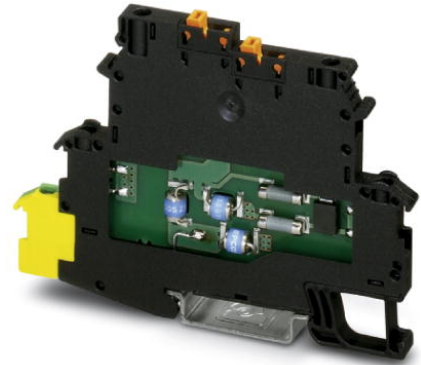


TT-2-PE-M-24DC

Order No.: 2920641

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2920641>

Modular terminal block with two-stage surge protection for one operated floating double conductor, disconnect knife on both signal paths, separate ground connection, nominal voltage: 24 V DC.

| Commercial data | |
|--------------------------|---------------------|
| EAN | 4046356160193 |
| Pack | 14 pcs. |
| Customs tariff | 85363010 |
| Weight/Piece | 0.033042 KG |
| Catalog page information | Page 162 (NTK-2008) |

<http://www.download.phoenixcontact.com>
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

| Technical data | |
|--------------------------------------|---|
| General | |
| Housing material | PA 6.6 |
| Inflammability class acc. to UL 94 | V2 |
| Color | black |
| Total surge current (8/20) μ s | 10 kA |
| Total surge current (10/350) μ s | 1 kA |
| Ambient temperature (operation) | -40 °C ... 80 °C |
| Mounting type | DIN rail 35 mm |
| Design | Double-level terminal block with PE foot – separate PE connection |
| Number of positions | 2 |

| | |
|----------------------|-------------------------------|
| Degree of protection | IP20 |
| Direction of action | Line-Line & Line-Earth Ground |
| Width | 6.20 mm |
| Height | 66.45 mm |
| Length | 92.00 mm |

Protective circuit

| | |
|--|------------------|
| IEC category | C1 |
| | C2 |
| | C3 |
| | D1 |
| Nominal voltage U_N | 24 V DC |
| | 17 V AC |
| Max. operating voltage U_{max} | 30 V DC |
| | 21 V AC |
| Arrester rated voltage U_c | 30 V DC |
| | 21 V AC |
| Arrester rated voltage U_c (Core-Core) | 30 V DC |
| | 21 V AC |
| Nominal current I_N | 300 mA (40°C) |
| Operating effective current I_c at U_c | $\leq 5 \mu A$ |
| Discharge current to PE at U_c | $\leq 2 \mu A$ |
| Nominal discharge surge current I_n (8/20) μs (Core-Core) | 5 kA |
| Nominal discharge surge current I_n (8/20) μs (Core-Earth) | 5 kA |
| Total surge current (8/20) μs | 10 kA |
| Max. discharge surge current I_{max} (8/20) μs maximum (Core-Core) | 5 kA |
| Max. discharge surge current I_{max} (8/20) μs maximum (Core-Earth) | 5 kA (per path) |
| Nominal pulse current I_{an} (10/1000) μs (Core-Core) | 30 A |
| Nominal pulse current I_{an} (10/1000) μs (Core-Earth) | 100 A (per path) |
| Lightning test current (10/350) μs , peak value I_{imp} | 500 A (per path) |
| Output voltage limitation at 1 kV/ μs (Core-Core) spike | $\leq 45 V$ |

| | |
|--|---|
| Output voltage limitation at 1 kV/ μ s (Core-Earth) spike | ≤ 650 V |
| Output voltage limitation at 1 kV/ μ s (Core-Core) static | ≤ 45 V |
| Output voltage limitation at 1 kV/ μ s (Core-Earth) static | ≤ 650 V |
| Residual voltage at I_n (conductor-conductor) | ≤ 45 V |
| Residual voltage with I_{an} (10/1000) μ s (conductor-conductor) | ≤ 50 V |
| Protection level U_p (Core-Core) | ≤ 55 V (C2 (10 kV/5 kA)) ≤ 53 V (C1 (500 V/250 A)) |
| Response time t_A (Core-Core) | ≤ 1 ns |
| Response time t_A (Core-Earth) | ≤ 100 ns |
| Input attenuation a_E , sym. | 0.6 dB (≤ 500 kHz / 50 Ω) 0.2 dB (≤ 200 kHz / 150 Ω) |
| Cut-off frequency f_g (3 dB), sym. in 50 Ohm system | Typ. 6 MHz |
| Cut-off frequency f_g (3 dB), sym. in 150 Ohm system | Typ. 2 MHz |
| Capacity (Core-Core) | Typ. 2.5 nF |
| Resistance in series | 3.3 Ω 20 % 3.3 Ω |
| Surge carrying capacity in acc. with IEC 61643-21 (Core-Core) | C2 (10 kV/5 kA) |
| Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth) | C2 (10 kV/5 kA) D1 (500 A) |
| Alternating current carrying capacity in acc. with IEC 61643-21 (Core-Earth) | 5 A - 1 s |

Connection data

| | |
|---------------------------------------|-----------------------|
| Type of connection | Screw connection |
| Connection type IN | Screw terminal blocks |
| Connection type OUT | Screw terminal blocks |
| Screw thread | M3 |
| Tightening torque, min | 0.8 Nm |
| Stripping length | 8 mm |
| Conductor cross section stranded min. | 0.2 mm ² |
| Conductor cross section stranded max. | 2.5 mm ² |

| | |
|--|---------------------|
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section AWG/kcmil min. | 24 |
| Conductor cross section AWG/kcmil max | 14 |

Connection, protective circuit

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

Accessories

| Item | Designation | Description |
|----------------|----------------|--|
| General | | |
| 2920654 | TT-D-2-PE-M-BK | End cover for TERMITRAB TT-2-PE-M-... and TT-2/2-M-... |

Marking

| | | |
|---------|-------------------------|---|
| 1051993 | B-STIFT | Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm |
| 1051016 | ZB 6,LGS:FORTL.ZAHLEN | Zack strip, 10-section, printed horizontally: with the numbers, 1-10, 11-20 etc. up to 991-1000, color: white |
| 1051430 | ZB 6,LGS:U-N | Zack strip, printed horizontally: 10-section, U, V, W, N, GND, U, V, W, N, GND, color: white |
| 1050499 | ZB 6:SO/CMS | Zack strip, 10-section, divisible, special printing, marking according to customer requirements |
| 1051003 | ZB 6:UNBEDRUCKT | Zack strip, unprinted, strips with 10 labels for individual labeling with M-PEN or CMS system, for terminal block width: 6.2 mm, color: white |
| 0808749 | ZBF 6,LGS:FORTL.ZAHLEN | Zack strip, flat, printed horizontally: 10-section, with the numbers, 1-10, 11-20 etc. up to 991-1000, color: White |
| 0808736 | ZBF 6/WH-100:UNBEDRUCKT | Zack strip, flat, unprinted: 10-section, for individual labeling with M-PEN or ZBF-T, large batch, sufficient for labeling 1000 terminal blocks, color: white |
| 0808710 | ZBF 6:UNBEDRUCKT | Zack strip, flat, unprinted: 10-section, for individual labeling with M-PEN or ZBF-T, sufficient for 100 terminal blocks, color: white |

Additional products

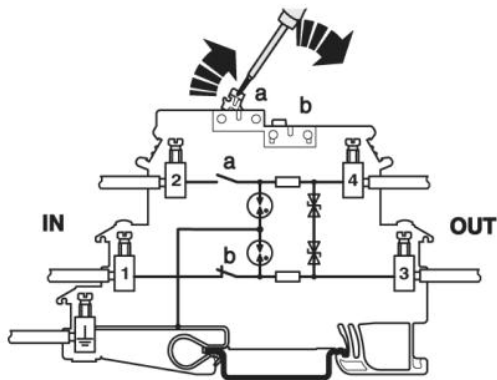
| Item | Designation | Description |
|-----------------|-------------|---|
| Assembly | | |
| 2839295 | SSA 3-6 | shield fast connections for conductor diameter 3 - 6 mm. Potential connection cable: 200 mm, black |
| 2839512 | SSA 5-10 | Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black |

General

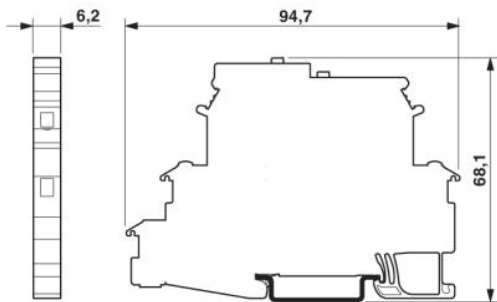
| | | |
|---------|----------------|--|
| 2920654 | TT-D-2-PE-M-BK | End cover for TERMITRAB TT-2-PE-M-... and TT-2/2-M-... |
|---------|----------------|--|

Drawings

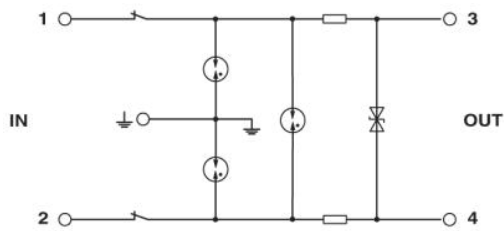
Connection diagram



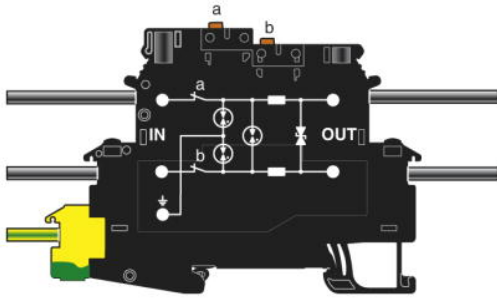
Dimensioned drawing



Circuit diagram



Schematic diagram



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