

## Relay base - PLC-BSP-230UC/21/SO46 - 2980377

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6.2 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 PDT, input voltage 230 V AC

### Your advantages

- Resistant to interference currents
- High relay release voltage



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 895754
GTIN	4017918895754
Weight per Piece (excluding packing)	28.840 g
Custom tariff number	85366990
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

#### Ambient conditions

# Relay base - PLC-BSP-230UC/21/SO46 - 2980377

## Technical data

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

### Input data

Input voltage range in reference to $U_N$	0.78 ... 1.14
Typical release voltage	80 V AC
Nominal input voltage $U_N$	230 V AC
Status display	LED
Protective circuit	Bridge rectifier Bridge rectifier
	RCZ filter RCZ filter

### Output data

Compatible components	Miniature relay, REL-MR-60DC/21AU, REL-MR-60DC/21; miniature optocoupler, OPT-60DC/48DC/100, OPT-60DC/24DC/2, OPT-60DC/230AC/1
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### Connection data, input side

Connection name	Input side
Connection method	Spring-cage connection
Stripping length	8 mm
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	Output side
Connection method	Spring-cage connection
Stripping length	8 mm
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

Protective circuit	Bridge rectifier Bridge rectifier
	RCZ filter RCZ filter
Color	green
Operating mode	100% operating factor
Mounting position	any
Assembly instructions	In rows with zero spacing

### Standards and Regulations

# Relay base - PLC-BSP-230UC/21/SO46 - 2980377

## Technical data

### Standards and Regulations

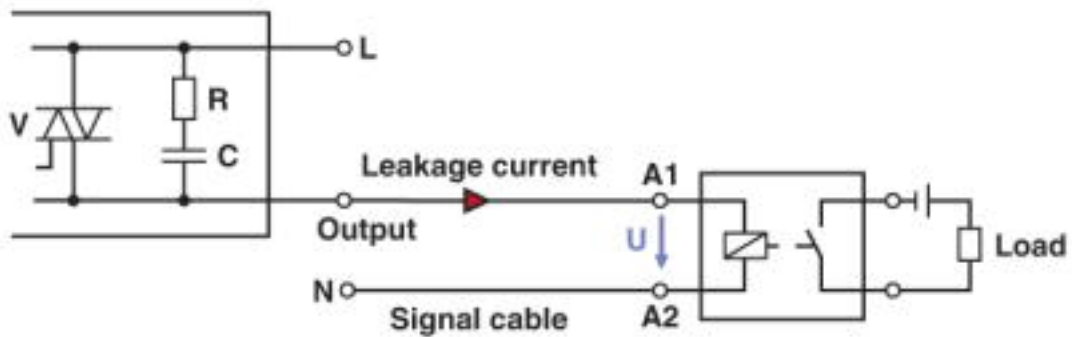
Connection in acc. with standard	CUL
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### Environmental Product Compliance

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

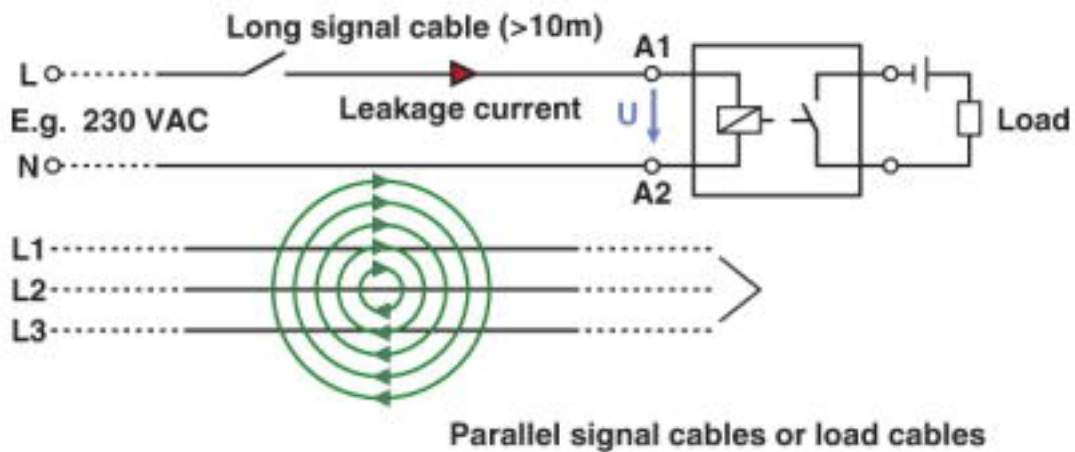
## Drawings

Application drawing



Occurrence of interference signals  
Scenario 1: controller - AC output card

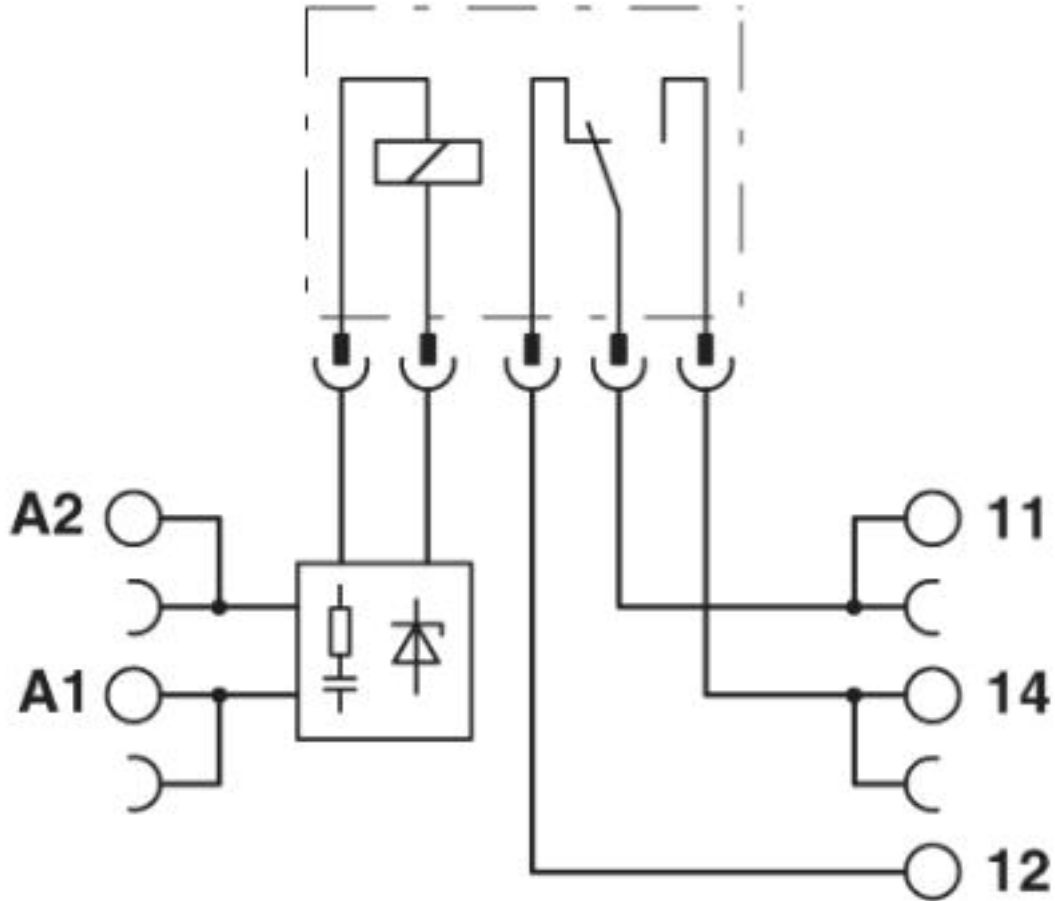
Application drawing



Occurrence of interference signals  
Scenario 2: long signal cables

## Relay base - PLC-BSP-230UC/21/SO46 - 2980377

Circuit diagram



### Classifications

#### eCl@ss

eCl@ss 5.0	27371603
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371603
eCl@ss 8.0	27371603
eCl@ss 9.0	27371603

#### ETIM

ETIM 2.0	EC001456
ETIM 3.0	EC001456
ETIM 4.0	EC001456

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## Classifications

### ETIM

ETIM 5.0	EC001456
ETIM 6.0	EC001456
ETIM 7.0	EC001456

### UNSPSC

UNSPSC 6.01	30211917
UNSPSC 7.0901	39121516
UNSPSC 11	39121516
UNSPSC 12.01	39121516
UNSPSC 13.2	39122326

## Approvals

### Approvals

#### Approvals

PRS / UL Recognized / cUL Recognized / EAC / DNV GL / cULus Recognized

#### Ex Approvals

### Approval details

PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2109/880590/16
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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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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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EAC			RU C- DE.A*30.B.01082
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## Relay base - PLC-BSP-230UC/21/SO46 - 2980377

### Approvals

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE0000196-02
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cULus Recognized	
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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 base - PLC-BSP-230UC/21/SO46 - 2980377

### Accessories

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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### Controller board

System connection - PLC-V8/FLK14/IN - 2296553



V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of input cards, connection 1: Screw connection 1x, connection 2: IDC/FLK pin strip 1x 14-position, connection 3: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: positive switching

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## Relay base - PLC-BSP-230UC/21/SO46 - 2980377

### Accessories

#### System connection - PLC-V8/FLK14/IN/M - 2304115



V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of input cards, connection 1: Screw connection 1x, connection 2: IDC/FLK pin strip 1x 14-position, connection 3: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: negative switching

#### System connection - PLC-V8/D15S/IN - 2296074



V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of input cards, connection 1: Screw connection 1x, connection 2: D-SUB pin strip 1x 15-position, connection 3: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: positive switching

#### System connection - PLC-V8/D15B/IN - 2296087



V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of input cards, connection 1: Screw connection 1x, connection 2: D-SUB socket strip 1x 15-position, connection 3: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: positive 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

## Relay base - PLC-BSP-230UC/21/SO46 - 2980377

### Accessories

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

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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

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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

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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

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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

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## Relay base - PLC-BSP-230UC/21/SO46 - 2980377

### Accessories

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

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

### Labeled terminal marker

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



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-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 size: 6.15 x 10.5 mm, Number of individual labels: 10

### 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

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### Accessories

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

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 - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

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



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

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Marker for terminal blocks - UC-TM 6 - 0818085



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 80

## Relay base - PLC-BSP-230UC/21/SO46 - 2980377

### Accessories

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#### Marker for terminal blocks - UCT-TM 6 - 0828736



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 60

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### Necessary add-on products

#### Single relay - REL-MR- 60DC/21AU - 2961134



Plug-in miniature power relay, with multi-layer gold contact, 1 PDT, input voltage 60 V DC

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#### Single relay - REL-MR- 60DC/21 - 2961118



Plug-in miniature power relay, with power contact, 1 PDT, input voltage 60 V DC

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#### Miniature solid-state relay - OPT-60DC/ 48DC/100 - 2966621



Plug-in miniature solid-state relay, input solid-state relay, 1 N/O contact, input: 60 V DC, output: 3 - 48 V DC/100 mA

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#### Miniature solid-state relay - OPT-60DC/ 24DC/ 2 - 2966605



Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 60 V DC, output: 3 ... 33 V DC/3 A

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## Relay base - PLC-BSP-230UC/21/SO46 - 2980377

### Accessories

Miniature solid-state relay - OPT-60DC/230AC/ 1 - 2967963



Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 60 V DC, output: 24 - 253 V AC/0.75 A