

## Knife disconnect terminal block - UT 4-MTL - 3046144

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Knife disconnect terminal block, with actuation latch, Connection type: Screw connection, Cross section: 0.14 mm² - 6 mm², AWG: 26 - 10, Nominal current: 20 A, Nominal voltage: 500 V, Length: 57.8 mm, Width: 6.2 mm, Color: gray, Assembly: NS 35/7,5, NS 35/15

### Product Features

- ☒ Compact design and high current carrying capacity of 20 A



### Key Commercial Data

|                                      |          |
|--------------------------------------|----------|
| Packing unit                         | 1 pc     |
| Minimum order quantity               | 50 pc    |
| Weight per Piece (excluding packing) | 13.6 g   |
| Custom tariff number                 | 85369010 |
| Country of origin                    | Poland   |

### Technical data

#### General

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Number of levels                       | 1                                           |
| Number of connections                  | 2                                           |
| Nominal cross section                  | 4 mm²                                       |
| Color                                  | gray                                        |
| Insulating material                    | PA                                          |
| Flammability rating according to UL 94 | V0                                          |
| Area of application                    | Mechanical engineering<br>Plant engineering |
| Rated surge voltage                    | 8 kV                                        |
| Degree of pollution                    | 3                                           |
| Overvoltage category                   | III                                         |
| Insulating material group              | I                                           |

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## Technical data

### General

|                                                                                           |                                                       |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Connection in acc. with standard                                                          | IEC 60947-7-1                                         |
| Maximum load current                                                                      | 20 A (with 6 mm <sup>2</sup> conductor cross section) |
| Nominal current I <sub>N</sub>                                                            | 20 A                                                  |
| Nominal voltage U <sub>N</sub>                                                            | 500 V                                                 |
| Open side panel                                                                           | No                                                    |
| Shock protection test specification                                                       | DIN EN 50274 (VDE 0660-514):2002-11                   |
| Back of the hand protection                                                               | guaranteed                                            |
| Finger protection                                                                         | guaranteed                                            |
| Result of surge voltage test                                                              | Test passed                                           |
| Surge voltage test setpoint                                                               | 7.3 kV                                                |
| Result of power-frequency withstand voltage test                                          | Test passed                                           |
| Power frequency withstand voltage setpoint                                                | 1.89 kV                                               |
| Result of the test for mechanical stability of terminal points (5 x conductor connection) | Test passed                                           |
| Result of bending test                                                                    | Test passed                                           |
| Bending test rotation speed                                                               | 10 rpm                                                |
| Bending test turns                                                                        | 135                                                   |
| Bending test conductor cross section/weight                                               | 0.14 mm <sup>2</sup> / 0.2 kg                         |
|                                                                                           | 4 mm <sup>2</sup> / 0.9 kg                            |
|                                                                                           | 6 mm <sup>2</sup> / 1.4 kg                            |
| Tensile test result                                                                       | Test passed                                           |
| Conductor cross section tensile test                                                      | 0.14 mm <sup>2</sup>                                  |
| Tractive force setpoint                                                                   | 10 N                                                  |
| Conductor cross section tensile test                                                      | 4 mm <sup>2</sup>                                     |
| Tractive force setpoint                                                                   | 60 N                                                  |
| Conductor cross section tensile test                                                      | 6 mm <sup>2</sup>                                     |
| Tractive force setpoint                                                                   | 80 N                                                  |
| Result of tight fit on support                                                            | Test passed                                           |
| Tight fit on carrier                                                                      | NS 35                                                 |
| Setpoint                                                                                  | 1 N                                                   |
| Result of voltage-drop test                                                               | Test passed                                           |
| Requirements, voltage drop                                                                | ≤ 6,4 mV                                              |
| Result of temperature-rise test                                                           | Test passed                                           |
| Short circuit stability result                                                            | Test passed                                           |
| Conductor cross section short circuit testing                                             | 2.5 mm <sup>2</sup>                                   |
| Short-time current                                                                        | 0.3 kA                                                |
| Result of thermal test                                                                    | Test passed                                           |

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## Technical data

### General

|                                                                         |                                                     |
|-------------------------------------------------------------------------|-----------------------------------------------------|
| Proof of thermal characteristics (needle flame) effective duration      | 30 s                                                |
| Oscillation, broadband noise test result                                | 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 |
| Test frequency                                                          | $f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$      |
| ASD level                                                               | $1.857 \text{ (m/s}^2\text{)}^2/\text{Hz}$          |
| Acceleration                                                            | 0.8g                                                |
| Test duration per axis                                                  | 5 h                                                 |
| Test directions                                                         | X-, Y- and Z-axis                                   |
| Shock 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.)                   |
| Relative insulation material temperature index (Elec., UL 746 B)        | 130 °C                                              |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 125 °C                                              |
| Static insulating material application in cold                          | -60 °C                                              |

### Dimensions

|                  |         |
|------------------|---------|
| Width            | 6.2 mm  |
| End cover width  | 2.2 mm  |
| Length           | 57.8 mm |
| Height NS 35/7,5 | 49.1 mm |
| Height NS 35/15  | 56.6 mm |

### Connection data

|                                            |                      |
|--------------------------------------------|----------------------|
| Connection method                          | Screw connection     |
| Connection in acc. with standard           | IEC 60947-7-1        |
| Conductor cross section solid min.         | 0.14 mm <sup>2</sup> |
| Conductor cross section solid max.         | 6 mm <sup>2</sup>    |
| Conductor cross section AWG min.           | 26                   |
| Conductor cross section AWG max.           | 10                   |
| Conductor cross section flexible min.      | 0.14 mm <sup>2</sup> |
| Conductor cross section flexible max.      | 6 mm <sup>2</sup>    |
| Min. AWG conductor cross section, flexible | 26                   |
| Max. AWG conductor cross section, flexible | 10                   |

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## Technical data

### Connection data

|                                                                                         |                      |
|-----------------------------------------------------------------------------------------|----------------------|
| Conductor cross section flexible, with ferrule without plastic sleeve min.              | 0.14 mm <sup>2</sup> |
| Conductor cross section flexible, with ferrule without plastic sleeve max.              | 4 mm <sup>2</sup>    |
| Conductor cross section flexible, with ferrule with plastic sleeve min.                 | 0.14 mm <sup>2</sup> |
| Conductor cross section flexible, with ferrule with plastic sleeve max.                 | 4 mm <sup>2</sup>    |
| 2 conductors with same cross section, solid min.                                        | 0.14 mm <sup>2</sup> |
| 2 conductors with same cross section, solid max.                                        | 1.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, stranded min.                                     | 0.14 mm <sup>2</sup> |
| 2 conductors with same cross section, stranded max.                                     | 1.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min. | 0.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 2.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.   | 0.14 mm <sup>2</sup> |
| 2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.   | 1.5 mm <sup>2</sup>  |
| Stripping length                                                                        | 9 mm                 |
| Internal cylindrical gage                                                               | A4                   |
| Screw thread                                                                            | M3                   |
| Tightening torque, min                                                                  | 0.6 Nm               |
| Tightening torque max                                                                   | 0.8 Nm               |

### Standards and Regulations

|                                        |               |
|----------------------------------------|---------------|
| Connection in acc. with standard       | IEC 60947-7-1 |
| Flammability rating according to UL 94 | V0            |

## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 5.1 | 27141126 |
| eCl@ss 6.0 | 27141126 |
| eCl@ss 8.0 | 27141126 |

### ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC000902 |
|----------|----------|

## Approvals

### Approvals

## Knife disconnect terminal block - UT 4-MTL - 3046144

### Approvals

Approvals

CSA / UL Recognized / cUL Recognized

Ex Approvals

Approvals submitted

### Approval details

| CSA                            |       |       |
|--------------------------------|-------|-------|
|                                | B     | C     |
| mm <sup>2</sup> /AWG/kcmil     | 26-10 | 26-10 |
| Nominal current I <sub>N</sub> | 16 A  | 16 A  |
| Nominal voltage U <sub>N</sub> | 600 V | 600 V |

| UL Recognized                  |       |       |
|--------------------------------|-------|-------|
|                                | B     | C     |
| mm <sup>2</sup> /AWG/kcmil     | 26-10 | 26-10 |
| Nominal current I <sub>N</sub> | 16 A  | 16 A  |
| Nominal voltage U <sub>N</sub> | 600 V | 600 V |

| cUL Recognized                 |       |       |
|--------------------------------|-------|-------|
|                                | B     | C     |
| mm <sup>2</sup> /AWG/kcmil     | 26-10 | 26-10 |
| Nominal current I <sub>N</sub> | 16 A  | 16 A  |
| Nominal voltage U <sub>N</sub> | 600 V | 600 V |

### Drawings

Circuit diagram



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- Оценку стоимости проекта по компонентам.
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