

## Engineering Data

### Isolated Power Panel: Isolation Panel Start-up Procedure

This procedure should only be used by qualified electricians and maintenance staff. Refer to National Electric Code (NEC) Article 517, and NFPA-99 as well as appropriate local codes.

Disconnect Line Isolation Monitor, as described below in Step 3, prior to any dielectric testing, including but not limited to Megger, Hipot, or Polarization Index tests. Damage to LIM due to application of high voltage during testing is not covered by warranty.

1. Review all assembly prints, wiring diagrams, and panel schedules. Verify all electrical feeds are of proper voltage and adequately protected from overload.
2. Verify that all circuit breakers are in the OFF position.
3. Disconnect Line Isolation Monitor at the 15-pin harness connector on bottom side of LIM. *(Use caution not to damage wires, connector, or terminal pins. Use a wide flat blade screw driver to carefully pry connector straight down. Use even pressure so that connector does not rotate and bend terminal pins. Do not pull on wires.)*
4. Turn Secondary Main breaker (if present) ON. Use a Digital Multi-Meter to verify that there is no continuity between either side of the secondary transformer winding and the reference ground bus. Turn Secondary Main breaker (if present) OFF. If continuity exists between either leg, panel has been improperly wired. Contact manufacturer and do not proceed with start-up.
5. Energize feeder source for Isolation Panel. Verify Proper voltage at Primary Main input terminals.
6. Energize Primary Main circuit breaker. Verify proper voltage at Secondary Main input terminals.
7. Energize Secondary Main circuit breaker. Verify proper voltage at bus bars. *(Note: Line-to-Ground voltages should be approximately 40-70% of nominal Line-to-Line voltage)*
8. De-Energize Primary and Secondary Mains. Re-connect LIM.
9. Energize Primary and Secondary Mains.
10. Verify that LIM performs start-up and self-calibration routine. After approximately 45 seconds, LIM should display Total Hazard Current of less than 0.5 mA. Press and release "Push to Test" button on front of LIM to manually calibrate unit.
11. Verify that all Remote Annunciators are operating properly.
12. Energize secondary branch breakers as required.
13. Schedule Field Checkout testing with manufacturer.

#### **DANGER** **HAZARD OF ELECTRIC SHOCK**

Only qualified personnel should install, operate, service, or maintain this equipment.



Dangerous voltages are present during panel start-up.

Utilize all necessary safety procedures and guidelines. Failure to follow these procedures can result in serious injury or death.

Prior to energizing panel, verify that no loose connections, stray tools, or foreign material is present inside panel.