



# Type 1 N/PE AC power Surge Protector

DS100EG  
DS100G



This Type 1 Surge Protector is designed to be used in association with DS150 surge protectors to provide common and differential surge protection for AC networks, following the «CT2» configuration in IEC60364-5-534 standard. For the possible associations, refer to pages A20 and A21.

The DS100EG is connected between the Neutral (N) and Protective Earth (PE) wires.

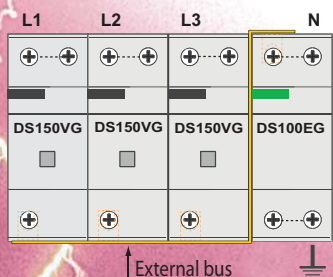
The DS100EG is based on CITEL P100 high energy gas tube, which provides much lower residual voltages than the air spark gap technology and a very high discharge current capability on a 10/350  $\mu$ s or 8/20  $\mu$ s impulses.

It is mechanically similar to the DS150 series, therefore making easy to use both products jointly.

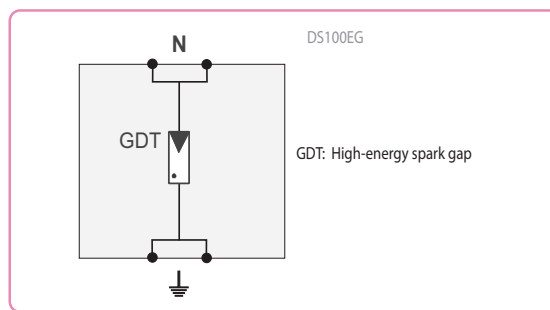
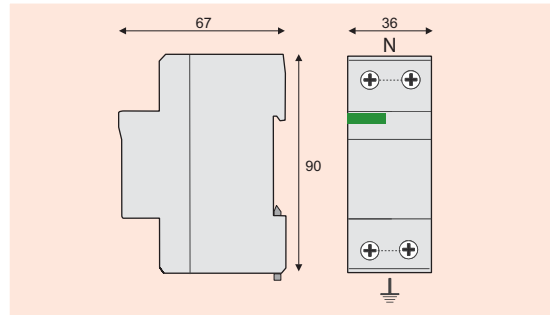
- N/PE Type 1 Surge Protector
- **Iimp : 50 and 100 kA (10/350  $\mu$ s)**
- **I<sub>max</sub> : 200 and 150 kA (8/20  $\mu$ s)**
- Adapted to DS250/DS150 range
- EN 61643-11 and IEC 61643-1 compliance
- UL 1449 ed.2 Recognition

## Association with DS150VG protectors

For example : DS154VG-300/G



## Dimensions and Diagram



## Characteristics

CITEL part number	DS100G-600	DS100EG-600	DS100EG-350
Network	230/400V	230/400V	120/208V
Connexion mode	N/PE	N/PE	N/PE
AC system	TT, TNS	TT, TNS	TT, TNS
Max. operating voltage U <sub>c</sub>	255 Vac	255 Vac	150 Vac
Temporary overvoltage withstand U <sub>T</sub>	400 Vac	400 Vac	150 Vac
Operating current I <sub>c</sub>	none	none	none
Leakage current at U <sub>c</sub>			
Follow current I <sub>f</sub>	yes	yes	yes
Nominal discharge current I <sub>n</sub> <i>15 x 8/20 <math>\mu</math>s impulses</i>	50 kA	50 kA	50 kA
Maximum discharge current I <sub>max</sub> <i>max. withstand 8/20 <math>\mu</math>s</i>	200 kA	150 kA	150 kA
Max. lightning current by pole I <sub>imp</sub> <i>max. withstand 10/350 <math>\mu</math>s</i>	100 kA	50 kA	50 kA
Protection level (at I <sub>n</sub> ) U <sub>p</sub>	1.5 kV	1.5 kV	1.5 kV
Admissible short-circuit current	250000 A	25000 A	25000 A
<b>Mechanical characteristics</b>			
Dimensions	see diagram		
Connection	by screw terminals : 6-35 mm <sup>2</sup> / by bus		
Mounting	symmetrical rail 35 mm		
Operating temperature	-40/+85 °C		
Protection class	IP20		
Housing material	Thermoplastic PEI UL94-5VA		
<b>Standards compliance</b>			
NF EN 61643-11	France	Parafoudre Basse Tension - Essais Classe I et II	
IEC 61643-1	International	Low Voltage SPD - Test Class I and II	
EN 61643-11	Europe	Low Voltage SPD - Test Class I and II	
UL1449 ed.2	USA	Low Voltage TVSS	