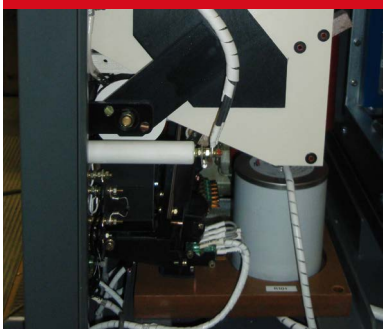
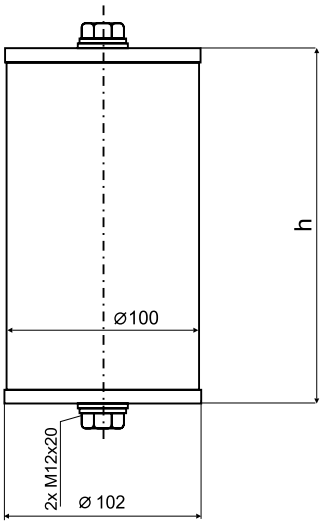
OVERVOLTAGE LIMITER
PSPI */10/III
LINE DISCHARGE CLASS 3
INNER LIMITER - DC NETWORKS





OVERVOLTAGE LIMITER PSPI */10/III - LINE DISCHARGE CLASS 3

PSPI */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 PSPI */III series is intended for outdoor applications; the PSPI *10/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 PSPI series conform to the standards EN 60099-4, IEC 60099-4 and EN 61643-11, IEC 61643-11.

Technical data		PSPI 1/10/III	PSPI 2/10/III	PSPI 3/10/III	PSPI 4/10/III	PSPI 5/10/III	PSPI 6/10/III
Max. continuous operating voltage (DC)	U_C	1 kV	2 kV	3 kV	4 kV	5 kV	6 kV
Nominal voltage (DC)	U_r	1,25 kV	2,5 kV	3,75 kV	5 kV	6,25 kV	7,5 kV
Nominal discharge current	I_n	10 kA	10 kA	10 kA	10 kA	10 kA	10 kA
High impulze current (4/10)		2 x 100 kA	2 x 100 kA	2 x 100 kA	2 x 100 kA	2 x 100 kA	2 x 100 kA
Long current impulse (2ms)		850 A	850 A	850 A	850 A	850 A	850 A
Discharge class acc. to EN 60099-4		3	3	3	3	3	3
Residual voltage at I_n	U_{res}	≤ 3,5 kV	≤ 7 kV	≤ 10,7 kV	≤ 14,2 kV	≤ 17,7 kV	≤ 21,4 kV
Height	h	79 mm	88 mm	106 mm	115 mm	123 mm	141 mm
Operating temperature range	ϑ	-35°C ÷ + 55°C	-35°C ÷ + 55°C	-35°C ÷ + 55°C	-35°C ÷ + 55°C	-35°C ÷ + 55°C	-35°C ÷ + 55°C
Weight	m	1,5 kg	1,6 kg	1,9 kg	2,1 kg	2,3 kg	2,6 kg
Article number		94001	94003	94006	94002	94004	94005

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