

Energy storage inverter overvoltage protection level





Overview

Why is the protection level at the inverter increased?

In addition, the protection level at the inverter is increased if the overvoltage occurs at one of the other strings. When excessive voltage is applied, voltage falls via the cable inductance. If the arrangement is not ideal, the protection level at the inverter is increased (see Fig. 6).

What is overvoltage protection?

Overvoltage protection serves to prevent damage to electrical and electronic devices as a result of excessive voltages. Overvoltage protection devices (surge protection devices, or SPD for short) generate equipotential bonding between the connected conductors when excessive voltage is applied.

Can lightning protection be combined with SMA inverters?

Also, special features of combining overvoltage protection devices with SMA inverters are described. The document covers lightning protection in as far as it influences overvoltage protection. Lightning protection systems are intended to prevent damage to buildings from lightning strikes.

How to protect an SMA inverter from overvoltage?

If you wish to protect an SMA inverter against impacting overvoltages, an SPD type II is sufficient. If lightning partial currents are expected, an SPD type I with connected SPD type II should be used. For inverters with one MPP tracker, the strings are combined before the inverter and connected to the SPD(s) at the point of interconnection.



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