

## Surge protection device - TT-UKK5-M/ 24DC - 2795960

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Double-level modular terminal block with suppressor diode as surge protection between both levels, disconnect knife in the upper level, nominal voltage: 24 V DC, for mounting on NS 32 or NS 35/7.5, closed housing, terminal width: 6.2 mm, terminal height: 68 mm

### Product Features

- Can be used in the signal circuits of electronic controllers



### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| GTIN                                 | <br>4 017918 073220 |
| Weight per Piece (excluding packing) | 25.82 g   |
| Custom tariff number                 | 85363010  |
| Country of origin                    | Greece  |

### Technical data

#### Dimensions

|        |        |
|--------|--------|
| Height | 80 mm  |
| Width  | 6.2 mm |
| Depth  | 68 mm  |

#### Ambient conditions

|                                 |                  |
|---------------------------------|------------------|
| Ambient temperature (operation) | -40 °C ... 85 °C |
| Degree of protection            | IP20             |

#### General

|  |    |
|--|----|
| Housing material                       | PA |
| Flammability rating according to UL 94 | V2 |

## Surge protection device - TT-UKK5-M/ 24DC - 2795960

### Technical data

#### General

|   |   |
|---|---|
| Color   | black   |
| Standards for clearances and creepage distances | VDE 0110-1  |
| Mounting type                                   | DIN rail/G-profile rail                           |
| Type  | Double-level terminal block with disconnect knife |
| Number of positions                             | 1   |
| Direction of action                             | Line-Line   |

#### Protective circuit

|   |                      |
|---|----------------------|
| IEC test classification   | C3                   |
| VDE requirement class   | C3                   |
| Nominal voltage $U_N$   | 24 V DC              |
| Maximum continuous voltage $U_C$  | 28 V DC              |
|   | 20 V AC              |
| Maximum continuous voltage $U_C$ (wire-wire)                              | 28 V DC              |
| Maximum continuous voltage $U_C$ (wire-ground)                            | 20 V AC              |
| Nominal current $I_N$   | 12 A (45°C)          |
| Operating effective current $I_C$ at $U_C$                                | $\leq 5 \mu\text{A}$ |
| Nominal discharge current $I_n$ (8/20) $\mu\text{s}$ (Core-Core)          | 169 A                |
| Total surge current (8/20) $\mu\text{s}$                                  | 169 A                |
| Max. discharge current $I_{max}$ (8/20) $\mu\text{s}$ maximum (Core-Core) | 169 A                |
| Nominal pulse current $I_{an}$ (10/1000) $\mu\text{s}$ (Core-Core)        | 33 A                 |
| Output voltage limitation at 1 kV/ $\mu\text{s}$ (Core-Core) static       | $\leq 40$ V          |
| Residual voltage at $I_n$ (conductor-conductor)                           | $\leq 55$ V          |
| Response time $t_A$ (Core-Core)   | $\leq 1$ ns          |
| Cut-off frequency $f_g$ (3 dB), sym. in 150 Ohm system                    | typ. 1.2 MHz         |
| Capacity (Core-Core)  | $\leq 1.6$ nF        |
| Impulse durability (conductor-conductor)                                  | C3 - 25 A            |

#### Connection data

|                                       |                       |
|---------------------------------------|-----------------------|
| Connection method                     | Screw connection      |
| Connection type IN                    | Screw terminal blocks |
| Connection type OUT                   | Screw terminal blocks |
| Screw thread                          | M3                    |
| Tightening torque                     | 0.5 Nm                |
| Stripping length                      | 8 mm                  |
| Conductor cross section flexible min. | 0.2 mm <sup>2</sup>   |
| Conductor cross section flexible max. | 4 mm <sup>2</sup>     |
| Conductor cross section solid min.    | 0.2 mm <sup>2</sup>   |

## Surge protection device - TT-UKK5-M/ 24DC - 2795960

### Technical data

#### Connection data

|                                    |                   |
|------------------------------------|-------------------|
| Conductor cross section solid max. | 4 mm <sup>2</sup> |
| Conductor cross section AWG min.   | 24                |
| Conductor cross section AWG max.   | 12                |

#### Standards and Regulations

|                       |              |
|-----------------------|--------------|
| Standards/regulations | IEC 61643-21 |
|-----------------------|--------------|

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27140201 |
| eCl@ss 4.1 | 27130801 |
| eCl@ss 5.0 | 27130801 |
| eCl@ss 5.1 | 27130801 |
| eCl@ss 6.0 | 27130807 |
| eCl@ss 7.0 | 27130807 |
| eCl@ss 8.0 | 27130807 |
| eCl@ss 9.0 | 27130807 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000943 |
| ETIM 3.0 | EC000943 |
| ETIM 4.0 | EC000943 |
| ETIM 5.0 | EC000943 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30212010 |
| UNSPSC 7.0901 | 39121610 |
| UNSPSC 11     | 39121610 |
| UNSPSC 12.01  | 39121610 |
| UNSPSC 13.2   | 39121620 |

### Approvals

#### Approvals

---

Approvals

CSA / EAC / EAC


# Surge protection device - TT-UKK5-M/ 24DC - 2795960

## Approvals

Ex Approvals

Approvals submitted

## Approval details

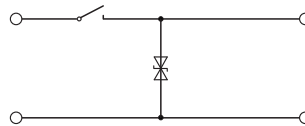
|   |       |
|---|-------|
| CSA  |       |
| mm <sup>2</sup> /AWG/kcmil  | 24-12 |
| Nominal current I <sub>N</sub>  | 12 A  |
| Nominal voltage U <sub>N</sub>  | 24 V  |

EAC

EAC

## Drawings

Circuit diagram



## Surge protection device - TT-UKK5-M/ 24DC - 2795960

Schematic diagram

