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IEEE Recommended Practice for Grounding of DC Equipment Enclosures in Traction Power Distribution Facilities

IEEE Vehicular Technology Society

Sponsored by the
Rail Transportation Standards Committee

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IEEE Std 1653.6™-2018
(Revision of IEEE Std 1653.6-2013)

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Abstract: The grounding of dc equipment enclosures installed in dc traction power distribution facilities as well as related insulation treatments required for solid and resistance grounding methods are covered in this standard. Guidelines are also given for material, installation, and testing of insulation used in dc traction facilities and further recommended criteria for acceptability are provided. System grounding, though related, is not covered in this document.

Keywords: 64, 64GS, 64HS, 64M, 64MR, bonding, building enclosure, dc, dc circuit breakers, device 64, diode ground, direct current, distribution facilities, electric trolley bus, enclosure ground, equipment enclosure, equipment ground, ETB, floor insulation, ground, ground protection, ground relay, grounded structure, grounding, GS, heavy rail, high resistance, high-resistance grounding, hot structure, HS, IEEE 1653.6™, insulation dielectric test, insulation testing, light rail, low resistance, low-resistance grounding, low-voltage equipment, negative return, rail transit, rectifier, single-point grounding, switchgear, system grounding, traction power, transfer trip, wall insulation

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