

## Relay Module - PLC-RSC- 48DC/21HC - 2967646

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PLC-INTERFACE, consisting of PLC-BSC.../21 HC basic terminal block with screw connection and plug-in miniature relay for a high continuous current, for mounting on DIN rail NS 35/7,5, limiting continuous current up to 10 A, 1 PDT, input voltage 48 V DC

The illustration shows the version PLC-RSC-230UC/21HC

### Product Features

- ✓ Efficient connection to system cabling using V8 adapter
- ✓ Long electrical service life thanks to 16 A relay
- ✓ All common input voltages of 12 V DC to 230 V AC
- ✓ Safe isolation according to DIN EN 50178 between coil and contact
- ✓ Max. continuous current of 10 A
- ✓ Functional plug-in bridges



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	72.95 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
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#### Dimensions

Width	14 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 $U_N$	48 V DC
Typical input current at $U_N$	20 mA
Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Protection against polarity reversal Polarity protection diode
	Free-wheeling diode Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.96 W

### Contact side

Contact type	1 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	12 V DC (at 10 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	30 A (300 ms)
Limiting continuous current	10 A
	6 A (value applies to connections 12. If connections 12 are bridged, the normal value applies.)
Interrupting rating (ohmic load) max.	240 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	2500 VA (for 250 V AC)
Interrupting rating (ohmic load) max. bridged	144 W (for 24 V DC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.)
	1500 VA (for 250 V AC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.)
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)
	6 A (at 24 V, AC15)

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### Technical data

#### Contact side

	6 A (at 120 V, AC15)
	6 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>
AWG conductor cross section	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>
AWG conductor cross section	26 ... 14

#### General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	RT II (Relay)
Mechanical service life	3 x 10 <sup>7</sup> cycles
Flammability rating according to UL 94	V0
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage/insulation	6 kV / Safe isolation, increased insulation
Pollution degree	2
Overvoltage category	III
Mounting position	any
Assembly instructions	In rows with zero spacing

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## 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

### 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

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#### Approvals

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

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#### Ex Approvals

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#### Approvals submitted

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#### Approval details

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## Approvals

UL Recognized 

UL Listed 


cUL Recognized 

cUL Listed 

GL

EAC

RC FRT

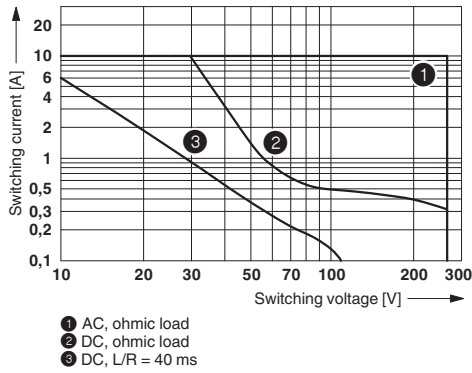
cULus Recognized 

cULus Listed 

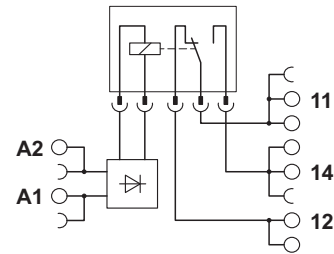
## Drawings

# Relay Module - PLC-RSC- 48DC/21HC - 2967646

Diagram

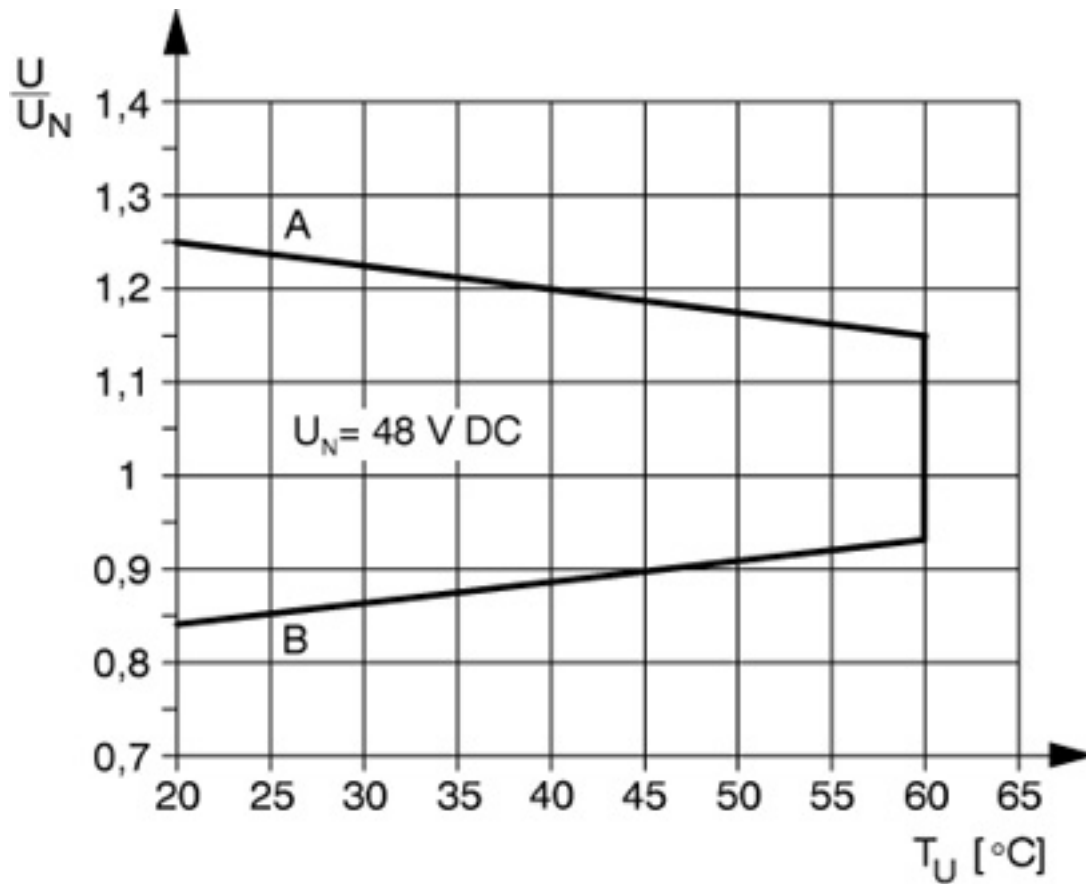


Circuit diagram



## Interrupting rating

Diagram



Curve A

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

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Curve B

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

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