

## Relay Module - PLC-RSP-120UC/21-21 - 2912549

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://download.phoenixcontact.com>)




PLC relay, consisting of basic terminal block PLC-BSP.../21-21 with spring-cage connection and pluggable miniature relay with power contact, for assembly on DIN rail NS 35/7.5, 2 PDT, input voltage 120 V AC/DC

### Why buy this product

- Narrow design
- Efficient connection to system cabling using V8 adapter
- Safe isolation according to DIN EN 50178 between coil and contact
- RT III sealed relay
- Integrated input circuit and interference suppression circuit
- Functional plug-in bridges



### Key commercial data

Packing unit	10 pc
GTIN	 4 046356 050951
Weight per Piece (excluding packing)	65.49 g
Custom tariff number	85364900
Country of origin	Germany

### Technical data

#### Note:

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

#### Dimensions

Width	14 mm
Height	80 mm
Depth	94 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 60 °C
---------------------------------	------------------

# Relay Module - PLC-RSP-120UC/21-21 - 2912549

## Technical data

### Ambient conditions

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

### Coil side

Nominal input voltage $U_N$	120 V AC (110 V DC)
	110 V DC
Nominal input current at $U_{IN}$	4.2 mA (at 110 V DC)
	4.5 mA (for 120 V AC)
Typical response time	7 ms
Typical release time	10 ms
Operating voltage display	Yellow LED
Protective circuit	Bridge rectifier Bridge rectifier

### Contact side

Contact type	2 PDT
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 (at 10 mA)
Maximum inrush current	15 A (300 ms)
Min. switching current	10 mA (At 5 V)
Limiting continuous current	6 A
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)

### General

Operating mode	100% operating factor
Degree of protection	RT III (Relay)
Mechanical service life	$3 \times 10^7$ cycles
Inflammability class according to UL 94	V0
Name	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage / insulation	6 kV (safe isolation: control side / contact side)
Pollution degree	2
Surge voltage category	III
Mounting position	any

# Relay Module - PLC-RSP-120UC/21-21 - 2912549

## Technical data

### General

Assembly instructions	In rows with zero spacing
-----------------------	---------------------------

### Connection data

Connection method	Spring-cage connection
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.14 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	14
Stripping length	8 mm

## Articles in set

### Relay socket - PLC-BSP-120UC/21-21 - 2912471



14 mm PLC basic terminal blocks with spring-cage connection, 120 V AC/DC input voltage (without relay or optocoupler)

### Single relay - REL-MR-110DC/21-21 - 2961202



Pluggable miniature relays, with power contact, 2 PDT, input voltage 110 V DC

## Classifications

### eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371001
eCl@ss 7.0	27371001
eCl@ss 8.0	27371001

### ETIM

ETIM 2.0	EC000196
----------	----------

# Relay Module - PLC-RSP-120UC/21-21 - 2912549

## Classifications

### ETIM

ETIM 3.0	EC000196
ETIM 4.0	EC000196
ETIM 5.0	EC000196

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39121515

## Approvals

### Approvals

---

#### Approvals

UL Listed / cUL Listed / GL / UL Recognized / cUL Recognized / cULus Recognized / cULus Listed

---

#### Ex Approvals

---

#### Approvals submitted

---

### Approval details

UL Listed


cUL Listed


GL

UL Recognized

# Relay Module - PLC-RSP-120UC/21-21 - 2912549

## Approvals

cUL Recognized 

cULus Recognized 

cULus Listed 

## Accessories

### Accessories

#### Bridge

Continuous plug-in bridge - FBST 500-PLC RD - 2966786



Continuous plug-in bridge, Length: 500 mm, Color: red

Continuous plug-in bridge - FBST 500-PLC BU - 2966692



Continuous plug-in bridge, Length: 500 mm, Color: blue

Continuous plug-in bridge - FBST 500-PLC GY - 2966838



Continuous plug-in bridge, Length: 500 mm, Color: gray

## Relay Module - PLC-RSP-120UC/21-21 - 2912549

### Accessories

Single plug-in bridge - FBST 6-PLC RD - 2966236



Single plug-in bridge, Length: 6 mm, Number of positions: 2, Color: red

---

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

---

Single plug-in bridge - FBST 6-PLC RD - 2966236



Single plug-in bridge, Length: 6 mm, Number of positions: 2, Color: red

---

Single plug-in bridge - FBST 6-PLC RD - 2966236



Single plug-in bridge, Length: 6 mm, Number of positions: 2, Color: red

---

Labeled terminal marker

## Relay Module - PLC-RSP-120UC/21-21 - 2912549

### Accessories

Zack marker strip - ZB10,LGS:FORTL.ZAHLEN - 1053014



Zack marker strip, Strip, white, labeled, Can be labeled with: Plotter, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 991 - 1000, Mounting type: Snap into tall marker groove, For terminal block width: 10.2 mm, Lettering field: 10.15 x 10.5 mm

---

### Mounting rail

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



DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

---

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



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

---

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



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

---

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



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

## Relay Module - PLC-RSP-120UC/21-21 - 2912549

### Accessories

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



DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m

---

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



DIN rail, material: Steel, unperforated, 2.3 mm thick, height 15 mm, width 35 mm, length: 2 m

---

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



DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm

---

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



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm

---

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



DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

---

### Partition plate

## Relay Module - PLC-RSP-120UC/21-21 - 2912549

### Accessories

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 - ZB10/WH-100:UNBEDRUCKT - 5060883



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 10.2 mm, Lettering field: 10.15 x 10.5 mm

Zack marker strip - ZB 10:UNBEDRUCKT - 1053001



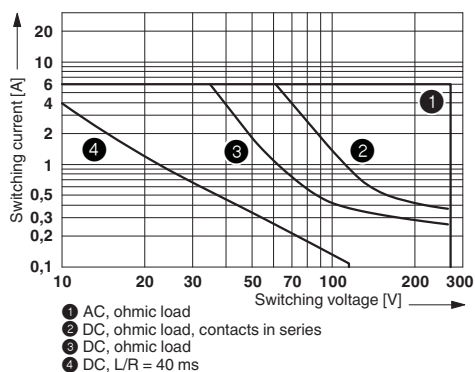
Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 10.2 mm, Lettering field: 10.5 x 10.15 mm

---

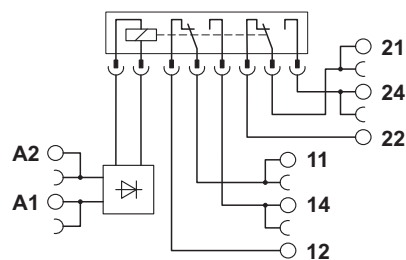
### Drawings

# Relay Module - PLC-RSP-120UC/21-21 - 2912549

Diagram

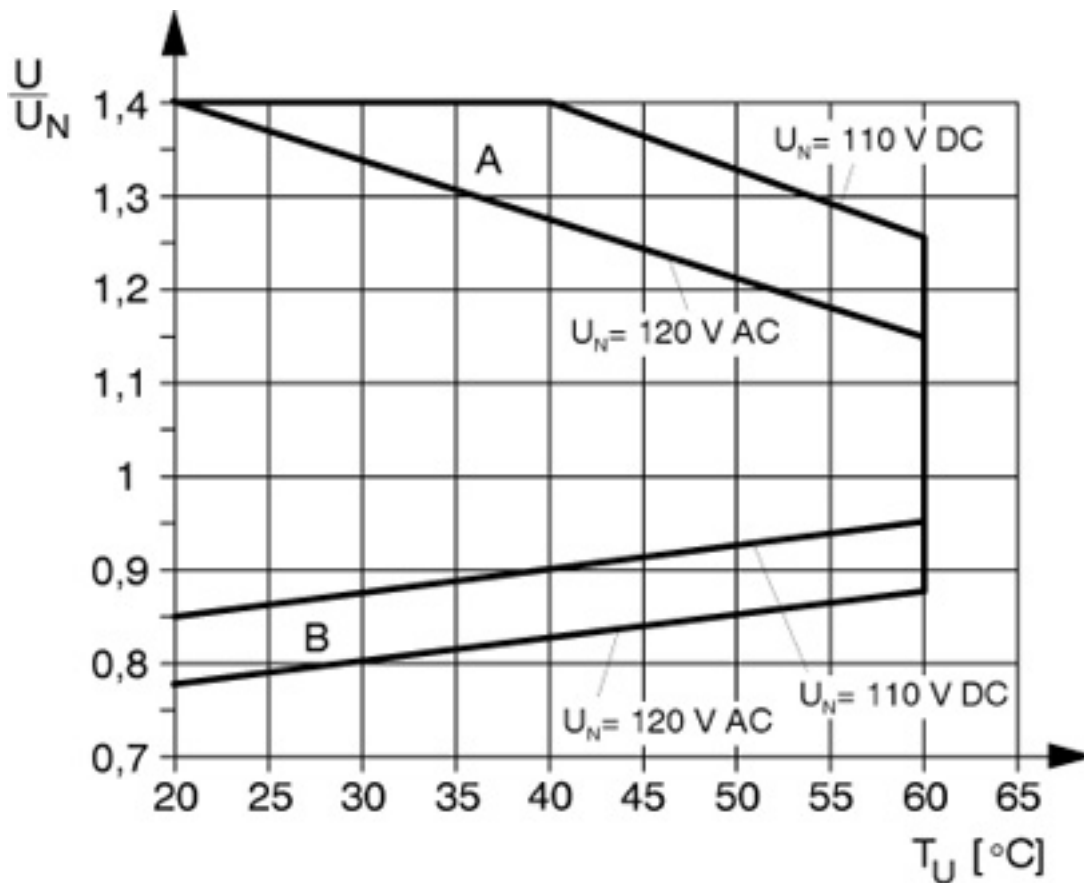


Circuit diagram



Interrupting rating

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)

