

## Feed-through terminal block - UT 16 - 3044199

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Feed-through terminal block, Connection method: Screw connection, Cross section: 1.5 mm<sup>2</sup> - 25 mm<sup>2</sup>, AWG: 16 - 4, Width: 12.2 mm, Height: 54.4 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15

### Product Features

- ✓ The reducing bridges can be used to connect terminal blocks with different connection technologies, e.g., UT 35 screw terminal block with Push-in technology 2,5 Push-in terminal blocks, to form power blocks
- ✓ Tested for railway applications
- ✓ Easy and time-saving potential supply and distribution of large currents and cross sections up to 35 mm<sup>2</sup> with reducing bridges
- ✓ The flexible options for reducing bridging in the CLIPLINE complete system can be found in "Accessories for the CLIPLINE complete modular terminal block system"



### Key commercial data

|                  |               |
|------------------|---------------|
| package_quantity | 50            |
| GTIN             | 4017918977535 |

### Technical data

#### General

|                                         |                        |
|-----------------------------------------|------------------------|
| Number of levels                        | 1                      |
| Number of connections                   | 2                      |
| Color                                   | gray                   |
| Insulating material                     | PA                     |
| Inflammability class according to UL 94 | V0                     |
| Area of application                     | Railway industry       |
| Area of application                     | Mechanical engineering |
| Area of application                     | Plant engineering      |
| Area of application                     | Process industry       |

#### General

|                           |                                                         |
|---------------------------|---------------------------------------------------------|
| Maximum load current      | 101 A (with 25 mm <sup>2</sup> conductor cross section) |
| Rated surge voltage       | 8 kV                                                    |
| Pollution degree          | 3                                                       |
| Surge voltage category    | III                                                     |
| Insulating material group | I                                                       |

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## Technical data

### General

|                                                                                 |                                                     |
|---------------------------------------------------------------------------------|-----------------------------------------------------|
| Connection in acc. with standard                                                | IEC 60947-7-1                                       |
| Nominal current $I_N$                                                           | 76 A                                                |
| Nominal voltage $U_N$                                                           | 1000 V                                              |
| Open side panel                                                                 | ja                                                  |
| Shock protection test specification                                             | DIN EN 50274 (VDE 0660-514):2002-11                 |
| Back of the hand protection                                                     | guaranteed                                          |
| Finger protection                                                               | guaranteed                                          |
| Surge voltage test setpoint                                                     | 9.8 kV                                              |
| Result of surge voltage test                                                    | Test passed                                         |
| Power frequency withstand voltage setpoint                                      | 2.2 kV                                              |
| Result of power-frequency withstand voltage test                                | Test passed                                         |
| Checking the mechanical stability of terminal points (5 x conductor connection) | Test passed                                         |
| Bending test rotation speed                                                     | 10 rpm                                              |
| Bending test turns                                                              | 135                                                 |
| Bending test conductor cross section/weight                                     | 1.5 mm <sup>2</sup> / 0.4 kg                        |
| Bending test conductor cross section/weight                                     | 16 mm <sup>2</sup> / 2.9 kg                         |
| Bending test conductor cross section/weight                                     | 25 mm <sup>2</sup> / 4.5 kg                         |
| Result of bending test                                                          | Test passed                                         |
| Conductor cross section tensile test                                            | 1.5 mm <sup>2</sup>                                 |
| Tractive force setpoint                                                         | 40 N                                                |
| Conductor cross section tensile test                                            | 16 mm <sup>2</sup>                                  |
| Tractive force setpoint                                                         | 100 N                                               |
| Conductor cross section tensile test                                            | 25 mm <sup>2</sup>                                  |
| Tractive force setpoint                                                         | 135 N                                               |
| Tensile test result                                                             | Test passed                                         |
| Tight fit on carrier                                                            | NS 35                                               |
| Setpoint                                                                        | 5 N                                                 |
| Result of tight fit test                                                        | Test passed                                         |
| Requirements, voltage drop                                                      | ≤ 3.2 mV                                            |
| Result of voltage drop test                                                     | Test passed                                         |
| Temperature-rise test                                                           | Test passed                                         |
| Conductor cross section short circuit testing                                   | 16 mm <sup>2</sup>                                  |
| Short-time current                                                              | 1.92 kA                                             |
| Conductor cross section short circuit testing                                   | 25 mm <sup>2</sup>                                  |
| Short-time current                                                              | 3 kA                                                |
| Short circuit stability result                                                  | Test passed                                         |
| Proof of thermal characteristics (needle flame) effective duration              | 30 s                                                |
| Result of thermal test                                                          | Test passed                                         |
| Test specification, oscillation, broadband noise                                | DIN EN 50155 (VDE 0115-200):2008-03                 |
| Test spectrum                                                                   | Service life test category 1, class B, body mounted |

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## Technical data

### General

|                                                                       |                                                |
|-----------------------------------------------------------------------|------------------------------------------------|
| Test frequency                                                        | $f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$ |
| ASD level                                                             | 0.02 g <sup>2</sup> /Hz                        |
| Acceleration                                                          | 0.8 g                                          |
| Test duration per axis                                                | 5 h                                            |
| Test directions                                                       | X-, Y- and Z-axis                              |
| Oscillation, broadband noise test result                              | Test passed                                    |
| Test specification, shock test                                        | DIN EN 50155 (VDE 0115-200):2008-03            |
| Shock form                                                            | Half-sine                                      |
| Acceleration                                                          | 5 g                                            |
| Shock duration                                                        | 30 ms                                          |
| Number of shocks per direction                                        | 3                                              |
| Test directions                                                       | X-, Y- and Z-axis (pos. and neg.)              |
| Shock test result                                                     | Test passed                                    |
| Temperature index, insulating material (DIN EN 60216-1 (VDE 0304-21)) | 120 °C                                         |

### Dimensions

|                  |         |
|------------------|---------|
| Width            | 12.2 mm |
| Length           | 55.5 mm |
| Height           | 54.4 mm |
| Height NS 35/7,5 | 55 mm   |
| Height NS 35/15  | 62.5 mm |

### Connection data

|                                                                            |                                                                                                                              |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Note                                                                       | Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area. |
| Conductor cross section solid min.                                         | 1.5 mm <sup>2</sup>                                                                                                          |
| Conductor cross section solid max.                                         | 25 mm <sup>2</sup>                                                                                                           |
| Conductor cross section AWG/kcmil min.                                     | 16                                                                                                                           |
| Conductor cross section AWG/kcmil max                                      | 4                                                                                                                            |
| Conductor cross section stranded min.                                      | 1.5 mm <sup>2</sup>                                                                                                          |
| Conductor cross section stranded max.                                      | 25 mm <sup>2</sup>                                                                                                           |
| Min. AWG conductor cross section, stranded                                 | 16                                                                                                                           |
| Max. AWG conductor cross section, stranded                                 | 4                                                                                                                            |
| Conductor cross section stranded, with ferrule without plastic sleeve min. | 1 mm <sup>2</sup>                                                                                                            |
| Conductor cross section stranded, with ferrule without plastic sleeve max. | 16 mm <sup>2</sup>                                                                                                           |
| Conductor cross section stranded, with ferrule with plastic sleeve min.    | 1 mm <sup>2</sup>                                                                                                            |
| Conductor cross section stranded, with ferrule with plastic sleeve max.    | 16 mm <sup>2</sup>                                                                                                           |
| 2 conductors with same cross section, solid min.                           | 1 mm <sup>2</sup>                                                                                                            |
| 2 conductors with same cross section, solid max.                           | 6 mm <sup>2</sup>                                                                                                            |

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## Technical data

### Connection data

|                                                                                         |                      |
|-----------------------------------------------------------------------------------------|----------------------|
| 2 conductors with same cross section, stranded min.                                     | 1 mm <sup>2</sup>    |
| 2 conductors with same cross section, stranded max.                                     | 6 mm <sup>2</sup>    |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min. | 0.75 mm <sup>2</sup> |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 10 mm <sup>2</sup>   |
| 2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.   | 1 mm <sup>2</sup>    |
| 2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.   | 6 mm <sup>2</sup>    |
| Connection method                                                                       | Screw connection     |
| Stripping length                                                                        | 14 mm                |
| Internal cylindrical gage                                                               | A7                   |
| Screw thread                                                                            | M5                   |
| Tightening torque, min                                                                  | 2.5 Nm               |
| Tightening torque max                                                                   | 3 Nm                 |

## classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27141120 |
| eCl@ss 4.1 | 27141120 |
| eCl@ss 5.0 | 27141120 |
| eCl@ss 5.1 | 27141120 |
| eCl@ss 6.0 | 27141120 |
| eCl@ss 7.0 | 27141120 |
| eCl@ss 8.0 | 27141120 |

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000897 |
| ETIM 3.0 | EC000897 |
| ETIM 4.0 | EC000897 |
| ETIM 5.0 | EC000897 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211811 |
| UNSPSC 7.0901 | 39121410 |
| UNSPSC 11     | 39121410 |
| UNSPSC 12.01  | 39121410 |
| UNSPSC 13.2   | 39121410 |

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## approvals

IECEEx / ATEX / CSA / UL Recognized / VDE Zeichengenehmigung / cUL Recognized / GL / RS / IECEx CB Scheme / cULus Recognized /

### Approval details

| IECEEx             |        |
|--------------------|--------|
| Nominal voltage UN | 690 V  |
| Nominal current IN | 73.5 A |
| mm²/AWG/kcmil      | 1.5-16 |

| ATEX  |        |
|----------------------------------------------------------------------------------------|--------|
| Nominal voltage UN                                                                     | 690 V  |
| Nominal current IN                                                                     | 89.5 A |
| mm²/AWG/kcmil                                                                          | 1.5-25 |

| CSA  |       |       |
|-----------------------------------------------------------------------------------------|-------|-------|
| Usegroups                                                                               | B     | C     |
| Nominal voltage UN                                                                      | 600 V | 600 V |
| Nominal current IN                                                                      | 85 A  | 85 A  |
| mm²/AWG/kcmil                                                                           | 16-4  | 16-4  |

| UL Recognized  |       |       |
|---------------------------------------------------------------------------------------------------|-------|-------|
| Usegroups                                                                                         | B     | C     |
| Nominal voltage UN                                                                                | 600 V | 600 V |
| Nominal current IN                                                                                | 85 A  | 85 A  |
| mm²/AWG/kcmil                                                                                     | 16-4  | 16-4  |

| VDE Zeichengenehmigung  |        |
|------------------------------------------------------------------------------------------------------------|--------|
| Nominal voltage UN                                                                                         | 1000 V |
| Nominal current IN                                                                                         | 76 A   |
| mm²/AWG/kcmil                                                                                              | 1.5-16 |

# Feed-through terminal block - UT 16 - 3044199

## approvals

| cUL Recognized  |       |       |
|--------------------------------------------------------------------------------------------------|-------|-------|
| Usegroups                                                                                        | B     | C     |
| Nominal voltage UN                                                                               | 600 V | 600 V |
| Nominal current IN                                                                               | 85 A  | 85 A  |
| mm²/AWG/kcmil                                                                                    | 16-4  | 16-4  |

|    |
|----|
| GL |
|----|

|    |
|----|
| RS |
|----|

| IECEE CB Scheme  |        |
|---------------------------------------------------------------------------------------------------|--------|
|                                                                                                   |        |
| Nominal voltage UN                                                                                | 1000 V |
| Nominal current IN                                                                                | 76 A   |
| mm²/AWG/kcmil                                                                                     | 1.5-16 |

|                                                                                                      |
|------------------------------------------------------------------------------------------------------|
| cULus Recognized  |
|------------------------------------------------------------------------------------------------------|

## accessories

### Pick-off terminal block

AGK 4-UT 16 - 3047125



### End cover

D-UT 16 - 3047206



# Feed-through terminal block - UT 16 - 3044199

## accessories

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### Partition plate

TPNS-UK - 0706647



### Marker pen

X-PEN 0,35 - 0811228



### Warning label printed

WS UT 16 - 3047374



### Bridge

FBS 2-12 - 3005950



## Feed-through terminal block - UT 16 - 3044199

### accessories

RB UT 16-(2,5/4) - 3047073



RB UT 16-ST(2,5/4) - 3047099



### Mounting rail

NS 35/ 7,5 PERF 2000MM - 0801733



NS 35/ 7,5 UNPERF 2000MM - 0801681



NS 35/ 7,5 WH PERF 2000MM - 1204119



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### accessories

NS 35/ 7,5 WH UNPERF 2000MM - 1204122



NS 35/ 7,5 AL UNPERF 2000MM - 0801704



NS 35/ 7,5 ZN PERF 2000MM - 1206421



NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



NS 35/ 7,5 CU UNPERF 2000MM - 0801762



NS 35/ 7,5 CAP - 1206560



## Feed-through terminal block - UT 16 - 3044199

### accessories

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NS 35/15 PERF 2000MM - 1201730



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NS 35/15 UNPERF 2000MM - 1201714



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NS 35/15 WH PERF 2000MM - 0806602



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NS 35/15 WH UNPERF 2000MM - 1204135



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NS 35/15 AL UNPERF 2000MM - 1201756



## Feed-through terminal block - UT 16 - 3044199

### accessories

NS 35/15 ZN PERF 2000MM - 1206599



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NS 35/15 ZN UNPERF 2000MM - 1206586



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NS 35/15 CU UNPERF 2000MM - 1201895



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NS 35/15 CAP - 1206573



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NS 35/15-2,3 UNPERF 2000MM - 1201798



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### Terminal marking

## Feed-through terminal block - UT 16 - 3044199

### accessories

ZB 12:UNPRINTED - 0812120



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UC-TM 12 - 0819194



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UCT-TM 12 - 0829144



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### Labeled terminal marker

ZB 12 CUS - 0824942



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UC-TM 12 CUS - 0824613



# Feed-through terminal block - UT 16 - 3044199

## accessories

UCT-TM 12 CUS - 0829630



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## Planning and marking software

CLIP-PROJECT ADVANCED - 5146040



CLIP-PROJECT PROFESSIONAL - 5146053



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## Drawings

### Circuit diagram



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