

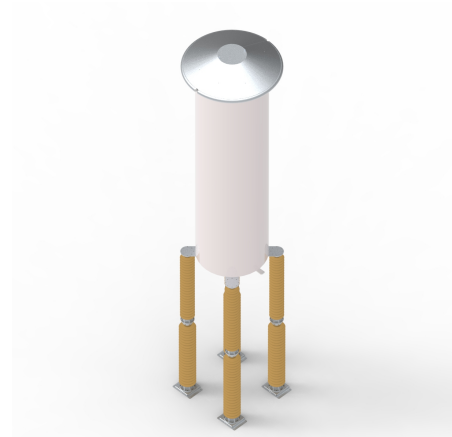
# CSN<sup>®</sup> pre-charging resistors (PIR)

## DESCRIPTION

CSN<sup>®</sup> pre-charging resistors are used to limit transient processes during switch-on processes of transformers and HVDC systems with intermediate voltage circuits (VSC technology).

CSN<sup>®</sup> pre-charging resistors are designed and manufactured individually according to customer specifications and application.

PIR = Pre-Insertion Resistor



## PRODUCT ADVANTAGES

- Technically mature, proven design for outdoor or indoor operation
- Optimised design for any current and any load duration
- reliable control of all operating voltages, even under the most difficult ambient conditions
- High long-term stability
- High creepage distances possible

## TECHNISCHE DATEN