



Grounding Transformer Technical Specifications

An electrical grounding transformer is a type of power transformer used to provide a ground reference for electrical equipment and systems. It is used to ensure that electrical equipment is properly grounded, which helps to prevent electrical shock, reduce electromagnetic interference, and improve the overall performance and safety of the electrical system.

Grounding transformers are typically connected between the electrical system's neutral and ground, and they work by providing a low-impedance path to ground for electrical current. This helps to ensure that any stray currents in the electrical system are safely carried to ground, reducing the risk of electrical shock and other safety hazards.

MPS' grounding transformers are protected against tampering and the weather, so they can be safely placed where people are present. All enclosures are made from heavy gauge sheet steel and powder painted with a baked-on coating to make them tamper-resistant.

MPS manufactures grounding transformers in various sizes and capacities that can be used in a variety of applications, including industrial, commercial, and residential electrical systems. They are typically designed to meet safety standards and regulations, such as UL, CE, and CSA, and they are tested and certified for use in specific applications.



Technical Specifications

Winding Configuration	Zig-Zag or Wye-Delta	Standards	IEC 60076-6 IEC 60076-1
High Voltage	Up to 36 kV (can be customized)	Enclosure Options	Transformer cabinets for any IP degrees with: CT VT Isolation switch
Frequency	60 Hz	Enclosure Type	Type 3R, 3R-Enhanced or Non-Ventilated
Number of Phases	3	Core Material	Cold- Rolled, Grain Oriented, Silicon Steel
System Neutral Earthing	Solidly Earthed / Resistance Earthed	Standard	IEEE C57.32
Current	Up to 3000 A	Winding Material	Copper, Aluminum
Percentage Impedance	≤5%	Altitude	Up to 1000 m
Max. duration of short time current	1 second		
Cooling method	ONAN		
Installation	Indoor / Outdoor		
Ambient Temperature	-30°C to 55°C*		

Tests

Every transformer undergoes all standard commercial tests in accordance with ANSI C57.12.90.

Type test	Routine tests	Special tests
<ul style="list-style-type: none"> • Dielectric tests • Temperature rise tests 	<ul style="list-style-type: none"> • Measurement of winding resistance • Measurement of zero sequence impedance • Measurement of no load and current • Dielectric tests • Sampling and test of insulating oil • Measurement of voltage ratio and check of voltage vector relationship • Measurement of impedance voltage and load loss • Tap changer tests 	<ul style="list-style-type: none"> • Short time current test • Measurement of sound level

Ancillary Equipment

<ul style="list-style-type: none"> • Oil Temperature Indicator (OTI) • Winding Temperature Indicator (WTI) • Magnetic Oil Level Gauge (MOG) • External drain and sample valve • Pressure Relief Device (PRD) • Sampling Valve 	<ul style="list-style-type: none"> • Radiator Valves • Adjustment Taps • High-Voltage warning signs • ANSI tank ground pads • Gauges with Contacts
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Meta-Power Solutions' grounding transformers are powerful, dependable, and designed with the environment in mind. With the ability to function indoor and outdoor, these transformers offer enhanced reliability and protection against critical equipment failure. The lower operating costs and heat emissions of this transformer make it an ideal choice for a wide range of applications. For more information or advice on your transformer project, please get in touch with us.

