



Dimension drawing DV M TNS 255 (FM)

Basic circuit diagram DV M TNS 255 FM

DV M TNS 255 (FM): Modular combined lightning current and surge arrester for use in TN-S systems

- 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
- 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 TNS 255 FM

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 (&#8804; 5m)	Type 1 + Type 2 + Type 3
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-PE] [I_{imp}]	25 kA
Nominal discharge current (8/20 µs) [I_n]	25 / 100 kA
Voltage protection level [L-PE] [U_P]	≤ 1.5 kV
Voltage protection level [N-PE] [U_P]	≤ 1.5 kV
Follow current extinguishing capability a.c. [I_{fI}]	50 kA _{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_T]	440 V / 5 sec.
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

Degree of protection	IP 20
Dimension	8 mods., DIN 4
Approvals, Certifications	KEMA, VDE, UL, VdS
Type of remote signalling contact	changeover contact
Switching capacity a.c.	250 V/0.5 A
Switching capacity d.c.	250 V/0.1 A; 125 V/0.2 A; 75 V/0.5 A
Cross-sectional area for remote signalling terminals	max. 1.5 mm ² solid/flexible
Ordering information	
Type	DV M TNS 255 FM
Part No.	951 405
Packing unit	1pcs.

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.