

**Description:**

The purpose of the section is to highlight the current applicable UMCP Design Standards for the design, selection and installation of lighting control systems.

**Related Sections:**

- TBD

**Effective Date:**

- July 10, 2009

**Applicable Standards:**

- NEMA ICS 2
- ANSI/NEMA ICS 4
- NEMA ICS 6

**General Requirements:****1. Required Submittals:**

- Shop Drawings: Indicate control device enclosure wiring diagrams and panel layout drawings
- Product Data: Provide data on each control device specified
- Operating and Maintenance Instructions: Include instructions on adjusting, repairing, cleaning, and lubricating each control device specified

**2. Product Requirements:**

- Control Switches and Stations
  - Description: Heavy duty, oil-tight control switches and stations manufactured to NEMA ICS 2
  - Contact Ratings: Class A150
- Photocells Switch
  - Description: Photocell switch manufactured to NEMA ICS 2
  - Ratings: Contact Ratings: Class A150
  - Enclosure: Gasketed, cast ferrous alloy box with conduit hub
- Relays
  - Description: Relays manufactured to NEMA ICS 2
    - Magnetic Control Relay: Class A300
    - Time-Delay Relay: Class A600
  - Ratings:
    - Contact Ratings: Class A150
    - Coil Voltage: 120 volts, 60 Hz., Single Phase
  - Enclosure: NEMA Type 1 for interior and NEMA type 4 for exterior use
- Time Switch
  - Description: Clock timer manufactured to NEMA ICS 2, with astronomical dial
  - Ratings:
    - Contact Ratings: Class A150; SPST
    - Coil Voltage: 120 volts, 60 Hz., Single Phase
    - Dial Time: 24 hours, 7 days
    - Enclosure: NEMA Type 1 for indoor applications, and NEMA Type 4 for outdoor applications

- Control Device Enclosures
  - Description: Shop, fabricate and wire control device enclosures to NEMA ICS 1, for groupings of more than one device
  - Use hinged cover enclosures under provisions of 26.05.00
  - Terminal Blocks: ANSI/NEMA ICS 4
  - Fabrication: Shop assemble to NEMA ICS 6 - Use plastic wiring through to route internal wiring
  
- Installation Requirements
  - Install control devices in accordance with manufacturer's instructions
  - Install individual components in enclosures
  - Connect control devices to systems controlled, to achieve proper system operation
  
- Adjustments
  - Adjust time delay relays and clock timers to achieve specified system operation