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## RESISTORS FOR WIND POWER GENERATION

- Crowbar
- Chopper







## Resistors for Wind Power Generation

## Crowbar resistors

Disturbances in the electrical network can produce high currents and transient voltages that can be transmitted to the rotors of wind generators.

The Crowbar circuit is used to prevent damage to the power electronics converters and is used to shortcircuit the rotor windings via a resistor. This resistance is designed to withstand the shock period.

These resistive devices are designed with low inductance and capable of handling very high currents during short periods. They are robust equipment designed fully customized for mounting on boards with limited space.

## **Brake Chopper Resistors**

The chopper resistor limits the current when the chopper switch is on. The chopper is usually switched at high frequency to control the dc voltage.

Therefore, the resistor must have high-voltage capability and high repetitive pulse energy ratings, which is equivalent to a high continuous power rating.

Low parasitic inductance is mandatory in the chopper resistor, because of the high switching frequency in the kilohertz range.









