

Lightning/surge arrester type 1/2 - F-MS-T1/T2 50 - 2801136

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>)



Lightning/surge arrester, consisting of base element and protective plug with N-PE total current spark gap, for mounting on NS 35/7,5. Housing width: 17.5 mm (1TE)



Key Commercial Data

| | |
|----------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 701952 |
| GTIN | 4046356701952 |
| Custom tariff number | 85363030 |
| Country of origin | Germany |

Technical data

Dimensions

| | |
|------------------|---------------------------------|
| Height | 89.8 mm |
| Width | 17.6 mm |
| Depth | 77.5 mm (incl. DIN rail 7.5 mm) |
| Horizontal pitch | 1 Div. |

Ambient conditions

| | |
|---|---|
| Degree of protection | IP20 (only when all terminal points are used) |
| Ambient temperature (operation) | -40 °C ... 80 °C |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C |
| Altitude | ≤ 2000 m (amsl (above mean sea level)) |
| Permissible humidity (operation) | 5 % ... 95 % |
| Shock (operation) | 30g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z) |

Lightning/surge arrester type 1/2 - F-MS-T1/T2 50 - 2801136

Technical data

Ambient conditions

| | |
|-----------------------|--|
| Vibration (operation) | 7.5g (10 ... 500 Hz / 2.5 h / X, Y, Z) |
|-----------------------|--|

General

| | |
|--|---|
| IEC test classification | I / II |
| | T1 / T2 |
| | I |
| EN type | T1 / T2 |
| IEC power supply system | TN-S |
| Mode of protection | N-PE |
| Mounting type | DIN rail: 35 mm |
| Color | jet black RAL 9005 |
| Housing material | PA 6.6 |
| | PBT |
| Degree of pollution | 2 |
| Flammability rating according to UL 94 | V-0 |
| Type | DIN rail module, two-section, divisible |
| Surge protection fault message | optical |

Protective circuit

| | |
|---|---------------------------|
| Nominal voltage U_N | 240/415 V AC (TN-S) |
| Nominal frequency f_N | 50 Hz (60 Hz) |
| Maximum continuous voltage U_C | 264 V AC |
| Rated load current I_L | 80 A |
| Residual current I_{PE} | $\leq 5 \mu A$ |
| Standby power consumption P_C | 1.3 mVA |
| Nominal discharge current I_n (8/20) μs | 12.5 kA |
| Maximum discharge current I_{max} (8/20) μs | 50 kA |
| Impulse discharge current (10/350) μs , charge | 25 As |
| Impulse discharge current (10/350) μs , specific energy | 625 kJ/ Ω |
| Impulse discharge current (10/350) μs , peak value I_{imp} | 50 kA |
| Total discharge current I_{total} (8/20) μs | 50 kA |
| Total discharge current I_{total} (10/350) μs | 50 kA |
| Follow current interrupt rating I_{fi} | 100 A |
| Voltage protection level U_p | ≤ 1.7 kV |
| Residual voltage U_{res} | ≤ 0.6 kV (at I_n) |
| | ≤ 0.5 kV (at 10 kA) |
| | ≤ 0.5 kV (at 5 kA) |
| | ≤ 0.4 kV (at 3 kA) |

Lightning/surge arrester type 1/2 - F-MS-T1/T2 50 - 2801136

Technical data

Protective circuit

| | |
|--|-------------------------------------|
| Front of wave sparkover voltage at 6 kV (1.2/50) μ s | ≤ 1.7 kV |
| TOV behavior at U_T | 1200 V AC (200 ms / withstand mode) |
| Response time t_A | ≤ 100 ns |

Connection data

| | |
|----------------------------------|---|
| Connection method | Screw connection |
| Screw thread | M5 |
| Tightening torque | 3 Nm (1.5 mm ² ... 16 mm ²) |
| | 4.5 Nm (25 mm ² ... 35 mm ²) |
| Stripping length | 16 mm |
| Conductor cross section flexible | 1.5 mm ² ... 25 mm ² |
| Conductor cross section solid | 1.5 mm ² ... 35 mm ² |
| Conductor cross section AWG | 15 ... 2 |
| Connection method | Fork-type cable lug |
| Conductor cross section flexible | 1.5 mm ² ... 16 mm ² |

Standards and Regulations

| | |
|-----------------------|-------------------|
| Standards/regulations | IEC 61643-11 2011 |
| | EN 61643-11 2012 |

Environmental Product Compliance

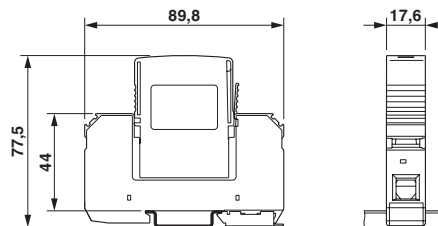
| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

Drawings

Circuit diagram



Dimensional drawing



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27130802 |
|---------------|----------|

Lightning/surge arrester type 1/2 - F-MS-T1/T2 50 - 2801136

Classifications

eCl@ss

| | |
|-------------|----------|
| eCl@ss 11.0 | 27130802 |
| eCl@ss 4.0 | 27130800 |
| eCl@ss 4.1 | 27130800 |
| eCl@ss 5.0 | 27130800 |
| eCl@ss 5.1 | 27130800 |
| eCl@ss 6.0 | 27130800 |
| eCl@ss 7.0 | 27130802 |
| eCl@ss 9.0 | 27130802 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC000943 |
| ETIM 4.0 | EC000381 |
| ETIM 6.0 | EC000381 |
| ETIM 7.0 | EC000381 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30212010 |
| UNSPSC 7.0901 | 39121610 |
| UNSPSC 11 | 39121610 |
| UNSPSC 12.01 | 39121610 |
| UNSPSC 13.2 | 39121620 |
| UNSPSC 18.0 | 39121620 |
| UNSPSC 19.0 | 39121620 |
| UNSPSC 20.0 | 39121620 |
| UNSPSC 21.0 | 39121620 |

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

Lightning/surge arrester type 1/2 - F-MS-T1/T2 50 - 2801136

Approvals

| | | |
|-----|---|-------------------------|
| EAC |  | RU C- DE.*09.B.00169 |
|-----|---|-------------------------|

Accessories

Accessories

Bridge

Wiring bridge end cover - MPB 18/3- D - 2809322



End cover for lateral connection of wiring bridges, 3-phase

Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap in, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

Feed-through terminal block

Feed-through terminal block - DK-BIC-35 - 2749880



Feed-through terminal block for VAL and FLT applications

Labeled device marker

Lightning/surge arrester type 1/2 - F-MS-T1/T2 50 - 2801136

Accessories

Marker for terminal blocks - ZBN 18,LGS:ERDE - 2749589



Marker for terminal blocks, Strip, white, labeled, horizontal: Grounding symbol, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

Marker for terminal blocks - ZBN 18,LGS:L1-N,ERDE - 2749576



Marker for terminal blocks, Strip, white, labeled, horizontal: L1, L2, L3, N, GND, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Spare parts

Type 1/2 surge protection plug - F-MS-T1/T2 50 ST - 2800191



N-PE replacement plug for VAL-MS-T1/T2 335/12.5 plug-in lightning/surge arrester.