

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



PLC-INTERFACE for protection against interference currents/voltages on the control side. Consisting of PLC-BPT-120UC/21/SO46 basic terminal block with screw connection and plug-in miniature relay with power contact up to 6 A, 1 changeover contact, input voltage: 120 V AC

Your advantages

- ✓ Slim design
- ✓ Resistant to interference currents
- ✓ Efficient connection to system cabling using V8 adapter
- ✓ Safe isolation according to DIN EN 50178 between coil and contact
- ✓ RT III sealed relay
- ✓ Functional plug-in bridges



Key Commercial Data

Packing unit	10 pc
GTIN	
GTIN	4046356686143

Technical data

Note

Trade restriction	The products are offered exclusively for export outside the EU and the European Economic Area.
Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
Note	Separating plate PLC-ATP must 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....
	The PLC-ATP separating plate should be installed for safe isolation between adjacent modules
	The PLC-ATP separating plate is required at the start and end of every PLC terminal strip.

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Technical data

Note

	The system installer must ensure the touch protection of the product (at voltages > 25 V AC/60 V DC). The product is a built-in device without protection against direct contact.
--	---

Dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Maximum altitude	≤ 2000 m
Degree of protection	RT III (Relay)
	IP20 (Relay base)
	IP54 (Installation location)

Coil side

Nominal input voltage U_N	120 V AC
	110 V DC
Mains frequency	50/60 Hz
Typical input current at U_N	7 mA (50 Hz)
	8 mA (60 Hz)
Typical response time	7 ms
Typical release voltage	50 V AC
Typical release time	20 ms
Coil voltage	60 V DC
Protective circuit	Bridge rectifier
	RC element
Status display	Yellow LED

Contact side

Contact type	1 PDT
Type of switch contact	Single contact
Contact material	AgSnO
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 100 mA)
Min. switching current	10 mA (at 12 V)
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 W (at 48 V DC)

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Technical data

Contact side

	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Flammability rating according to UL 94	V0 (Housing)
Mechanical service life	2x 10 ⁷ cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

Connection data

Connection name	Coil side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M 3
Conductor cross section solid	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ²
Conductor cross section AWG	26 ... 14

Connection data 2

Connection name	Contact side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M 3
Conductor cross section solid	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ²
Conductor cross section AWG	26 ... 14

Standards and Regulations

Designation	Standards/regulations
Standards/regulations	EN 50178
	EN 61810
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Technical data

Standards and Regulations

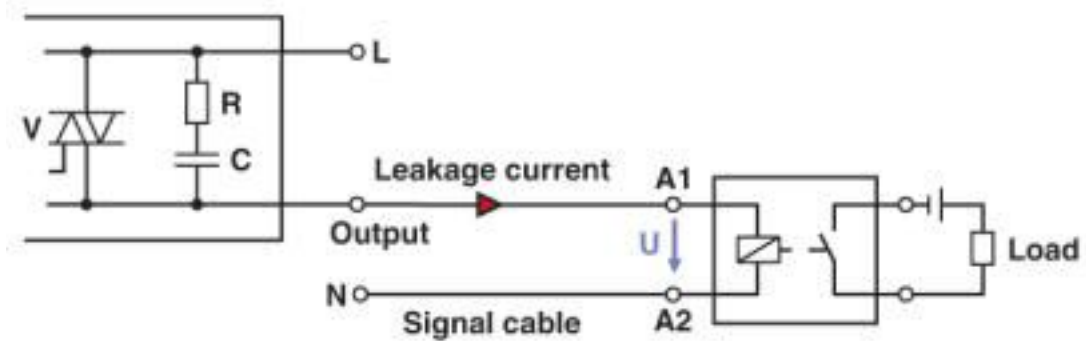
Rated insulation voltage	250 V AC
Rated surge voltage	6 kV
Insulation	Safe isolation, reinforced insulation
Pollution degree	2
Overvoltage category	III

Environmental Product Compliance

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

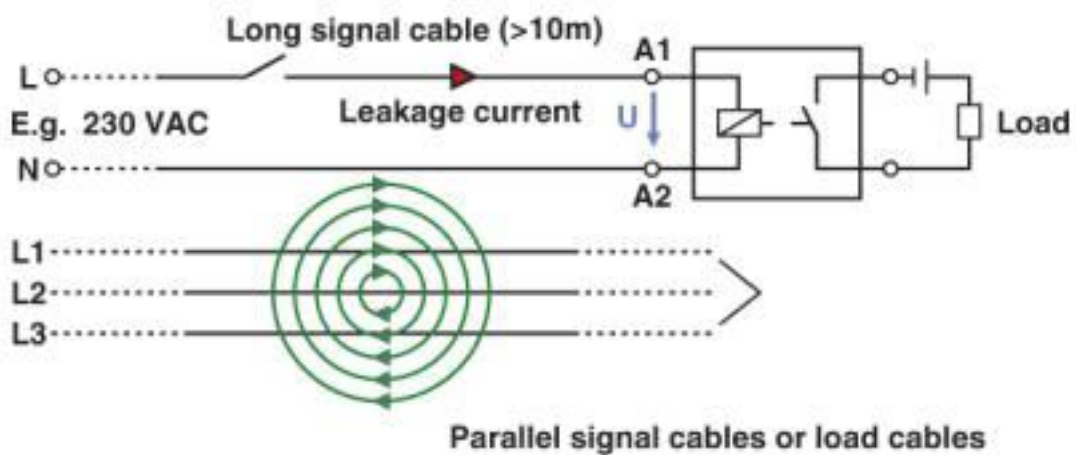
Drawings

Application drawing



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

Application drawing

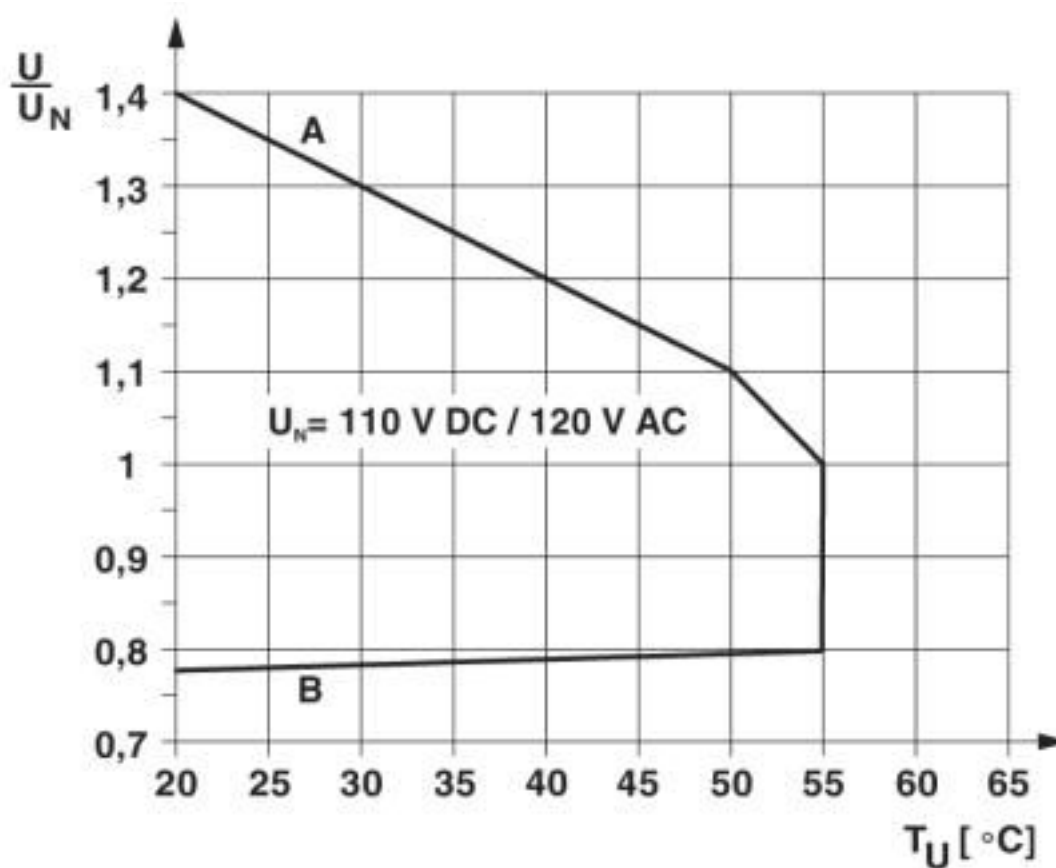


Occurrence of interference signals

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Scenario 2: long signal cables

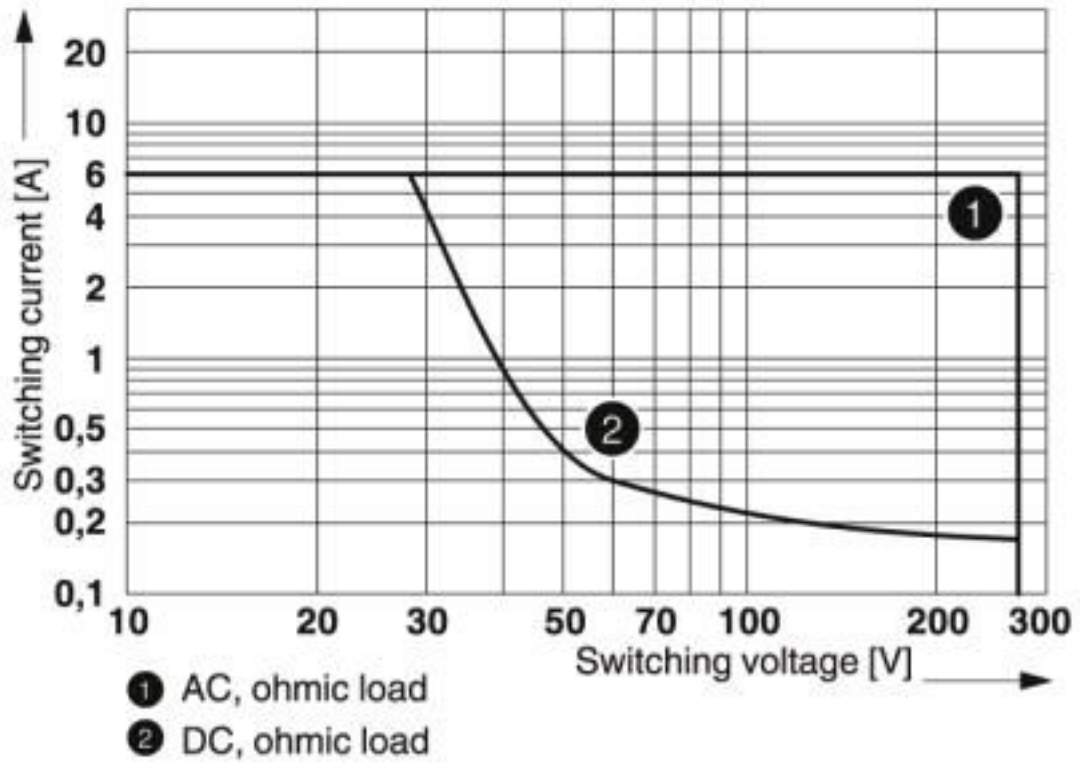
Diagram



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)

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

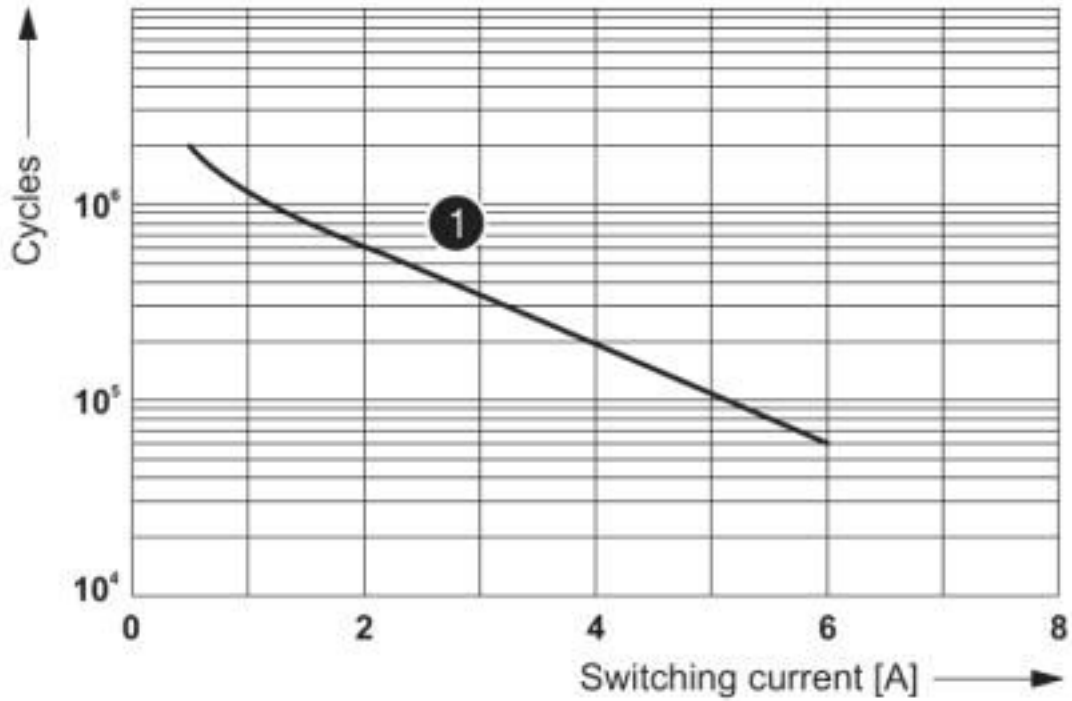
Diagram



Interrupting rating

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Diagram

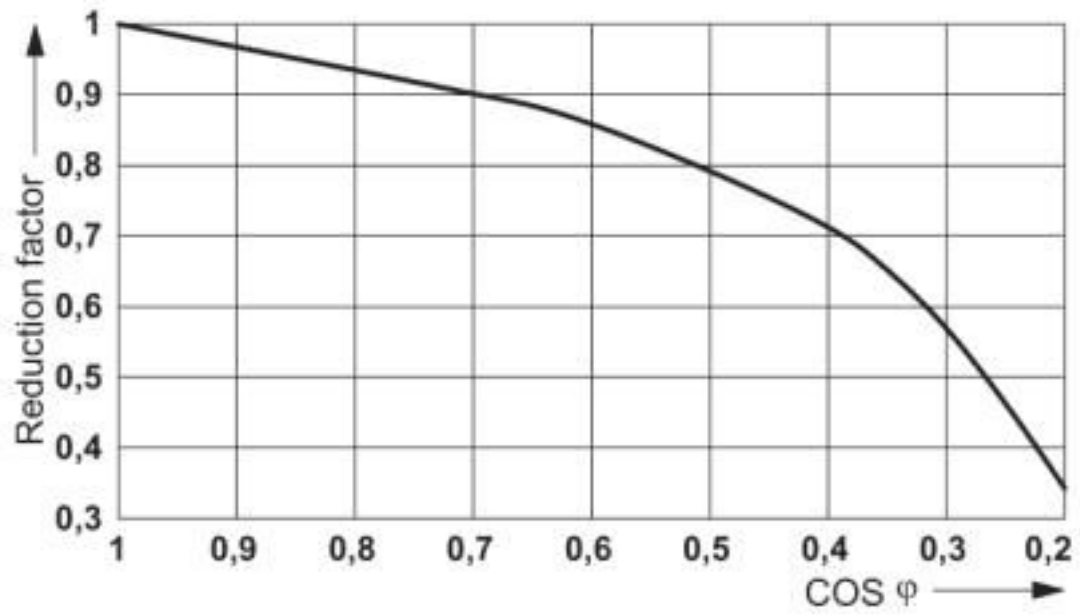


① 250 V AC, ohmic load

Electrical service life

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

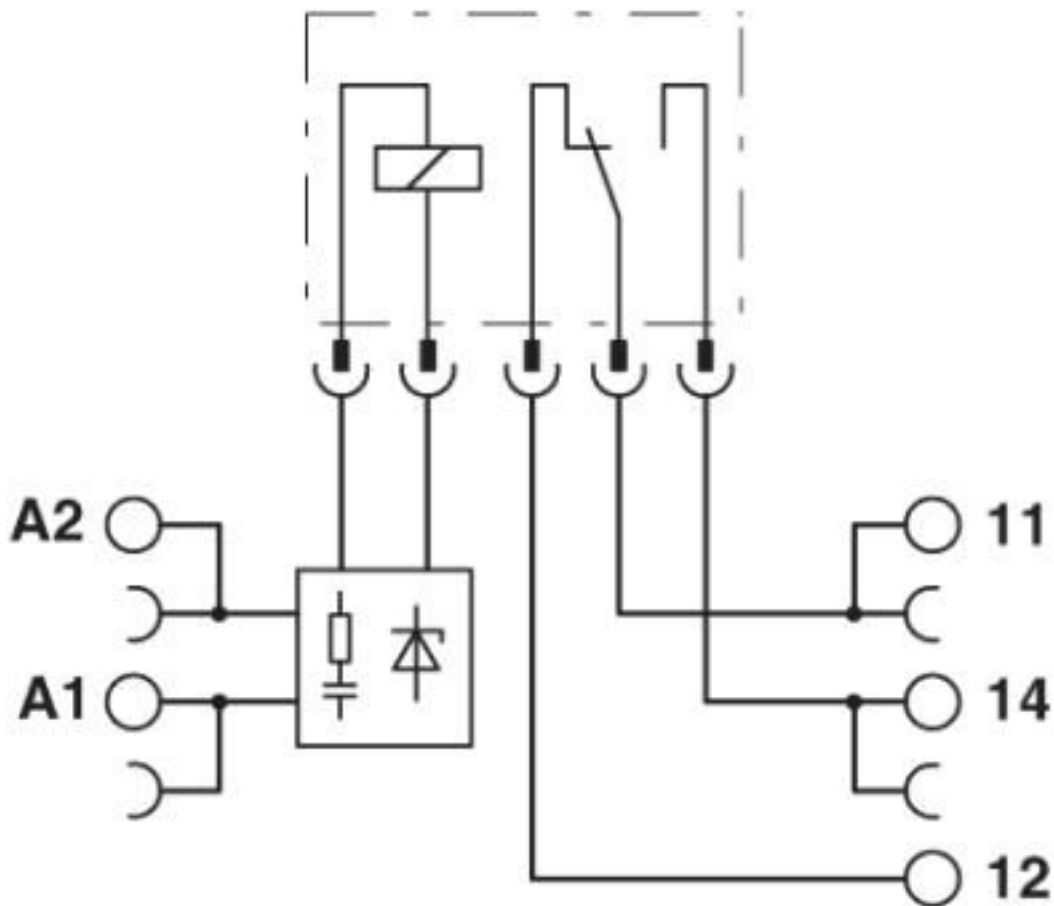
Diagram



Service life reduction factor

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27371601
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
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 3.0	EC001456
ETIM 4.0	EC001504
ETIM 5.0	EC001437

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Classifications

ETIM

ETIM 6.0	EC001437
ETIM 7.0	EC001437

UNSPSC

UNSPSC 6.01	30211917
UNSPSC 7.0901	39121516
UNSPSC 11	39121516
UNSPSC 12.01	39121516
UNSPSC 13.2	39122326
UNSPSC 19.0	39122326

Approvals

Approvals

Approvals

UL Listed / UL Recognized / cUL Recognized / cUL Listed / DNV GL / EAC / EAC / cULus Recognized / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
-----------	--	---	---------------

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
---------------	--	---	---------------

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
----------------	--	---	---------------

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
------------	--	---	---------------

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Approvals

DNV GL		https://approvalfinder.dnvgl.com/	TAE0000196-03
--------	--	---	---------------

EAC			TR_TS_D_00573_c
-----	--	--	-----------------

EAC			RU*C- DE.*08.B.00010
-----	--	--	-------------------------

cULus Recognized			
------------------	--	--	--

cULus Listed			
--------------	--	--	--

Accessories

Accessories

Bridge

Single plug-in bridge - FBST 6-PLC BU - 2966812



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

Single plug-in bridge - FBST 6-PLC GY - 2966825



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

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Accessories

Single plug-in bridge - FBST 8-PLC GY - 2967688



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

DIN rail

DIN rail, unperforated - NS 35/ 7,5 V2A UNPERF 2000MM - 0801377



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Stainless steel V2A, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



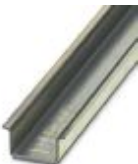
DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Accessories

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

Labeled terminal marker

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Accessories

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

Partition plate

Separating plate - PLC-ATP BK - 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

Power module

Power terminal block - PLC-ESK GY - 2966508



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

Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 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

Terminal marking

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



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: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Relay Module - PLC-RSC-120UC/21/SO46 - 5603593

Accessories

Zack marker strip - ZB 6/WH-100:UNBEDRUCKT - 5060935



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: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Spare parts

Single relay - REL-MR- 60DC/21 - 2961118



Plug-in miniature power relay, with power contact, 1 PDT, input voltage 60 V DC

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Industrial Relays](#) category:

Click to view products by [Phoenix Contact](#) manufacturer:

Other Similar products are found below :

[6-1617801-8](#) [6-1618107-9](#) [7-1618273-3](#) [EV250-4A-02](#) [EV250-6A-01](#) [FCA-125-CX8](#) [FCA-325-159](#) [FCA-410-138](#) [8000-S3121](#) [8-1618273-6](#)
[8-1618393-1](#) [GCA63A220VAC60HZ](#) [GCA63A277VAC60HZ](#) [GCA63A600VAC60HZ](#) [1-1672275-3](#) [1-1833005-4](#) [H-16/S1](#) [A711Z](#) [H-8C](#)
[H-8/S11](#) [H-8/S68](#) [ACC530U20](#) [ACC730U30](#) [RF303ZM4-12](#) [DH18DA](#) [1423675-8](#) [AR4-15F13-C01](#) [AR7-41F11](#) [AVR907](#) [15732A200](#)
[B07B032AC1-0329](#) [B329](#) [B490A](#) [1618279-1](#) [BHR124Y](#) [1810DDB-SX](#) [N417](#) [P30C42A12D1-120](#) [2-1617748-6](#) [2-1618375-1](#) [2-1618396-6](#)
[2-1618398-1](#) [JMAPD-5XL](#) [JMGACD-5M](#) [JMGSC-5LW](#) [JMGSCD-5L](#) [PBO-18A1218](#) [PBO-40A3040](#) [K8DSPH1200480VAC](#) [KA-3C-12A](#)