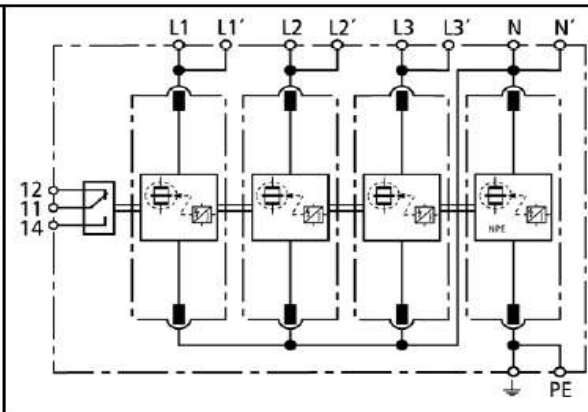


Dimension drawing DV M TT 255 (FM)



Basic circuit diagram DV M TT 255 FM



DV M TT 255 (FM): Modular combined lightning current and surge arrester for TT and TN-S systems ("3+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: 100 kA (10/350 μs)**
- * **Allows for protection of terminal equipment**
- * **Fault indication by red mark in the inspection window**
- * **Easy exchange of protection modules by module locking system with releasing button**
- * **Tested for vibration- and shock-proofness acc. to EN 60068-2**

DV M TT 255 FM	
SPD classification acc. to EN 61643-11	Type 1
SPD classification acc. to IEC 61643-1	Class I
Nominal a.c. voltage [U _N]	230 / 400 V
Max. continuous operating a.c. voltage [U _C]	255 V
Lightning impulse current (10/350 μs) [L1+L2+L3+N-PE] [I _{total}]	100 kA
Lightning impulse current (10/350 μs) [L-N] [I _{imp}]	25 kA
Lightning impulse current (10/350 μs) [N-PE] [I _{imp}]	100 kA
Nominal discharge current (8/20 μs) [I _n]	25 / 100 kA
Voltage protection level [L-N] [U _p]	≤ 1.5 kV
Voltage protection level [N-PE] [U _p]	≤ 1.5 kV
Follow current extinguishing capability [L-N] a.c. [I _{fi}]	50 kA _{rms}
Follow current extinguishing capability [N-PE] a.c. [I _{fi}]	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) at I _K > 50 kA _{rms}	200 A gL/gG
Max. backup fuse (L-L')	125 A gL/gG
Temporary overvoltage (TOV) [L-N] [U _T]	440 V / 5 sec.
Temporary overvoltage (TOV) [N-PE] [U _T]	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 (L1, L1', L2, L2', L3, L3', N, N', PE, ±) [min.]	10 mm ² solid/flexible
Cross-sectional area (L1, L2, L3, N, PE) [max.]	50 mm ² stranded/35 mm ² flexible
Cross-sectional area (L1', L2', L3', N', ±) [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

