PLC-RSC- 48DC/21-21 - Relay module

2967248

https://www.phoenixcontact.com/us/products/2967248

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PLC-INTERFACE, consisting of basic terminal block PLC-BSC.../21 with screw connection and plug-in miniature relay with power contact, for assembly on DIN rail NS 35/7,5, 2 changeover contacts, input voltage 48 V DC

Your advantages

- Slim design
- Efficient connection to system cabling using V8 adapter
- RT III sealed relay
- Safe isolation between coil and contact side
- Integrated input circuit and interference suppression circuit
- Functional plug-in bridges

Commercial data

Item number	2967248
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	CK6238
Catalog page	Page 366 (C-5-2019)
GTIN	4017918163495
Weight per piece (including packing)	71.18 g
Weight per piece (excluding packing)	71.18 g
Customs tariff number	85364190
Country of origin	DE

Technical data

Product properties

Product type	Relay Module
Product family	PLC-INTERFACE
Application	Universal
Operating mode	100% operating factor
Mechanical service life	3x 10^7 cycles

Data management status

Date of last data management	29.07.2024
Article revision	08

Insulation characteristics

Insulation	Safe isolation: Control side / contact side
Overvoltage category	III
Pollution degree	3

Electrical properties

Maximum power dissipation for nominal condition	0.96 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)
Test voltage (Changeover contact/changeover contact)	2.5 kV AC (50 Hz, 1 min., changeover contact/changeover contact)
Rated surge voltage	6 kV

Input data

Coil side

Nominal input voltage U_N	48 V DC
Input voltage range	40.3 V DC ... 60 V DC (20 °C)
Nominal voltage (plugged-in electromechanical relay)	24 V DC
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	20 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 AC/DC (10 mA)
Limiting continuous current	6 A
Maximum inrush current	15 A (300 ms)
Min. switching current	10 mA (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)
	1500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	0.2 A (at 250 V, DC13)
	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 mm² ... 2.5 mm²
Conductor cross section flexible	0.14 mm² ... 2.5 mm²
	0.2 mm² ... 2.5 mm² (Single ferrule)
	2x 0.5 mm² ... 1.5 mm² (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

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0 (Housing)

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)	-40 °C ... 60 °C

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

Approvals

CE

Certificate	CE-compliant

UKCA

Certificate	UKCA-compliant

Shipbuilding approval

Certificate	TAE0000196

Corrosive gas test

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

DNV GL data

Temperature	D
Humidity	A
Vibration	B/C
EMC	B
Enclosure	Required protection according to the Rules shall be provided upon installation on board

EMC data

Low Voltage Directive	Conformance with Low Voltage Directive
Electromagnetic compatibility	Conformance with EMC directive

Standards and regulations

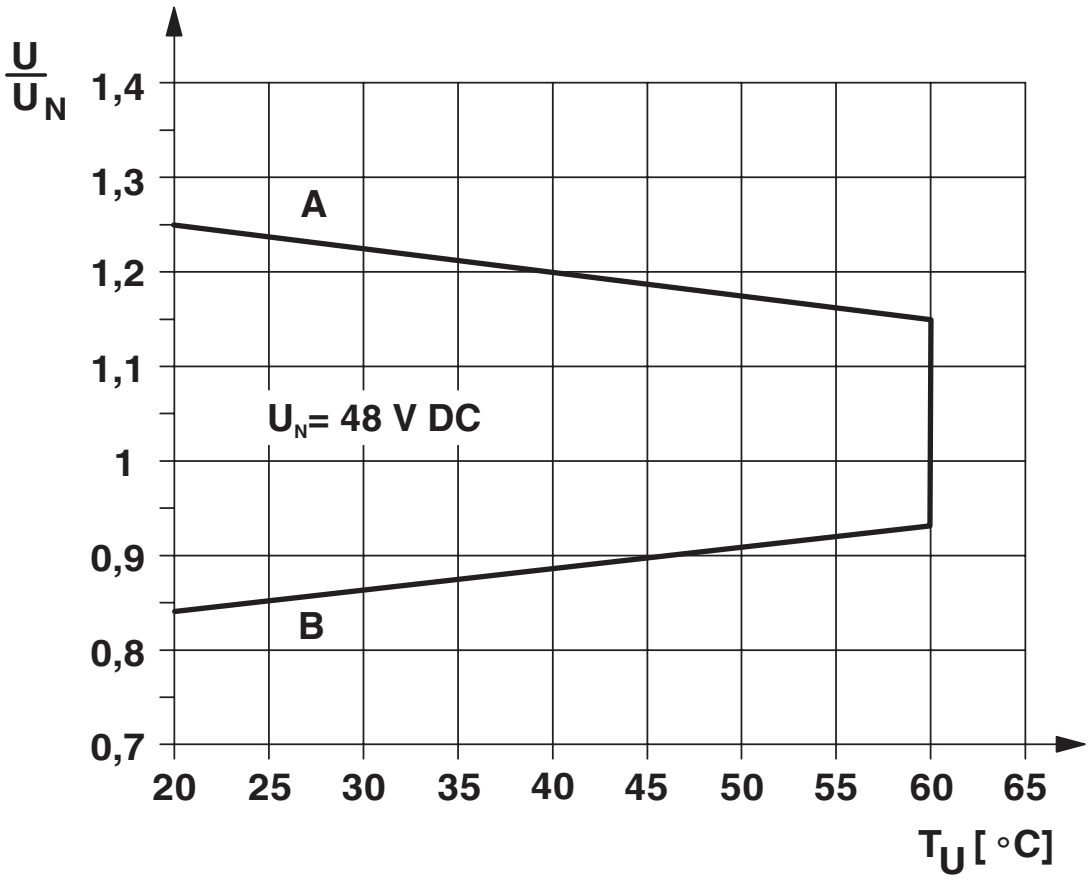
Standards/regulations	IEC 60947-5-1

Mounting

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

Drawings

Diagram



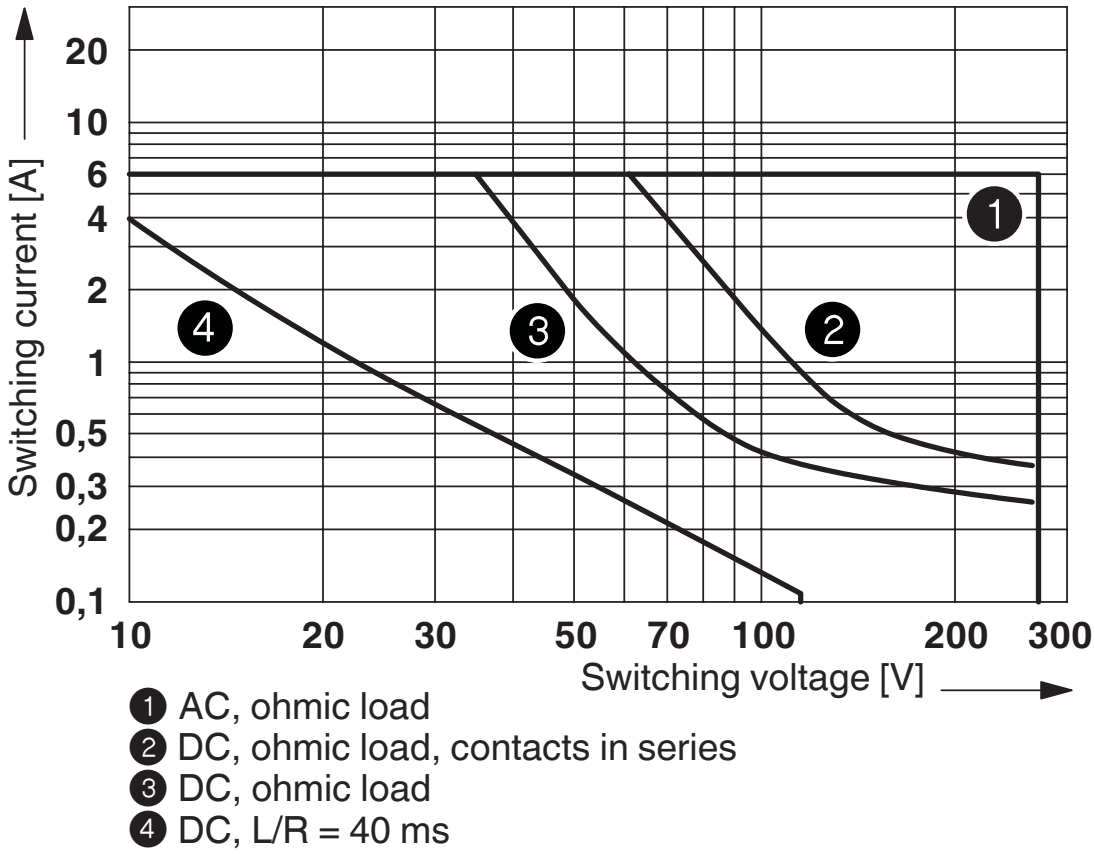
Curve A

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)

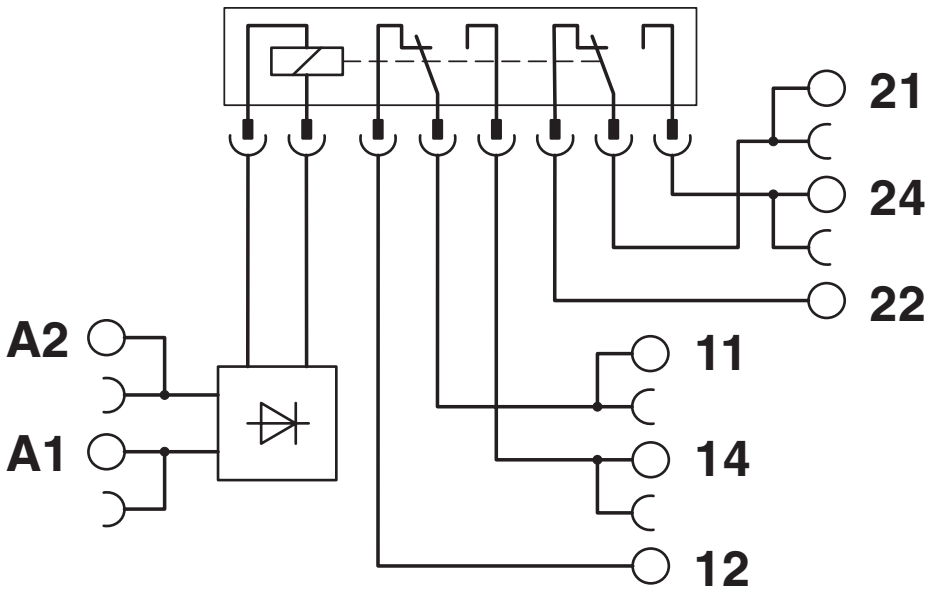
Diagram



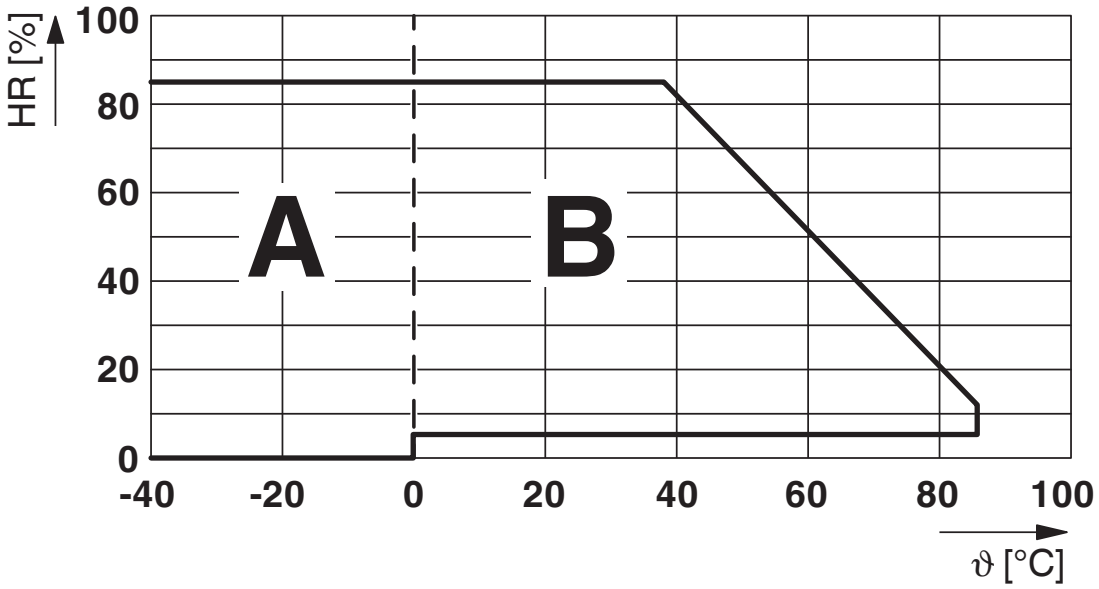
1 AC, ohmic load
2 DC, ohmic load, contacts in series
3 DC, ohmic load
4 DC, L/R = 40 ms

Interrupting rating

Circuit diagram



Diagram



Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented
Area B: Condensation at ambient temperatures > 0°C must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature ≤ 25°C.

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2967248

cUL Recognized
Approval ID: E238705

UL Recognized
Approval ID: E238705

EAC
Approval ID: TR_TS_D_00573_c

DNV GL
Approval ID: TAE0000196

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

UL Listed
Approval ID: FILE E 172140

cUL Listed
Approval ID: FILE E 172140

cULus Listed
Approval ID: E140324

cULus Recognized

cULus Listed

Classifications

ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

ETIM

ETIM 9.0	EC001437

UNSPSC

UNSPSC 21.0	39122300

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

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)
SCIP	bd0ff98e-a8e6-4945-b94c-f22c51e1f9a9

Accessories

Note: Applying some accessories below might limit this product.

FBST 500-PLC RD - Continuous plug-in bridge

2966786

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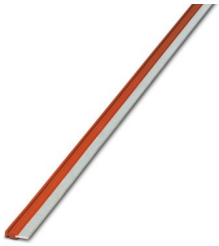


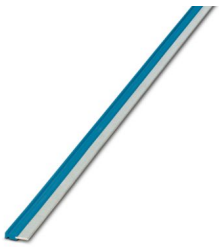
Continuous plug-in bridge, length: 500 mm, color: red

Max. current carrying capacity: 32 A

FBST 500-PLC BU - Continuous plug-in bridge

2966692

https://www.phoenixcontact.com/us/products/2966692



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

Max. current carrying capacity: 32 A

FBST 500-PLC GY - Continuous plug-in bridge

2966838

https://www.phoenixcontact.com/us/products/2966838



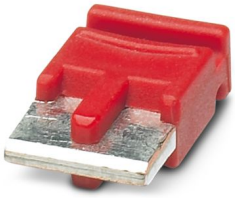
Continuous plug-in bridge, length: 500 mm, color: gray

Max. current carrying capacity: 32 A

FBST 6-PLC RD - Single plug-in bridge

2966236

https://www.phoenixcontact.com/us/products/2966236



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

Max. current carrying capacity: 6 A

FBST 6-PLC BU - Single plug-in bridge

2966812

https://www.phoenixcontact.com/us/products/2966812



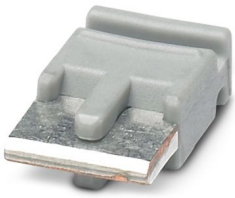
Single plug-in bridge, number of positions: 2, length: 6 mm, color: blue

Max. current carrying capacity: 6 A

FBST 6-PLC GY - Single plug-in bridge

2966825

https://www.phoenixcontact.com/us/products/2966825



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

Max. current carrying capacity: 6 A

FBST 8-PLC GY - Single plug-in bridge

2967688

https://www.phoenixcontact.com/us/products/2967688

Single plug-in bridge, number of positions: 2, length: 8 mm, color: gray



Max. current carrying capacity: 6 A

FBST 14-PLC BK - Single plug-in bridge

2967691

https://www.phoenixcontact.com/us/products/2967691

Single plug-in bridge, number of positions: 2, length: 14 mm, color: black



Max. current carrying capacity: 10 A

ZB 10:UNBEDRUCKT - Zack marker strip

1053001

https://www.phoenixcontact.com/us/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

ZB 10 CUS - Zack marker strip

0824941

https://www.phoenixcontact.com/us/products/0824941



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

ZB10,LGS:FORTL.ZAHLEN - Zack marker strip

1053014

https://www.phoenixcontact.com/us/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

ZB10,QR:FORTL.ZAHLEN - Zack marker strip

1053027

https://www.phoenixcontact.com/us/products/1053027



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: 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

ZB10,LGS:L1-N,PE - Marker for terminal blocks

1053412

https://www.phoenixcontact.com/us/products/1053412



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: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

ZB10,LGS:U-N - Marker for terminal blocks

1053438

https://www.phoenixcontact.com/us/products/1053438



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, horizontal: U, V, W, N, GND, U, V, W, N, GND, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

UC-TM 10 - Marker for terminal blocks

0818069

https://www.phoenixcontact.com/us/products/0818069



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: 10.2 mm, lettering field size: 9.6 x 10.5 mm, Number of individual labels: 48

UC-TM 10 CUS - Marker for terminal blocks

0824605

https://www.phoenixcontact.com/us/products/0824605



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: 10.2 mm, lettering field size: 9.6 x 10.5 mm, Number of individual labels: 48

UCT-TM 10 - Marker for terminal blocks

0829142

https://www.phoenixcontact.com/us/products/0829142



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: 10.2 mm, lettering field size: 8.9 x 9.6 mm, Number of individual labels: 36

UCT-TM 10 CUS - Marker for terminal blocks

0829623

https://www.phoenixcontact.com/us/products/0829623



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: 10.2 mm, lettering field size: 8.9 x 9.6 mm, Number of individual labels: 36

ZB 12:UNPRINTED - Zack marker strip

0812120

https://www.phoenixcontact.com/us/products/0812120



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 12.2 mm, lettering field size: 12 x 10.5 mm, Number of individual labels: 5

ZB 12 CUS - Zack marker strip

0824942

https://www.phoenixcontact.com/us/products/0824942



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 12.2 mm, lettering field size: 10.5 x 12.15 mm, Number of individual labels: 5

ZB 12,LGS:L1-N,PE - Zack marker strip

0812146

https://www.phoenixcontact.com/us/products/0812146



Zack marker strip, Strip, white, labeled, printed horizontally: L1, L2, L3, N, PE, mounting type: snapped, for terminal block width: 12.2 mm, lettering field size: 10.5 x 12.15 mm, Number of individual labels: 5

UC-TM 12 - Marker for terminal blocks

0819194

https://www.phoenixcontact.com/us/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

UC-TM 12 CUS - Marker for terminal blocks

0824613

https://www.phoenixcontact.com/us/products/0824613



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

UCT-TM 12 - Marker for terminal blocks

0829144

https://www.phoenixcontact.com/us/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

UCT-TM 12 CUS - Marker for terminal blocks

0829630

https://www.phoenixcontact.com/us/products/0829630



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: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

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

0801733

https://www.phoenixcontact.com/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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/us/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

PLC-ATP BK - Separating plate

2966841

https://www.phoenixcontact.com/us/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/us/products/2966508



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

PLC-RSC- 48DC/21-21 - Relay module

2967248

https://www.phoenixcontact.com/us/products/2967248

SZF 1-0,6X3,5 - Screwdriver

1204517

https://www.phoenixcontact.com/us/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

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

2961192

https://www.phoenixcontact.com/us/products/2961192



Plug-in miniature power relay, with power contact, 2 changeover contacts, input voltage 24 V DC

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