

PLC-BSC-230UC/21/SO46 - Relay base



2980335

<https://www.phoenixcontact.com/us/products/2980335>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



6.2 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 230 V AC

Your advantages

- High relay release voltage
- Resistant to interference currents

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 2980335 |
| Packing unit | 10 pc |
| Minimum order quantity | 1 pc |
| Sales key | C461 |
| Product key | DK622M |
| GTIN | 4017918895723 |
| Weight per piece (including packing) | 35.08 g |
| Weight per piece (excluding packing) | 30.26 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |

Technical data

Notes

Utilization restriction

| | |
|----------|---|
| EMC note | EMC: class A product, see manufacturer's declaration in the download area |
|----------|---|

Product properties

| | |
|----------------|--------------------------------|
| Product type | Relay socket |
| Product family | PLC-INTERFACE |
| Application | Filter to prevent interference |
| Operating mode | 100% operating factor |

Insulation characteristics

| | |
|------------------|---|
| Pollution degree | 3 |
|------------------|---|

Electrical properties

| | |
|--------------------|------------------------------------|
| Protective circuit | Bridge rectifier; Bridge rectifier |
| | RCZ filter; RCZ filter |

Input data

| | |
|-----------------------------|--|
| Nominal input voltage U_N | 230 V AC |
| | 220 V DC |
| | The nominal voltage of the plug-on electromechanical relay or solid-state relay (see necessary accessories) deviates from the nominal input voltage of the base with integrated upstream circuit |
| | 230 V AC |
| | 220 V DC |
| | The nominal voltage of the plug-on electromechanical relay or solid-state relay (see necessary accessories) deviates from the nominal input voltage of the base with integrated upstream circuit |

Relay assembly

| | |
|---|------------------------------------|
| Nominal input voltage U_N | 230 V AC |
| Input voltage range in reference to U_N | 0.78 ... 1.14 |
| Typical input current at U_N | 8.8 mA (50 Hz) |
| | 10 mA (60 Hz) |
| Typical response time | 7 ms |
| Typical release time | 20 ms |
| Typical release voltage | 80 V AC |
| Operating voltage display | Yellow LED |
| Protective circuit | Bridge rectifier; Bridge rectifier |
| | Filter; Filter |

Optocoupler assembly

| | |
|-----------------------------|----------|
| Nominal input voltage U_N | 230 V AC |
|-----------------------------|----------|

PLC-BSC-230UC/21/SO46 - Relay base



2980335

<https://www.phoenixcontact.com/us/products/2980335>

| | |
|--|------------------------------------|
| Input voltage range in reference to U_N | 0.8 ... 1.1 |
| Typical input current at U_N | 8.8 mA (50 Hz) |
| | 10 mA (60 Hz) |
| Switching threshold "0" signal in reference to U_N | ≤ 0.4 |
| Typical response time | 6 ms |
| Typical release time | 10 ms |
| Operating voltage display | Yellow LED |
| Protective circuit | Bridge rectifier; Bridge rectifier |
| | Filter; Filter |

Output data

| | |
|--|---|
| Maximum switching voltage | 48 V DC |
| Minimum switching voltage | 3 V DC |
| Limiting continuous current | 100 mA |
| Voltage drop at max. limiting continuous current | < 1 V DC |
| Output circuit | 2-conductor, floating |
| Protective circuit | Reverse polarity protection |
| | Surge protection |
| Maximum switching voltage | 30 V DC |
| Minimum switching voltage | 3 V DC |
| Limiting continuous current | 3 A |
| Voltage drop at max. limiting continuous current | < 200 mV |
| Maximum inrush current | 15 A (10 ms) |
| Output circuit | 2-conductor, floating |
| Protective circuit | Reverse polarity protection |
| | Surge protection |
| Maximum switching voltage | 253 V AC (Partition plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal points in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...) |
| Minimum switching voltage | 24 V AC |
| Limiting continuous current | 0.75 A |
| Voltage drop at max. limiting continuous current | < 1 V AC |
| Maximum inrush current | 30 A (10 ms) |
| Output circuit | 2-conductor, floating |
| Protective circuit | RCV circuit |
| Leakage current | < 1 mA |
| Phase angle $\cos \phi$ min | 0.5 |
| Max. load value | 4.5 A ² s |

Connection data

| | |
|-------------------------------|--|
| Connection method | Screw connection |
| Stripping length | 8 mm |
| Screw thread | M3 |
| Conductor cross-section rigid | 0.14 mm ² ... 2.5 mm ² |

PLC-BSC-230UC/21/SO46 - Relay base



2980335

<https://www.phoenixcontact.com/us/products/2980335>

| | |
|----------------------------------|---|
| Conductor cross-section flexible | 0.14 mm ² ... 2.5 mm ² |
| | 0.2 mm ² ... 2.5 mm ² (Single ferrule) |
| | 2x 0.5 mm ² ... 1.5 mm ² (TWIN ferrule) |
| Conductor cross-section AWG | 26 ... 14 |
| Tightening torque | 0.6 Nm ... 0.8 Nm |

Signaling

| | |
|----------------|-----|
| Status display | LED |
|----------------|-----|

Dimensions

Item dimensions

| | |
|--------|--------|
| Width | 6.2 mm |
| Height | 80 mm |
| Depth | 94 mm |

Material specifications

| | |
|--|-----------------|
| Color | gray (RAL 7042) |
| Flammability rating according to UL 94 (Housing) | V0 (Housing) |

Environmental and real-life conditions

Ambient conditions

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

Approvals

CE

| | |
|-------------|--------------|
| Certificate | CE-compliant |
|-------------|--------------|

UKCA

| | |
|-------------|----------------|
| Certificate | UKCA-compliant |
|-------------|----------------|

Shipbuilding approval

| | |
|-------------|------------|
| Certificate | TAE0000196 |
|-------------|------------|

Corrosive gas test

| | |
|----------------|----------------------------|
| Identification | ISA-S71.04. G3 Harsh Group |
| | EN 60068-2-60 |

Shipbuilding data

| | |
|-------------|---|
| Temperature | D |
| Humidity | A |
| Vibration | B/C |
| EMC | B |
| Enclosure | Required protection according to the Rules shall be provided upon installation on board |

PLC-BSC-230UC/21/SO46 - Relay base



2980335

<https://www.phoenixcontact.com/us/products/2980335>

EMC data

| | |
|-------------------------------|--|
| Electromagnetic compatibility | Conformance with EMC directive |
| Low Voltage Directive | Conformance with Low Voltage Directive |

Standards and regulations

| | |
|-----------------------|----------------|
| Standards/regulations | IEC/EN 60664-1 |
|-----------------------|----------------|

Mounting

| | |
|-------------------|---------------------------|
| Mounting type | DIN rail mounting |
| Assembly note | in rows with zero spacing |
| Mounting position | any |

Drawings

Application drawing



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

Application drawing



Occurrence of interference signals
Scenario 2: long signal cables

PLC-BSC-230UC/21/SO46 - Relay base

2980335

<https://www.phoenixcontact.com/us/products/2980335>



Circuit diagram



DC output

Circuit diagram



AC output

PLC-BSC-230UC/21/SO46 - Relay base



2980335

<https://www.phoenixcontact.com/us/products/2980335>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2980335>



cUL Recognized
Approval ID: E238705



UL Recognized
Approval ID: E238705



EAC
Approval ID: RU D-DE.B*00573/18

DNV

Approval ID: TAE0000196

PLC-BSC-230UC/21/SO46 - Relay base



2980335

<https://www.phoenixcontact.com/us/products/2980335>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27371603 |
| ECLASS-15.0 | 27371603 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC001456 |
|-----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39122300 |
|-------------|----------|

2980335

<https://www.phoenixcontact.com/us/products/2980335>

Environmental product compliance

EU RoHS

| | |
|---|--------------|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 7(a), 7(c)-I |

China RoHS

| | |
|--|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|-------------------------------------|--|
| REACH candidate substance (CAS No.) | Hexahydromethylphthalic anhydride(CAS: n/a) |
| | Lead(CAS: 7439-92-1) |
| | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol(CAS: 79-94-7) |
| SCIP | d16e42c1-db3e-45e5-9c8a-1c4e53bcccb5 |

EF3.1 Climate Change

| | |
|---------|---------------|
| CO2e kg | 0.325 kg CO2e |
|---------|---------------|

Phoenix Contact 2026 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
 586 Fulling Mill Road
 Middletown, PA 17057, United States
 (+717) 944-1300
info@phoenixcon.com