PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

14 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 2 changeover contacts, input voltage 120 V AC

Your advantages

- High relay release voltage
- Resistant to interference currents

Commercial data

Item number	2980416
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C461
Product key	CK6211
Catalog page	Page 389 (C-5-2019)
GTIN	4017918921217
Weight per piece (including packing)	64.61 g
Weight per piece (excluding packing)	56.43 g
Customs tariff number	85366990
Country of origin	DE

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area

Product properties

Product type	Relay socket
Product family	PLC-INTERFACE
Application	Filter to prevent interference
Operating mode	100% operating factor
Compatible components	Miniature relay, REL-MR-110DC/21-21AU, REL-MR-110DC/21-21

Insulation characteristics

Pollution degree	3

Electrical properties

Protective circuit	Bridge rectifier; Bridge rectifier
	RC element

Input data

Nominal input voltage U_N	120 V AC
Input voltage range in reference to U_N	0.78 ... 1.4 (at 20 °C)
Typical input current at U_N	9 mA
Typical response time	7 ms
Typical release time	10 ms

Relay assembly

Nominal input voltage U_N	120 V AC
Input voltage range in reference to U_N	0.78 ... 1.4
Typical input current at U_N	6 mA (50 Hz)
	7 mA (60 Hz)
Typical response time	7 ms
Typical release time	10 ms
Typical release voltage	16 V AC
Operating voltage display	Yellow LED
Protective circuit	Bridge rectifier; Bridge rectifier
	Filter; Filter

Optocoupler assembly

Operating voltage display	Yellow LED
Protective circuit	Bridge rectifier; Bridge rectifier
	Filter; Filter

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

Output data

Compatible components	Miniature relay, REL-MR-110DC/21-21AU, REL-MR-110DC/21-21

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

Signaling

Status display	LED

Dimensions

Width	14 mm
Height	80 mm
Depth	94 mm

Material specifications

Flammability rating according to UL 94	V0 (Housing)

Environmental and real-life conditions

Ambient conditions

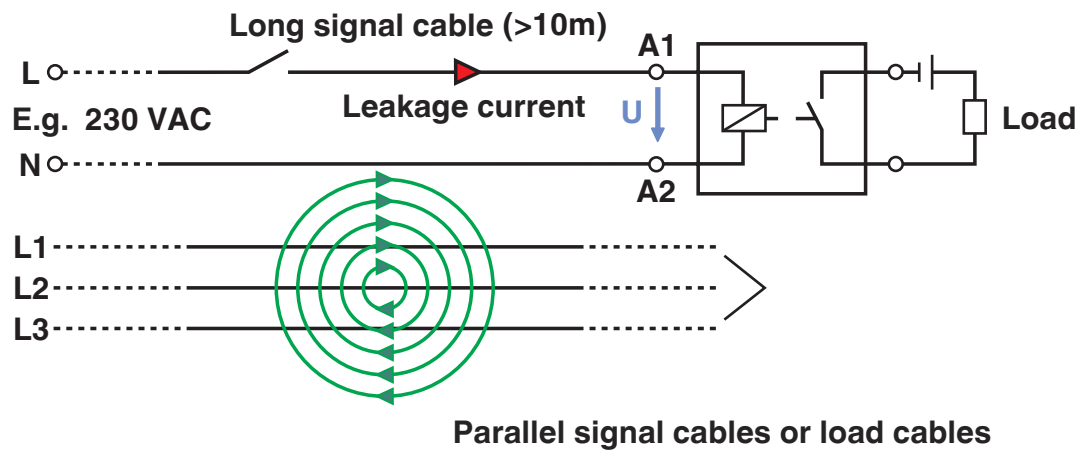|	
Ambient temperature (operation)	-40 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

Corrosive gas test

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

Mounting

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

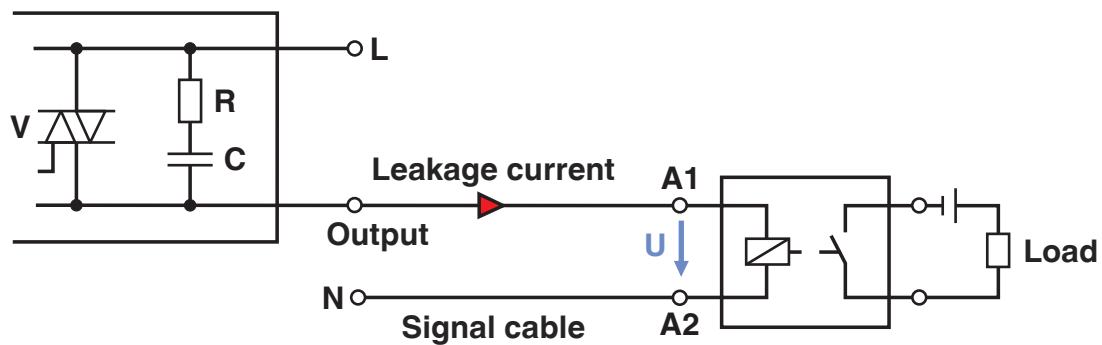# PLC-BSC-120UC/21-21/SO46 - Relay base

Drawings

Application drawing

Occurrence of interference signals
Scenario 2: long signal cables

Application drawing
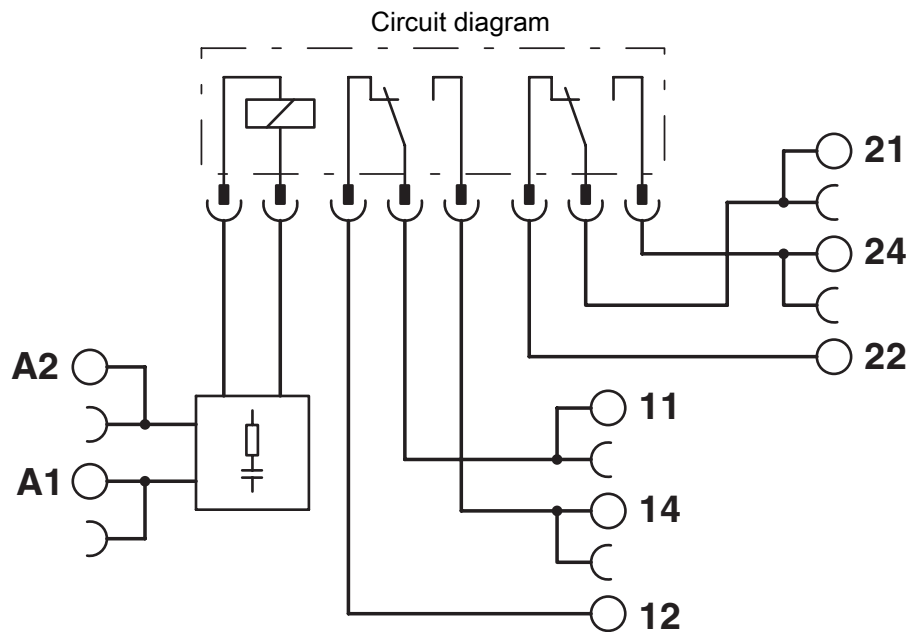

Occurrence of interference signals
Scenario 1: controller - AC output card

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

Circuit diagram

A2

A1

21

24

22

11

14

12

Approvals

💡 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2980416

cUL Recognized
Approval ID: FILE E 238705

UL Recognized
Approval ID: FILE E 238705

EAC
Approval ID: RU D-DE.B*00573/18

DNV GL
Approval ID: TAE0000196

cULus Recognized

Classifications

ECLASS

ECLASS-11.0	27371603
ECLASS-12.0	27371603
ECLASS-13.0	27371603

ETIM

ETIM 8.0	EC001456

UNSPSC

UNSPSC 21.0	39122300

Environmental product compliance

REACh SVHC	Lead 7439-92-1
	Hexahydromethylphthalic anhydride

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

Mandatory accessories

REL-MR-110DC/21-21AU - Single relay

2961228

https://www.phoenixcontact.com/us/products/2961228

Plug-in miniature power relay, with multi-layer gold contact, 2 changeover contacts, input voltage 110 V DC

REL-MR-110DC/21-21 - Single relay

2961202

https://www.phoenixcontact.com/us/products/2961202

Plug-in miniature power relay, with power contact, 2 changeover contacts, input voltage 110 V DC

Accessories

> ℹ️ Note: Applying some accessories below might limit this product.
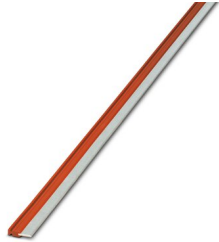
PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

FBST 500-PLC RD - Continuous plug-in bridge

2966786

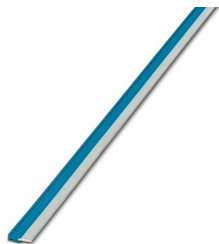https://www.phoenixcontact.com/us/products/2966786

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

FBST 500-PLC GY - Continuous plug-in bridge

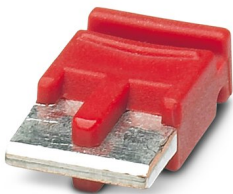2966838

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
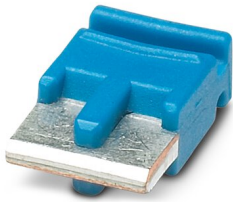
PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

PHŒNIX CONTACT

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
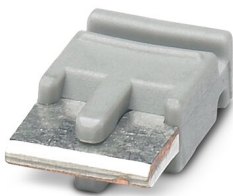
PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

ZB 10:UNBEDRUCKT - Zack marker strip

1053001

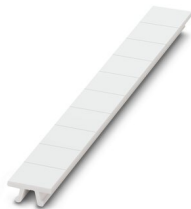https://www.phoenixcontact.com/us/products/1053001

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

ZB 12:UNPRINTED - Zack marker strip

0812120

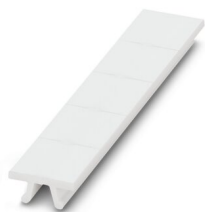https://www.phoenixcontact.com/us/products/0812120

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

0801681

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

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

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

1204119

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

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

1204122

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

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

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

0801704

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

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

1206421

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

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

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

1206434

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

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

0801762

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

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

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

NS 35/15 PERF 2000MM - DIN rail perforated

1201730

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

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

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

1201714

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

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

0806602

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

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

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

1204135

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

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

1206586

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

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

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

1201895

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

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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

PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

https://www.phoenixcontact.com/us/products/2980416

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