

# Inverter release power protection





## Overview

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What is inverter power switch short-circuit protection?

Inverter power switch short-circuit protection is fully integrated. A desaturation detection circuit is embedded in both the high- and low-side output stages and monitors the IGBT collector-to-emitter voltage by means of an external high voltage diode.

What is a 100% inverter-based power system (IBPS)?

In the future, 100% inverter-based power systems (IBPS) will arise. Protective systems against grid faults are a substantial part of electrical grids. They prevent danger to living beings and damage to technical equipment caused by grid faults. The control algorithms of VSCs and protection algorithms must collaborate in future grids.

Do inverterized motor drives need short-circuit protection?

Short-circuit protection on low- and medium-power inverterized motor drives is becoming essential to comply with safety standards. However, the implementation of such a feature can consistently increase board component count and system complexity when using traditional sensors and optocouplers.

What are inverter-based resources (IBRS)?

There is a rapid increase in the amount of inverter-based resources (IBRs) on the grid from Solar PV, Wind, and Batteries. All of these technologies are Inverter-based Resources (IBRs).



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