

## SolarInnovate Energy Solutions

# What type of resistor should I use for a 12v inverter



## Overview

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What makes a good solar inverter resistor?

For the resistor, this means high reliability with long lifetime, high voltage-withstand capability and high accuracy. Panasonic has a variety of resistor families that can be employed in solar inverters applications.

Is 20R a good voltage for a 48V inverter?

20R at 48V is about 2.5A or therabouts, I'd suggest that will be just fine, give it a suitably rated switch and you're good to go. You're just trying to avoid that massive (almost infinite) current splat when you first connect the discharged inverter. The Seplos 48V BMS has a 51R 10W pre-charge resistor for about 1A pre-charge.

Is a 20R resistor enough for a 48V BMS?

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What are the different types of resistors?

These requirements may include filter resistors, snubbers, gate resistors, bleeders, balancing resistors, voltage dividers, braking/regenerative braking resistors, power factor control, surge current protection, pre-charge resistors, and even current shunts. Here we will discuss the various resistor solutions.

What wattage resistor should I use if my inverter fails?

If the resistor fails open circuit after a few trial starts, try a higher wattage resistor. Not all inverters have similar starting characteristics, but if it really does need a soft start, it probably needs something pretty robust. 5w should work fine. I would go with 50w metal case resistor since they are cheap.

Do inverters need a resistor?

Because inverters contain capacitors, connecting them with a battery will tend to spark upon contact. To avoid this being a hazardous spark, adding a resistor in the circuit was recommended. How would such a resistor be sized, and would it be added on the positive wire between battery (or fuse if used) and inverter?

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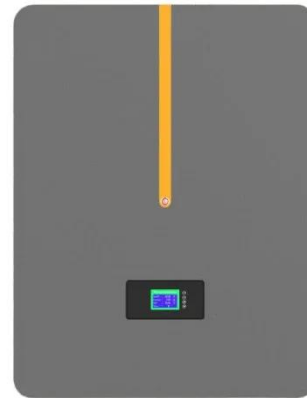


### Calculating the correct size of braking resistors (DBR's)

Oct 10, 2023 · A drive motor can also act as a generator. If the drive system is built so as to allow reverse power to flow then this power can be fed into a resistor, thus taking energy out of the ...

### LED Resistor and Choosing the Correct Resistor for LED Circuits

Using Series Resistors With LEDs A light emitting diode will illuminate once current starts to flow through it so a series LED resistor is required for current limitation. This series resistor creates ...



### Inverter Capacitor Pre-charging , DIY Solar Power Forum

Mar 30, 2021 · I've watched Will Prowse and other's on pre-charging the capacitors on their inverters before connecting them to the battery. Generally, they use a high power resistor ...

## **I see Will uses a [Resistor] when connecting an inverter to a ...**

Apr 10, 2021 · FYI - it's capacitor, not capaciator. But Will is using a resistor, not a capacitor. Search this forum for "precharge resistor" or "pre-charge resistor". There are several good ...



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