



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 protecting TT and TN-S systems ("3+1" circuit) against surges

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)

Protection of terminal equipment

Fault indication by red indicator flag in window

Easy replacement of protection modules due to module locking system with release button

Vibration- and shock-tested acc. to EN 60068-2

DV M TT 255

SPD according to EN 61643-11 / ... IEC 61643-1	Type 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 ($\leq 5\text{m}$)	Type 1 + Type 2 + Type 3
Nominal a.c. voltage [U_N]	230 / 400 V
Max. continuous operating a.c. voltage [U_{C1}]	255 V
Lightning impulse current (10/350 µs) [$L1+L2+L3+N-PE$] [I_{total}]	100 kA
Specific energy [$L1+L2+L3+N-PE$] [W/R]	2.50 MJ/ohms
Lightning impulse current (10/350 µs) [$L-N$]/[$N-PE$] [I_{imp}]	25 / 100 kA
Specific energy [$L-N$]/[$N-PE$] [W/R]	156.25 kJ/ohms / 2.50 MJ/ohms
Nominal discharge current (8/20 µs) [I_n]	25 / 100 kA
Voltage protection level [$L-N$]/[$N-PE$] [U_P]	$\leq 1.5\text{ kV} / \leq 1.5\text{ kV}$
Follow current extinguishing capability [$L-N$]/[$N-PE$] [I_m]	50 kA _{rms} / 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]	$\leq 100\text{ ns}$
Max. backup fuse (L) up to $I_K = 50\text{ kA}_{rms}$	315 A gL/gG
Max. backup fuse (L) for $I_K > 50\text{ kA}_{rms}$	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
TOV characteristics	withstand
Operating temperature range [parallel]/[continuity] [T_U]	-40°C...+80°C / -40°C...+60°C
Operating state/fault indication	green / red
Number of ports	1
Cross-sectional area (L1, L1', L2, L2', L3, L3', N, N', PE, \pm) [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', \pm) [max.]	35 mm ² stranded/25 mm ² flexible
For mounting on	35 mm DIN rail acc. to EN 60715

Enclosure material	thermoplastic, red, UL 94 V-0
Location category	indoor
Degree of protection	IP 20
Capacity	8 mods., DIN 4
Approvals, Certifications	KEMA, VDE, UL, VdS
Ordering information	
Type	DV M TT 255
Part No.	951 310
Packing unit	1 pc

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.