

# UK 3 N - Feed-through terminal block



3001501

<https://www.phoenixcontact.com/pc/products/3001501>

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.



Feed-through terminal block, nom. voltage: 800 V, nominal current: 24 A, number of connections: 2, connection method: Screw connection, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.2 mm<sup>2</sup> - 4 mm<sup>2</sup>, mounting type: NS 32, NS 35/15, NS 35/7,5, color: gray

## Your advantages

- Universal foot which can be used on NS 35... and NS 32... DIN rails
- The UK universal screw terminal block series has the typical features which are decisive for practical applications
- Potential distribution via fixed bridges in the terminal center or insertion bridges in the clamping space

## Commercial Data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 3001501             |
| Packing unit                         | 50 pc               |
| Minimum order quantity               | 1 pc                |
| Product Key                          | BE1211              |
| Catalog Page                         | Page 459 (C-1-2019) |
| GTIN                                 | 4017918089955       |
| Weight per Piece (including packing) | 7.411 g             |
| Weight per Piece (excluding packing) | 6.984 g             |
| Customs tariff number                | 85369010            |
| Country of origin                    | CN                  |

# UK 3 N - Feed-through terminal block



3001501

<https://www.phoenixcontact.com/pc/products/3001501>

## Technical Data

### Product properties

|                       |                             |
|-----------------------|-----------------------------|
| Product type          | Feed-through terminal block |
| Number of connections | 2                           |
| Number of rows        | 1                           |
| Potentials            | 1                           |

### Insulation characteristics

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

### Electrical properties

|   |        |
|---|--------|
| Rated surge voltage                             | 8 kV   |
| Maximum power dissipation for nominal condition | 0.77 W |

### Connection data

|                                 |                     |
|---------------------------------|---------------------|
| Number of connections per level | 2                   |
| Nominal cross section           | 2.5 mm <sup>2</sup> |

### Level 1 above 1 below 1

|   |   |
|---|---|
| Screw thread  | M3  |
| Tightening torque   | 0.6 ... 0.8 Nm  |
| Stripping length  | 8 mm  |
| 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> ... 2.5 mm <sup>2</sup>           |
| Conductor cross section, flexible [AWG]   | 24 ... 14 (converted acc. to IEC)                     |
| Conductor cross-section flexible (ferrule without plastic sleeve)                         | 0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>          |
| Flexible conductor cross section (ferrule with plastic sleeve)                            | 0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>          |
| Cross-section with insertion bridge, rigid  | 4 mm <sup>2</sup>                                     |
| Cross-section with insertion bridge, flexible   | 2.5 mm <sup>2</sup>                                   |
| 2 conductors with same cross section, solid   | 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 mm <sup>2</sup>             |
| Nominal current   | 24 A  |
| Maximum load current  | 32 A (with 4 mm <sup>2</sup> conductor cross section) |
| Nominal voltage   | 800 V   |
| Nominal cross section   | 2.5 mm <sup>2</sup>                                   |

### Ex data

# UK 3 N - Feed-through terminal block



3001501

<https://www.phoenixcontact.com/pc/products/3001501>

## Rated data (ATEX/IECEX)

|  |  |
|--|--|
| Identification                                     | □ II 2 GD Ex eb IIC Gb                 |
| Operating temperature range                        | -60 °C ... 110 °C                      |
| Ex-certified accessories                           | 3003020 D-UK 4/10                      |
|  | 3006027 D-UK 16                        |
|  | 3004210 ATP-UK 5-MTK                   |
|  | 1212587 SF-SL 0,6X3,5-100 S-VDE        |
|  | 1201442 E/UK                           |
| List of bridges                                    | Fixed bridge / FBR 2-5-EX / 0716129    |
|  | Fixed bridge / FBR 10-5-EX / 2303226   |
|  | Fixed bridge / FBR 80-5-EX / 3000942   |
| Bridge data  | 18.5 A / 2.5 mm <sup>2</sup>           |
| List of bridges                                    | Insertion bridge / EBL 2- 5 / 2303145  |
|  | Insertion bridge / EBL 3- 5 / 2303158  |
|  | Insertion bridge / EBL 4- 5 / 2303161  |
|  | Insertion bridge / EBL 5- 5 / 2303174  |
|  | Insertion bridge / EBL 6- 5 / 2303190  |
|  | Insertion bridge / EBL 10- 5 / 2303132 |
| Bridge data  | 20 A / 2.5 mm <sup>2</sup>             |
| Ex temperature increase                            | 40 K (24 A / 2.5 mm <sup>2</sup> )     |
| Rated voltage                                      | 690 V                                  |
| - At bridging between non-adjacent terminal blocks | 176 V                                  |
| Rated insulation voltage                           | 630 V                                  |
| output   | (Permanent)                            |

## Ex level General

|                      |        |
|----------------------|--------|
| Rated current        | 21.5 A |
| Maximum load current | 27.5 A |
| Contact resistance   | 0.5 mΩ |

## Ex connection data General

|   |   |
|---|---|
| Torque range  | 0.6 Nm ... 0.8 Nm                           |
| Nominal cross section                                 | 2.5 mm <sup>2</sup>                         |
| Rated cross section AWG                               | 14  |
| Connection capacity rigid                             | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>   |
| Connection capacity AWG                               | 24 ... 12                                   |
| Connection capacity flexible                          | 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Connection capacity AWG                               | 24 ... 14                                   |
| 2 conductors with same cross section, solid           | 0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| 2 conductors with the same cross-section AWG rigid    | 24 ... 16                                   |
| 2 conductors with same cross section, stranded        | 0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| 2 conductors with the same cross-section AWG flexible | 24 ... 16                                   |

## Dimensions

# UK 3 N - Feed-through terminal block



3001501

<https://www.phoenixcontact.com/pc/products/3001501>

|                  |         |
|------------------|---------|
| Width            | 5.2 mm  |
| End cover width  | 1.8 mm  |
| Height NS 35/15  | 54.5 mm |
| Height NS 35/7,5 | 47 mm   |
| Height           | 1.85 "  |
| Height NS 32     | 52 mm   |
| Length           | 42.5 mm |

## Material specifications

|  |      |
|--|------|
| Color                                  | gray |
| Flammability rating according to UL 94 | V0   |
| Insulating material group              | I    |
| Insulating material                    | PA   |

## Electrical tests

### Surge voltage test

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

### Temperature-rise test

|  |                                     |
|--|-------------------------------------|
| Requirement temperature-rise test                | Increase in temperature $\leq 45$ K |
| Result   | Test passed                         |
| Short-time withstand current 2.5 mm <sup>2</sup> | 0.3 kA                              |
| Result   | Test passed                         |

### Power-frequency withstand voltage

|                       |             |
|-----------------------|-------------|
| Test voltage setpoint | 2 kV        |
| Result                | Test passed |

## Mechanical properties

### Mechanical data

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

## Mechanical tests

### Mechanical strength

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

### Attachment on the carrier

|                         |             |
|-------------------------|-------------|
| DIN rail/fixing support | NS 32/NS 35 |
| Test force setpoint     | 1 N         |
| Result                  | Test passed |

## Environmental and real-life conditions

### Needle-flame test

|                  |      |
|------------------|------|
| Time of exposure | 30 s |
|------------------|------|

# UK 3 N - Feed-through terminal block



3001501

<https://www.phoenixcontact.com/pc/products/3001501>

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

## Ambient conditions

|  |   |
|--|---|
| Ambient temperature (operation)          | -60 °C ... 105 °C (max. short-term operating temperature 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 (storage/transport) | 30 % ... 70 %   |

## Standards and regulations

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

## Mounting

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

# UK 3 N - Feed-through terminal block

3001501

<https://www.phoenixcontact.com/pc/products/3001501>



## Drawings

Circuit diagram




# UK 3 N - Feed-through terminal block





3001501


<https://www.phoenixcontact.com/pc/products/3001501>

## Approvals


|  |                       |                       |                   |                             |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  <b>CSA</b><br>Approval ID: 13631 |                       |                       |                   |                             |
|  | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|  | 600 V                 | 20 A                  | 28 - 12           | -                           |


|  |                       |                       |                   |                             |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  <b>IECEE CB Scheme</b><br>Approval ID: NL-39956_A1 |                       |                       |                   |                             |
|  | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|  | 800 V                 | 24 A                  | -                 | - 2.5                       |

|  |                       |                       |                   |                             |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  <b>cULus Recognized</b><br>Approval ID: E60425 |                       |                       |                   |                             |
|  | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
| Use group B  |                       |                       |                   |                             |
|  | 600 V                 | 20 A                  | 28 - 12           | -                           |
| Use group C  |                       |                       |                   |                             |
|  | 600 V                 | 20 A                  | 28 - 12           | -                           |
| Use group F  |                       |                       |                   |                             |
|  | 800 V                 | 20 A                  | 28 - 12           | -                           |

|  |                       |                       |                   |                             |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  <b>KEMA-KEUR</b><br>Approval ID: 71-119849 |                       |                       |                   |                             |
|  | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|  | 800 V                 | 24 A                  | -                 | - 2.5                       |

|  |  |  |  |  |
|--|--|--|--|--|
|  <b>KR</b><br>Approval ID: HMB17372-EL001 |  |  |  |  |
|--|--|--|--|--|

|  |  |  |  |  |
|--|--|--|--|--|
|  <b>ClassNK</b><br>Approval ID: 09 ME 141 |  |  |  |  |
|--|--|--|--|--|

|  |  |  |  |  |
|--|--|--|--|--|
|  <b>RS</b><br>Approval ID: 22.44.01.00083.250 |  |  |  |  |
|--|--|--|--|--|

|   |  |  |  |  |
|---|--|--|--|--|
|  <b>ATEX</b><br>Approval ID: KEMA98ATEX1651U |  |  |  |  |
|---|--|--|--|--|

# UK 3 N - Feed-through terminal block



3001501

<https://www.phoenixcontact.com/pc/products/3001501>



**cUL Recognized**  
Approval ID: E192998

|  | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  | 300 V                 | 20 A                  | 28 - 12           | -                           |



**EAC Ex**  
Approval ID: RU C-DE.HA91.B.00066



**GL**  
Approval ID: 98876-96 HH

|                           | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|---------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| EEx e II part certificate | 690 V                 | 23 A                  | -                 | - 2.5                       |



**IECEx**  
Approval ID: IECEx KEM 06.0034U



**UL Recognized**  
Approval ID: E192998

|  | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  | 300 V                 | 20 A                  | 28 - 12           | -                           |



**CCC**  
Approval ID: 2020322313000623



**NEPSI**  
Approval ID: GYJ20.1195U



**DNV GL-EX**  
Approval ID: TAE00003K6

|                           | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|---------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| EEx e II part certificate | 440 V                 | 32 A                  | -                 | - 2.5                       |



# UK 3 N - Feed-through terminal block



3001501

<https://www.phoenixcontact.com/pc/products/3001501>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27141120 |
|-------------|----------|

### ETIM

|          |          |
|----------|----------|
| ETIM 8.0 | EC000897 |
|----------|----------|

### UNSPSC

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

# UK 3 N - Feed-through terminal block



3001501

<https://www.phoenixcontact.com/pc/products/3001501>

## Environmental Product Compliance

|            |   |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstraße 8  
D-32825 Blomberg  
+49 (0) 5235-3 00  
[info@phoenixcontact.com](mailto:info@phoenixcontact.com)