

CSN® filter and damping resistors

DESCRIPTION

CSN® filter resistors (AC/DC filter resistors) and CSN® damping resistors are used in HVDC grids in conjunction with filter capacitors and inductors to attenuate or filter certain frequency components. This is necessary to reduce unwanted interference, such as harmonics or electromagnetic interference, which can be caused by the conversion of alternating current into direct current and vice versa.

The CSN® filter resistors provide a resistance path for these unwanted frequency components, allowing them to be dissipated and absorbed. Proper design and placement of the resistors can improve the performance and stability of the HVDC grid by keeping unwanted interference under control.



PRODUCT ADVANTAGES

- Excellent high-voltage resistance
- Low inductance

Cooling

- high load capacity due to good convection conditions
- Proven design for outdoor or indoor operation
- high long-term stability

TECHNISCHE DATEN

Resistance value
according to customer

requirements

Insulation level Customised (already supplied up to 1675)

kV_{BIL})

Active elements - Resistance fabric (CSN® Schniewindt)

mesh)

- Wire meander

- Belt elements

Active material selectable depending on requirement profile

air-cooled

Protection classes according to requirements (IP00 - IPX3)

PREN index (Pitting Resistance Equivalent 0 to > 50 (sea water resistant)

Number)

Alternating current (AC) and direct current Voltage type (DC)

Ambient conditions Reliable operation possible under difficult conditions in the following areas:

- Seismic

- wind

- pollution

- Temperature influences

- Ice and snow loads

CI - C5 according to DIN EN ISO Corrosivity categories 12944

- Insulators (porcelain or composite)

- Feedthrough

- Connection pads

- screws

- stranded wire

- etc.

Type of connection and connections