module - RIF-4-RPT-LV-120AC/3X21 - 2903277

Accessories

Zack marker strip - ZB 15:UNBEDRUCKT - 0811972



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, 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

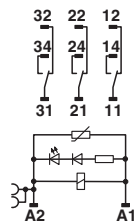
Test plugs - MPS-MT - 0201744



Test plugs, Color: silver

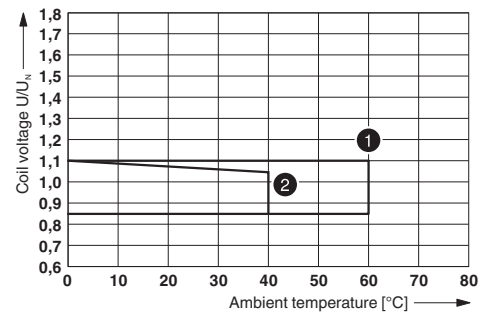
Drawings

Circuit diagram



AC coils

Diagram

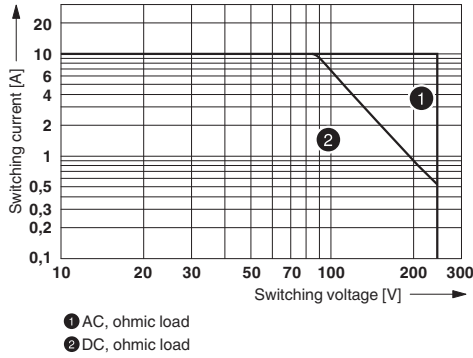


- ① DC coil (observe contact derating)
- ② AC coil (observe contact derating)

Operating voltage range

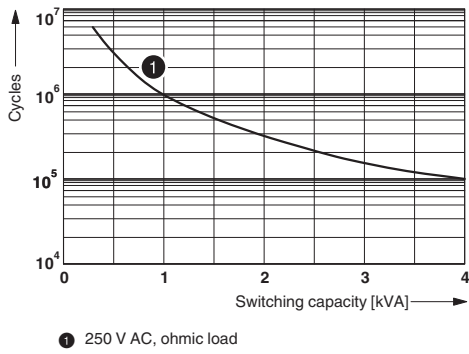
Relay Module - RIF-4-RPT-LV-120AC/3X21 - 2903277

Diagram



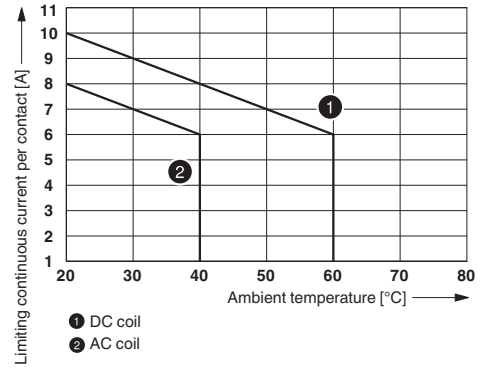
Interrupting rating

Diagram



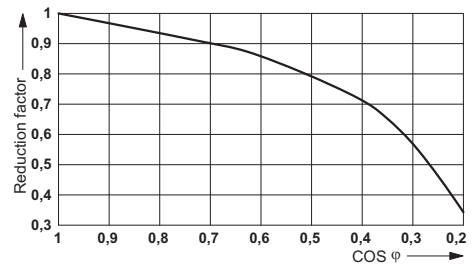
Electrical service life

Diagram



Contact derating

Diagram



Service life reduction factor