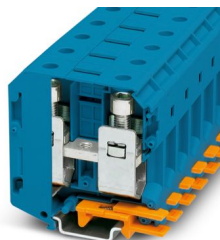


UKH 70 BU - High-current terminal block

3244601

<https://www.phoenixcontact.com/ie/products/3244601>

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.



High-current terminal block, nom. voltage: 1000 V, nominal current: 192 A, number of connections: 2, number of positions: 1, connection method: Screw connection, Rated cross section: 70 mm², cross section: 16 mm² - 95 mm², mounting type: NS 35/7,5, NS 35/15, NS 35/15-2,3, NS 32, color: blue

Your advantages

- Reliable cable connection is ensured by three-point centering of the conductor in the prismatic sleeve base

- Tested for railway applications
- Low contact resistance of the contact surface due to ribbing
- Screw locking by means of spring-loaded elements in the clamping part

UKH 70 BU - High-current terminal block



3244601

<https://www.phoenixcontact.com/ie/products/3244601>

Technical data

Notes

General

| | |
|------|---|
| Note | For a reliable contact of multi stranded conductors it is recommended to untwist multi stranded conductors. |
|------|---|

Product properties

| | |
|-----------------------|-----------------------------|
| Product type | High current terminal block |
| Area of application | Railway industry |
| | Machine building |
| | Plant engineering |
| Number of positions | 1 |
| 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 | 6.27 W |

Connection data

| | |
|---------------------------------|--------------------|
| Number of connections per level | 2 |
| Nominal cross section | 70 mm ² |

Level 1 above 1 below 1

| | |
|---|---|
| Connection method | Screw connection |
| Screw thread | M8 |
| Tightening torque | 8 ... 10 Nm |
| Stripping length | 24 mm |
| Internal cylindrical gage | A11 |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross-section rigid | 16 mm ² ... 95 mm ² |
| Cross section AWG | 4 ... 3/0 (converted acc. to IEC) |
| Conductor cross-section flexible | 25 mm ² ... 70 mm ² |
| Conductor cross-section, flexible [AWG] | 2 ... 2/0 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 16 mm ² ... 70 mm ² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 16 mm ² ... 70 mm ² |
| 2 conductors with same cross section, rigid | 16 mm ² ... 25 mm ² |
| 2 conductors with same cross section, flexible | 16 mm ² ... 25 mm ² |

UKH 70 BU - High-current terminal block



3244601

<https://www.phoenixcontact.com/ie/products/3244601>

| | |
|---|--|
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve | 16 mm ² ... 25 mm ² |
| Nominal cross section | 70 mm ² |
| Nominal current | 192 A |
| Maximum load current | 192 A (with 70 mm ² conductor cross-section) |
| Nominal voltage | 1000 V |
| Note | Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area. |

Ex data

Rated data (ATEX/IECEx)

| | |
|-----------------------------|------------------------------------|
| Identification | Ⓔ II 2 GD Ex eb IIC Gb |
| Operating temperature range | -60 °C ... 110 °C |
| Ex-certified accessories | 1201934 VDE-ISS 6 |
| | 1201659 E/AL-NS 32 |
| | 1201662 E/AL-NS 35 |
| List of bridges | / FBI 2-20 N EX / 3213210 |
| | / FBI 3-20 N EX / 3213211 |
| Bridge data | 180 A (70 mm ²) |
| Ex temperature increase | 40 K (180 A / 70 mm ²) |
| Rated insulation voltage | 800 V (NS 35) |
| | 630 V (NS 32) |
| output | (Permanent) |

Ex level General

| | |
|----------------------|---------------|
| Rated voltage | 880 V (NS 35) |
| | 690 V (NS 32) |
| Rated current | 180 A |
| Maximum load current | 180 A |
| Contact resistance | 0.08 mΩ |

Ex connection data General

| | |
|---|---|
| Torque range | 8 Nm ... 10 Nm |
| Nominal cross section | 70 mm ² |
| Rated cross section AWG | 2/0 |
| Connection capacity rigid | 16 mm ² ... 95 mm ² |
| Connection capacity AWG | 4 ... 3/0 |
| Connection capacity flexible | 25 mm ² ... 70 mm ² |
| Connection capacity AWG | 3 ... 2/0 |
| 2 conductors with same cross section, solid | 16 mm ² ... 25 mm ² |
| 2 conductors with the same cross-section AWG rigid | 4 ... 3 |
| 2 conductors with same cross section, stranded | 16 mm ² ... 25 mm ² |
| 2 conductors with the same cross-section AWG flexible | 4 ... 3 |

Dimensions

UKH 70 BU - High-current terminal block



3244601

<https://www.phoenixcontact.com/ie/products/3244601>

| | |
|--------------------|---------|
| Width | 20.3 mm |
| Height | 70.5 mm |
| Depth | 78.3 mm |
| Depth on NS 32 | 85 mm |
| Depth on NS 35/7,5 | 80 mm |
| Depth on NS 35/15 | 87.5 mm |

Material specifications

| | |
|---|-----------------|
| Color | blue (RAL 5015) |
| 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 |
| Calorimetric heat release NFPA 130 (ASTM E 1354) | 28 MJ/kg |
| 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

| | |
|-----------------------|-------------|
| Test voltage setpoint | 9.8 kV |
| Result | Test passed |

Temperature-rise test

| | |
|---|-------------------------------------|
| Requirement temperature-rise test | Increase in temperature \leq 45 K |
| Result | Test passed |
| Short-time withstand current 70 mm ² | 8.4 kA |
| Result | Test passed |

Power-frequency withstand voltage

| | |
|-----------------------|-------------|
| Test voltage setpoint | 2.2 kV |
| Result | Test passed |

Mechanical properties

Mechanical data

| | |
|-----------------|----|
| Open side panel | No |
|-----------------|----|

Mechanical tests

UKH 70 BU - High-current terminal block



3244601

<https://www.phoenixcontact.com/ie/products/3244601>

Mechanical strength

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

Attachment on the carrier

| | |
|-------------------------|-------------|
| DIN rail/fixing support | NS 32/NS 35 |
| Test force setpoint | 10 N |
| Result | Test passed |

Test for conductor damage and slackening

| | |
|--------------------------------|-----------------------------|
| Rotation speed | 10 (+/- 2) rpm |
| Revolutions | 135 |
| Conductor cross-section/weight | 16 mm ² / 2.9 kg |
| | 70 mm ² /10.4 kg |
| | 95 mm ² /14 kg |
| Result | Test passed |

Environmental and real-life conditions

Needle-flame test

| | |
|------------------|-------------|
| Time of exposure | 30 s |
| Result | Test passed |

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 ²) ² /Hz |
| Acceleration | 3.12g |
| Test duration per axis | 5 h |
| Test directions | X-, Y- and Z-axis |
| Result | Test passed |

Shocks

| | |
|--------------------------------|-------------------------------------|
| Specification | DIN EN 50155 (VDE 0115-200):2022-06 |
| Pulse shape | Half-sine |
| Acceleration | 5g |
| Shock duration | 30 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 |

UKH 70 BU - High-current terminal block



3244601

<https://www.phoenixcontact.com/ie/products/3244601>

| | |
|--|-----------------|
| 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 35/15-2,3 |
| | NS 32 |

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact (Ireland) Ltd
C6 The Exchange, Calmount Park, Ballymount
Dublin 12, D12 XE18
+353/1/2051-300
info@phoenixcontact.ie