



Dimension drawing DV M TT 2P 255 (FM)

Basic circuit diagram DV M TT 2P 255 FM

DV M TT 2P 255 (FM): Modular combined lightning current and surge arrester for use in single-phase TT and TN systems ("1+1" circuit)

- **Prewired combined spark-gap-based lightning current and surge arrester, consisting of a base part and plug-in protection modules**
- **Maximum system availability due to RADAX Flow follow current limitation**
- **No tripping of 20 A gL/gG fuses up to 50 kA_{rms} short-circuit currents**
- **Lightning current discharge capacity: 50 kA (10/350 μs)**
- **Allows for protection of terminal equipment**
- **Fault indication by red mark in the inspection window**
- **Allows for easy replacing of protection modules due to module locking system with releasing button**
- **Tested for vibration- and shock-proofness acc. to EN 60068-2**

DV M TT 2P 255	
SPD according to EN 61643-11	Type 1
SPD according to IEC 61643-1	Class I
Energy-coordinated protection effect with regard to the terminal equipment	Type 1 + Type 2
Energy-coordinated protection effect with regard to the terminal equipment (≤ 5m)	Type 1 + Type 2 + Type 3
Nominal a.c. voltage [U _N]	230 V
Max. continuous operating a.c. voltage [U _C]	255 V
Lightning impulse current (10/350 μs) [L+N-PE] [I _{total}]	50 kA
Lightning impulse current (10/350 μs) [L-N] [I _{imp}]	25 kA
Lightning impulse current (10/350 μs) [N-PE] [I _{imp}]	50 kA
Nominal discharge current (8/20 μs) [I _n]	25 / 50 kA
Voltage protection level [L-N] [U _{p1}]	≤ 1.5 kV
Voltage protection level [N-PE] [U _{p1}]	≤ 1.5 kV
Follow current extinguishing capability [L-N] a.c. [I _{ff1}]	50 kA _{rms}
Follow current extinguishing capability [N-PE] a.c. [I _{ff1}]	100 A _{rms}
Follow current limitation/Selectivity	no tripping of a 20 A gL/gG fuse up to 50 kA _{rms} (prosp.)
Response time [t _A]	≤ 100 ns
Max. backup fuse (L) up to I _K = 50 kA _{rms}	315 A gL/gG
Max. backup fuse (L) for I _K > 50 kA _{rms}	200 A gL/gG
Max. backup fuse (L-L')	125 A gL/gG
Temporary overvoltage (TOV) [L-N] [U _{T1}]	440 V / 5 sec.
Temporary overvoltage (TOV) [N-PE] [U _{T1}]	1200 V / 200 ms
Operating temperature range (parallel connection) [T _{UP}]	-40°C...+80°C

Operating temperature range (series connection) [T_{US}]	-40°C...+60°C
Operating state/fault indication	green / red
Cross-sectional area (L, L', N, N', PE, \pm) [min.]	10 mm ² solid/flexible
Cross-sectional area (L, N, PE) [max.]	50 mm ² stranded/35 mm ² flexible
Cross-sectional area (L', N', \pm) [max.]	35 mm ² stranded/25 mm ² flexible
For mounting on	35 mm DIN rail acc. to EN 60715
Enclosure material	red thermoplastic, UL 94-V-0
Degree of protection	IP 20
Dimension	4 mods., DIN 4
Approvals, Certifications	KEMA, VDE, UL, VdS
Ordering information	
Type	DV M TT 2P 255
Part No.	951 110
Packing unit	1 pcs.

We reserve the right to modify design, technology, dimensions, weights and materials according to technical progress. Illustrations are non-binding. Pictures may differ from the modules described.