

## OVERVOLTAGE LIMITER PSPI \*20/IV - LINE DISCHARGE CLASS 4 Limiters for indoor use

**OVERVOLTAGE LIMITER  
PSPI \*/20/IV**  
LINE DISCHARGE CLASS 4  
INNER LIMITER - DC NETWORKS

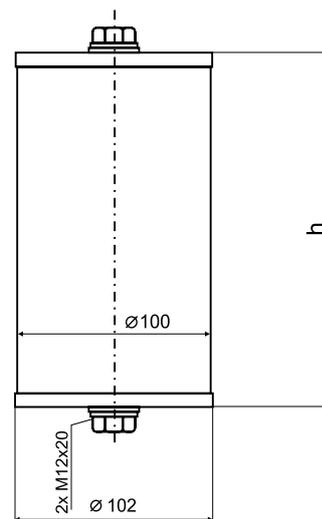


## OVERVOLTAGE LIMITER PSPI \*20/IV - LINE DISCHARGE CLASS 4

PSPI \*/20/IV is an overvoltage limiter as per EN 60099-4 (line discharge class 4), designed for protecting DC networks and DC stations from atmospheric and switching overvoltage. These limiters are especially suitable for rail vehicles, trolleybuses and overhead lines. They can be used in indoor areas.

The functional part of the limiters consists of a column of varistors sized for continuous operating voltage  $U_c$ , the outer insulating shell is composed of silicon caoutchouc (grey colour). The material of the shell shows high resistance to the effects of surface leakage currents and to electric arc, possesses hydrophobic properties and shows excellent resistance to weather effects, pollution and UV radiation. The cover caps, connecting screws, nuts and terminals are made of stainless steel suitable for the connection of a conductor with a diameter of 6 to 16 mm.

With their design and technical parameters, the overvoltage limiters of the PSPI series conform to the standards EN 60099-4, IEC 60099-4 and EN 61643-11, IEC 61643-11.



Technical data		PSPI 1/20/IV	PSPI 2/20/IV	PSPI 3/20/IV	PSPI 4/20/IV	PSPI 5/20/IV
Max. continuous operating voltage (DC)	$U_c$	1 kV	2 kV	3 kV	4 kV	5 kV
Nominal voltage (DC)	$U_n$	1,25 kV	2,5 kV	3,75 kV	5 kV	6,25 kV
Nominal discharge current	$I_n$	20 kA				
High impulse current (4/10)		2 x 100 kA				
Long current impulse (2ms)		1350 A				
Discharge class acc. to EN 60099-4		4	4	4	4	4
Residual voltage at $I_n$	$U_{res}$	$\leq 3,1$ kV	$\leq 6,2$ kV	$\leq 9,3$ kV	$\leq 12,4$ kV	$\leq 15,5$ kV
Height	mm	85 mm	102 mm	117 mm	134 mm	151 mm
Operating temperature range	$\theta$	$-35^\circ\text{C} \div +55^\circ\text{C}$				
Weight	m	1,9 kg	2,3 kg	2,9 kg	3,4 kg	4 kg
Article number		94008	94009	94010	94011	94012

### Transport and storage

The overvoltage limiters may not be exposed to strong shocks and impacts during transport. They should be stored in the long term in an indoor store.

### Maintenance

No testing of the function or maintenance such as cleaning is necessary during the anticipated life of the limiter.

### Advantages

- Long protective distance
- High absorption capacity
- Stable U-I characteristics even after repeated discharges
- Resistance to ageing
- Design resistant to explosion and bursting
- Resistance to pollution and UV radiation
- Resistance of the shell to rough handling
- Maintenance-free design
- Resistance to shocks and vibrations
- High mechanical resistance