

## SECTION 26 33 23.11

### CENTRAL BATTERY SYSTEMS FOR EMERGENCY LIGHTING

#### PART 1 GENERAL

##### 1.01 WARRANTY

- A. Require a two (2) year unconditional warranty on batteries.
- B. Require a two (2) year warranty on the equipment.

#### PART 2 PRODUCTS

##### 2.01 ACCEPTABLE MANUFACTURERS

- A. Emergency Lighting Battery Power Supply:
  - 1. Philips Bodine
  - 2. Philips Chloride
  - 3. Controlled Power Company (CPC)
  - 4. Digital Signal Manufacturing, Inc (DSPM Inc.)
  - 5. Meyers Power Products
  - 6. Dual-Lite

##### 2.02 EQUIPMENT

- A. Emergency Power Supply (Battery or UPS):
  - 1. Input Voltage:
    - a) Single Phase: 120V or 277V, 1Ø, 60 Hz.
    - b) Three Phase: 208V or 480V, 3Ø, 60Hz.
  - 2. Output Power:
    - a) As required at 0.8 power factor lagging minimum.
    - b) Nominal Battery Voltage 384 VDC; Float Operation 2.27 VDC per cell.
    - c) Ripple Voltage: less than 1% RMS voltage, with inverter fully loaded and battery disconnected.
    - d) Battery AC Current Ripple: less than 1% nominal.
    - e) Electronic current limiting input breaker and fuses.
    - f) Output voltage: 120V or 277V, 1Ø, 60 Hz or 208V or 480V, 3Ø, 60Hz, ±5 percent.
    - g) Total harmonic distortion: less than 3 percent at full resistive load.
  - 3. Batteries:
    - a) Battery operating time: 1.5 hours at full load and output voltage.
    - b) Maximum recharge time: twelve hours following 1.5-hour discharge.
    - c) Utilize Valve Regulated Lead-Acid (VRLA) batteries with a nominal voltage of 384VDC.
  - 4. Efficiency: 86 percent minimum at full load.
  - 5. Transfer time: 50 milliseconds (continuous output power if serving HID luminaires).
  - 6. Accessories:
    - a) Remote Trouble Monitor: common audible signal for system disarray.

**PART 3 EXECUTION**

**3.01 INSTALLATION**

- A. Locate unit in an area that is not subject to unusual temperature extremes.
- B. Require factory-authorized technician to test and start up system.

**3.02 DEMONSTRATION**

- A. Provide training for DPS Maintenance Personnel on the proper use and maintenance of the all the equipment.

**END OF SECTION 26 33 23.11**