

Introduction

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<http://www.controleng.com/search/search-single-display/10-tips-for-better-grounding/61c6363ad24fde3568b64f91c9171e96.html>

Tips

- 1) Control system ac power should be supplied from a distribution system that's separate from other equipment and uses.
- 2) The power source should be designed to accommodate initial inrush currents that can last up to 10 cycles.
- 3) Control system ac power should be supplied through an isolation transformer or uninterruptible power supply (UPS).
- 4) Control system ac ground should be established at or near the isolation transformer or UPS.
- 5) Control system workstation ac power should be routed to a dedicated receptacle.
- 6) When connecting field device power to several I/O interface carriers, barrier strips should be used.
- 7) When ac and dc input are connected to the same terminal block, the block must be marked with appropriate warning labels.
- 8) The ac ground wire should be the same or one size larger than the current-carrying conductors.
- 9) Leaving a little extra exposed wire or using a terminal lug are ways to provide test points.
- 10) Electrical resistance of an earth ground system must be tested to ensure the ground meets control system manufacturer requirement

Electrical Grounding

