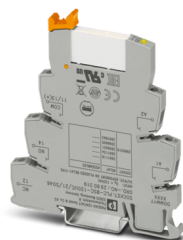


# Relay Module - PLC-RSC- 120UC/21/SO46 - 5603593

<https://www.phoenixcontact.com/in/products/5603593>

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PLC-INTERFACE for protection against interference currents or interference voltages on the control side. Consisting of PLC-BSC-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

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## 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

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## Commercial Data

Order Key	5603593
Packing unit	10 pc
Minimum order quantity	1 pc
Sales Key	CK6
GTIN	4046356686143
Weight per Piece (including packing)	41.0 GRM
Weight per Piece (excluding packing)	41.0 GRM
Customs tariff number	85364900

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## Technical Data

### Environmental and real-life conditions

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

### Output data

#### Switching

Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 W (at 48 V DC)
	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
Min. switching current	10 mA (at 12 V)
Contact material	AgSnO
Contact type	1 PDT
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...)
Limiting continuous current	6 A
Minimum switching voltage	5 V (at 100 mA)
Type of switch contact	Single contact
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)

### Input data

#### Coil side

Coil voltage	60 V DC
Typical release voltage	50 V AC
Typical release time	20 ms
Nominal input voltage $U_N$	120 V AC
	110 V DC
Status display	Yellow LED

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Typical response time	7 ms
Typical input current at $U_N$	7 mA (50 Hz)
	8 mA (60 Hz)
Protective circuit	Bridge rectifier
	RC element
Mains frequency	50/60 Hz

## Notes

General	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.
	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.

## Utilization restriction

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

CE note	The products are offered exclusively for export outside the EU and the European Economic Area.
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## Environmental Product Compliance

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

## Electrical properties

Rated insulation voltage	250 V AC
Rated surge voltage	6 kV
Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)

## Dimensions

Height	80 mm
Width	6.2 mm
Depth	94 mm

## Material specifications

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

## Mounting

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

## Approval data

### Corrosive gas test

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

## Connection data

### Coil side

Conductor cross section AWG	26 ... 14
Screw thread	M 3
Conductor cross section solid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Stripping length	8 mm
Connection method	Screw connection
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

### Contact side

Conductor cross section AWG	26 ... 14
Screw thread	M 3
Conductor cross section solid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Stripping length	8 mm
Connection method	Screw connection
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

## Standards and regulations

### Air clearances and creepage distances between the power circuits

Standards/regulations	DIN EN 50178
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### Standards/regulations

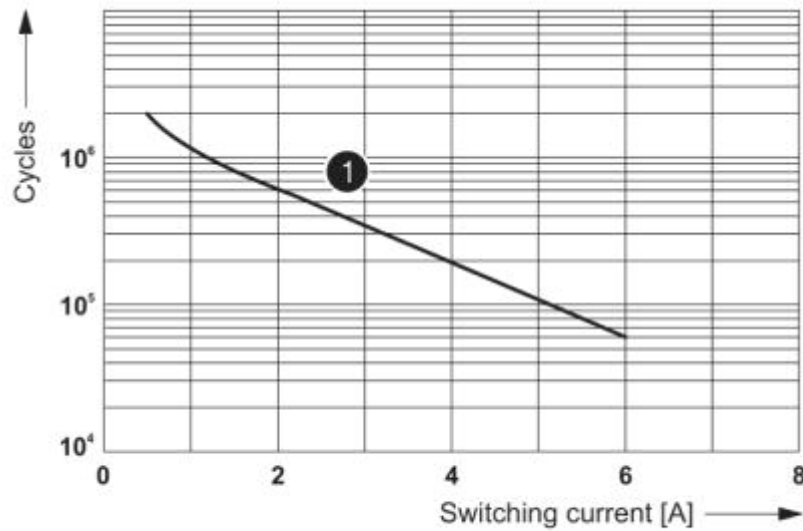
Standards/regulations	EN 50178
	EN 61810

## Product properties

Operating mode	100% operating factor
Application	Filter to prevent interference
Set consists of	2980319 PLC-BSC-120UC/21/SO46
	2961118 REL-MR- 60DC/21
Mechanical service life	2x 10 <sup>7</sup> cycles

Drawings

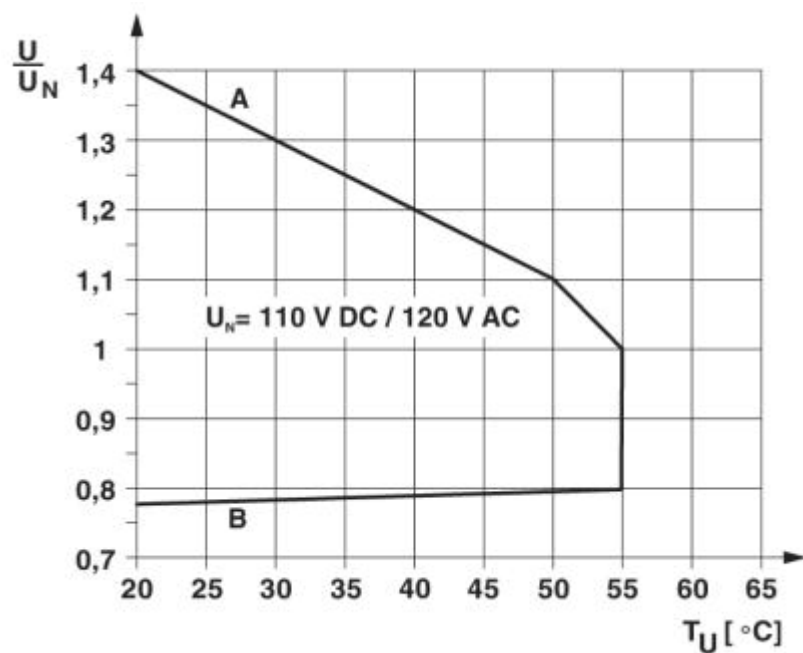
Diagram



1 250 V AC, ohmic load

Electrical service life

Diagram



Curve A

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

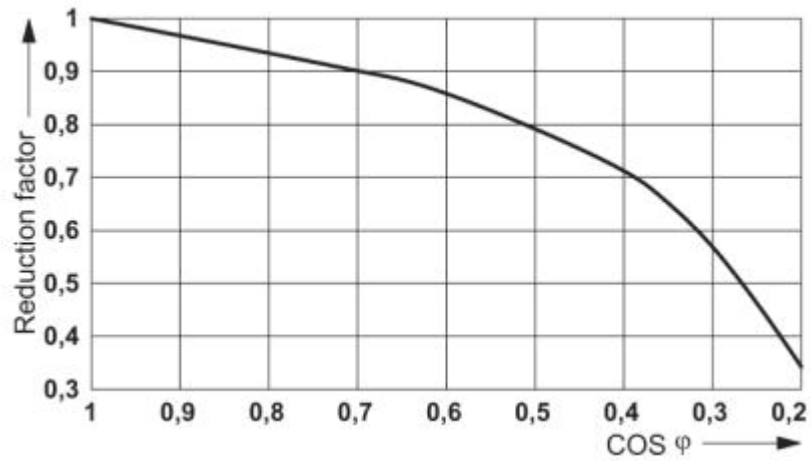
Curve B

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

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

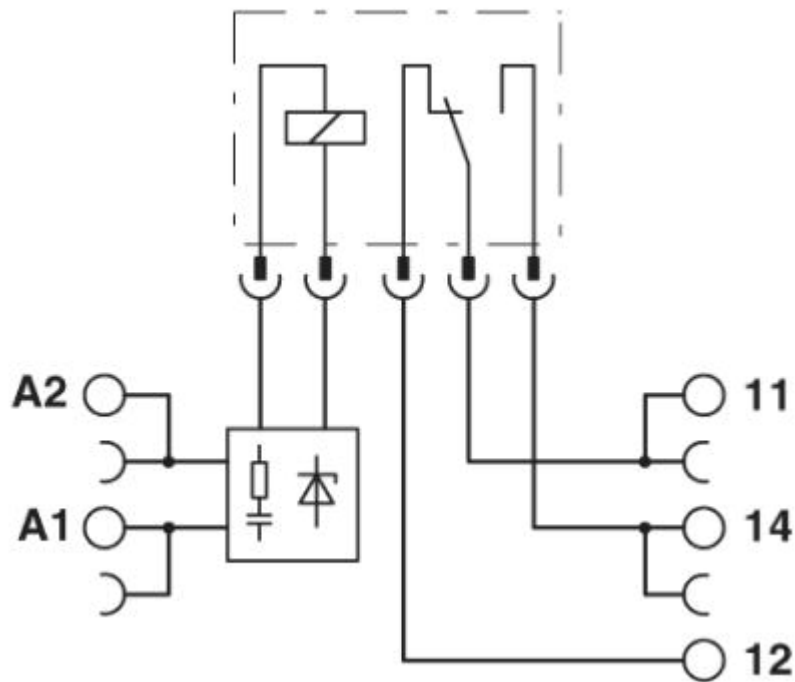
<https://www.phoenixcontact.com/in/products/5603593>

Diagram



Service life reduction factor

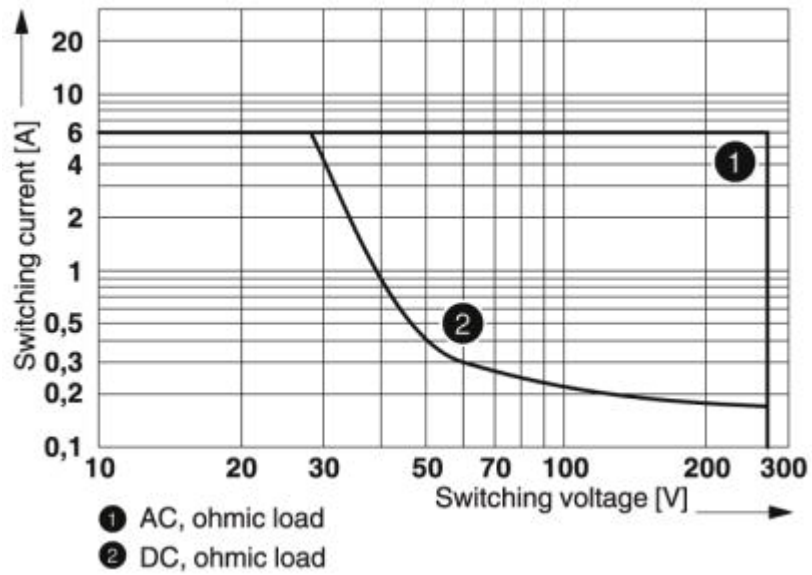
Circuit diagram



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Diagram



Interrupting rating





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




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## Approvals


UL Listed 


UL Recognized 

cUL Recognized 

cUL Listed 

DNV GL 

EAC 

EAC 

cULus Recognized

cULus Listed

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

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## Accessories

### Partition plate

Partition 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

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### DIN rail

DIN rail - 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

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### DIN rail

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

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

<https://www.phoenixcontact.com/in/products/5603593>



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

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## DIN rail

DIN rail - 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

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## DIN rail

DIN rail - 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

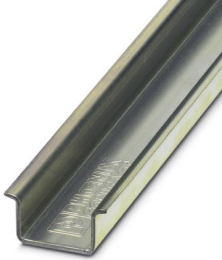
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## DIN rail

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

<https://www.phoenixcontact.com/in/products/5603593>

DIN rail - 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

DIN rail

DIN rail - 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

DIN rail - 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

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

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## DIN rail

DIN rail - 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

## DIN rail

DIN rail - 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

## Screwdriver tools

Screwdriver tools - 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

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

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## Terminal marking

Terminal marking - 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

## Terminal marking

Terminal marking - 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

## Power module

Power module - PLC-ESK GY - 2966508



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

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