

0709932

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Panel feed-through terminal block, connection method: Screw connection with tension sleeve, Screw connection with tension sleeve, number of positions: 1, load current: 150 A, cross section: 16 mm<sup>2</sup> - 50 mm<sup>2</sup>, connection direction of the conductor to plug-in direction: 0 °, width: 18.8 mm

#### **Product Description**

Internal part, without current bar

#### Your advantages

- · Well-known connection principle allows worldwide use
- · Low temperature rise, thanks to maximum contact force
- Tool-free snap-in principle enables easy mounting on the device panel
- · Automatic panel thickness compensation enables universal use

#### Commercial Data

| Item number                          | 0709932       |
|--------------------------------------|---------------|
| Packing unit                         | 10 pc         |
| Minimum order quantity               | 10 pc         |
| Sales Key                            | AA1           |
| Product Key                          | AA1FAA        |
| GTIN                                 | 4017918254155 |
| Weight per Piece (including packing) | 49.69 g       |
| Weight per Piece (excluding packing) | 49.69 g       |
| Customs tariff number                | 85369010      |
| Country of origin                    | GR            |



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### **Technical Data**

#### Product properties

| Product type        | Panel feed-through terminal block |
|---------------------|-----------------------------------|
| Product family      | HDFK 50                           |
| Number of positions | 1                                 |
| Pitch               | 18.8 mm                           |

#### Electrical properties

| Nominal current I <sub>N</sub> | 150 A |
|--------------------------------|-------|
| Nominal voltage U <sub>N</sub> | 690 V |
| Degree of pollution            | 3     |
| Rated voltage (III/3)          | 690 V |
| Rated surge voltage (III/3)    | 8 kV  |

#### Connection data

#### Connection technology

| Connector system      | HDFK 50 |
|-----------------------|---------|
| Nominal cross section | 50 mm²  |

#### Conductor connection exterior

| Conductor Connection exterior   |                                      |
|---|--------------------------------------|
| Connection method   | Screw connection with tension sleeve |
| Connection direction of the conductor to plug-in direction                                | 0 °                                  |
| Conductor cross section rigid   | 16 mm² 50 mm²                        |
| Conductor cross section flexible  | 16 mm² 50 mm²                        |
| Conductor cross section flexible, with ferrule without plastic sleeve                     | 10 mm² 50 mm²                        |
| Conductor cross section, flexible, with ferrule, with plastic sleeve                      | 10 mm² 50 mm²                        |
| 2 conductors with same cross section, solid   | 6 mm² 16 mm²                         |
| 2 conductors with same cross section, flexible  | 10 mm² 16 mm²                        |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 6 mm² 16 mm²                         |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 6 mm² 10 mm²                         |
| Internal cylindrical gage   | B10                                  |
| Stripping length  | 24 mm                                |
| Tightening torque   | 6 Nm 8 Nm                            |
|   |                                      |

#### Conductor connection interior

| Connection method   | Screw connection with tension sleeve |
|---|--------------------------------------|
| Connection direction of the conductor to plug-in direction            | 0 °                                  |
| Conductor cross section rigid   | 16 mm² 50 mm²                        |
| Conductor cross section flexible                                      | 16 mm² 50 mm²                        |
| Conductor cross section flexible, with ferrule without plastic sleeve | 10 mm² 50 mm²                        |



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| Conductor cross section, flexible, with ferrule, with plastic sleeve                      | 10 mm² 50 mm²                        |
|---|--------------------------------------|
| 2 conductors with same cross section, solid   | 6 mm² 16 mm²                         |
| 2 conductors with same cross section, flexible  | 10 mm² 16 mm²                        |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 6 mm² 16 mm²                         |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 6 mm <sup>2</sup> 10 mm <sup>2</sup> |
| Internal cylindrical gage   | B10                                  |
| Stripping length  | 24 mm                                |
| Tightening torque   | 6 Nm 8 Nm                            |

#### Material specifications

| Mai  | tarial | data - | con | tact |
|------|--------|--------|-----|------|
| ivia | tenai  | uala - | COH | ıacı |

| Note                    | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201 |
|-------------------------|--|
| Contact material        | Cu alloy   |
| Surface characteristics | tin-plated   |

#### Material data - housing

| Color (Housing)   | gray (7042) |
|---|-------------|
| Insulating material   | PA          |
| Insulating material group   | I           |
| CTI according to IEC 60112  | 600         |
| Flammability rating according to UL 94                            | V0          |
| Glow wire flammability index GWFI according to EN 60695-2-12      | 850         |
| Glow wire ignition temperature GWIT according to EN 60695-2-13    | 775         |
| Temperature for the ball pressure test according to EN 60695-10-2 | 125 °C      |

#### Material data - actuating element

| •        |    |
|----------|----|
| Color () | () |

| Note on application | The technical data applies when using external part HDFK 50A-IB - 0711328  |
|---------------------|--|
| Safety note         | 15 - 07 11020  |
| Safety note         | Only electrically qualified personnel may install and operate the product.  To recognize and prevent danger, the qualified personnel must be familiar with the basics of electrical engineering.   |
|                     | <ul> <li>Observe the technical data provided here and refer to the<br/>documents listed under "Downloads". The download area<br/>contains important information, such as installation notes,<br/>technical drawings, and 3D data.</li> </ul> |
|                     | The cable entry funnel is not safe to touch. Never connect or  |

disconnect the terminal when it is energized. Take appropriate

steps to ensure touch protection.



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|  | ☐ There is no electrical contact to the housing. Make sure that protective grounding is provided for green/yellow color variants and articles marked with PE. |
|--|---|
| nensions   |   |
| Dimensional drawing  | h2 h1   |
| Pitch  | 18.8 mm   |
| Width [w]  | 18.8 mm   |
| External dimensions  |   |
| Height [h1]  | 55 mm   |
| Length [I1]  | 35 mm   |
| nternal dimensions   |   |
| Height [h2]  | 54 mm   |
| Length [I2]  | 43 mm   |
| ir clearances and creepage distances   1. Insulation coordination  |   |
| ir clearances and creepage distances   1. Insulation coordination  Application  Specification  | Metal wall 1.0 mm 6.0 mm  IEC 60947-7-1:2002-07   |
| Application  |   |
| Application Specification  | IEC 60947-7-1:2002-07   |
| Application Specification Insulating material group  | IEC 60947-7-1:2002-07   |
| Application Specification Insulating material group Comparative tracking index (IEC 60112)   | IEC 60947-7-1:2002-07 I CTI 600   |
| Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  | IEC 60947-7-1:2002-07 I CTI 600 690 V   |
| Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3)  | IEC 60947-7-1:2002-07  I  CTI 600  690 V  8 kV  |
| Application Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/3)   | IEC 60947-7-1:2002-07  I  CTI 600  690 V  8 kV  8 mm  |
| Application Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/3)   | IEC 60947-7-1:2002-07  I  CTI 600  690 V  8 kV  8 mm  |
| Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)  minimum clearance value - non-homogenous field (III/3)  minimum creepage distance (III/3)  ir clearances and creepage distances   2. Insulation coordination   | IEC 60947-7-1:2002-07  I  CTI 600  690 V  8 kV  8 mm  8 mm  |
| Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)  minimum clearance value - non-homogenous field (III/3)  minimum creepage distance (III/3)  ir clearances and creepage distances   2. Insulation coordination  Application  | IEC 60947-7-1:2002-07  I CTI 600 690 V 8 kV 8 mm 8 mm Plastic panel 1.0 6.0 mm  |
| Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)  minimum clearance value - non-homogenous field (III/3)  minimum creepage distance (III/3)  ir clearances and creepage distances   2. Insulation coordination  Application  Specification   | IEC 60947-7-1:2002-07  I CTI 600 690 V 8 kV 8 mm 8 mm Plastic panel 1.0 6.0 mm IEC 60947-7-1:2002-07  |
| Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)  minimum clearance value - non-homogenous field (III/3)  minimum creepage distance (III/3)  ir clearances and creepage distances   2. Insulation coordination  Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  | IEC 60947-7-1:2002-07  I CTI 600 690 V 8 kV 8 mm 8 mm  Plastic panel 1.0 6.0 mm IEC 60947-7-1:2002-07 I CTI 600 630 V   |
| Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)  minimum clearance value - non-homogenous field (III/3)  minimum creepage distance (III/3)  ir clearances and creepage distances   2. Insulation coordination  Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)   | IEC 60947-7-1:2002-07  I CTI 600 690 V 8 kV 8 mm 8 mm Plastic panel 1.0 6.0 mm IEC 60947-7-1:2002-07  I CTI 600 630 V 8 kV                                    |
| Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)  minimum clearance value - non-homogenous field (III/3)  minimum creepage distance (III/3)  ir clearances and creepage distances   2. Insulation coordination  Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)  minimum clearance value - non-homogenous field (III/3) | IEC 60947-7-1:2002-07  I CTI 600  690 V  8 kV  8 mm  8 mm  Plastic panel 1.0 6.0 mm  IEC 60947-7-1:2002-07  I CTI 600  630 V  8 kV  8 mm                      |
| Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)  minimum clearance value - non-homogenous field (III/3)  minimum creepage distance (III/3)  ir clearances and creepage distances   2. Insulation coordination  Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)   | IEC 60947-7-1:2002-07  I CTI 600 690 V 8 kV 8 mm 8 mm Plastic panel 1.0 6.0 mm IEC 60947-7-1:2002-07  I CTI 600 630 V 8 kV                                    |
| Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)  minimum clearance value - non-homogenous field (III/3)  minimum creepage distance (III/3)  ir clearances and creepage distances   2. Insulation coordination  Application  Specification  Insulating material group  Comparative tracking index (IEC 60112)  Rated insulation voltage (III/3)  Rated surge voltage (III/3)  minimum clearance value - non-homogenous field (III/3) | IEC 60947-7-1:2002-07  I CTI 600 690 V 8 kV 8 mm 8 mm  Plastic panel 1.0 6.0 mm IEC 60947-7-1:2002-07  I CTI 600 630 V 8 kV 8 mm                              |



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| Specification  | IEC 60947-7-1:2002-07 |
|--|-----------------------|
| Insulating material group                              | I                     |
| Comparative tracking index (IEC 60112)                 | CTI 600               |
| Rated insulation voltage (III/3)                       | 1000 V                |
| Rated surge voltage (III/3)                            | 8 kV                  |
| minimum clearance value - non-homogenous field (III/3) | 8 mm                  |
| minimum creepage distance (III/3)                      | 12.5 mm               |

#### Packaging specifications

| Type of packaging | packed in cardboard |
|-------------------|---------------------|



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### Approvals

| CSA Approval ID: 13631 |                                |                                |                   |                               |
|------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
|                        | Nominal Voltage U <sub>N</sub> | Nominal Current I <sub>N</sub> | Cross Section AWG | Cross Section mm <sup>2</sup> |
| Use group B            |                                |                                |                   |                               |
|                        | 600 V                          | 125 A                          | 6 - 1/0           | -                             |
| Use group C            |                                |                                |                   |                               |
|                        | 600 V                          | 125 A                          | 6 - 1/0           | -                             |

| <b>91</b> UL Recognized Approval ID: E60425-19 | SUL Recognized Approval ID: E60425-19890329 |                                |                   |                               |
|--|---|--------------------------------|-------------------|-------------------------------|
|  | Nominal Voltage U <sub>N</sub>              | Nominal Current I <sub>N</sub> | Cross Section AWG | Cross Section mm <sup>2</sup> |
| Use group B                                    |   |                                |                   |                               |
|  | 600 V                                       | 170 A                          | 6 - 2/0           | -                             |
| Use group C                                    |   |                                |                   |                               |
|  | 600 V                                       | 170 A                          | 6 - 2/0           | -                             |

| ERC  | EAC                  |
|------|----------------------|
| LIIL | Approval ID: B.01687 |



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### Classifications

#### **ECLASS**

|        | ECLASS-11.0 | 27141134 |  |  |
|--------|-------------|----------|--|--|
|        | ECLASS-13.0 | 27141134 |  |  |
|        | ECLASS-12.0 | 27141134 |  |  |
| ETIM   |             |          |  |  |
|        | ETIM 8.0    | EC001283 |  |  |
| UNSPSC |             |          |  |  |
|        | UNSPSC 21.0 | 39121400 |  |  |



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### **Environmental Product Compliance**

| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |  |
|------------|---|--|
|            | No hazardous substances above threshold values          |  |



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#### Accessories

SZS 1,2X8,0 VDE - Screwdriver

1205082

https://www.phoenixcontact.com/in/products/1205082



Screwdriver, slot-headed, VDE insulated, size:  $1.2 \times 8.0 \times 175$  mm, 2-component grip, with non-slip grip

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