

# PLC-BSC-24DC/1/SSI - Relay base



1094753

<https://www.phoenixcontact.com/us/products/1094753>

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6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, internal amplifier circuit, and an appropriate auxiliary supply for weak signal sources, 24 V DC nominal input voltage

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1094753                        |
| Packing unit                         | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | C461                           |
| Product key                          | DK6211                         |
| GTIN                                 | 4055626921242                  |
| Weight per piece (including packing) | 32.12 g                        |
| Weight per piece (excluding packing) | 32.12 g                        |
| Customs tariff number                | 85366990                       |
| Country of origin                    | DE                             |

## Technical data

### Notes

|                    |  |
|--------------------|--|
| Notes on operation | Do not connect adjacent channels to SELV/ PELV and voltages dangerous to the touch.  |
| Notes on operation | The outputs are not suitable for switching different outer conductors with appropriate switching output (applies to the AC optocoupler variants and relays).   |
| Notes on operation | The system installer must ensure the touch protection of the product (at voltages > 25 V AC/60 V DC). The product is a built-in device without protection against direct contact.  |
| Notes on operation | At least one functional insulation against adjacent modules is complied with in the support rail direction.<br>If the application has higher requirements on the insulation (basic or reinforced insulation), then these must be realized through suitable measures (e. g., partition plates). |
| Notes on operation | Do not use to separate SELV/PELV circuits from other circuits, because safe isolation is not guaranteed. (applies to the optocoupler variants)   |

### Product properties

|                |                       |
|----------------|-----------------------|
| Product type   | Relay socket          |
| Product family | PLC-INTERFACE         |
| Operating mode | 100% operating factor |

#### Insulation characteristics: Air clearances and creepage distances between the power circuits

|                      |                                       |
|----------------------|---------------------------------------|
| Insulation           | Safe isolation, reinforced insulation |
| Overvoltage category | III                                   |
| Pollution degree     | 2                                     |

### Electrical properties

#### Air clearances and creepage distances between the power circuits

|                          |          |
|--------------------------|----------|
| Rated insulation voltage | 250 V AC |
| Rated surge voltage      | 6 kV     |

### Input data

|   |             |
|---|-------------|
| Nominal input voltage $U_N$               | 24 V DC     |
| Input voltage range in reference to $U_N$ | 0.8 ... 1.2 |
| Nominal input voltage $U_N$               | 24 V DC     |

#### Relay assembly

|  |             |
|--|-------------|
| Rated control circuit supply voltage $U_S$ | 24 V DC     |
| Voltage range with reference to $U_S$      | 0.8 ... 1.2 |
| Rated control supply current $I_S$         | 9 mA        |
| Rated actuating current $I_C$              | 1 mA        |
| Typical response time                      | 5 ms        |
| Typical release time                       | 7 ms        |

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|                          |                             |
|--------------------------|-----------------------------|
| Protective circuit       | Reverse polarity protection |
|                          | Surge protection            |
| Surge voltage protection | > 33 V                      |

## Optocoupler assembly

|  |                               |
|--|-------------------------------|
| Rated control circuit supply voltage $U_S$ | 24 V DC                       |
| Voltage range with reference to $U_S$      | 0.8 ... 1.2                   |
| Rated control supply current $I_S$         | $\geq 8$ mA (depends on type) |

## 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   |
| Output circuit                                   | 2-conductor, floating   |
| Protective circuit                               | Reverse polarity protection   |
|  | Surge protection  |
| Maximum switching voltage                        | 33 V DC   |
| Minimum switching voltage                        | 3 V DC  |
| Limiting continuous current                      | 3 A   |
| Voltage drop at max. limiting continuous current | < 200 mV  |
| 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   |
| Maximum inrush current                           | 30 A (10 ms)  |
| Output circuit                                   | 2-conductor, floating   |
| Protective circuit                               | RCV circuit   |
|  | Surge protection  |
| Leakage current                                  | < 1 mA  |
| Max. load value                                  | 4.5 A <sup>2</sup> s  |

## Connection data

|                                  |  |
|----------------------------------|--|
| Connection method                | Screw connection   |
| Stripping length                 | 8 mm   |
| Screw thread                     | M3   |
| Conductor cross-section rigid    | 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>                 |
|                                  | 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule) |

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|                             |   |
|-----------------------------|---|
|                             | 2x 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule) |
| Conductor cross-section AWG | 26 ... 14   |
| Tightening torque           | 0.6 Nm ... 0.8 Nm   |

## Signaling

|                |              |
|----------------|--------------|
| Status display | LED (yellow) |
|----------------|--------------|

## Dimensions

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

## Material specifications

|       |                 |
|-------|-----------------|
| Color | gray (RAL 7042) |
|-------|-----------------|

## Environmental and real-life conditions

### Ambient conditions

|   |                  |
|---|------------------|
| Degree of protection                    | IP20             |
| Ambient temperature (operation)         | -25 °C ... 60 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Altitude                                | ≤ 2000 m         |

## Approvals

### Corrosive gas test

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

## Standards and regulations

### Air clearances and creepage distances between the power circuits

|                       |              |
|-----------------------|--------------|
| Standards/regulations | DIN EN 50178 |
|-----------------------|--------------|

## Mounting

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

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## Classifications

### UNSPSC

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

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## 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.) | Lead(CAS: 7439-92-1)                 |
| SCIP                                | a5f74883-be6a-45bb-a2cf-33ffe4c12b92 |

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