Division 263353
Static Lighting Inverters
DESIGN GUIDE

1 General

1.1 Introduction

A. This section applies to the following:

1. Static Lighting Inverters

B. Inverters shall be located such that access can be achieved without the use of a ladder. Avoid locating above ceilings. Locate inverters in electrical closets where possible.

2 Materials

2.1 General

A. Manufacturers: Dual Lite, Myers, Iota or approved equal.

2.2 Static Lighting Inverter

A. System Configuration: Non-redundant off-line type.

B. Components:

1. Battery.

2. Rectifier/charger to maintain battery charge and to provide input to inverter when utility power is available.

3. External make-before-breaker maintenance bypass switch.

4. Monitors, sensors, and control circuits.

C. Battery Capacity: Capable of operating at full load for 90 minutes unless otherwise indicated on the drawings.

D. Inverter Type: Pulse Width Modulation.

E. Rectifier/Charger Capacity: Three-step float.

F. Cooling: Natural convection.

G. Automatic Testing: Self-test/self-diagnostic microprocessor controlled circuitry.

H. Input: AC circuit breaker.

I. The system shall include the following options:

1. Output Breakers: Provide 20 amp, single pole output circuit breakers with alarms.

2. Maintenance Bypass Switch: Maintenance switch shall be break before make.

3. Auxiliary Terminal Strip: Provide an auxiliary terminal strip to allow remote monitoring of inverter status and alarm indications.

3 Execution

3.1 Installation

A. Provide housekeeping pads under the enclosure.

B. Demonstrate system operation by simulating an outage.

4 Appendix

4.1 Reserved for future.