

# **380V inverter DC voltage relationship**





## Overview

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How do you calculate dc power demand in a three-phase inverter?

The corresponding DC power demand is equal to the sum of the fixed power loss and the AC power demand. You can use the Average-Value Inverter (Three-Phase) block only as a full-wave inverter. It behaves as a DC-voltage-controlled AC voltage source. The ratio you specify determines the ratio between the DC voltage and the AC voltage.

How does a three-phase inverter work?

It converts DC voltage to three-phase AC voltages and converts three-phase AC power demand to DC power demand. The corresponding DC power demand is equal to the sum of the fixed power loss and the AC power demand. You can use the Average-Value Inverter (Three-Phase) block only as a full-wave inverter.

What is an average value inverter (three-phase) block?

The Average-Value Inverter (Three-Phase) block models an average-value, full-wave inverter. It converts DC voltage to three-phase AC voltages and converts three-phase AC power demand to DC power demand. The corresponding DC power demand is equal to the sum of the fixed power loss and the AC power demand.

How does a DC inverter work?

Minimum power drawn on the DC side. The default value is  $1e3$ . When the DC supply voltage rises above this value, the inverter produces an AC output voltage. When the DC supply voltage falls below this value, the inverter turns off and the block sets the output AC currents to zero.



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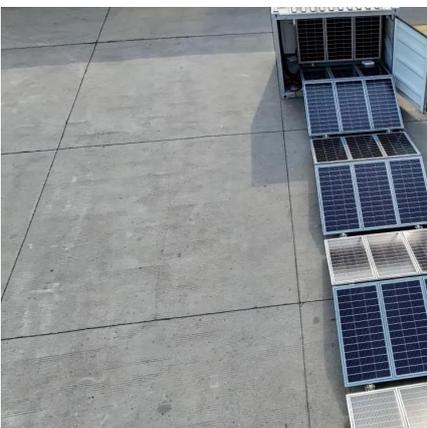
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