

# Knife disconnect terminal block - UT 4-MT RD - 3046279

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Knife disconnect terminal block, nom. voltage: 500 V, nominal current: 20 A, connection method: Screw connection, cross section: 0.14 mm<sup>2</sup> - 6 mm<sup>2</sup>, AWG: 26 - 10, length: 57.8 mm, width: 6.2 mm, color: red, mounting: NS 35/7,5, NS 35/15, nom. voltage: 500 V



## Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 50 STK        |
| GTIN         |               |
| GTIN         | 4046356631471 |

## Technical data

### General

|   |   |
|---|---|
| Number of levels                                | 1   |
| Number of connections                           | 2   |
| Potentials                                      | 1   |
| Nominal cross section                           | 4 mm <sup>2</sup>                                     |
| Color   | red   |
| Insulating material                             | PA  |
| Flammability rating according to UL 94          | V0  |
| Rated surge voltage                             | 6 kV  |
| Degree of pollution                             | 3   |
| Overvoltage category                            | III   |
| Insulating material group                       | I   |
| Maximum power dissipation for nominal condition | 1.02 W  |
| 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             | IEC 60529:2001-02                                     |

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## Technical data

### General

|   |   |
|---|---|
| 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   |
| 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz    |
| ASD level   | 1.857 (m/s <sup>2</sup> ) <sup>2</sup> /Hz          |
| Acceleration  | 0,8 g   |
| Test duration per axis  | 5 h   |
| Test directions   | X-, Y- and Z-axis                                   |
| Shock test result   | Test passed   |

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### General

|   |                                     |
|---|-------------------------------------|
| 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)        | 125 °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  |
| 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                   |
| 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> |

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## Technical data

### Connection data

|   |                     |
|---|---------------------|
| 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       | CSA           |
|  | IEC 60947-7-1 |
| Flammability rating according to UL 94 | V0            |

### Environmental Product Compliance

|            |   |
|------------|---|
| REACH SVHC | Lead 7439-92-1  |
| China RoHS | Environmentally Friendly Use Period = 50  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

## Drawings

Circuit diagram



## Approvals

### Approvals

Approvals

CSA / UL Recognized / cUL Recognized / EAC / DNV GL / EAC / cULus Recognized

Ex Approvals

### Approval details

|                    |       |   |       |
|--------------------|-------|---|-------|
| CSA                |       | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 13631 |
|                    | B     | C   |       |
| Nominal voltage UN | 600 V | 600 V   |       |
| Nominal current IN | 16 A  | 16 A  |       |

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## Approvals

|                            |       |       |
|----------------------------|-------|-------|
|                            | B     | C     |
| mm <sup>2</sup> /AWG/kcmil | 26-10 | 26-10 |

|                            |       |   |              |
|----------------------------|-------|---|--------------|
| UL Recognized              |       | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 60425 |
|                            | B     | C   |              |
| Nominal voltage UN         | 600 V | 600 V   |              |
| Nominal current IN         | 16 A  | 16 A  |              |
| mm <sup>2</sup> /AWG/kcmil | 26-10 | 26-10   |              |

|                            |       |   |              |
|----------------------------|-------|---|--------------|
| cUL Recognized             |       | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 60425 |
|                            | B     | C   |              |
| Nominal voltage UN         | 600 V | 600 V   |              |
| Nominal current IN         | 16 A  | 16 A  |              |
| mm <sup>2</sup> /AWG/kcmil | 26-10 | 26-10   |              |

|     |  |               |
|-----|--|---------------|
| EAC |  | EAC-Zulassung |
|-----|--|---------------|

|        |   |            |
|--------|---|------------|
| DNV GL | <a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a> | TAE00001S9 |
|--------|---|------------|

|     |  |                          |
|-----|--|--------------------------|
| EAC |  | RU C-<br>DE.A*30.B.01742 |
|-----|--|--------------------------|

|                  |  |   |
|------------------|--|---|
| cULus Recognized |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> |
|------------------|--|---|

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