

2980461

<https://www.phoenixcontact.com/ca/products/2980461>

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PLC-INTERFACE, consisting of DIN rail-mountable basic terminal block with screw connection and plug-in miniature relay with power contact, 2 changeover contacts, input voltage: 24 V DC, UL/cUL: approved for use in Ex Zone Class I, Div. 2 and ATEX (Zone 2)

Commercial data

Item number	2980461
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CK05
Product key	CK6212
Catalog page	Page 412 (C-7-2015)
GTIN	4046356051262
Weight per piece (including packing)	78.22 g
Weight per piece (excluding packing)	75.97 g
Customs tariff number	85364100
Country of origin	DE

PLC-RSC- 24DC/21-21/ATEX - Relay Module



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Technical data

Product properties

Product type	Relay Module
Application	Class I, Division 2
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles

Insulation characteristics

Insulation	Safe isolation: Control side / contact side
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Insulation characteristics: Standards/regulations

Insulation	Safe isolation: Control side / contact side
Overvoltage category	III
Pollution degree	2

Electrical properties

Maximum power dissipation for nominal condition	0.43 W
Test voltage (Winding/contact)	4 kV (50 Hz, 1 min., winding/contact)
Test voltage (Changeover contact/changeover contact)	2.5 kV (50 Hz, 1 min., changeover contact/changeover contact)

Standards/regulations

Rated surge voltage	6 kV
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Input data

Coil side

Nominal input voltage U _N	24 V DC
Input voltage range	20.2 V DC ... 33.6 V DC
Typical input current at U _N	18 mA
Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Reverse polarity protection; Polarity protection diode Freewheeling diode; Freewheeling diode
Operating voltage display	Yellow LED

Output data

Switching

Contact switching type	2 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC (The separating plate PLC-ATP should be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...)
Minimum switching voltage	5 V (at 10 mA)

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Limiting continuous current	6 A
Maximum inrush current	15 A (300 ms)
Min. switching current	10 mA (At 5 V)
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	85 W (at 48 V DC)
	60 W (at 60 V DC)
	44 W (at 110 V DC)
	60 W (at 220 V DC)
Switching capacity	1500 VA (for 250 V AC)
	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 250 V, AC15)

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ²
	0.2 mm ² ... 2.5 mm ² (Single ferrule)
	2x 0.5 mm ² ... 1.5 mm ² (TWIN ferrule)
Conductor cross section AWG	26 ... 14
Tightening torque	0.6 Nm ... 0.8 Nm

Dimensions

Width	14 mm
Height	80 mm
Depth	94 mm

Material specifications

Flammability rating according to UL 94	V0 (Housing)
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Environmental and real-life conditions

Ambient conditions

Degree of protection (Relay)	RT III (Relay)
Degree of protection (Relay base)	IP20 (Relay base)
Ambient temperature (operation)	-20 °C ... 60 °C (UL)
	-40 °C ... 60 °C (ATEX / IECEx)
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

CE

PLC-RSC- 24DC/21-21/ATEX - Relay Module



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Identification	CE-compliant
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ATEX

Identification	Ⓔ II 3G Ex ec nC IIC T4 Gc
Certificate	IBExU16ATEXB015 X

IECEX

Identification	Ex ec nC IIC T4 Gc
Certificate	IECEX IBE 16.0029X

UL, USA

Identification	Class I, Zone 2, AEx nA nC IIC T6
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UL, USA/Canada

Identification	Class I, Div. 2, Groups A, B, C, D
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UL, Canada

Identification	Class I, Zone 2, Ex nA nC IIC Gc T6 X
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Standards and regulations

Standards/regulations

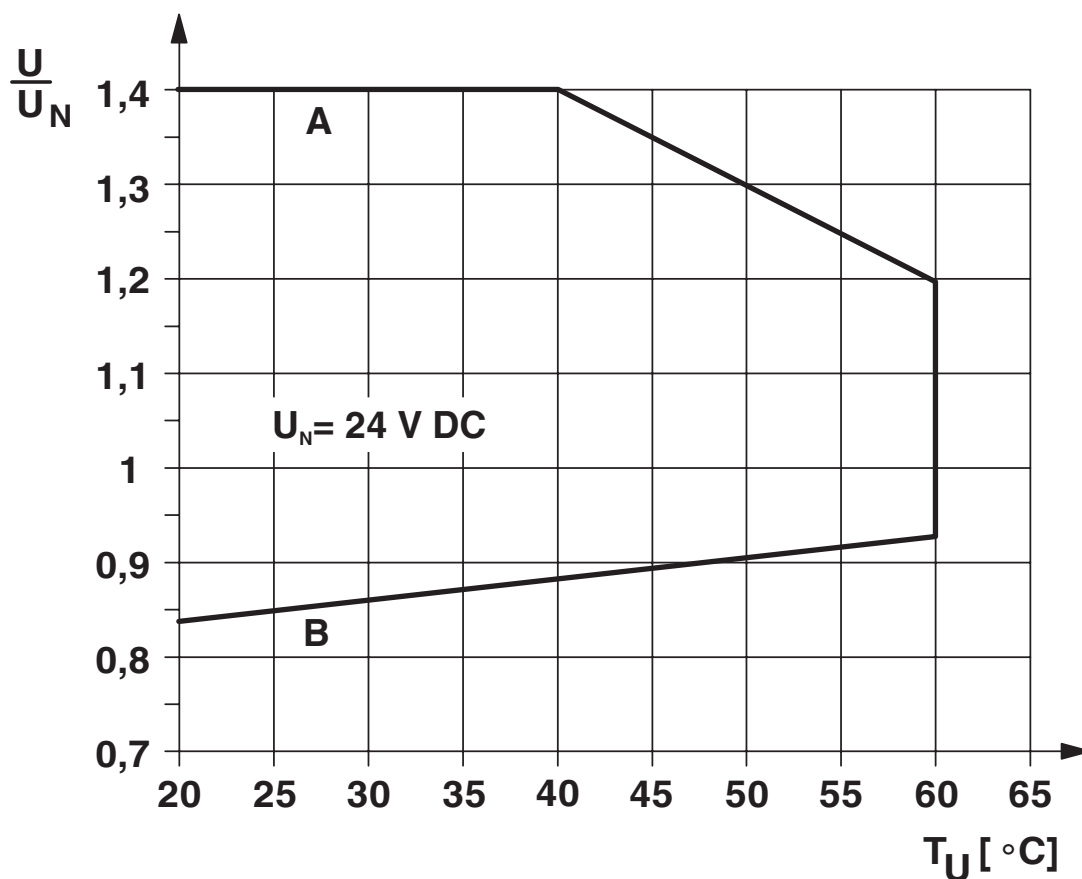
Standards/regulations	IEC 60664
	EN 50178
	EN 60079-0, -7, -15

Mounting

Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

Drawings

Diagram

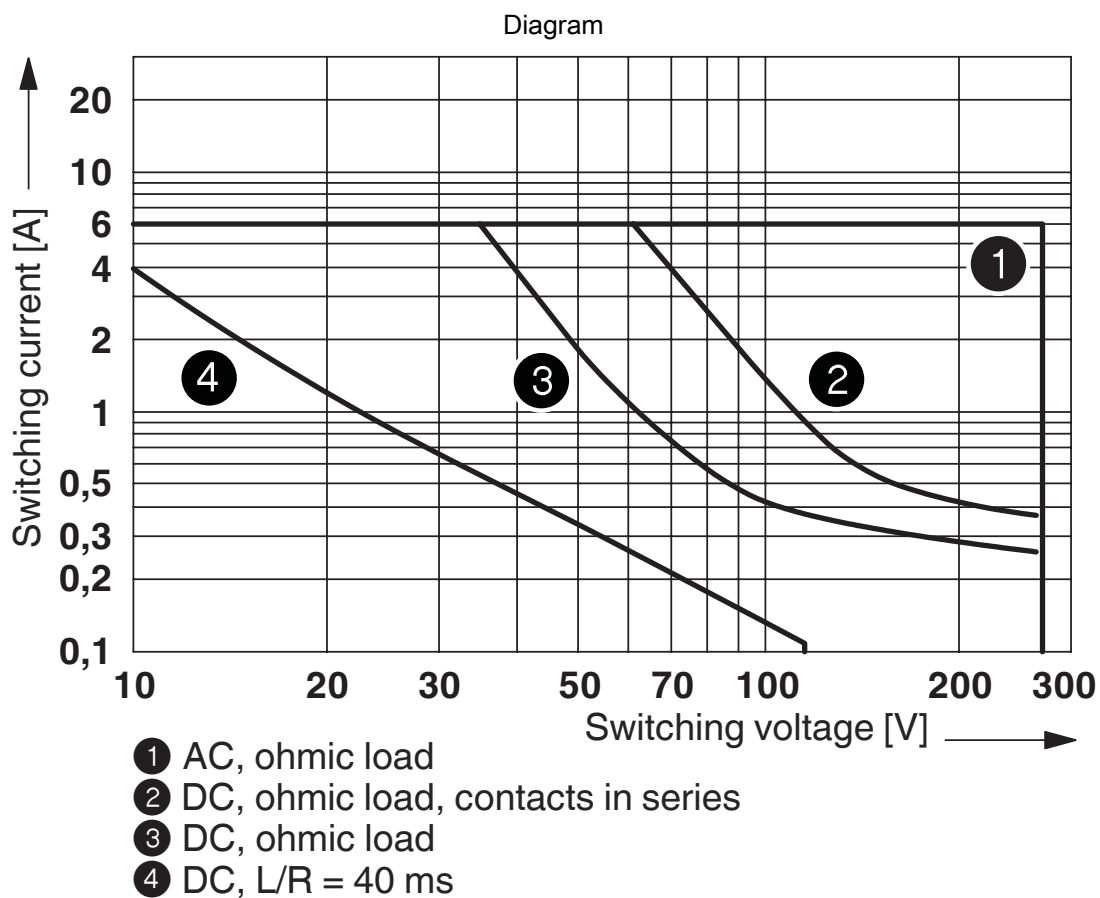
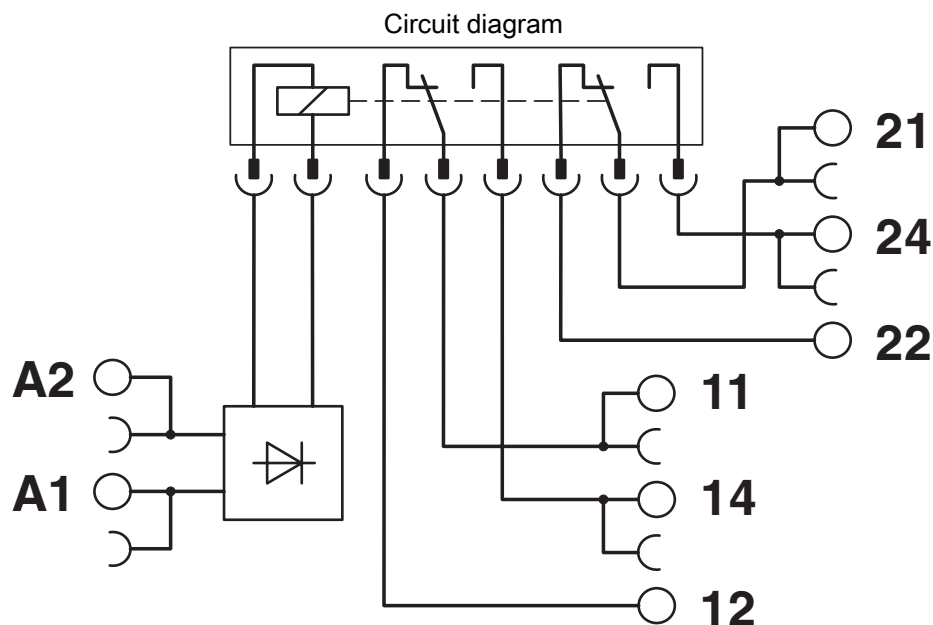


Curve A

Maximum permissible continuous voltage U_{max} with limiting continuous current on the contact side (see relevant technical data)

Curve B

Minimum permissible operate voltage U_{op} after pre-excitation (see relevant technical data)



Interrupting rating

PLC-RSC- 24DC/21-21/ATEX - Relay Module



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Classifications

ECLASS

ECLASS-11.0	27371601
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes
Exemption	7(a)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)

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Accessories

i Note: Applying some accessories below might limit this product.

FBST 500-PLC RD - Continuous plug-in bridge

2966786

<https://www.phoenixcontact.com/ca/products/2966786>



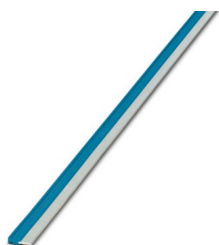
Continuous plug-in bridge, length: 500 mm, color: red

i Max. current carrying capacity: 32 A

FBST 500-PLC BU - Continuous plug-in bridge

2966692

<https://www.phoenixcontact.com/ca/products/2966692>



Continuous plug-in bridge, length: 500 mm, color: blue

i Max. current carrying capacity: 32 A

PLC-RSC- 24DC/21-21/ATEX - Relay Module



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FBST 500-PLC GY - Continuous plug-in bridge

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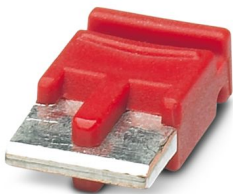
Continuous plug-in bridge, length: 500 mm, color: gray

 Max. current carrying capacity: 32 A

FBST 6-PLC RD - Single plug-in bridge

2966236

<https://www.phoenixcontact.com/ca/products/2966236>



Single plug-in bridge, number of positions: 2, length: 6 mm, color: red

 Max. current carrying capacity: 6 A

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FBST 6-PLC BU - Single plug-in bridge

2966812

<https://www.phoenixcontact.com/ca/products/2966812>



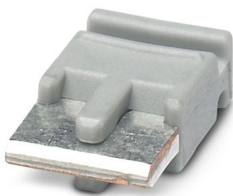
Single plug-in bridge, number of positions: 2, length: 6 mm, color: blue

 Max. current carrying capacity: 6 A

FBST 6-PLC GY - Single plug-in bridge

2966825

<https://www.phoenixcontact.com/ca/products/2966825>



Single plug-in bridge, number of positions: 2, length: 6 mm, color: gray

 Max. current carrying capacity: 6 A

PLC-RSC- 24DC/21-21/ATEX - Relay Module



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NS 35/ 7,5 V2A UNPERF 2000MM - DIN rail, unperforated

0801377

<https://www.phoenixcontact.com/ca/products/0801377>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Stainless steel V2A, uncoated, Standard profile, color: silver

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

0801733

<https://www.phoenixcontact.com/ca/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

PLC-RSC- 24DC/21-21/ATEX - Relay Module



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

0801762

<https://www.phoenixcontact.com/ca/products/0801762>



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

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

1201714

<https://www.phoenixcontact.com/ca/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

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

1201895

<https://www.phoenixcontact.com/ca/products/1201895>



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

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

1201798

<https://www.phoenixcontact.com/ca/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

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

1201756

<https://www.phoenixcontact.com/ca/products/1201756>



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

NS 35/15 PERF 2000MM - DIN rail perforated

1201730

<https://www.phoenixcontact.com/ca/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

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

0801681

<https://www.phoenixcontact.com/ca/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

ZB10/WH-100:UNBEDRUCKT - Zack marker strip

5060883

<https://www.phoenixcontact.com/ca/products/5060883>



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 1000

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ZB10,LGS:FORTL.ZAHLEN - Zack marker strip

1053014

<https://www.phoenixcontact.com/ca/products/1053014>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

ZB 10:UNBEDRUCKT - Zack marker strip

1053001

<https://www.phoenixcontact.com/ca/products/1053001>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10.5 x 10.15 mm, Number of individual labels: 10

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PLC-ATP BK - Separating plate

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<https://www.phoenixcontact.com/ca/products/2966841>



Separating plate, 2 mm thick, required at the start and end of a PLC terminal strip. Furthermore, it is used for: visual separation of groups, safe isolation of different voltages of neighboring PLC relays in acc. with DIN VDE 0106-101, isolation

PLC-ESK GY - Power terminal block

2966508

<https://www.phoenixcontact.com/ca/products/2966508>



Power terminal block, for the input of up to four potentials, for mounting on NS 35/7.5

PLC-RSC- 24DC/21-21/ATEX - Relay Module



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SZF 1-0,6X3,5 - Screwdriver

1204517

<https://www.phoenixcontact.com/ca/products/1204517>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

PLC-V8L/FLK14/OUT - System connection

2299660

<https://www.phoenixcontact.com/ca/products/2299660>



V8 adapter for 8 x PLC-INTERFACE (14 mm), controller: PLC system cabling of output cards, connection 1: IDC/FLK pin strip 1x 14-position, connection 2: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), connection 3: Screw connection 1x 2-position, number of channels: 8, control logic: positive switching

PLC-RSC- 24DC/21-21/ATEX - Relay Module



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PLC-V8L/FLK14/OUT/M - System connection

2304306

<https://www.phoenixcontact.com/ca/products/2304306>



V8 adapter for 8 x PLC-INTERFACE (14 mm), controller: PLC system cabling of output cards, connection 1: IDC/FLK pin strip 1x 14-position, connection 2: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), connection 3: Screw connection 1x 2-position, number of channels: 8, control logic: minusschaltend

UC-TM 12 - Marker for terminal blocks

0819194

<https://www.phoenixcontact.com/ca/products/0819194>



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: 12 mm, lettering field size: 11.45 x 10.5 mm, Number of individual labels: 40

PLC-RSC- 24DC/21-21/ATEX - Relay Module



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UCT-TM 12 - Marker for terminal blocks

0829144

<https://www.phoenixcontact.com/ca/products/0829144>

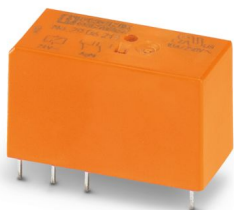


Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, for terminal block width: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

REL-MR-24DC/21-21/ATEX - Single relay

2906213

<https://www.phoenixcontact.com/ca/products/2906213>



Plug-in miniature power relay, RT III sealed with power contacts, 2 changeover contacts, input voltage: 24 V DC, in connection with the corresponding PLC base approved in accordance with ATEX/IECEx (zone 2) and Ex zone class I, div. 2.

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