

## OVERVOLTAGE LIMITER PSP \*/10/III - LINE DISCHARGE CLASS 3

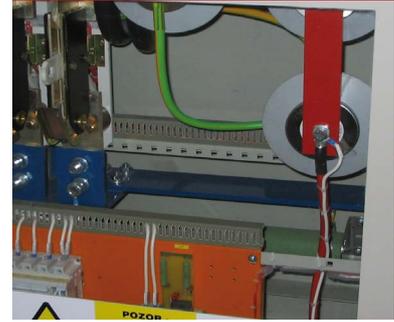
The limiters are suitable for both outdoor and indoor use

## OVERVOLTAGE LIMITER

PSP \*/10/III

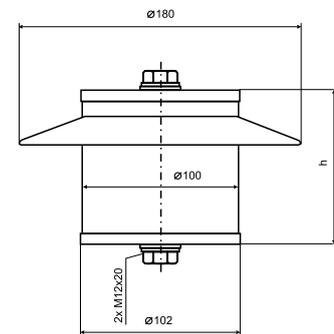
LINE DISCHARGE CLASS 3

OUTER LIMITER - DC NETWORKS



## OVERVOLTAGE LIMITER PSP \*/10/III - LINE DISCHARGE CLASS 3

PSP \*/10/III overvoltage limiters as per EN 50163 designed to protect converter stations and DC networks of electric traction systems linked to them from the effects of atmospheric and switching overvoltage. They are used for protecting traction lines, electrical equipment of trolleybuses, trams and electric locomotives. They do not require any maintenance during operation. The PSP \*/III series is intended for outdoor applications; the PSP I \*/III series for indoor applications. If used as a line arrester, it can be used as a support or suspension insulator. 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 caoutchouk (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 PSP series conform to the standards EN 60099-4, IEC 60099-4 and EN 61643-11, IEC 61643-11.



Technical data		PSP 1/10/III	PSP 2/10/III	PSP 3/10/III	PSP 4/10/III
Max. continuous operating voltage (DC)	$U_c$	1 kV	2 kV	3 kV	4 kV
Nominal voltage (DC)	$U_n$	1,25 kV	2,5 kV	3,75 kV	5 kV
Nominal discharge current	$I_n$	10 kA	10 kA	10 kA	10 kA
High impulse current (4/10)		2 x 100 kA			
Long current impulse (2ms)		850 A	850 A	850 A	850 A
Discharge class acc. to EN 60099-4		3	3	3	3
Residual voltage at $I_n$	$U_{res}$	$\leq 3,5$ kV	$\leq 7$ kV	$\leq 10,7$ kV	$\leq 14,2$ kV
Height	$h$	80 mm	90 mm	102 mm	110 mm
Operating temperature range	$\vartheta$	$-35^\circ\text{C} \div +55^\circ\text{C}$	$-35^\circ\text{C} \div +55^\circ\text{C}$	$-35^\circ\text{C} \div +55^\circ\text{C}$	$-35^\circ\text{C} \div +55^\circ\text{C}$
Weight	$m$	1,7 kg	1,9 kg	2,3 kg	2,5 kg
Article number		92001	92003	92004	92002

### 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

