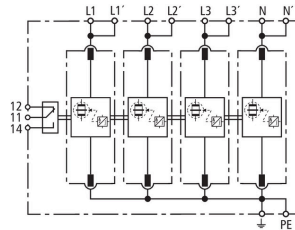


**DV M TNS 255 FM (951 405)**

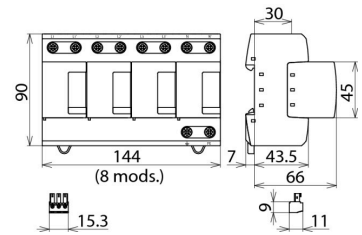
- Prewired spark-gap-based type 1 and type 2 combined lightning current and surge arrester consisting of a base part and plug-in protection modules
- Maximum system availability due to RADAX Flow follow current limitation
- Capable of protecting terminal equipment



Figure without obligation



Basic circuit diagram DV M TNS 255 FM



Dimension drawing DV M TNS 255 FM

Modular combined lightning current and surge arrester for TN-S systems.

Type	DV M TNS 255 FM
Part No.	951 405
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II
Energy coordination with terminal equipment ( $\leq 10$ m)	type 1 + type 2 + type 3
Nominal voltage (a.c.) ( $U_n$ )	230 / 400 V (50 / 60 Hz)
Max. continuous operating voltage (a.c.) ( $U_c$ )	264 V (50 / 60 Hz)
Lightning impulse current (10/350 $\mu$ s) [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 $\mu$ s) [L, N-PE] ( $I_{imp}$ )	25 kA
Specific energy [L,N-PE] (W/R)	156.25 kJ/ohms
Nominal discharge current (8/20 $\mu$ s) [L/N-PE]/[L1+L2+L3+N-PE] ( $I_n$ )	25 / 100 kA
Voltage protection level [L-PE]/[N-PE] ( $U_p$ )	$\leq 1.5$ / $\leq 1.5$ kV
Follow current extinguishing capability (a.c.) ( $I_f$ )	50 kA <sub>rms</sub>
Follow current limitation / Selectivity	no tripping of a 20 A gG fuse up to 50 kA <sub>rms</sub> (prosp.)
Response time ( $t_A$ )	$\leq 100$ ns
Max. backup fuse (L) up to $I_K = 50$ kA <sub>rms</sub>	315 A gG
Max. backup fuse (L-L')	125 A gG
Temporary overvoltage (TOV) [L-N] ( $U_T$ ) – Characteristic	440 V / 120 min. – withstand
Operating temperature range [parallel] / [series] ( $T_U$ )	-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 <sup>2</sup> solid / flexible
Cross-sectional area (L1, L2, L3, N, PE) (max.)	50 mm <sup>2</sup> stranded / 35 mm <sup>2</sup> flexible
Cross-sectional area (L1', L2', L3', N', $\pm$ ) (max.)	35 mm <sup>2</sup> stranded / 25 mm <sup>2</sup> flexible
For mounting on	35 mm DIN rails acc. to EN 60715
Enclosure material	thermoplastic, red, UL 94 V-0
Place of installation	indoor installation
Degree of protection	IP 20
Capacity	8 module(s), DIN 43880
Approvals	KEMA, VDE, UL
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 <sup>2</sup> solid / flexible
Extended technical data:	For use in switchgear installations with prospective short-circuit currents of more than 50 kA <sub>rms</sub> (tested by the German VDE)
– Max. prospective short-circuit current	100 kA <sub>rms</sub> (220 kA <sub>peak</sub> )
– Limitation / Extinction of mains follow currents	up to 100 kA <sub>rms</sub> (220 kA <sub>peak</sub> )
– Max. backup fuse (L) up to $I_K = 100$ kA <sub>rms</sub>	315 A gG

## Use for 16.7 Hz traction power supply systems

Type	DV M TNS 255 FM
Part No.	951 405
– Nominal voltage (a.c.) ( $U_N$ )	230 / 400 V
– Nominal frequency (a.c.) ( $f_N$ )	16.7 Hz
– Max. backup fuse	125 A gG @ 16,7 Hz
Weight	1,36 kg
Customs tariff number (Comb. Nomenclature EU)	85363090
GTIN	4013364108165
PU	1 pc(s)

We reserve the right to introduce changes in performance, configuration and technology, dimensions, weights and materials in the course of technical progress. The figures are shown without obligation.