

- Lightning impulse current 100 kA (10/350)
- Total current arrester, especially for use in TT systems in "3+1" circuits according to IEC 60364-5-53 between neutral conductor N and protective conductor PE
- Creepage discharge spark gap technology

DGPM 255:	Non-exhausting, coordinated N-PE lightning current arrester
DGP BN 255:	Non-exhausting N-PE lightning current arrester
DGP B 255:	<b>discontinued</b> Exhausting N-PE lightning current arrester
DGP B NH00 N 255:	Non-exhausting N-PE lightning current arrester in NH design

The single-pole N-PE lightning current arresters DEHNgap Maxi, DEHNgap BN, DEHNgap B and DEHNgap B NH, being total current arresters between neutral and protective conductor in TT systems, are designed to ensure the fulfilment of the so-called "3+1" requirements regarding protection of persons and material assets. Especially for this challenge the creepage discharge spark gaps used have been developed. With a discharge capacity of up to 100 kA (10/350) they fulfil the highest requirements made on such kinds of devices by national and international lightning protection standards. Their leakage current free spark gap design allows the devices to be used in areas upstream of supply meters according to national regulations (e.g. Germany: VDN guidelines). Being a coordinated N-PE lightning current arrester, DEHNgap Maxi has a special position among the total current arresters: Thanks to its response performance, DEHNgap Maxi can be coordinated directly with N-PE surge arrester DEHNgap C/T without additional decoupling coil. If lightning current and surge arresters have to be installed together at one site, DEHNgap C/T has no longer to be additionally installed thanks to the low voltage protection level of DEHNgap Maxi.



SPD Type 1 according to EN 61643-11;  
Classification B according to E DIN VDE 0675-6;  
SPD Class I according to IEC 61643-1;



For protection of low voltage consumer's installations against surges even at direct lightning strikes. For use in the lightning protection zones concept at boundaries 0<sub>A</sub> – 1 in 3+1 circuits.

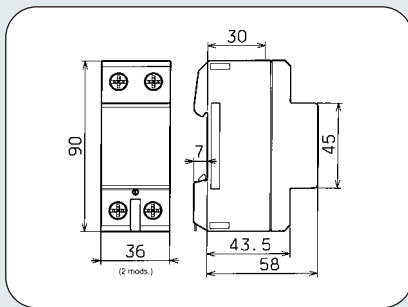
DEHNgap B NH has been developed especially for industrial installations as well as for supply networks. This device can be integrated very easily into existing NH fuse holders, size 00. The DIN rail mounted devices DEHNgap Maxi, DEHNgap BN and DEHNgap B provide multifunctional terminals for connecting conductors and busbars for easy wiring in connection with other DIN rail mounted terminals. The integrated feed-through terminal in DEHNgap Maxi allows an especially compact, space-saving design.



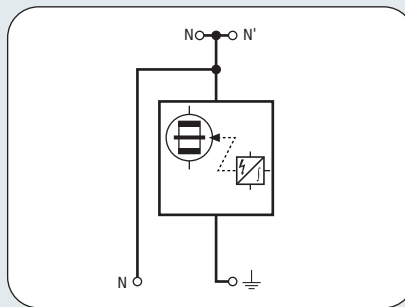
## POWER SUPPLY SYSTEMS

### LIGHTNING CURRENT ARRESTERS – TYPE 1

**DEHNgap ...**  
**DEHNgap Maxi**



Dimension drawing DGPM 255

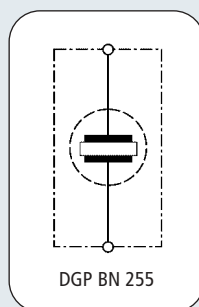


Basic circuit diagram DGPM 255

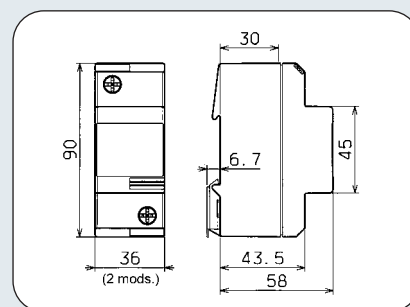
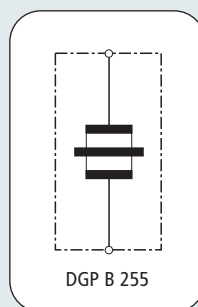


DGPM 255: Encapsulated, coordinated N-PE lightning current arrester.

DGPM 255	
SPD according to EN 61643-11	Type 1
SPD according to IEC 61643-1	Class I
Classification according to E DIN VDE 0675-6	B
Max. continuous ac voltage $U_c$	255 V
Lightning impulse current (10/350) $I_{imp}$	100 kA
Voltage protection level $U_p$	$\leq 1.5$ kV
Follow current extinguishing capability ac $I_{fi}$	100 A <sub>rms</sub>
Response time $t_A$	$\leq 100$ ns
TOV voltage	1200 V / 200 ms
Operating temperature range (parallel wiring) $T_{Up}$	-40°C...+80°C
Operating temperature range (through wiring) $T_{Us}$	-40°C...+60°C
Cross-sectional area (N,N',PE) min.	10 mm <sup>2</sup> solid / flexible
Cross-sectional area (N,PE) max.	50 mm <sup>2</sup> stranded / 35 mm <sup>2</sup> flexible
Cross-sectional area (N') max.	35 mm <sup>2</sup> stranded / 25 mm <sup>2</sup> flexible
Mounting on	35 mm DIN rail acc. to EN 60715
Enclosure material	red thermoplastic, UL 94 V-0
Degree of protection	IP 20
Dimension	2 mods., DIN 43880
Ordering information	
Type	DGPM 255
Part No.	900 055
Packing unit	1 pc(s)



Basic circuit diagram DGP BN 255



DGP BN 255: Encapsulated N-PE lightning current arrester

DGP B 255: Exhausting N-PE lightning current arrester

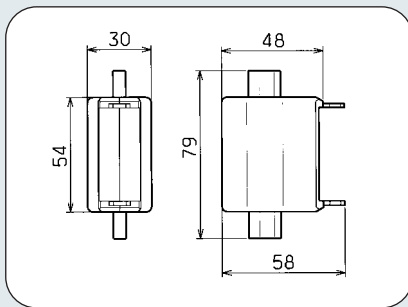
**discontinued**

	DGP BN 255	DGP B 255
SPD according to EN 61643-11	Type 1	Type 1
SPD according to IEC 61643-1	Class I	Class I
Classification according to E DIN VDE 0675-6	B	B
Max. continuous ac voltage $U_c$	255 V	255 V
Lightning impulse current (10/350) $I_{imp}$	100 kA	100 kA
Nominal discharge current (8/20) $I_n$	100 kA	100 kA
Voltage protection level $U_p$	$\leq 4$ kV	$\leq 4$ kV
Follow current extinguishing capability ac $I_{fi}$	100 A <sub>rms</sub>	100 A <sub>rms</sub>
Response time $t_A$	$\leq 100$ ns	$\leq 100$ ns
TOV voltage	1200 V / 200 ms	1200 V / 200 ms
Operating temperature range $T_U$	-40°C...+80°C	-40°C...+80°C
Min. cross-sectional area	10 mm <sup>2</sup> solid / flexible	10 mm <sup>2</sup> solid / flexible
Max. cross-sectional area	50 mm <sup>2</sup> stranded / 35 mm <sup>2</sup> flexible	50 mm <sup>2</sup> stranded / 35 mm <sup>2</sup> flexible
Mounting on	35 mm DIN rail acc. to EN 60715	35 mm DIN rail acc. to EN 60715
Enclosure material	red thermoplastic, UL 94 V-0	red thermoplastic, UL 94 V-0
Degree of protection	IP 20	IP 20
Dimension	2 mods., DIN 43880	2 mods., DIN 43880
Approvals, Certifications	KEMA, VDE, UL	—
<b>Ordering information</b>		
Type	DGP BN 255	DGP B 255
Part No.	900 132	900 130
Packing unit	1 pc(s)	1 pc(s)

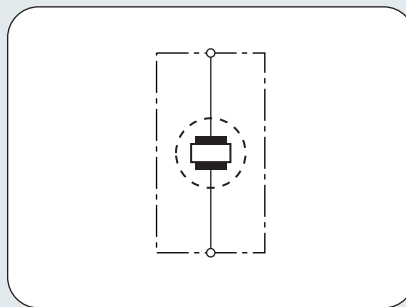
## POWER SUPPLY SYSTEMS

### LIGHTNING CURRENT ARRESTERS – TYPE 1

**DEHNgap ...**  
**DEHNgap B NH**



Dimension drawing DGP B NH00 N 255



Basic circuit diagram DGP B NH00 N 255



DGP B NH00 N 255: Encapsulated N-PE lightning current arrester, NH design, size 00

DGP B NH00 N 255	
SPD according to EN 61643-11	Type 1
SPD according to IEC 61643-1	Class I
Classification according to E DIN VDE 0675-6	B
Max. continuous ac voltage $U_c$	255 V
Lightning impulse current (10/350) $I_{imp}$	50 kA
Nominal discharge current (8/20) $I_n$	50 kA
Voltage protection level $U_p$	$\leq 4$ kV
Follow current extinguishing capability ac $I_{fi}$	100 A <sub>rms</sub>
Response time $t_A$	$\leq 100$ ns
TOV voltage	1200 V / 200 ms
Operating temperature range $T_U$	-40°C...+80°C
Mounting on	NH fuse holder, size 00
Enclosure material	red thermoplastic, UL 94 V-0
Approvals, Certifications	VDE, UL
Ordering information	
Type	DGP B NH00 N 255
Part No.	900 269
Packing unit	1 pc(s)