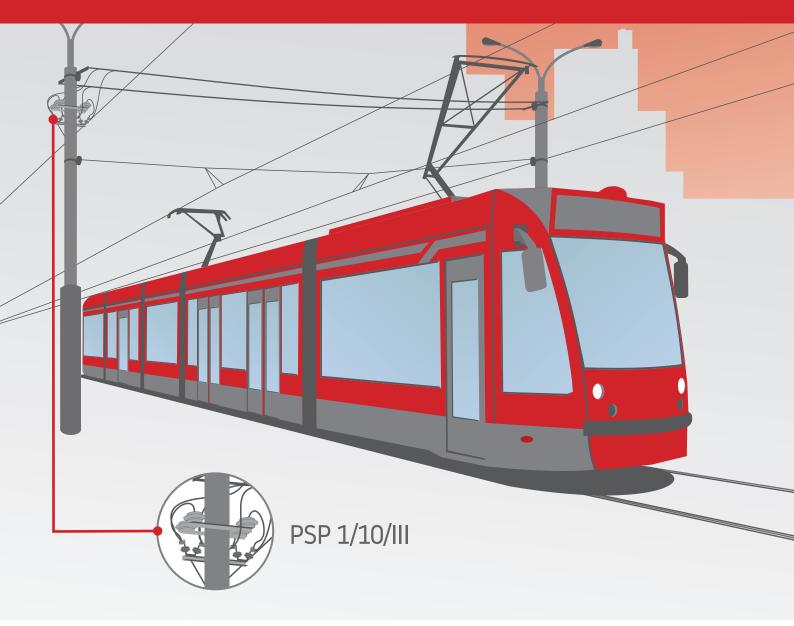
PROTECTION AGAINST ATMOSPHERIC AND SWITCHING OVERVOLTAGE IN DC SYSTEMS

protection of DC traction system, rail traction vehicles and equipment in DC systems



PSP */10/III - Line discharge class 3 (outdoor and indoor use)

PSPI */10/III - Line discharge class 3 (indoor use)

PSP */20/IV - Line discharge class 4 (outdoor and indoor use)

PSPI */20/IV - Line discharge class 4 (indoor use)

Overvoltage limiters 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 equipments of trolleybuses and trams. They do not require any maintenance during their

traffic lite. The functional part of the limiters consists of a column of varistors sized for continuous operating voltage $\rm U_c$. 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. With their design and technical parameters, the overvoltage limiters of the PSP series conform to the standards EN 60099-4: 2014, IEC 60099-4: 2014 and EN 50526-1: 2012.



PROTECTION AGAINST ATMOSPHERIC AND SWITCHING OVERVOLTAGE IN DC SYSTEMS

protection of DC traction system, rail traction vehicles and equipment in DC systems

Line discharge class 3 outdoor and indoor use



Nominal discharge current $I_n = 10 \text{ kA}$

PSP */10/III - overvoltage limiters designed to protect converter stations and DC systems 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 trains.

With their design and technical parameters, the overvoltage limiters of the PSP series conform to the standards EN 60099-4: 2014, IEC 60099-4: 2014 and EN 50526-1: 2012.

Line discharge class 3

indoor use











Nominal discharge current $I_n = 10 \text{ kA}$

PSPI */10/III - Line discharge class 3 - overvoltage limiters designed to protect converter stations and DC systems 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 trains.

With their design and technical parameters, the overvoltage limiters of the PSP series conform to the standards EN 60099-4: 2014, IEC 60099-4: 2014 and EN 50526-1: 2012.

Line discharge class 4

outdoor and indoor use



Nominal discharge current I_n = 20 kA

PSP */20/IV - Line discharge class 4 - overvoltage limiters designed to protect converter stations and DC systems 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 trains.

With their design and technical parameters, the overvoltage limiters of the PSP series conform to the standards EN 60099-4: 2014, IEC 60099-4: 2014 and EN 50526-1: 2012.

Line discharge class 4 indoor use









Nominal discharge current I_n = 20 kA

PSPI */20/IV - Line discharge class 4 - overvoltage limiters designed to protect converter stations and DC systems 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 trollevbuses, trams and electric trains.

With their design and technical parameters, the overvoltage limiters of the PSP series conform to the standards EN 60099-4: 2014, IEC 60099-4: 2014 and EN 50526-1: 2012.





