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with power contact, for assembly on DIN rail NS 35/7.5, 1 PDT, input voltage 48 V DC

PLC relay, consisting of base terminal block PLC-BSC.../21 with screw connection and pluggable miniature relay

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

#### **Product Features**

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



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	35.73 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	6.2 mm
Height	80 mm
Depth	94 mm



## 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 <sub>N</sub>	48 V DC
Typical input current at $U_N$	9.2 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	yes
Power dissipation for nominal condition	0.44 W

#### Contact side

Contact type	1 PDT
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 orFBST 500)
Minimum switching voltage	5 V (at 100 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	10 A (4 s)
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	Screw connection



## Technical data

#### Connection data input side

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>
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>
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 x 10 <sup>7</sup> cycles
Flammability rating according to UL 94	V0
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Degree of pollution	3
Overvoltage category	Ш
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	111
Flammability rating according to UL 94	V0



## 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	27371601
eCl@ss 9.0	27371601

#### ETIM

ETIM 2.0	EC000196
ETIM 3.0	EC000196
ETIM 4.0	EC000196
ETIM 5.0	EC001437

#### UNSPSC

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

## Approvals

Approvals

#### Approvals

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

Ex Approvals

Approvals submitted

Approval details



## Approvals

UL Listed
cUL Listed
GL
EAC
RC FRT
EAC
cULus Recognized CALus
cULus Listed
Accessories
Accessories
Bridge



### 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

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

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



### Accessories

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



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

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



### Accessories

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

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



### 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, 2component 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

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-BSC- 48DC/21 - 2966090



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 48 V DC

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



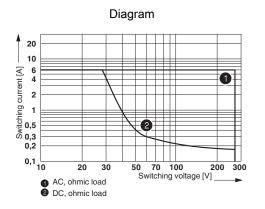
Plug-in miniature power relay, with power contact, 1 PDT, input voltage 24 V DC

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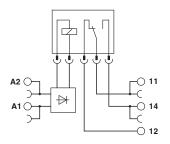
### Accessories

## Drawings

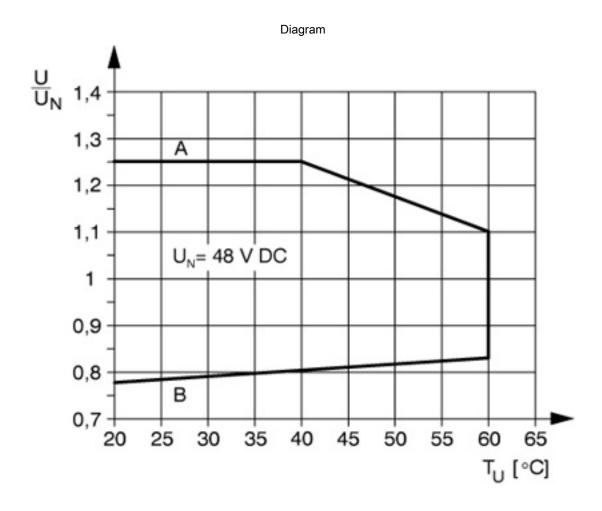


Interrupting rating

Circuit 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)

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