

## Feed-through terminal block - UK 3-RETURN - 3002513

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Universal terminal block with screw connection, cross section: 0,2- 2.5 mm<sup>2</sup>, AWG: 24- 12, width: 5.2 mm, color: Gray

RoHS

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 50 STK                                                                                                  |
| GTIN         | <br>4 017918 090289 |
| GTIN         | 4017918090289                                                                                           |

### Technical data

#### General

|                                                 |                                                                  |
|-------------------------------------------------|------------------------------------------------------------------|
| Number of levels                                | 2                                                                |
| Number of connections                           | 2                                                                |
| Potentials                                      | 1                                                                |
| Nominal cross section                           | 2.5 mm <sup>2</sup>                                              |
| Color                                           | gray                                                             |
| Insulating material                             | PA                                                               |
| Flammability rating according to UL 94          | V2                                                               |
| Rated surge voltage                             | 6 kV                                                             |
| Degree of pollution                             | 3                                                                |
| Overvoltage category                            | III                                                              |
| Insulating material group                       | I                                                                |
| Maximum power dissipation for nominal condition | 0.77 W (the value is multiplied when connecting multiple levels) |
| Maximum load current                            | 32 A (with 4 mm <sup>2</sup> conductor cross section)            |
| Nominal current I <sub>N</sub>                  | 32 A                                                             |
| Nominal voltage U <sub>N</sub>                  | 500 V                                                            |
| Open side panel                                 | Yes                                                              |
| Shock protection test specification             | DIN EN 50274 (VDE 0660-514):2002-11                              |

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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                  |
| 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                                               | 0.2 mm <sup>2</sup> / 0.2 kg |
|                                                                                           | 2.5 mm <sup>2</sup> / 0.7 kg |
|                                                                                           | 4 mm <sup>2</sup> / 0.9 kg   |
| Tensile test result                                                                       | Test passed                  |
| Conductor cross section tensile test                                                      | 0.2 mm <sup>2</sup>          |
| Tractive force setpoint                                                                   | 20 N                         |
| Conductor cross section tensile test                                                      | 2.5 mm <sup>2</sup>          |
| Tractive force setpoint                                                                   | 100 N                        |
| Conductor cross section tensile test                                                      | 4 mm <sup>2</sup>            |
| Tractive force setpoint                                                                   | 120 N                        |
| Result of tight fit on support                                                            | Test passed                  |
| Tight fit on carrier                                                                      | NS 32/NS 35                  |
| Setpoint                                                                                  | 1 N                          |
| Result of voltage-drop test                                                               | Test passed                  |
| Requirements, voltage drop                                                                | ≤ 3.2 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                       |
| Conductor cross section short circuit testing                                             | 4 mm <sup>2</sup>            |
| Short-time current                                                                        | 0.48 kA                      |
| Result of thermal test                                                                    | Test passed                  |
| Proof of thermal characteristics (needle flame) effective duration                        | 30 s                         |
| 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                       |

### Dimensions

|                  |         |
|------------------|---------|
| Width            | 5.2 mm  |
| Length           | 47.5 mm |
| Height NS 35/7,5 | 58.5 mm |
| Height NS 35/15  | 66 mm   |

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## Technical data

### Dimensions

|              |         |
|--------------|---------|
| Height NS 32 | 63.5 mm |
|--------------|---------|

### Connection data

|                                                                                         |                      |
|-----------------------------------------------------------------------------------------|----------------------|
| Connection method                                                                       | Screw connection     |
| Connection in acc. with standard                                                        | IEC/EN               |
| Conductor cross section solid min.                                                      | 0.2 mm <sup>2</sup>  |
| Conductor cross section solid max.                                                      | 4 mm <sup>2</sup>    |
| Conductor cross section AWG min.                                                        | 24                   |
| Conductor cross section AWG max.                                                        | 12                   |
| Conductor cross section flexible min.                                                   | 0.2 mm <sup>2</sup>  |
| Conductor cross section flexible max.                                                   | 2.5 mm <sup>2</sup>  |
| Min. AWG conductor cross section, flexible                                              | 24                   |
| Max. AWG conductor cross section, flexible                                              | 14                   |
| Conductor cross section flexible, with ferrule without plastic sleeve min.              | 0.25 mm <sup>2</sup> |
| Conductor cross section flexible, with ferrule with plastic sleeve min.                 | 0.25 mm <sup>2</sup> |
| Conductor cross section flexible, with ferrule with plastic sleeve max.                 | 1.5 mm <sup>2</sup>  |
| Cross section with insertion bridge, solid max.                                         | 4 mm <sup>2</sup>    |
| Cross section with insertion bridge, stranded max.                                      | 2.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, solid min.                                        | 0.2 mm <sup>2</sup>  |
| 2 conductors with same cross section, solid max.                                        | 1 mm <sup>2</sup>    |
| 2 conductors with same cross section, stranded min.                                     | 0.2 mm <sup>2</sup>  |
| 2 conductors with same cross section, stranded max.                                     | 1 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. | 1 mm <sup>2</sup>    |
| 2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.   | 0.25 mm <sup>2</sup> |
| 2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.   | 1 mm <sup>2</sup>    |
| Cross section with insertion bridge, solid max.                                         | 4 mm <sup>2</sup>    |
| Cross section with insertion bridge, stranded max.                                      | 2.5 mm <sup>2</sup>  |
| Connection in acc. with standard                                                        | UL                   |
| Conductor cross section AWG min.                                                        | 30                   |
| Conductor cross section AWG max.                                                        | 12                   |
| Stripping length                                                                        | 8 mm                 |
| 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/EN |

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## Technical data

### Standards and Regulations

|                                        |    |
|----------------------------------------|----|
| Flammability rating according to UL 94 | V2 |
|----------------------------------------|----|

### Environmental Product Compliance

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

## Approvals

### Approvals

#### Approvals

CSA / UL Recognized / EAC

#### 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 |
| mm²/AWG/kcmil                  | 28-12                                                                               |                                                                                                                                         |       |
| Nominal current I <sub>N</sub> | 25 A                                                                                |                                                                                                                                         |       |
| Nominal voltage U <sub>N</sub> | 300 V                                                                               |                                                                                                                                         |       |

|                                |                                                                                     |                                                                                                                                                       |              |
|--------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 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 |
| mm²/AWG/kcmil                  | 30-12                                                                               |                                                                                                                                                       |              |
| Nominal current I <sub>N</sub> | 20 A                                                                                |                                                                                                                                                       |              |
| Nominal voltage U <sub>N</sub> | 300 V                                                                               |                                                                                                                                                       |              |

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

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