RIF-0-OPT-24DC/230AC/1 - Solid-state relay module

2905295

https://www.phoenixcontact.com/gb/products/2905295

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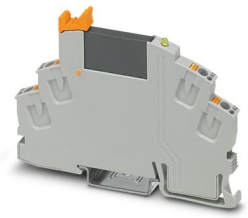


Pre-assembled solid-state relay module with push-in connection, consisting of: relay base with ejector and plug-in miniature solid-state relay. Input voltage: 24 V DC. Output: 24 - 253 V AC/0.75 A

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.

Commercial data

Item number	2905295
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	CK652K
Product key	CK652K
Catalog page	Page 323 (C-5-2019)
GTIN	4046356945431
Weight per piece (including packing)	24.4 g
Weight per piece (excluding packing)	22.008 g
Customs tariff number	85364110
Country of origin	JP

sales@prom-elec.com / ООО ПРОМЭЛЕКТРОНИКА

Set consists of

RIF-0-BPT/1 - Relay base

2901873

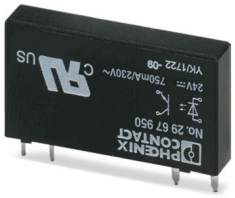
https://www.phoenixcontact.com/gb/products/2901873

RIF-0... relay base, for miniature power relay with 1 N/O contact or solid-state relays of the same design, push-in connection, for mounting on NS 35/7,5

OPT-24DC/230AC/ 1 - Miniature solid-state relay

2967950

https://www.phoenixcontact.com/gb/products/2967950



Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 V DC, output: 24 - 253 V AC/0.75 A

Technical data

Product properties

Product type	Solid-state relay module
Product family	RIFLINE complete
Application	Universal
Operating mode	100% operating factor

Insulation characteristics

Insulation	Basic insulation

Insulation characteristics: Air clearances and creepage distances between the power circuits

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Electrical properties

Maximum power dissipation for nominal condition	0.19 W
Test voltage (Input/output)	2.5 kV_{rms} (50 Hz, 1 min., input/output)

Air clearances and creepage distances between the power circuits

Rated insulation voltage	250 V AC
Rated surge voltage	4 kV

Input data

Rated actuating voltage U_C	24 V DC
Voltage range with reference to U_C	0.8 ... 1.2
Rated actuating current I_C	8 mA
Input voltage range	19.2 V DC ... 28.8 V DC
"0" signal switching threshold in reference to U_C	< 0.4
"1" signal switching threshold in reference to U_C	> 0.8
Typical response time	10 ms
Typical turn-off time	10 ms
Status display	Yellow LED
Protective circuit	Freewheeling diode
Transmission frequency	10 Hz

Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
Output voltage range	24 V AC ... 253 V AC (50/60 Hz)
Limiting continuous current	750 mA (see derating curve)
Maximum inrush current	30 A (10 ms)
Min. load current	10 mA
Leakage current	1 mA (in off state)

Surge current	30 A AC (tp = 20 ms, at 25 °C)
Phase angle cos phi min	0.5
Max. load value	4.5 A^2s (tp = 10 ms, at 25 °C)
Surge voltage protection	> 275 V
Voltage drop at max. limiting continuous current	< 1 V
Output circuit	2-conductor, zero voltage switch
Protective circuit	RCV circuit
Utilization category CB Scheme (IEC 60947-5-1)	AC12, 0.75 A/250 V

Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section rigid	0.14 mm² ... 1.5 mm²
Conductor cross section flexible	0.14 mm² ... 1.5 mm²
	0.14 mm² ... 1.5 mm² (Ferrule with plastic sleeve)
Conductor cross section AWG	24 ... 16

Dimensions

Width	6.2 mm
Height	93 mm
Depth	66 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V2 (Housing)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Standards and regulations

Air clearances and creepage distances between the power circuits

Standards/regulations	DIN EN 60947-5-1

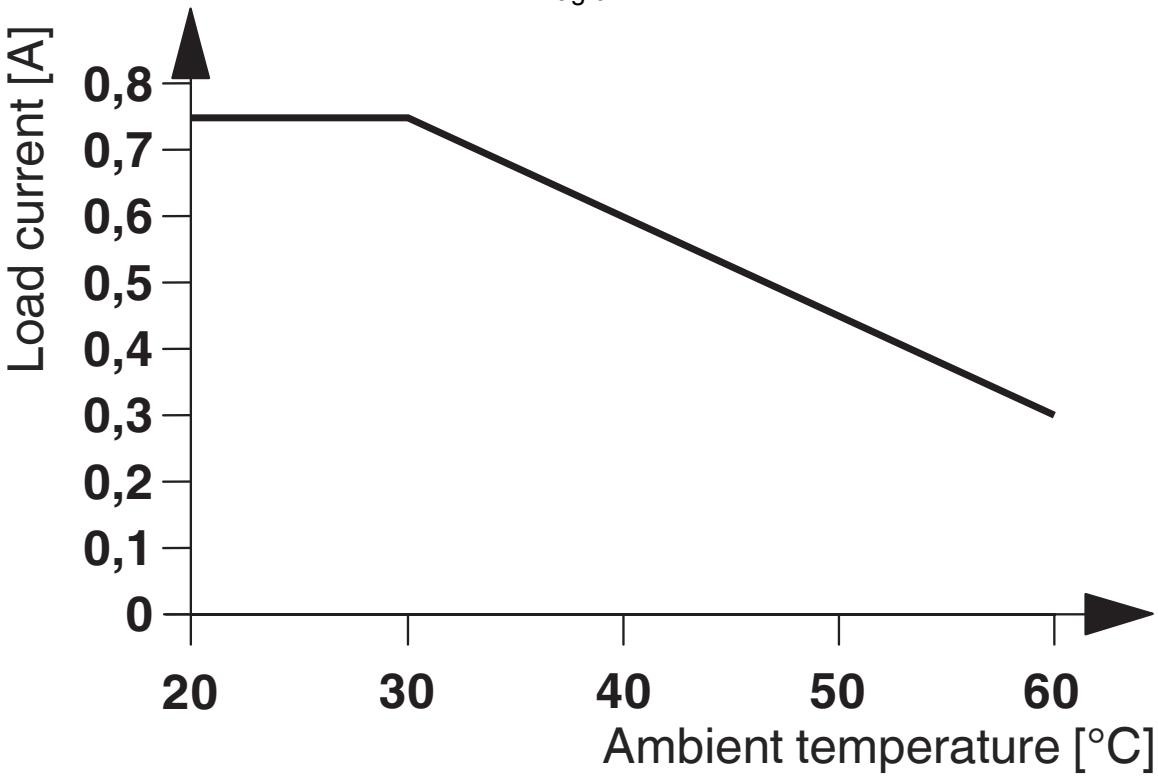
Mounting

Mounting type	DIN rail mounting

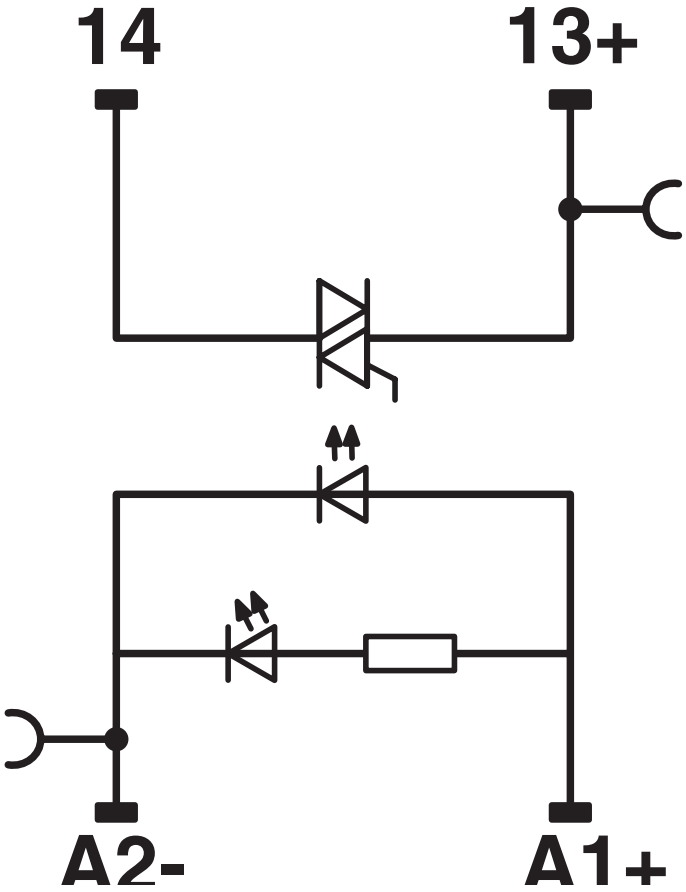
Assembly instructions	in rows with zero spacing
Mounting position	any

Drawings

Diagram



Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/2905295

EAC
Approval ID: TR_TS_D_00573_c

DNV GL
Approval ID: TAA000018V

EAC
Approval ID: RU*C-DE.*08.B.00010

Classifications

ECLASS

ECLASS-11.0	27371604
ECLASS-12.0	27371604
ECLASS-13.0	27371604

ETIM

ETIM 9.0	EC001504

UNSPSC

UNSPSC 21.0	39122300

Environmental product compliance

REACh SVHC	Lead 7439-92-1

China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

Accessories

FBS 2-6 - Plug-in bridge

3030336

https://www.phoenixcontact.com/gb/products/3030336

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

FBS 3-6 - Plug-in bridge

3030242

https://www.phoenixcontact.com/gb/products/3030242

Plug-in bridge, pitch: 6.2 mm, number of positions: 3, color: red

FBS 4-6 - Plug-in bridge

3030255

https://www.phoenixcontact.com/gb/products/3030255

Plug-in bridge, pitch: 6.2 mm, number of positions: 4, color: red

FBS 5-6 - Plug-in bridge

3030349

https://www.phoenixcontact.com/gb/products/3030349

Plug-in bridge, pitch: 6.2 mm, number of positions: 5, color: red

FBS 10-6 - Plug-in bridge

3030271

https://www.phoenixcontact.com/gb/products/3030271

Plug-in bridge, pitch: 6.2 mm, number of positions: 10, color: red

FBS 20-6 - Plug-in bridge

3030365

https://www.phoenixcontact.com/gb/products/3030365

Plug-in bridge, pitch: 6.2 mm, number of positions: 20, color: red

FBS 50-6 - Plug-in bridge

3032224

https://www.phoenixcontact.com/gb/products/3032224

Plug-in bridge, pitch: 6.2 mm, number of positions: 50, color: red

FBS 2-6 BU - Plug-in bridge

3036932

https://www.phoenixcontact.com/gb/products/3036932

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

FBS 3-6 BU - Plug-in bridge

3036945

https://www.phoenixcontact.com/gb/products/3036945

Plug-in bridge, pitch: 6.2 mm, number of positions: 3, color: blue

FBS 4-6 BU - Plug-in bridge

3036958

https://www.phoenixcontact.com/gb/products/3036958

Plug-in bridge, pitch: 6.2 mm, number of positions: 4, color: blue

FBS 5-6 BU - Plug-in bridge

3036961

https://www.phoenixcontact.com/gb/products/3036961

Plug-in bridge, pitch: 6.2 mm, number of positions: 5, color: blue

FBS 10-6 BU - Plug-in bridge

3032198

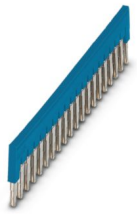
https://www.phoenixcontact.com/gb/products/3032198

Plug-in bridge, pitch: 6.2 mm, number of positions: 10, color: blue

FBS 20-6 BU - Plug-in bridge

3032208

https://www.phoenixcontact.com/gb/products/3032208



Plug-in bridge, pitch: 6.2 mm, number of positions: 20, color: blue

FBS 50-6 BU - Plug-in bridge

3032211

https://www.phoenixcontact.com/gb/products/3032211

Plug-in bridge, pitch: 6.2 mm, number of positions: 50, color: blue

FBS 2-6 GY - Plug-in bridge

3032237

https://www.phoenixcontact.com/gb/products/3032237

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

FBS 3-6 GY - Plug-in bridge

3032240

https://www.phoenixcontact.com/gb/products/3032240

Plug-in bridge, pitch: 6.2 mm, number of positions: 3, color: gray

FBS 4-6 GY - Plug-in bridge

3032279

https://www.phoenixcontact.com/gb/products/3032279

Plug-in bridge, pitch: 6.2 mm, number of positions: 4, color: gray

FBS 5-6 GY - Plug-in bridge

3032266

https://www.phoenixcontact.com/gb/products/3032266

Plug-in bridge, pitch: 6.2 mm, number of positions: 5, color: gray

FBS 10-6 GY - Plug-in bridge

3032253

https://www.phoenixcontact.com/gb/products/3032253

Plug-in bridge, pitch: 6.2 mm, number of positions: 10, color: gray

NS 35/ 7,5 PERF 2000MM - DIN rail perforated

0801733

https://www.phoenixcontact.com/gb/products/0801733

DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

NS 35/ 7,5 UNPERF 2000MM - DIN rail, unperforated

0801681

https://www.phoenixcontact.com/gb/products/0801681

DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

NS 35/ 7,5 WH PERF 2000MM - DIN rail perforated

1204119

https://www.phoenixcontact.com/gb/products/1204119

DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

NS 35/ 7,5 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204122

https://www.phoenixcontact.com/gb/products/1204122

DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

NS 35/ 7,5 AL UNPERF 2000MM - DIN rail, unperforated

0801704

https://www.phoenixcontact.com/gb/products/0801704

DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

NS 35/ 7,5 ZN PERF 2000MM - DIN rail perforated

1206421

https://www.phoenixcontact.com/gb/products/1206421

DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver

NS 35/ 7,5 ZN UNPERF 2000MM - DIN rail, unperforated

1206434

https://www.phoenixcontact.com/gb/products/1206434

DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver

NS 35/ 7,5 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

0801762

https://www.phoenixcontact.com/gb/products/0801762

DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

NS 35/ 7,5 CAP - End cap

1206560

https://www.phoenixcontact.com/gb/products/1206560

DIN rail end piece, for DIN rail NS 35/7.5

NS 35/15 PERF 2000MM - DIN rail perforated

1201730

https://www.phoenixcontact.com/gb/products/1201730

DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

NS 35/15 UNPERF 2000MM - DIN rail, unperforated

1201714

https://www.phoenixcontact.com/gb/products/1201714

DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

NS 35/15 WH PERF 2000MM - DIN rail perforated

0806602

https://www.phoenixcontact.com/gb/products/0806602

DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: white

NS 35/15 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204135

https://www.phoenixcontact.com/gb/products/1204135

DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

NS 35/15 AL UNPERF 2000MM - DIN rail, unperforated

1201756

https://www.phoenixcontact.com/gb/products/1201756

DIN rail, unperforated, similar to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

NS 35/15 ZN PERF 2000MM - DIN rail perforated

1206599

https://www.phoenixcontact.com/gb/products/1206599

DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver

NS 35/15 ZN UNPERF 2000MM - DIN rail, unperforated

1206586

https://www.phoenixcontact.com/gb/products/1206586

DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver

NS 35/15 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201895

https://www.phoenixcontact.com/gb/products/1201895

DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

NS 35/15 CAP - End cap

1206573

https://www.phoenixcontact.com/gb/products/1206573

DIN rail end piece, for DIN rail NS 35/15

NS 35/15-2,3 UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201798

https://www.phoenixcontact.com/gb/products/1201798

DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile 2.3 mm, color: silver

CLIPFIX 35 - End bracket

3022218

https://www.phoenixcontact.com/gb/products/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

CLIPFIX 35-5 - End bracket

3022276

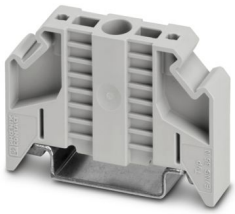
https://www.phoenixcontact.com/gb/products/3022276

Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5. 15 mm, color: gray

E/NS 35 N - End bracket

0800886

https://www.phoenixcontact.com/gb/products/0800886



End clamp, width: 9.5 mm, color: gray

MPS-MT - Test plug

0201744

https://www.phoenixcontact.com/gb/products/0201744

Test plug, with solder connection up to 1 mm^2 conductor cross section, number of positions: 1, color: gray

MPS-IH WH - Insulating sleeve

0201663

https://www.phoenixcontact.com/gb/products/0201663

Insulating sleeve, color: white

MPS-IH RD - Insulating sleeve

0201676

https://www.phoenixcontact.com/gb/products/0201676

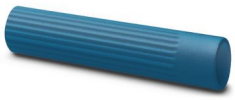
Insulating sleeve, color: red

MPS-IH BU - Insulating sleeve

0201689

https://www.phoenixcontact.com/gb/products/0201689

Insulating sleeve, color: blue



MPS-IH YE - Insulating sleeve

0201692

https://www.phoenixcontact.com/gb/products/0201692

Insulating sleeve, color: yellow

MPS-IH GN - Insulating sleeve

0201702

https://www.phoenixcontact.com/gb/products/0201702

Insulating sleeve, color: green

MPS-IH GY - Insulating sleeve

0201728

https://www.phoenixcontact.com/gb/products/0201728

Insulating sleeve, color: gray

MPS-IH BK - Insulating sleeve

0201731

https://www.phoenixcontact.com/gb/products/0201731

Insulating sleeve, color: black

ZB 6:UNBEDRUCKT - Zack marker strip

1051003

https://www.phoenixcontact.com/gb/products/1051003

Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

ZB 6 CUS - Zack marker strip

0824992

https://www.phoenixcontact.com/gb/products/0824992

Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

ZB 6,LGS:FORTL.ZAHLEN - Zack marker strip

1051016

https://www.phoenixcontact.com/gb/products/1051016

Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

ZB 6,QR:FORTL.ZAHLEN - Zack marker strip

1051029

https://www.phoenixcontact.com/gb/products/1051029

Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

ZB 6,LGS:GLEICHE ZAHLEN - Zack marker strip

1051032

https://www.phoenixcontact.com/gb/products/1051032

Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: Identical numbers 1 or 2, etc. up to 100, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

ZB 6,LGS:L1-N,PE - Marker for terminal blocks

1051414

https://www.phoenixcontact.com/gb/products/1051414

Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

ZB 6,LGS:U-N - Marker for terminal blocks

1051430

https://www.phoenixcontact.com/gb/products/1051430

Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: U, V, W, N, GND, U, V, W, N, GND, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

UC-TM 6 - Marker for terminal blocks

0818085

https://www.phoenixcontact.com/gb/products/0818085

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 80

UC-TM 6 CUS - Marker for terminal blocks

0824589

https://www.phoenixcontact.com/gb/products/0824589

Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 80

UCT-TM 6 - Marker for terminal blocks

0828736

https://www.phoenixcontact.com/gb/products/0828736

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 60

UCT-TM 6 CUS - Marker for terminal blocks

0829602

https://www.phoenixcontact.com/gb/products/0829602

Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 60

OPT-24DC/230AC/ 1 - Miniature solid-state relay

2967950

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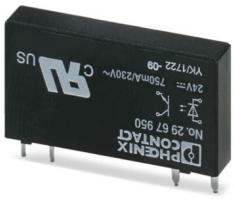

Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 V DC, output: 24 - 253 V AC/0.75 A

RIF-0-BPT/1 - Relay base

2901873

https://www.phoenixcontact.com/gb/products/2901873

RIF-0... relay base, for miniature power relay with 1 N/O contact or solid-state relays of the same design, push-in connection, for mounting on NS 35/7,5

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