

Lesson: LTIII Installation

This lesson presents an introduction to the LTIII Installation Manual (913-0600), which covers 30 –260 amps transfer switch frame sizes.

Objectives

After completing this lesson, you should be able to:

- Locate the sections in the Installation Manual as needed.
- Recognize the hazards when working on or near an LTIII transfer switch.
- Setup and calibrate an LTIII transfer switch.
- Verify proper operation of the transfer switch before turning over as operational to customer.

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Transfer Switch Safety

High Voltage in the cabinet

- Keep cabinet closed and locked
- Know the “hot spots”

Turn off the power.

- Disable and “tag it out”
- Remove AC line power.

Protect Yourself.

- Be aware of your hands and feet.
- Remove jewelry.
- Never work when you are fatigued.
- Don’t work under the influence of alcohol or drugs.
- Don’t hurry.
- No “short cuts”.
- Never “assume”.

Activity: Automatic Transfer Switch Safety

1. List at least three components of the LTIII transfer switch that present serious shock hazards.
 - a.
 - b.
 - c.

NOTE: Do not assume that all hazardous components are listed above. Always be certain that no electrical power is present before coming into contact with hazardous parts of this equipment.

2. What mechanical/physical hazards are present?
 - a.
 - b.
3. List several load-related hazards.
 - a.
 - b.

Activity: Introduction to the LTIII Automatic Transfer Switch Installation Manual

Using the Installation Manual (913–0600) answer the following questions:

General

4. What types of protective devices may be used as overcurrent protection for the transfer switch?

Mounting

5. Approximate NEMA 1 cabinet dimensions of a 30, 60, 100, or 150 amp transfer switch are

H = _____

D = _____

W = _____

6. What size bolts are used for wall mounting?

7. There must be a _____ in the commercial power line ahead of the transfer switch.

Wiring

8. The Terminal Lug Capacity of a 200 Amp LTIII automatic transfer switch is

_____ number of conductors per phase and

_____ size range of conductors.

9. The Normal and Emergency power connections are labeled ____, ____, and ____.

10. The Load power connections are labeled ____, ____, and ____.

11. The phase rotation check and correction procedure can be found on page ____.

12. The minimum torque of a 9/16 IN set screw socket size is

_____.

13. Three-wire starting for Onan air-cooled genset uses terminal block _____.

Setup and Calibration

14. Undervoltage sensor calibration procedure can be found on page _____.
15. Undervoltage dropout and pickup adjustments apply to Control Package ____.
16. Control Package A requires that the _____ switch be in the ____ position before calibrating the undervoltage sensors.
17. Time delays are _____ for Control Package A and _____ for Control Package B.
18. Control Package B start time delay range of adjustment is _____.
19. Program Transition is available on _____ only.
20. The exerciser clock is available with _____ only.

Checkout

21. The Test Transfer with Load check can be performed on the LTIII equipped with Control Package A by _____.
22. The Test Transfer with Load check can be performed on the LTIII equipped with Control Package B by _____ or _____.