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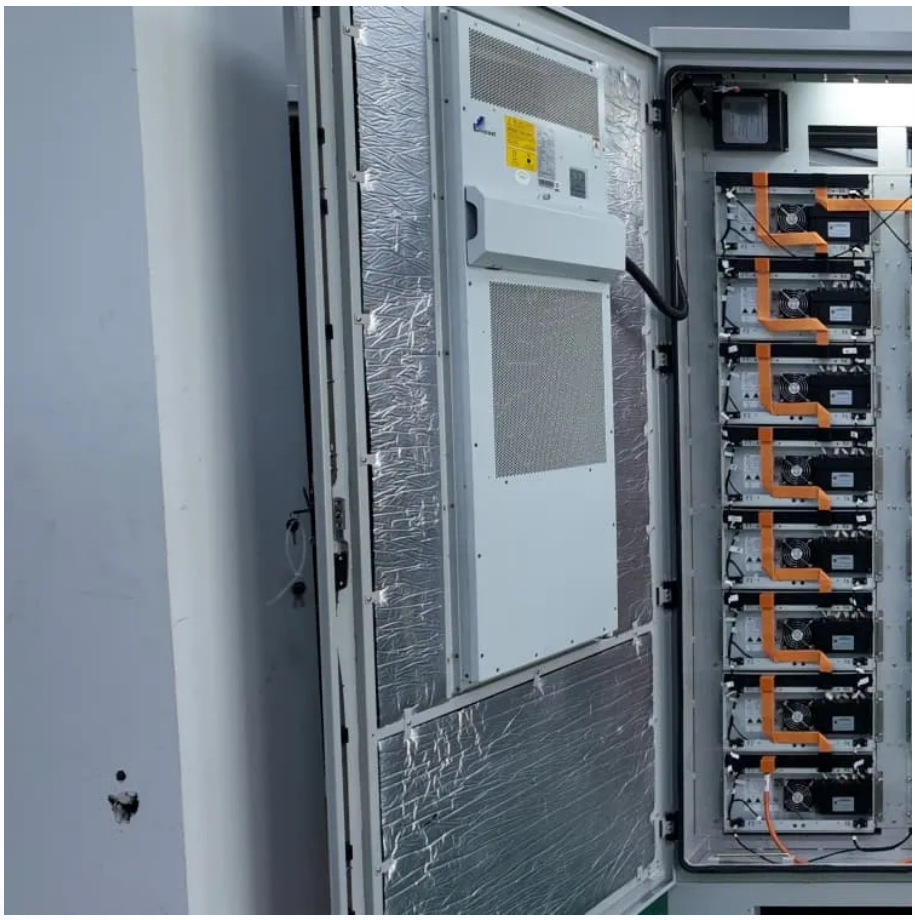
Solar inverter DC floating ground



Overview

Which grounding rods are used in a solar inverter?

As shown in the fig, separate grounding rods are used for individual systems e.g. AC side and DC side. The equipment grounding conductor (EGC) from the main panel and PV arrays are connected to the Ground terminal and Ground bus in the inverter.

Do floating DC systems need a grounding system?

Floating DC systems do not require a grounding system because there is no return path for fault currents to the earth. However, in a separate DC grounding system, the ground electrodes should be bonded together to reduce ground resistance.

How to ground a PV inverter?

This means that it is possible to connect the equipment grounding conductor (EGC) of the PV circuit to the grounding point of the inverter. The inverter’s ground point is then connected to the ground electrode in the premises’ main grounding system.

Can a grounded inverter be isolated from a grounding circuit?

Modern grounded inverters and PV arrays are not isolated from the grounded output circuit of the inverter. In this scenario, the equipment grounding conductor (EGC) of the PV circuit can be connected to the grounding terminal of the inverter, which is eventually connected to the AC grounding system and electrode within the premises.

Solar inverter DC floating ground

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