Amphenol Energy Technologies

Power Whips

For Data Center Power Distribution

Safe, Rugged and Reliable Solution



Power whips are pre-assembled electrical cables designed to connect Power Distribution Units (PDUs) or Remote Power Panels (RPPs) to individual server racks or equipment. They provide consistent and uninterrupted power delivery to critical data center components, minimizing downtime risks.

Power whips efficiently route electricity from PDUs to server racks, reducing cable clutter and contributing to improved airflow and cooling efficiency. Proper cable management also prevents overcrowding in underfloor or overhead pathways.



Flexibility in Amphenol solution

- Customizable Lengths: Available in a variety of lengths and configurations to suit specific data center layouts.
- Support for Multiple Voltages: Designed to handle diverse voltage requirements, including 120V, 208V, and 240V, catering to a wide range of equipment needs.
- Plug-and-Play Installation: Pre-terminated designs simplify installation and make reconfigurations faster, enhancing scalability.



Applications in Data Centers

- Underfloor Distribution: In raised-floor environments, power whips route electricity beneath the floor to connect PDUs with equipment racks.
- Overhead Distribution: In overhead configurations, power whips are routed through cable trays or conduits above the racks.



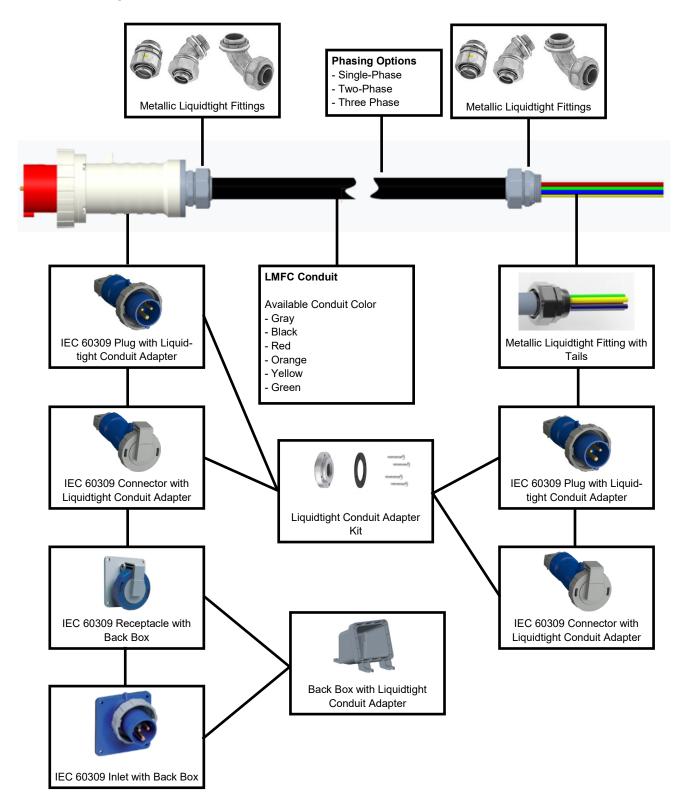




Full Customization at Ease

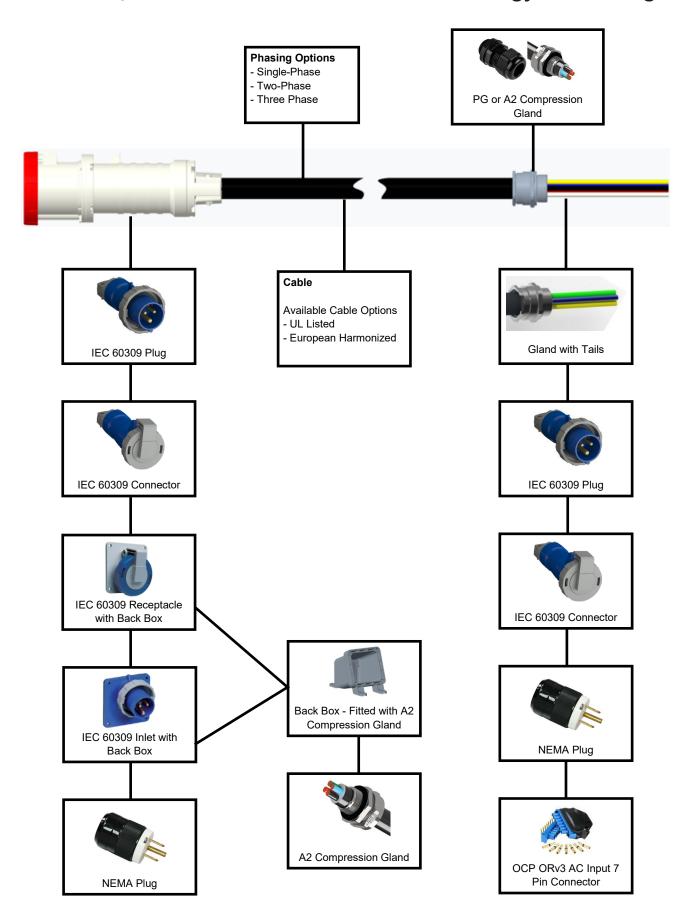
Our Power Whip Configurator which is available on our website makes it faster, simpler, and easier to customize the Power Whip to meet your requirement. The following shows a snip shot of the available customizable options.

Power Whips with LFMC Conduit



Ampheno Energy Technologies

Power Whips with Cable





In-House Testing & Quality Assurance

All Power Whips undergo comprehensive testing to ensure compliance with quality standards. Each unit is subjected to 100% electrical testing and visual inspection before shipment. The following tests are performed:

Dielectric Strength Test

- Purpose: Assesses the insulation capability of the Device Under Test (DUT) under high-stress conditions.
- Procedure: A high voltage is applied to the DUT, exceeding normal operating conditions. The test voltage is set at 1000V plus twice the normal operating voltage.

Continuity Test

- Purpose: Verifies proper wiring continuity and ensures correct connections.
- Procedure: Confirms that line and neutral conductors are not interchanged, ensuring safe and reliable operation.

Insulation Resistance Test

- Purpose: Measures the resistance between two points separated by electrical insulation.
- Procedure: Evaluates the dielectric's effectiveness in preventing current leakage, ensuring optimal insulation performance.