

Relay Module - RIF-1-RSC-LDP-12DC/1X21 - 2908500

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Pre-assembled relay module with screw connection, consisting of: relay base, power contact relay, plug-in display/interference suppression module, and retaining bracket. Contact type: 1 changeover contact. Input voltage: 12 V DC

Product Description

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
Minimum order quantity	10 pc
GTIN	 4 055626 306223
GTIN	4055626306223
Weight per Piece (excluding packing)	69.520 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)

Dimensions

Width	16 mm
Height	89 mm
Depth	75 mm

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Technical data

Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	IP20 (Relay base)
	RT III (Relay)

Coil side

Nominal input voltage U_N	12 V DC
Input voltage range in reference to U_N	see diagram
Typical input current at U_N	33 mA
Typical response time	8 ms
Typical release time	10 ms
Coil voltage	12 V DC
Protective circuit	Damping diode
Operating voltage display	Yellow LED

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	50 A (20 ms, N/O contact)
Limiting continuous current	11 A (see diagram)
Interrupting rating (ohmic load) max.	264 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	2750 VA (for 250 V AC)
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 _{rms} (50 Hz, 1 min.)
Operating mode	100% operating factor
Mechanical service life	approx. 3×10^7 cycles
Service life, electrical	see diagram

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Technical data

General

Mounting position	any
Assembly instructions	In rows with zero spacing

Connection data

Connection name	Coil side
Connection method	Screw connection
Stripping length	8 mm
Conductor cross section solid	0.5 mm ² ... 4 mm ²
Conductor cross-section solid (2 conductors with same cross section)	0.5 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.5 mm ² ... 4 mm ²
	0.5 mm ² ... 4 mm ² (Ferrule with plastic sleeve)
Conductor cross section flexible (2 conductors with same cross section)	0.5 mm ² ... 2.5 mm ²
	0.5 mm ² ... 1.5 mm ² (TWIN ferrule with plastic sleeve)
Conductor cross section AWG	20 ... 10 (solid)
	20 ... 12 (flexible)
Torque	0.5 Nm ... 0.6 Nm

Connection data 2

Connection name	Contact side
Connection method	Screw connection
Stripping length	8 mm
Conductor cross section solid	0.5 mm ² ... 4 mm ²
Conductor cross-section solid (2 conductors with same cross section)	0.5 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.5 mm ² ... 4 mm ²
	0.5 mm ² ... 4 mm ² (Ferrule with plastic sleeve)
Conductor cross section flexible (2 conductors with same cross section)	0.5 mm ² ... 2.5 mm ²
	0.5 mm ² ... 1.5 mm ² (TWIN ferrule with plastic sleeve)
Conductor cross section AWG	20 ... 10 (solid)
	20 ... 12 (flexible)
Torque	0.5 Nm ... 0.6 Nm

Standards and Regulations

Standards/regulations	DIN EN 50178
Rated insulation voltage	250 V AC
Rated surge voltage	6 kV
Insulation	safe isolation
Pollution degree	2
Overvoltage category	III

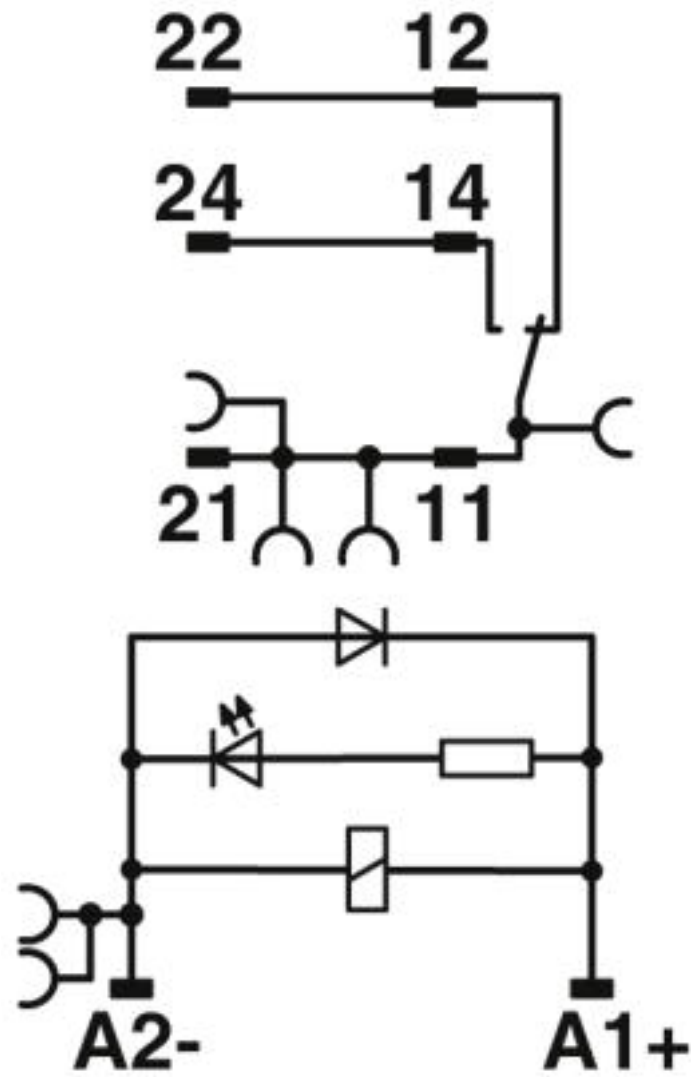
Environmental Product Compliance

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

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Drawings

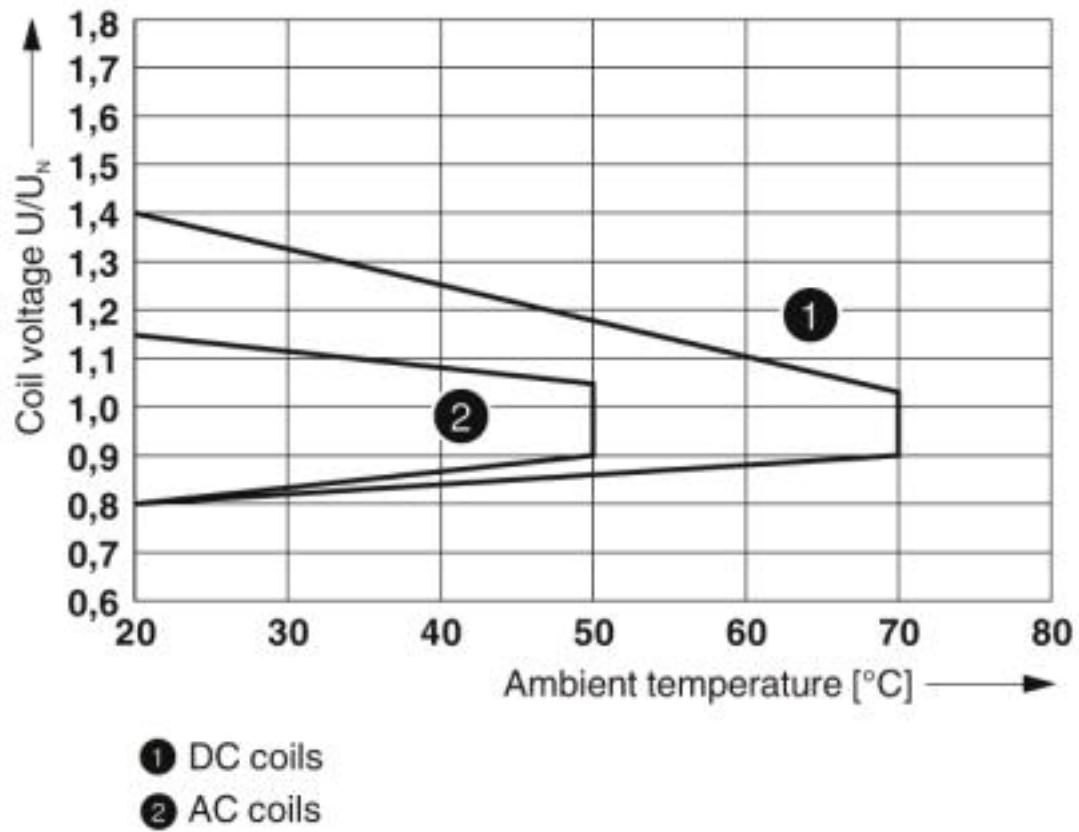
Circuit diagram



DC coils

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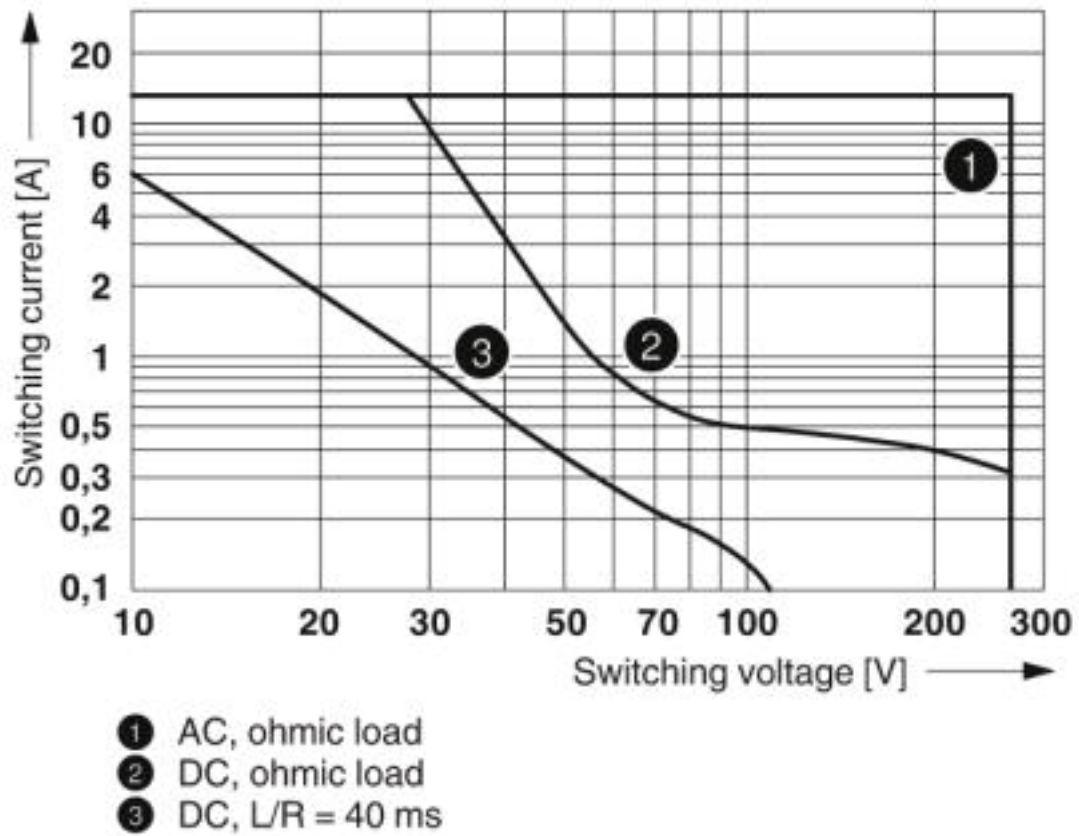
Diagram



Operating voltage range

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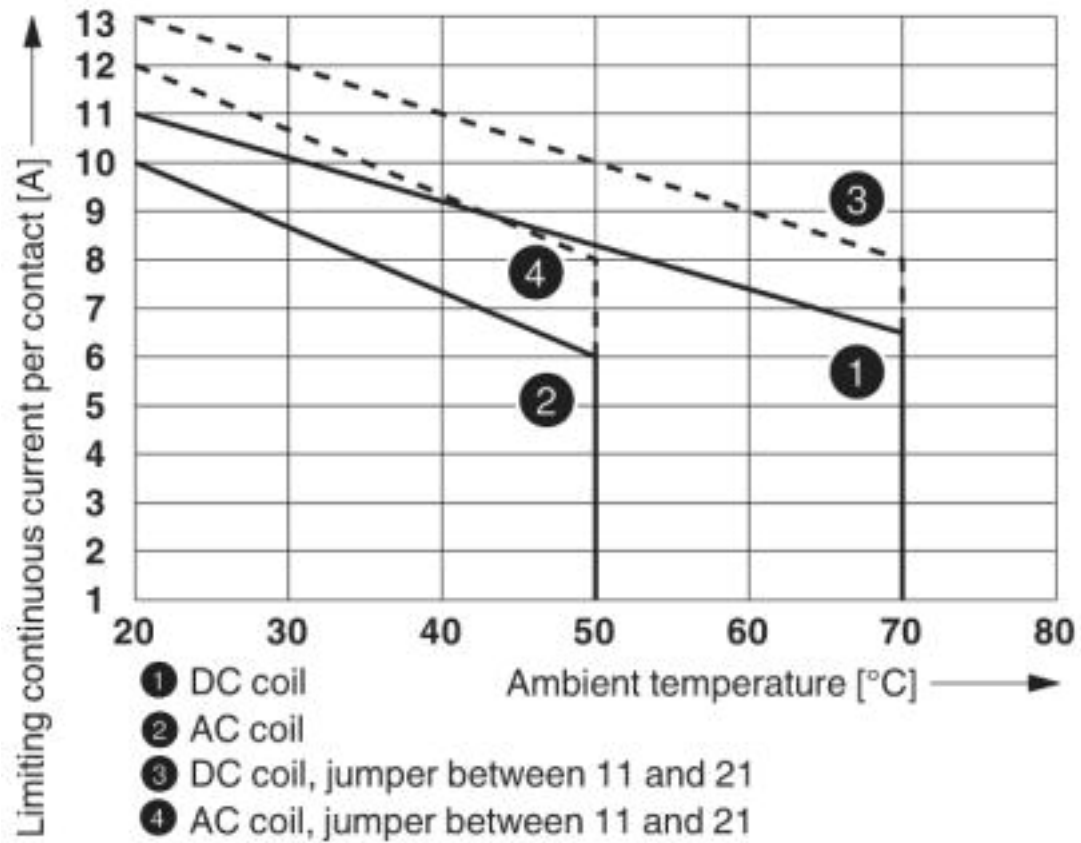
Diagram



Interrupting rating

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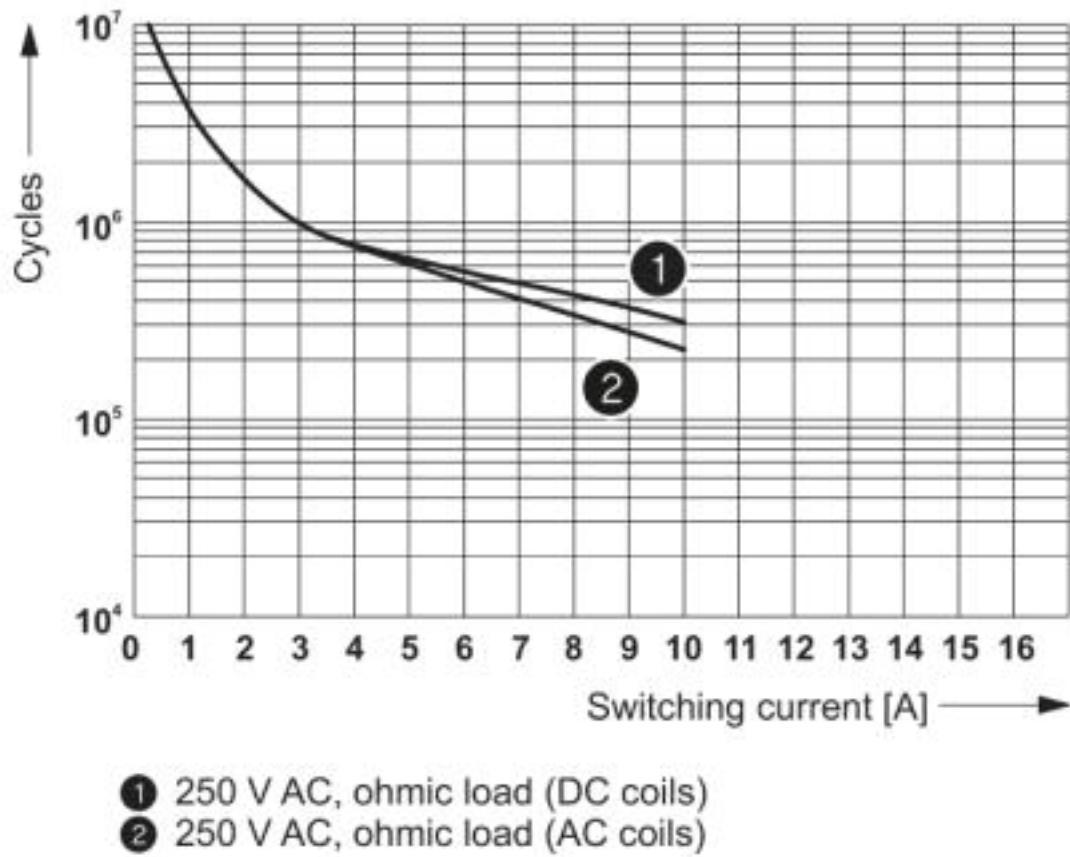
Diagram



Contact derating

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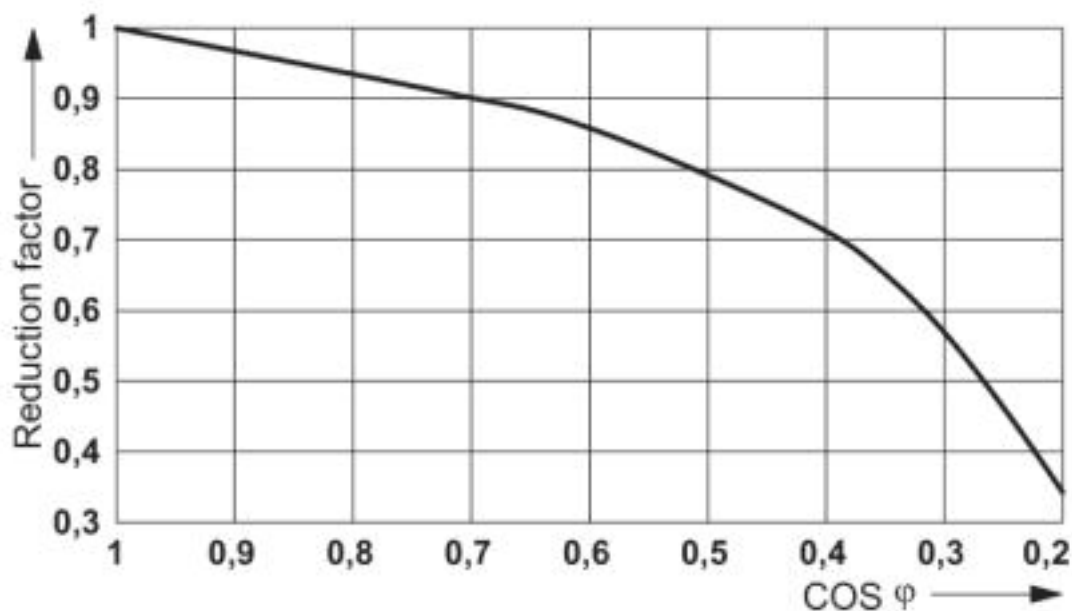
Diagram



Electrical service life

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Diagram



Service life reduction factor

Articles in set

Relay base - RIF-1-BSC/2X21 - 2900930



RIF-1... relay base, for miniature power relay with 1 or 2 changeover contacts or identical solid-state relays, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Single relay - REL-MR- 12DC/21HC - 2961309



Plug-in miniature power relay, with power contact for high continuous currents, 1 PDT, input voltage 12 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 $\pm 20\%$

Relay Module - RIF-1-RSC-LDP-12DC/1X21 - 2908500

Articles in set

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 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437
ETIM 5.0	EC001437
ETIM 6.0	EC001437
ETIM 7.0	EC001437

UNSPSC

UNSPSC 13.2	39122334
UNSPSC 18.0	39122334
UNSPSC 19.0	39122334
UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

Approvals

Approvals

Approvals

DNV GL / EAC / EAC

Ex Approvals

Relay Module - RIF-1-RSC-LDP-12DC/1X21 - 2908500

Approvals

Approval details

DNV GL		https://approvalfinder.dnvgl.com/	TAA000018V
EAC			TR_TS_D_00573_c
EAC			TR_TS_S_00010_c

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



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Accessories

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



Insulating sleeve - MPS-IH GY - 0201728

Insulating sleeve, color: gray



Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



Jumper

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Accessories

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

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

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Accessories

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, Number of individual labels: 10

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, Number of individual labels: 5

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, Number of individual labels: 32

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Accessories

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, Number of individual labels: 32

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-1-BSC/2X21 - 2900930



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Accessories

Retaining bracket - RIF-RH-1 - 2900953



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