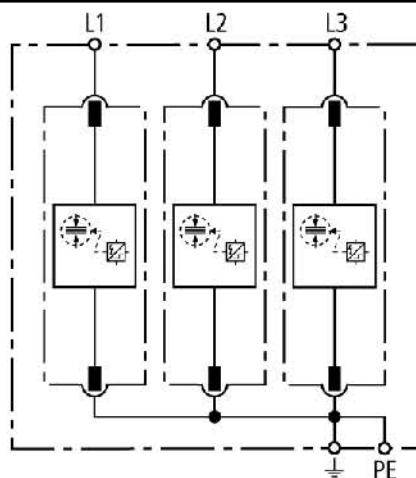


Dimension drawing DSH TNC 255



Basic circuit diagram DSH TNC 255



**Prewired spark-gap-based combined lightning current and surge arrester**

**Discharge capacity up to 50 kA (10/350  $\mu$ s)**

**Fulfills the requirements of class of LPS III + IV**

**Protection of terminal devices**

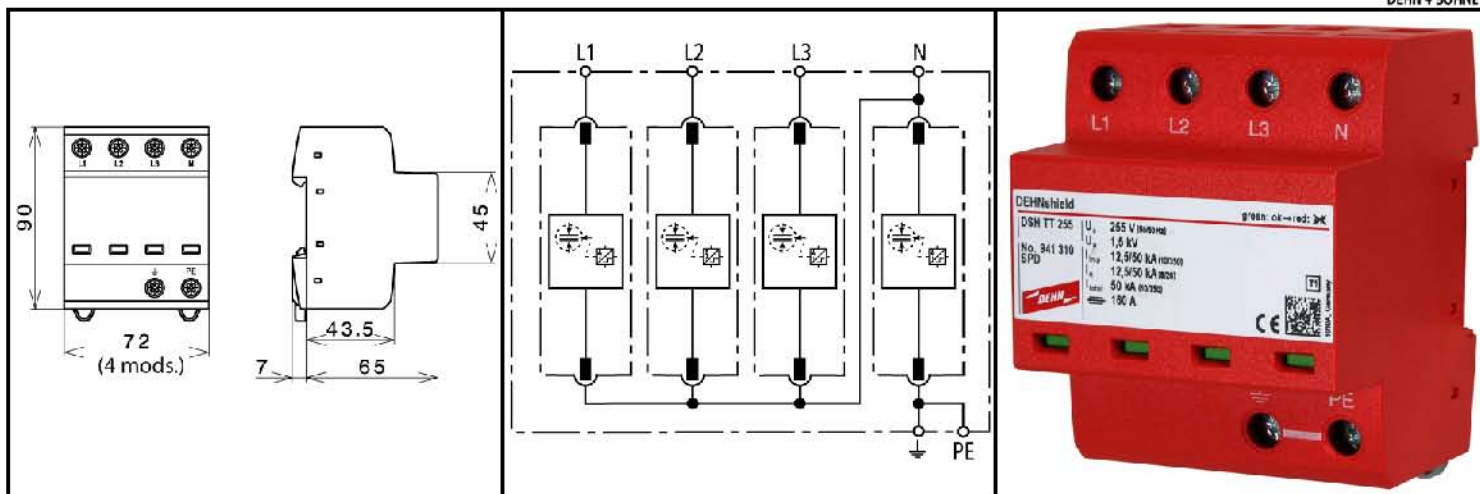
**No tripping of 32 A gL/gG fuses up to short-circuit currents of 10 kA<sub>rms</sub>**

**Operating state/fault indication by indicator flag in the inspection window**

DSH TNC 255: Prewired combined lightning current and surge arrester for TN-C systems; fulfils the requirements of class of LPS III + IV

DSH TNC 255	
SPD according to EN 61643-11 / ... IEC 61643-1	Type 1 / Class I
Nominal a.c. voltage [U <sub>N</sub> ]	230 / 400 V
Max. continuous operating a.c. voltage [U <sub>C1</sub> ]	255 V
Lightning impulse current (10/350 $\mu$ s) [L1+L2+L3-PEN] [I <sub>total</sub> ]	37.5 kA
Specific energy [L1+L2+L3-PEN] [W/M]	352 kJ/ohms
Lightning impulse current (10/350 $\mu$ s) [L-PEN] [I <sub>imp</sub> ]	12.5 kA
Specific energy [L-PEN] [W/M]	39 kJ/ohms
Nominal discharge current (8/20 $\mu$ s) [I <sub>n</sub> ]	12.5 / 37.5 kA
Voltage protection level [U <sub>p1</sub> ]	$\leq$ 1.5 kV
Follow current extinguishing capability a.c. [I <sub>fl</sub> ]	10 kA <sub>rms</sub>
Follow current limitation/Selectivity	no tripping of a 32 A gL/gG fuse up to 10 kA <sub>rms</sub> (prosp.)
Response time [t <sub>A1</sub> ]	$\leq$ 100 ns
Max. mains-side overcurrent protection	160 A gL/gG
Temporary overvoltage (TOV) [U <sub>T1</sub> ]	440 V / 5 sec.
TOV characteristics	withstand
Operating temperature range [T <sub>U1</sub> ]	-40°C...+80°C
Operating state/fault indication	green / red
Number of ports	1
Cross-sectional area (L1, L2, L3, PEN) [max.]	1,5 mm <sup>2</sup> solid/flexible
[Max.] cross-sectional area (L1, L2, L3, PEN)	35 mm <sup>2</sup> stranded/25 mm <sup>2</sup> flexible
For mounting on	35 mm DIN rail acc. to EN 60715
Enclosure material	thermoplastic, red, UL 94 V-0
Place of installation	indoor
Degree of protection	IP 20
Mounting dimensions	4 mod., DIN 43880
<b>Ordering information</b>	
Type	DSH TNC 255
Part No.	<b>941 900</b>
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.



Dimension drawing DSH TT 255

Basic circuit diagram DSH TT 255

DSH TT 255: Prewired combined lightning current and surge arrester for TT systems; fulfils the requirements of class of LPS III + IV

**Prewired spark-gap-based combined lightning current and surge arrester**

**Discharge capacity up to 50 kA (10/350 µs)**

**Fulfils the requirements of class of LPS III + IV**

**Protection of terminal devices**

**No tripping of 32 A gL/gG fuses up to short-circuit currents of 10 kA<sub>rms</sub>**

**Operating state/fault indication by indicator flag in the inspection window**

DSH TT 255	
SPD according to EN 61643-11 / ... IEC 61643-1	Type 1 / Class I
Nominal a.c. voltage [U <sub>N</sub> ]	230 / 400 V
Max. continuous operating a.c. voltage [U <sub>C</sub> ]	255 V
Lightning impulse current (10/350 µs) [L1+L2+L3+N-PE] [I <sub>totIM</sub> ]	50 kA
Specific energy [L1+L2+L3+N-PE] [W/N]	625 kJ/ohms
Lightning impulse current (10/350 µs) [L-N]/[N-PE] [I <sub>imp</sub> ]	12.5 / 50 kA
Specific energy [L-N]/[N-PE] [W/N]	39 kJ/ohms / 625 kJ/ohms
Nominal discharge current (8/20 µs) [L-N]/[N-PE] [I <sub>n</sub> ]	12.5 / 50 kA
Voltage protection level [L-N]/[N-PE] [U <sub>p</sub> ]	≤ 1.5 kV / ≤ 1.5 kV
Follow current extinguishing capability [L-N]/[N-PE] [I <sub>rl</sub> ]	10 kA <sub>rms</sub> / 100 A <sub>rms</sub>
Follow current limitation/Selectivity	no tripping of a 32 A gL/gG fuse up to 10 kA <sub>rms</sub> (prosp.)
Response time [t <sub>A</sub> ]	≤ 100 ns
Max. mains-side overcurrent protection	160 A gL/gG
Temporary overvoltage (TOV) [L-N] [U <sub>T</sub> ]	440 V / 5 sec.
Temporary overvoltage (TOV) [N-PE] [U <sub>T</sub> ]	1200 V / 200 ms
TOV characteristics	withstand
Operating temperature range [T <sub>U</sub> ]	-40°C...+80°C
Operating state/fault indication	green / red
Number of ports	1
Cross-sectional area (L1, L2, L3, N, PE, ⚡) [min.]	1.5 mm <sup>2</sup> solid/flexible
Cross-sectional area (L1, L2, L3, N, PE, ⚡) [max.]	35 mm <sup>2</sup> stranded/25 mm <sup>2</sup> flexible
For mounting on	35 mm DIN rail acc. to EN 60715
Enclosure material	thermoplastic, red, UL 94 V-0
Place of installation	indoor
Degree of protection	IP 20
Mounting dimensions	4 mod., DIN 43880
<b>Ordering information</b>	
Type	DSH TT 255
Part No.	<b>941 310</b>
Packing unit	1 pc