

CTM 1X2-110AC

Order No.: 2838539


The illustration shows version CTM 1x2- 24 DC



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LSA-PLUS plug (COMTRAB CTM) with protection for conductor pairs in floating signal circuits. Nominal voltage: 110 V AC



| Commercial data | |
|--------------------------|--|
| GTIN (EAN) |  4 017918 819569 |
| sales group | J460 |
| Pack | 10 pcs. |
| Customs tariff | 85363010 |
| Catalog page information | Page 116 (TT-2011) |

Product notes

WEEE/RoHS-compliant since:
04/12/2006



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Technical data

General

| | |
|------------------------------------|-------|
| Housing material | PA |
| Inflammability class acc. to UL 94 | V0 |
| Color | black |

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| Standards for air and creepage distances | DIN VDE 0110-1 |
| | IEC 60664-1: 1992-10 |
| Surge voltage category | II |
| Pollution degree | 2 |
| Total surge current (8/20) μ s | 10 kA |
| Total surge current (10/350) μ s | 2.5 kA |
| Ambient temperature (operation) | -25 °C ... 75 °C |
| Mounting type | On CT-TERMIBLOCK and LSA-PLUS disconnect strip |
| Design | LSA-PLUS module |
| Number of positions | 2 |
| Degree of protection | IP20 |
| Direction of action | Line-Line & Line-Earth Ground |
| Arrester can be tested with CHECKMASTER from software version: | From SW rev. 1.10 |
| Width | 9.50 mm |
| Height | 53.50 mm |
| Length | 21.00 mm |

Protective circuit

| | |
|--|------------------|
| IEC category | B2 |
| | C1 |
| | C2 |
| | C3 |
| | D1 |
| VDE requirement class | B2 |
| | C1 |
| | C2 |
| | C3 |
| | D1 |
| Nominal voltage U_N | 110 V AC |
| Maximum continuous operating voltage U_C | \pm 180 V DC |
| Maximum continuous voltage U_C (wire-wire) | \pm 180 V DC |
| Maximum continuous voltage U_C (wire-ground) | 184 V DC |
| Nominal current I_N | 380 mA (25°C) |
| Operating effective current I_C at U_C | \leq 5 μ A |
| Ground conductor current I_{PE} | \leq 2 μ 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-Earth) | 10 kA (in total) |
| Nominal pulse current I_{an} (10/1000) μs (Core- Core) | 100 A |
| Nominal pulse current I_{an} (10/1000) μs (Core- Earth) | 100 A |
| Lightning test current (10/350) μs , peak value I_{imp} | 1 kA |
| Output voltage limitation at 1 kV/ μs (Core-Core) spike | ≤ 260 V |
| Output voltage limitation at 1 kV/ μs (Core-Earth) spike | ≤ 800 V |
| Output voltage limitation at 1 kV/ μs (Core-Core) static | ≤ 260 V |
| Output voltage limitation at 1 kV/ μs (Core-Earth) static | ≤ 800 V |
| Residual voltage at I_n , (conductor-conductor) | ≤ 10 V |
| Residual voltage at I_n , (conductor-ground) | ≤ 55 V |
| Residual voltage with I_{an} (10/1000) μs (conductor- conductor) | ≤ 10 V |
| Residual voltage with I_{an} (10/1000) μs (conductor- ground) | ≤ 12 V |
| Protection level U_p (Core-Core) | ≤ 260 V (C2, 10 kV/5 kA, spike) ≤ 10 V (C2, 10 kV/5 kA, static) |
| | ≤ 260 V (C3, 7.5 kV/100 A, spike) ≤ 10 V (C3, 7.5 kV/100 A, static) |
| Protection level U_p (Core-Earth) | ≤ 800 V (C2, 10 kV/5 kA, spike) ≤ 60 V (C2, 10 kV/5 kA, static) |
| | ≤ 800 V (C3, 7.5 kV/100 A, spike) ≤ 12 V (C3, 7.5 kV/100 A, static) |
| Response time t_A (Core-Core) | ≤ 1 ns |
| Response time t_A (Core-Earth) | ≤ 100 ns |
| Input attenuation aE, sym. | 0.3 dB (≤ 1.8 MHz) |
| Cut-off frequency f_g (3 dB), sym. in 100 Ohm system | 20 MHz |
| Capacity (Core-Core) | 100 pF ($f=1$ MHz / $V_R=0$ V) |

| | |
|--|-------------------|
| Resistance in series | 3.3 Ω 10 % |
| | 3.3 Ω |
| Max. required back-up fuse | 150 mA |
| Surge carrying capacity in acc. with IEC 61643-21 (Core-Core) | C2 (4 kV/2 kA) |
| | C3 (100 A) |
| | B2 (4 kV / 100 A) |
| Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth) | C2 (4 kV / 2 kA) |
| | C3 (100 A) |
| | B2 (4 kV / 100 A) |
| | D1 (1 kA) |
| Alternating current carrying capacity in acc. with IEC 61643-21 (Core-Earth) | 5 A - 1 s |

Connection data

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|---------------------|---|
| Connection method | can be plugged into COMTRAB-TERMIBLOCK and LSA-PLUS disconnect and switching strips |
| Connection type IN | COMTRAB plug-in system |
| Connection type OUT | COMTRAB plug-in system |
| Connection method | LSA-PLUS |

Connection, equipotential bonding

| | |
|-------------------|----------------|
| Connection method | Spring contact |
|-------------------|----------------|

Connection, protective circuit

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



Certification

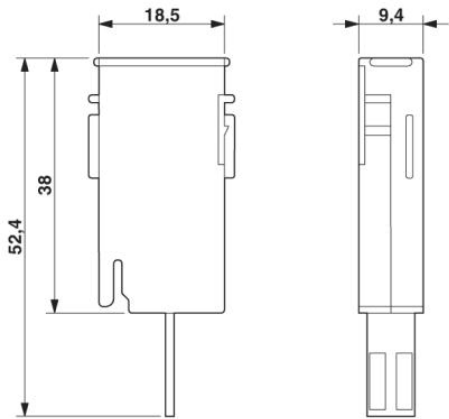
GOST, UL

Additional products

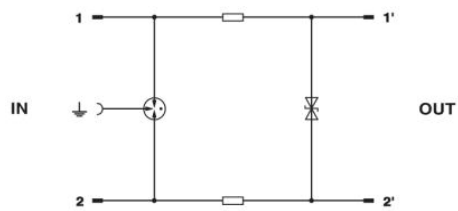
| Item | Designation | Description |
|-----------------|---------------------|--|
| Assembly | | |
| 0441711 | CT-TERMIBLOCK 10 DA | Screw termination block with disconnect contacts for accommodating protective plugs CT and CTM. Use in MCR and telecommunications systems. Design: 10 double wires |
| 2839295 | 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 | | |
| 2765547 | CT 1-10-ES | Ground rail for CTM protective plug when used in combination with LSA-PLUS disconnect strip. Version: 10 double conductors |
| 2765372 | CT 10-MB/ 3 | Mounting clip, for holding 3 disconnect or ground wire strips. Version: 10 double conductors, dimensions: A 104.5 mm, B 65 mm. |
| 2765385 | CT 10-MB/10 | Mounting clip, for holding 10 disconnect or ground wire strips. Version: 10 double conductors, dimensions: A 104.5 mm, dimensions B 245.5 mm |
| 2765356 | CT 10-TL | LSA-PLUS disconnect strip to hold the CTM and CT 10 protection modules. Version: 10 double conductors, dimension A: 124 mm. |
| 2765518 | CT-KDT | Cable bush for assembly troughs, for protection of the lines guided through the laminated frame |
| 2838610 | CTM 10-MAG | Magazine with a grounding rail to accommodate up to 10 LSA-PLUS protective plugs (COMTRAB CTM), to insert in CT-TERMIBLOCK or LSA-PLUS disconnect strip |
| 2838649 | CTM EST | LSA-PLUS grounding plug (COMTRAB CTM) to short-circuit and ground potentials in CT-TERMIBLOCK... and disconnect strip CT 10... |

Diagrams/Drawings

Dimensioned drawing



Circuit diagram



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