

# UKK 5-DIO/UL-UR - Component terminal block



2791029

<https://www.phoenixcontact.com/us/products/2791029>

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.



Component terminal block, with integrated diode, nominal current: 0.5 A, number of connections: 4, connection method: Screw connection, Rated cross section: 4 mm<sup>2</sup>, 1st and 2nd level, cross section: 0.2 mm<sup>2</sup> - 4 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, NS 32, color: gray

## Your advantages

- Double-level diode terminal blocks with various forms of wiring are available for a wide range of applications

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 2791029       |
| Packing unit                         | 50 pc         |
| Minimum order quantity               | 50 pc         |
| Sales key                            | BE12          |
| Product key                          | BE1272        |
| GTIN                                 | 4017918072391 |
| Weight per piece (including packing) | 15.02 g       |
| Weight per piece (excluding packing) | 15 g          |
| Customs tariff number                | 85369010      |
| Country of origin                    | IN            |

2791029

<https://www.phoenixcontact.com/us/products/2791029>

## Technical data

### Product properties

|                       |                          |
|-----------------------|--------------------------|
| Product type          | Component terminal block |
| Number of connections | 4                        |
| Number of rows        | 2                        |
| Potentials            | 2                        |

### Insulation characteristics

|                      |     |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution  | 3   |

### Electrical properties

|   |        |
|---|--------|
| Rated insulation voltage                        | 500 V  |
| Rated surge voltage                             | 6 kV   |
| Maximum power dissipation for nominal condition | 1.02 W |

### Connection data

|                                 |                   |
|---------------------------------|-------------------|
| Number of connections per level | 2                 |
| Nominal cross section           | 4 mm <sup>2</sup> |

### 1st and 2nd level

|   |  |
|---|--|
| Connection method   | Screw connection                             |
| Screw thread  | M3   |
| Tightening torque   | 0.6 ... 0.8 Nm                               |
| Stripping length  | 8 mm   |
| Internal cylindrical gage   | A4   |
| Connection in acc. with standard  | IEC 60947-7-1                                |
| Conductor cross-section rigid   | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>    |
| Cross section AWG   | 24 ... 12 (converted acc. to IEC)            |
| Conductor cross-section flexible  | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>    |
| Conductor cross-section, flexible [AWG]   | 24 ... 12 (converted acc. to IEC)            |
| Conductor cross-section flexible (ferrule without plastic sleeve)                         | 0.25 mm <sup>2</sup> ... 4 mm <sup>2</sup>   |
| Flexible conductor cross-section (ferrule with plastic sleeve)                            | 0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| 2 conductors with same cross section, rigid   | 0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, flexible  | 0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| Nominal cross section   | 4 mm <sup>2</sup>                            |
| Nominal current   | 0.5 A  |
| Maximum load current  | 0.5 A  |
| Component type  | Diode 1N4007                                 |
| Reverse voltage   | 1300 V                                       |

# UKK 5-DIO/UL-UR - Component terminal block



2791029

<https://www.phoenixcontact.com/us/products/2791029>

## Dimensions

|                    |         |
|--------------------|---------|
| Width              | 6.2 mm  |
| End cover width    | 2.5 mm  |
| Height             | 56 mm   |
| Depth on NS 32     | 67 mm   |
| Depth on NS 35/7,5 | 62 mm   |
| Depth on NS 35/15  | 69.5 mm |

## Material specifications

|   |                 |
|---|-----------------|
| Color   | gray (RAL 7042) |
| Flammability rating according to UL 94                                  | V0              |
| Insulating material group   | I               |
| Insulating material   | PA              |
| Static insulating material application in cold                          | -60 °C          |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 130 °C          |
| Relative insulation material temperature index (Elec., UL 746 B)        | 130 °C          |
| Fire protection for rail vehicles (DIN EN 45545-2) R22                  | HL 1 - HL 3     |
| Fire protection for rail vehicles (DIN EN 45545-2) R23                  | HL 1 - HL 3     |
| Fire protection for rail vehicles (DIN EN 45545-2) R24                  | HL 1 - HL 3     |
| Fire protection for rail vehicles (DIN EN 45545-2) R26                  | HL 1 - HL 3     |
| Surface flammability NFPA 130 (ASTM E 162)                              | passed          |
| Specific optical density of smoke NFPA 130 (ASTM E 662)                 | passed          |
| Smoke gas toxicity NFPA 130 (SMP 800C)                                  | passed          |

## Electrical tests

### Surge voltage test

|        |             |
|--------|-------------|
| Result | Test passed |
|--------|-------------|

### Power-frequency withstand voltage

|                       |             |
|-----------------------|-------------|
| Test voltage setpoint | 1.89 kV     |
| Result                | Test passed |

## Mechanical properties

### Mechanical data

|                 |     |
|-----------------|-----|
| Open side panel | Yes |
|-----------------|-----|

## Mechanical tests

### Attachment on the carrier

|        |             |
|--------|-------------|
| Result | Test passed |
|--------|-------------|

### Test for conductor damage and slackening

|                |        |
|----------------|--------|
| Rotation speed | 10 rpm |
|----------------|--------|

|                                |                              |
|--------------------------------|------------------------------|
| Revolutions                    | 135                          |
| Conductor cross-section/weight | 0.2 mm <sup>2</sup> / 0.2 kg |
|                                | 4 mm <sup>2</sup> / 0.9 kg   |
| Result                         | Test passed                  |

## Environmental and real-life conditions

### Oscillation/broadband noise

|                        |  |
|------------------------|--|
| Specification          | DIN EN 50155 (VDE 0115-200):2022-06            |
| Spectrum               | Long life test category 2, bogie-mounted       |
| Frequency              | $f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$ |
| ASD level              | 6.12 (m/s <sup>2</sup> )/Hz                    |
| Acceleration           | 3.12g  |
| Test duration per axis | 5 h  |
| Test directions        | X-, Y- and Z-axis                              |
| Result                 | Test passed                                    |

### Shocks

|                                |                                   |
|--------------------------------|-----------------------------------|
| Pulse shape                    | Half-sine                         |
| Acceleration                   | 30g                               |
| Shock duration                 | 18 ms                             |
| Number of shocks per direction | 3                                 |
| Test directions                | X-, Y- and Z-axis (pos. and neg.) |
| Result                         | Test passed                       |

### Ambient conditions

|  |  |
|--|--|
| Ambient temperature (operation)          | -60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.) |
| Ambient temperature (storage/transport)  | -25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  |
| Ambient temperature (assembly)           | -5 °C ... 70 °C  |
| Ambient temperature (actuation)          | -5 °C ... 70 °C  |
| Permissible humidity (operation)         | 20 % ... 90 %  |
| Permissible humidity (storage/transport) | 30 % ... 70 %  |

## Standards and regulations

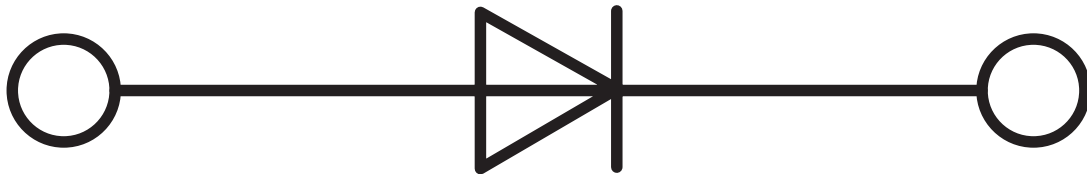
|                                  |               |
|----------------------------------|---------------|
| Connection in acc. with standard | IEC 60947-7-1 |
|----------------------------------|---------------|

## Mounting

|               |           |
|---------------|-----------|
| Mounting type | NS 35/7,5 |
|               | NS 35/15  |
|               | NS 32     |

## Drawings

Circuit diagram



# UKK 5-DIO/UL-UR - Component terminal block



2791029

<https://www.phoenixcontact.com/us/products/2791029>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2791029>



**EAC**

Approval ID: KZ7500651131219505



**cULus Recognized**

Approval ID: E60425

|             | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|-------------|-----------------------|-----------------------|-------------------|-----------------------------|
| <b>B</b>    |                       |                       |                   |                             |
| upper level | 300 V                 | 30 A                  | 26 - 10           | -                           |
| lower level | 300 V                 | 1 A                   | 26 - 10           | -                           |
| <b>C</b>    |                       |                       |                   |                             |
| upper level | 300 V                 | 30 A                  | 26 - 10           | -                           |
| lower level | 300 V                 | 1 A                   | 26 - 10           | -                           |
| <b>D</b>    |                       |                       |                   |                             |
| upper level | 600 V                 | 5 A                   | 26 - 10           | -                           |
| lower level | 600 V                 | 1 A                   | 26 - 10           | -                           |

# UKK 5-DIO/UL-UR - Component terminal block



2791029

<https://www.phoenixcontact.com/us/products/2791029>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27250114 |
| ECLASS-15.0 | 27250114 |

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC000898 |
|-----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

2791029

<https://www.phoenixcontact.com/us/products/2791029>

## 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                                | e0ea8581-a313-4891-8620-d12a67521f6b |

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](mailto:info@phoenixcon.com)