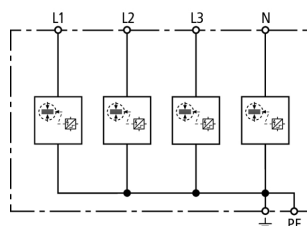


DSH TNS 255 (941 400)

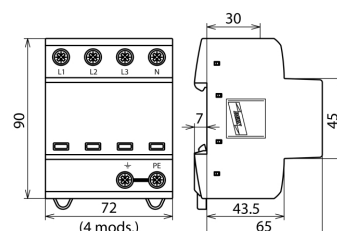
- Application-optimised and prewired type 1 and type 2 spark-gap-based combined lightning current and surge arrester
- Space-saving arrester for compact and simply equipped electrical installations with reduced technical requirements
- Capable of protecting terminal equipment



Figure without obligation



Basic circuit diagram DSH TNS 255



Dimension drawing DSH TNS 255

Application-optimised and prewired combined lightning current and surge arrester for TN-S systems.

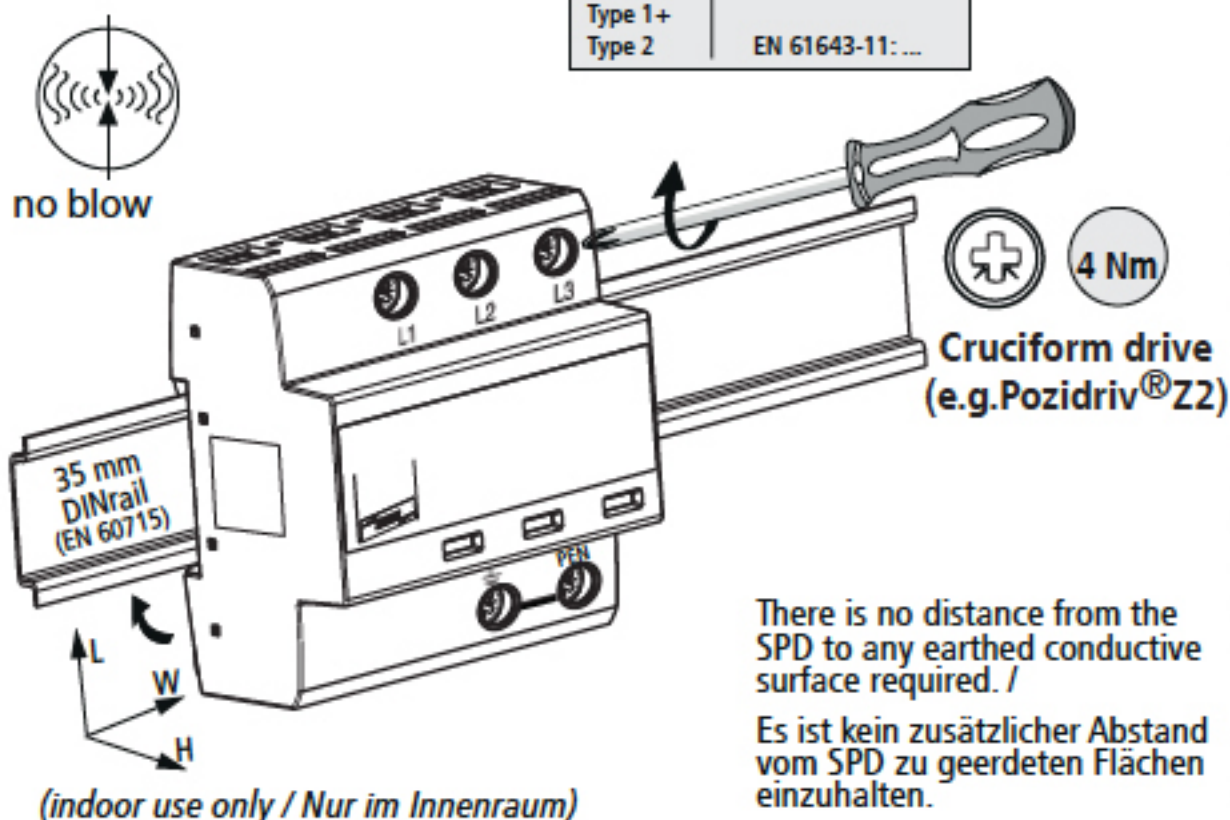
Type	DSH TNS 255
Part No.	941 400
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II
Energy coordination with terminal equipment (≤ 5 m)	type 1 + type 2 + type 3
Nominal a.c. voltage (U_N)	230 / 400 V (50 / 60 Hz)
Max. continuous operating a.c. voltage (U_C)	255 (50 / 60 Hz)
Lightning impulse current (10/350 μ s) [L1+L2+L3+N-PE] (I_{total})	50 kA
Specific energy [L1+L2+L3+N-PE] (W/R)	625.00 kJ/ohms
Lightning impulse current (10/350 μ s) [L, N-PE] (I_{imp})	12.5 kA
Specific energy [L,N-PE] (W/R)	39.06 kJ/ohms
Nominal discharge current (8/20 μ s) [L/N-PE]/[L1+L2+L3+N-PE] (I_n)	12.5 / 50 kA
Voltage protection level [L-PE]/[N-PE] (U_P)	≤ 1.5 / ≤ 1.5 kV
Follow current extinguishing capability a.c. (I_n)	25 kA _{rms}
Follow current limitation / Selectivity	no tripping of a 32 A gL/gG fuse up to 25 kA _{rms} (prosp.)
Response time (t_A)	≤ 100 ns
Max. mains-side overcurrent protection	160 A gL/gG
Temporary overvoltage (TOV) [L-N] (U_T) – Characteristic	440 V / 120 min. – withstand
Operating temperature range (T_U)	-40 °C ... +80 °C
Operating state / fault indication	green / red
Number of ports	1
Cross-sectional area (L1, L2, L3, N, PE, $\pm$) (min.)	1.5 mm ² solid / flexible
Cross-sectional area (L1, L2, L3, N, PE, $\pm$) (max.)	35 mm ² stranded / 25 mm ² 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	4 module(s), DIN 43880
Approvals	KEMA, VDE, UL
Weight	525 g
Customs tariff number	85363030
GTIN	4013364133563
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.

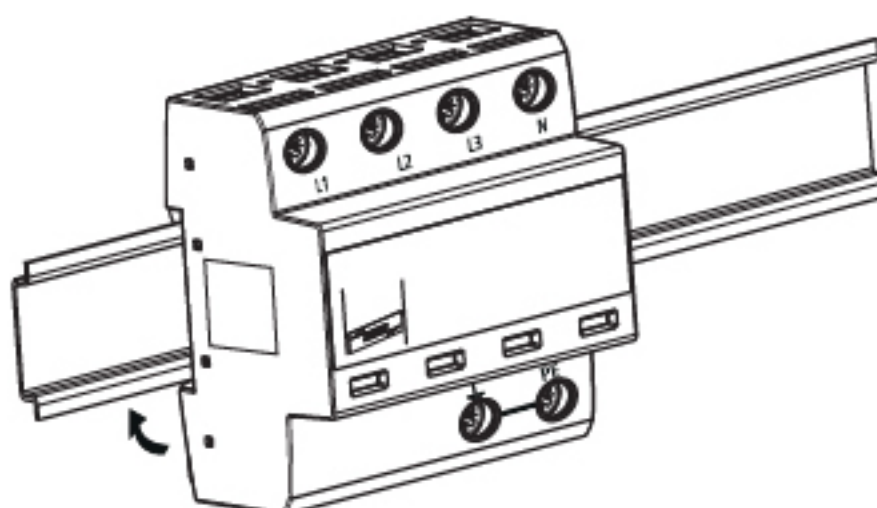
DEHNshield®

DSH TNC 255

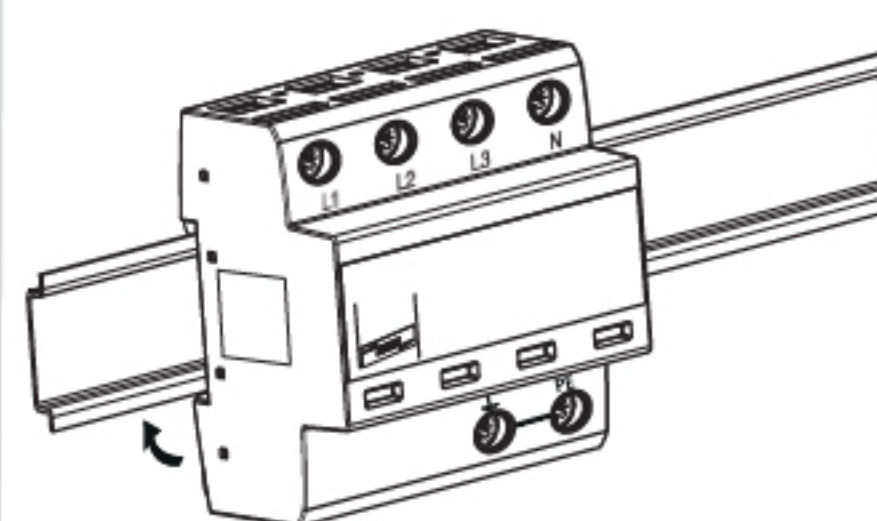
Class I + Class II	IEC 61643-11: ...
Type 1 + Type 2	EN 61643-11: ...



DSH TNS 255



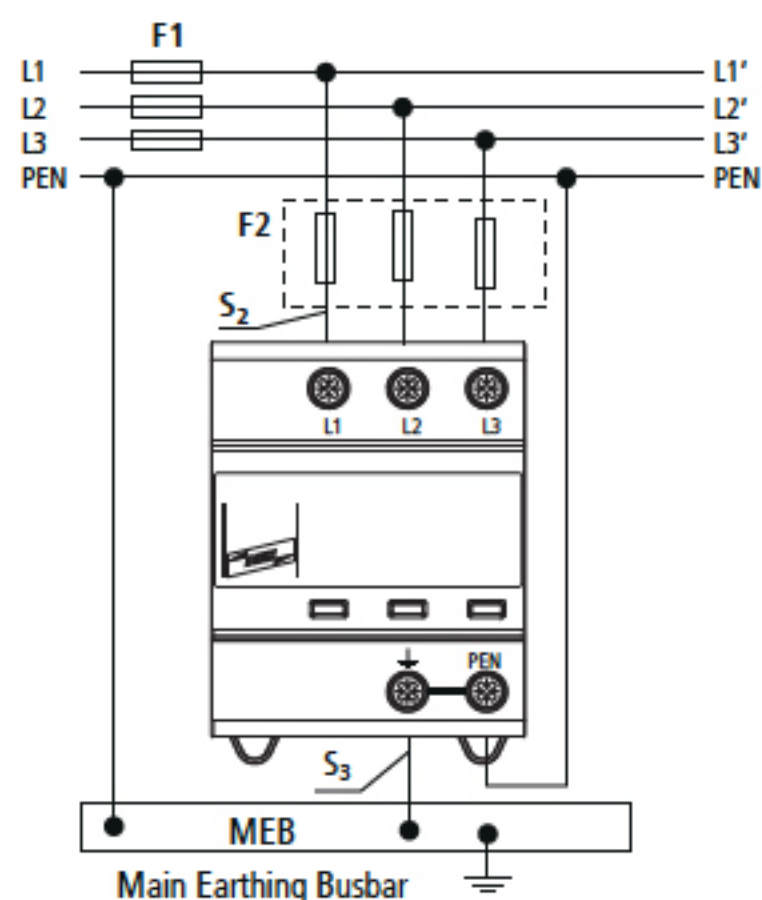
DSH TT 255



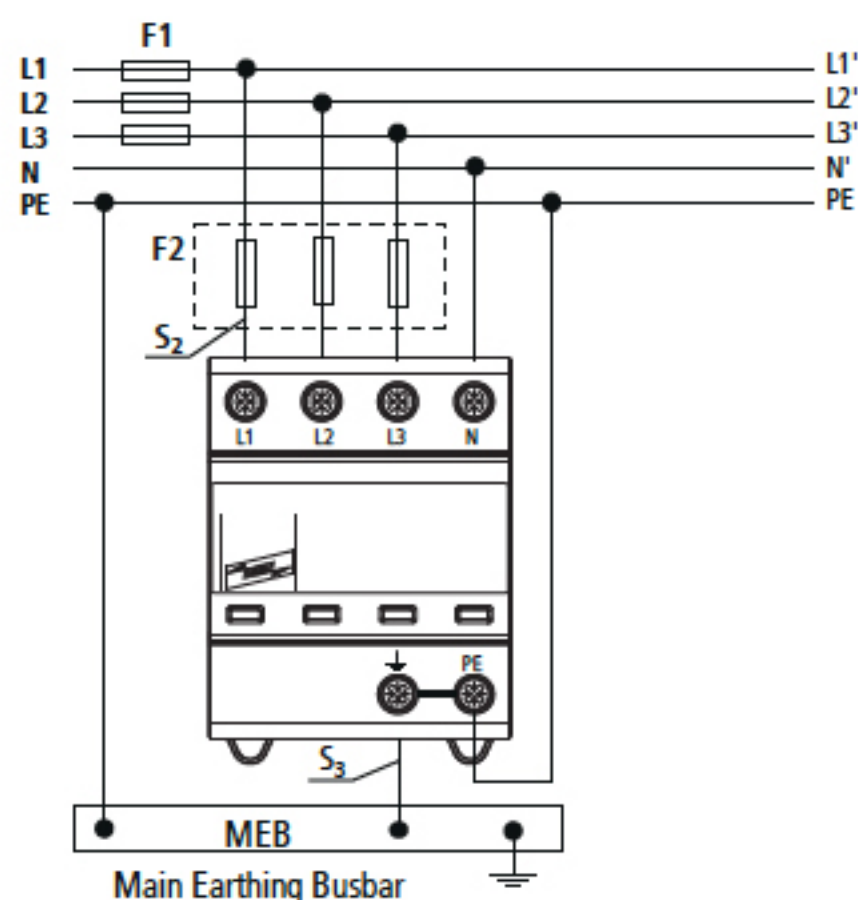
Technical data / Technische Daten

Typ	DSH TNC 255	DSH TNS 255	DSH TT 255
U_N	230 V (50/60 Hz)		
U_C	255 V (50/60 Hz)		
I_n	25 kA _{rms}	25 kA _{rms}	25 kA _{rms} (L → N) 100 A _{rms} (N → PE)
I_{SCCR}	25 kA _{rms}		
I_{imp} (10/350μs)	12,5 kA (L → PEN) 37,5 kA (L1+L2+L3 → PE)	12,5 kA (L → PE); 50 kA (L1+L2+L3+N → PE)	12,5 kA (L → N) 50 kA (L1+L2+L3+N → PE) 50 kA (N → PE)
max. I_{gG}	160 A gG		
°C	-40°C ... +80°C		
humidity / Feuchte	5% ... 95%		
I_{PE}	<< 10 μA		
Ports	1		
IP Code	IP 20 (built in / eingebaut)		
L x W x H	90 mm x 72 mm x 72 mm		

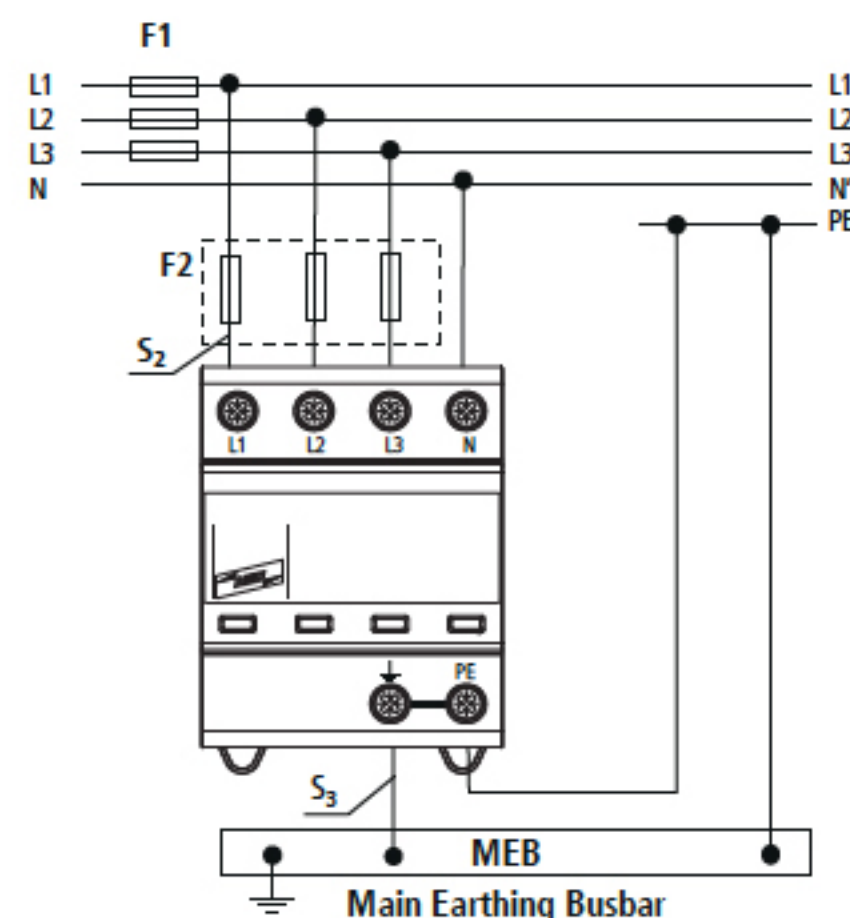
TN-C



TN-S



TT (3+1)

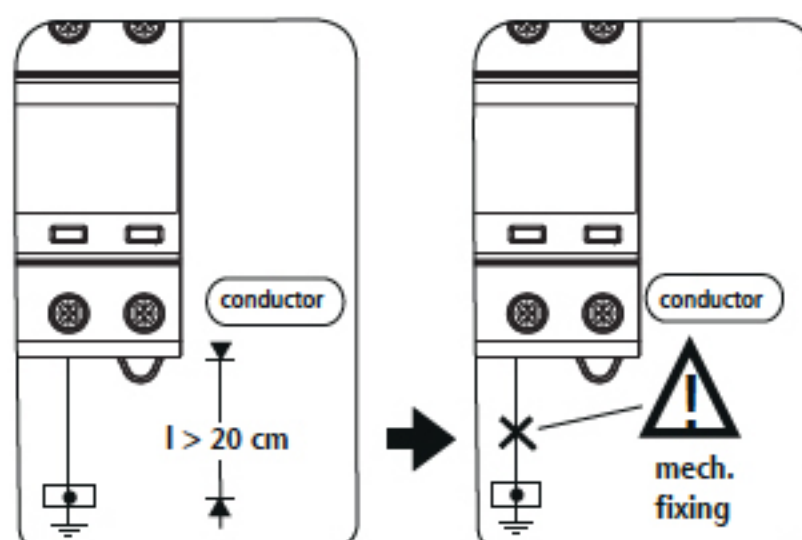


min. □ L1, L2, L3, N, PE	12 mm	12 mm	12 mm
max. □ L1, L2, L3, N, PE	25 mm²	35 mm²	35 mm²
!	16 mm² Cu	$MMF \geq 15,5$	

Backup fuse / Vorsicherung

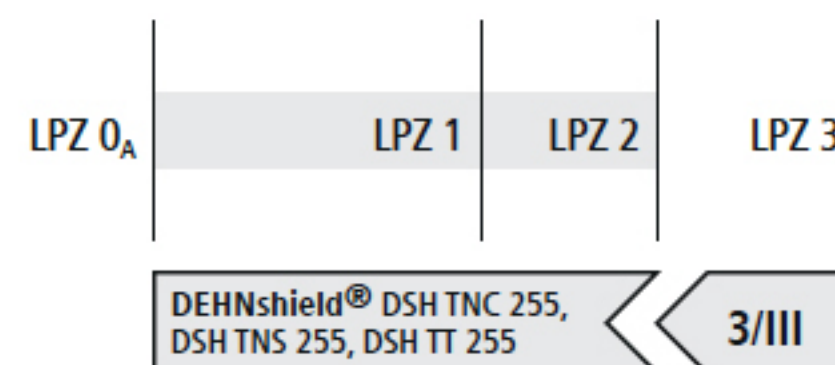
DEHNshield® DSH TNC 255, DSH TNS 255, DSH TT 255				
Fuse F1 A gL / gG	S_2 / mm²	S_3 / mm²	Fuse F2 A gL / gG	
F1 > 160 A gL / gG	25	10	16	---
F2 ≤ 160 A gL / gG	35	10	16	---
F1 ≤ 160 A gL / gG	40	10	16	---
	50	10	16	---
	63	10	16	---
	80	10	16	---
	100	16	16	---
	125	16	16	---
	160	25	25	---
	>160	25	25	160

Mechanical fixing / Mechanische Befestigung



Coordination / Koordination

DIN VDE 0185-305-4
IEC 62305-4: ...



SPD Type 3
acc. to EN 61643-11: ...

Fig. 3 Fault indication / Defektanzeige

