

## Where is the grounding point for the Level 3 distribution box



### Overview

How to handle the grounding of a three-level distribution box Each DISTRIBUTION BOX and controller must be grounded. On the US market, a 5.26 mm<sup>2</sup> (10 AWG).

### Key Takeaways

The grounding point for a Level 3 distribution box is the threaded stud at the bottom of the housing, connected via the mounting plate to the factory central grounding point. Grounding Location and Connection

For proper grounding, attach a ground wire from one of the threaded studs at the bottom of the distribution box housing to the mounting plate. From the mounting plate, a second grounding wire should connect to the factory central grounding point to ensure the entire system is properly earthed and the ground resistance remains below 0.1 Ohm . Inside the distribution box, the PE (Protective Earth) bar or grounding plate serves as the internal connection point for all electrical components that require grounding. Electrical components within the box should be connected to this PE bar using copper core wires to maintain safe operation .

#### Wire Specifications

- In the US market, use a 10 AWG (5.26 mm<sup>2</sup>) ground wire.
- In other markets, a 6 mm<sup>2</sup> ground wire is recommended .



- For connections between the mounting plate and spindle plate, a 16 mm<sup>2</sup> wire is typically used, or 6 AWG (13.29 mm<sup>2</sup>) in the US to ensure proper grounding regardless of cable length or number of spindles .

#### Safety and Maintenance

- Ensure all connections are tight and secure, with no looseness.
- Use yellow-green insulated copper core wires for clear identification and safety .
- Regularly inspect the grounding connections to maintain system safety and compliance with standards . By following these steps, the Level 3 distribution box will be safely grounded, protecting both equipment and personnel from electrical faults.

## Article Content

### How to Install a Cable Distribution Box Safely and Correctly?

Misconception: If the cable distribution box is not grounded or has poor grounding, it is easy to cause electric shock

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

