

## Relay Module - PLC-RSC- 24DC/21-21AU - 2967125

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PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 2 PDTs, input voltage 24 V DC

### Your advantages

- ✓ Slim design
- ✓ 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
- ✓ Integrated input circuit and interference suppression circuit



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 156428
GTIN	4017918156428
Weight per Piece (excluding packing)	76.000 g
Custom tariff number	85364190
Country of origin	Germany

### Technical data

#### Note

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

Width	14 mm
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# Relay Module - PLC-RSC- 24DC/21-21AU - 2967125

## Technical data

### Dimensions

Height	80 mm
Depth	94 mm

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

### Coil side

Nominal input voltage $U_N$	24 V DC
Typical input current at $U_N$	18 mA
Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Reverse polarity protection Polarity protection diode Free-wheeling diode Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.43 W

### Contact side

Contact type	2 PDT
Type of switch contact	Single contact
Contact material	AgNi, hard gold-plated
Maximum switching voltage	30 V AC 36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Min. switching current	1 mA (at 24 V)
Maximum inrush current	50 mA
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)

### Contact side (with destroyed gold layer)

Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V AC/DC
Limiting continuous current	6 A
Maximum inrush current	15 A (300 ms)
Min. switching current	10 mA
Interrupting rating (ohmic load) max.	140 W (at 24 V DC) 85 W (at 48 V DC) 60 W (at 60 V DC)

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## Technical data

### Contact side (with destroyed gold layer)

	44 W (at 110 V DC)
	60 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	2 A (at 24 V, AC15)
	2 A (at 120 V, AC15)
	2 A (at 250 V, AC15)

### Connection data input side

Connection name	Coil side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> ( )
	2x 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> ( )
Conductor cross section AWG	26 ... 14

### Connection data output side

Connection name	Contact side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> ( )
	2x 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> ( )
Conductor cross section AWG	26 ... 14

## General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Test voltage PDT/PDT	2.5 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	RT III (Relay)
	IP20 (Relay base)
Mechanical service life	3x 10 <sup>7</sup> cycles

# Relay Module - PLC-RSC- 24DC/21-21AU - 2967125

## Technical data

### General

Mounting position	any
Assembly instructions	In rows with zero spacing

### Standards and Regulations

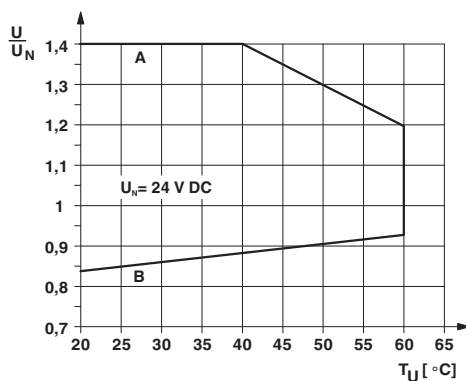
Connection in acc. with standard	CUL
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
Rated surge voltage	6 kV
Insulation	Basic insulation
Degree of pollution	2
Overvoltage category	III
Flammability rating according to UL 94	V0

### Environmental Product Compliance

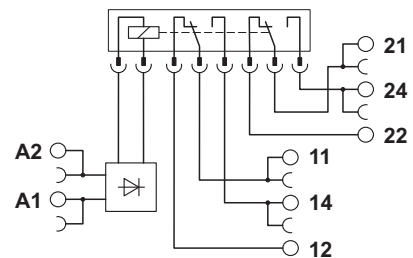
REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Diagram



Circuit diagram



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

# Relay Module - PLC-RSC- 24DC/21-21AU - 2967125

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

## Articles in set

Relay base - PLC-BSC- 24DC/21-21 - 2967015



14 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 PDTs, input voltage 24 V DC

Single relay - REL-MR- 24DC/21-21AU - 2961215



Plug-in miniature power relay, with multi-layer gold contact, 2 PDTs, input voltage 24 V DC

## Classifications

### eCl@ss

eCl@ss 5.0	27371601
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 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437
ETIM 5.0	EC001437
ETIM 6.0	EC001437

### UNSPSC

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

# Relay Module - PLC-RSC- 24DC/21-21AU - 2967125

## Classifications

### UNSPSC

UNSPSC 13.2	39122334
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## Approvals

### Approvals

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UL Recognized / UL Listed / cUL Recognized / cUL Listed / GL / EAC / RC FRT / PRS / cULus Recognized / cULus Listed

### Ex Approvals

## Approval details

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
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UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
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cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
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cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
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GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	46016-03 HH
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EAC			RU C- DE.A*30.B.01082
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# Relay Module - PLC-RSC- 24DC/21-21AU - 2967125

## Approvals

RC FRT		<a href="http://www.rsfgt.ru/en/web/guest/english">http://www.rsfgt.ru/en/web/guest/english</a>	B.00094
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PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2109/880590/16
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cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	
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cULus Listed			
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## 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-RSC- 24DC/21-21AU - 2967125

### Accessories

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



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

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



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

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



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

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



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

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Single plug-in bridge - FBST 14-PLC BK - 2967691



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

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### Controller board



## Relay Module - PLC-RSC- 24DC/21-21AU - 2967125

### Accessories

System connection - PLC-V8L/FLK14/OUT - 2299660



V8 adapter for 8 x PLC-INTERFACE (14 mm); Controller: PLC system cabling of output cards; connection 1: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals); connection 2: 1x IDC/FLK pin strip (14-position); number of channels: 8; control logic: positive switching

System connection - PLC-V8L/FLK14/OUT/M - 2304306



V8 adapter for 8 x PLC-INTERFACE (14 mm); Controller: PLC system cabling of output cards; connection 1: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals); connection 2: 1x IDC/FLK pin strip (14-position); number of channels: 8; control logic: negative switching

### 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

## Relay Module - PLC-RSC- 24DC/21-21AU - 2967125

### Accessories

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

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

## Relay Module - PLC-RSC- 24DC/21-21AU - 2967125

### Accessories

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

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### Labeled terminal marker

Zack marker strip - ZB10,LGS:FORTL.ZAHLEN - 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 991 - 1000, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

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### 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

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### 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

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### Screwdriver tools

## Relay Module - PLC-RSC- 24DC/21-21AU - 2967125

### Accessories

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

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### Terminal marking

Zack marker strip - ZB10/WH-100:UNBEDRUCKT - 5060883



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm

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Zack marker strip - ZB 10:UNBEDRUCKT - 1053001



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.5 x 10.15 mm

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Marker for terminal blocks - UC-TM 12 - 0819194



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID, BLUEMARK ID COLOR, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 12 mm, lettering field size: 11.45 x 10.5 mm

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Marker for terminal blocks - UCT-TM 12 - 0829144



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, THERMOMARK CARD 2.0, THERMOMARK PRIME, BLUEMARK ID, BLUEMARK ID COLOR, TOPMARK LASER, TOPMARK NEO, mounting type: snap into tall marker groove, for terminal block width: 12 mm, lettering field size: 10.8 x 9.6 mm

## Relay Module - PLC-RSC- 24DC/21-21AU - 2967125

### Accessories

#### Spare parts

Relay base - PLC-BSC- 24DC/21-21 - 2967015



14 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 PDTs, input voltage 24 V DC

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Single relay - REL-MR- 24DC/21-21AU - 2961215



Plug-in miniature power relay, with multi-layer gold contact, 2 PDTs, input voltage 24 V DC