PHŒNIX CONTACT

Relay Module - PLC-RSP- 24DC/21 - 2966472

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PLC relay, consisting of base terminal block PLC-BSP.../21 with spring-cage connection and pluggable miniature relay with power contact, for assembly on DIN rail NS 35/7.5, 1 PDT, input voltage 24 V DC

The illustration shows the version
PLC-RSC-24DC/21

Why buy this product

☑ 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	10 STK
GTIN	4 017918 164799
GTIN	4017918164799
Weight per Piece (excluding packing)	28.430 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

Dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

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Technical data

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	9 mA
Typical response time	5 ms
Typical release time	8 ms
Protective circuit	Reverse polarity protection Polarity protection diode
	Free-wheeling diode Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.22 W

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)
Maximum inrush current	on request
Limiting continuous current	6 A
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)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	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)

Connection data input side

Connection name	Coil side
Connection method	Spring-cage connection
Stripping length	8 mm
Conductor cross section solid	0.14 mm² ... 2.5 mm²

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Technical data

Connection data input side

Conductor cross section flexible	0.14 mm² ... 2.5 mm²
Conductor cross section AWG	26 ... 14

Connection data output side

Connection name	Contact side
Connection method	Spring-cage connection
Stripping length	8 mm
Conductor cross section solid	0.14 mm² ... 2.5 mm²
Conductor cross section flexible	0.14 mm² ... 2.5 mm²
Conductor cross section AWG	26 ... 14

General

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

Standards and Regulations

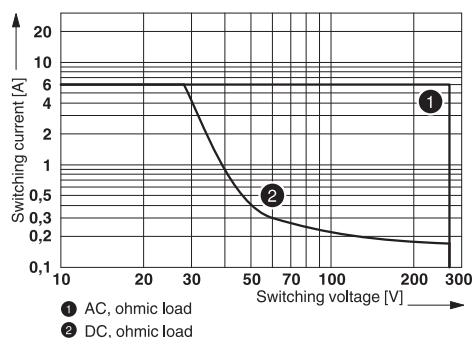| Connection in acc. with standard	CUL
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Degree of pollution	3
Overvoltage category	III
Flammability rating according to UL 94	V0

Environmental Product Compliance

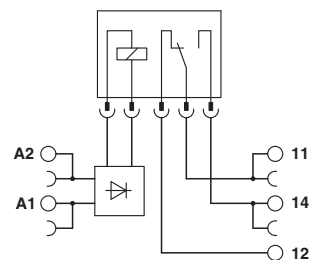| China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings
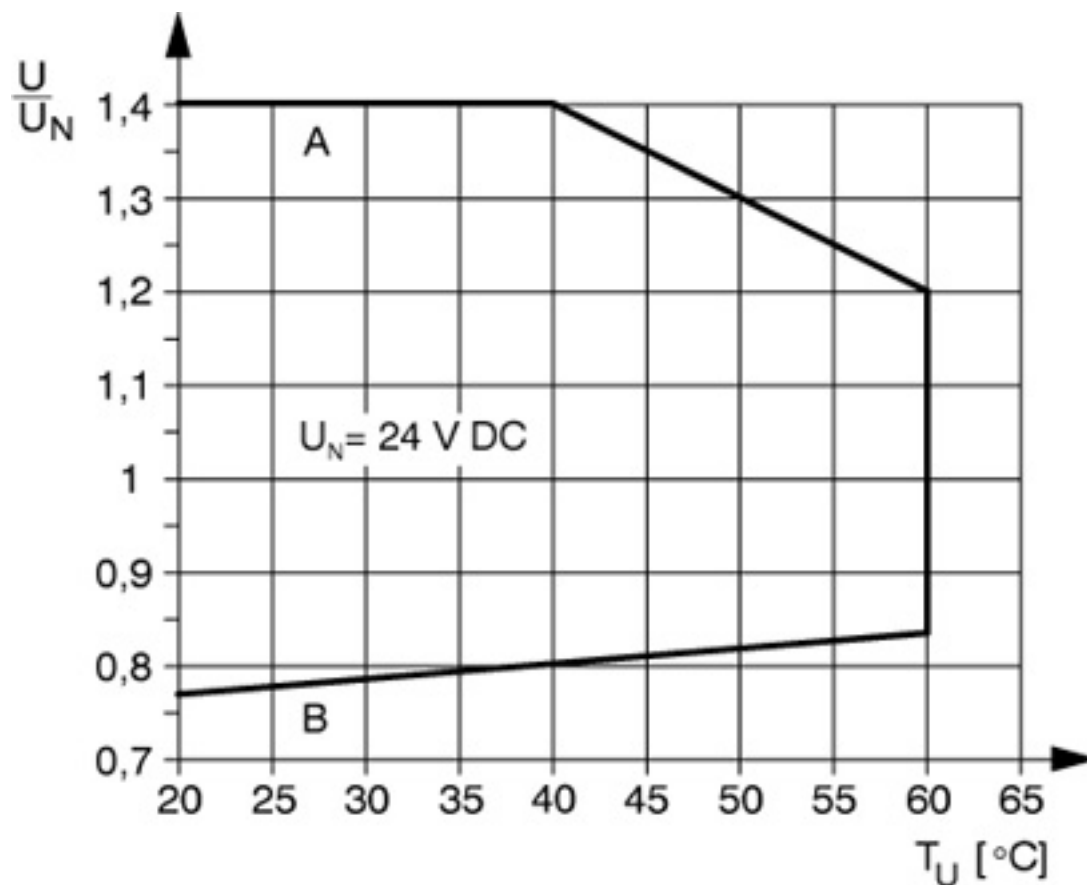
Relay Module - PLC-RSP- 24DC/21 - 2966472

Diagram

Circuit diagram

❶ AC, ohmic load
❷ DC, ohmic load

Interrupting rating

Diagram

$U_N = 24 \text{ V DC}$

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)

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Classifications

eCl@ss

eCl@ss 5.0	27371601
eCl@ss 5.1	27371601
eCl@ss 6.0	27371601
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
UNSPSC 13.2	39122334

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

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

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

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GL		http://www.gl-group.com/newbuilding/approvals/index.html	46016-03 HH

EAC			7500651.22.01.00244

RC FRT		http://www.rsfgt.ru/en/web/guest/english	B.00094

EAC			EAC-Zulassung

PRS		http://www.prs.pl/	TE/2109/880590/16

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	

cULus Listed	

Accessories

Accessories

Bridge

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Accessories

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

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

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Accessories

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 8-PLC GY - 2967688

Single plug-in bridge, Length: 8 mm, Number of positions: 2, Color: gray

Controller board

System connection - PLC-V8/FLK14/OUT - 2295554

System connection - PLC-V8/FLK14/OUT/M - 2304102

System connection - PLC-V8/D15S/OUT - 2296058

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Accessories

System connection - PLC-V8/D15B/OUT - 2296061

DIN 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

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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

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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

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

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

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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, unperforated, Width: 35 mm, Height: 15 mm, Length: 2000 mm, Color: silver

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

Labeled terminal marker

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Accessories

Zack marker strip - ZB 6,LGS:FORTL.ZAHLEN - 1051016

Zack marker strip, Strip, white, labeled, can be labeled with: 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: 6.15 x 10.5 mm

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: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

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Accessories

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

Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

Spare parts

Relay socket - PLC-BSP- 24DC/21 - 2967219

6.2 mm PLC basic terminal block with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

Single relay - REL-MR- 24DC/21 - 2961105

Plug-in miniature power relay, with power contact, 1 PDT, input voltage 24 V DC