

**Specification Number:** 26 24 19.05

**Product Name:** LIGHTING AND APPLIANCE BRANCH CIRCUIT LOAD CENTERS

## **SECTION 26 24 19.05**

### **LIGHTING AND APPLIANCE BRANCH CIRCUIT LOAD CENTERS**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

A. Load centers to be furnished and installed at locations as shown on the drawings. Load centers shall be of the type approved, indicated, and specified herein.

##### **1.02 SERVICE ENTRANCE LABEL**

A. Load centers identified for use as service equipment are to be labeled for this application.

##### **1.03 REFERENCES**

A. NEMA AB 1 - Molded Case Circuit Breakers and Molded Case Switches.

B. NEMA PB 1 - Panelboards

C. NEMA PB 1.1 - General Instruction For Safe Installation, Operation And Maintenance Of Panelboards Rated 600 Volts Or Less

D. Federal Specification W-C-375B/Gen - Circuit Breakers, Molded Case, Branch Circuit And Service.

E. Federal Specifications W-C-375B - Molded Case Circuit Breakers

F. Federal Specifications W-P115C - Type 1 Class 2 Load Center.

#### **PART 2 PRODUCTS**

##### **2.01 MANUFACTURERS**

A. Load centers shall be manufactured by Square D Company [or approved equal].

##### **2.02 ENCLOSURES**

A. NEMA PB1: [Type 1] [Type 3R] as shown on the drawings.

B. Enclosure shall be fabricated of cold rolled steel for NEMA 1 and galvanized steel or equivalent rust-resistant steel for NEMA 3R.

C. Indoor Type 1 enclosures shall have a [flush] [surface] front [and flush cylinder tumble-type lock, all keyed alike], with finish to be gray baked enamel.

D. Outdoor Type 3R enclosures shall have a hasp to secure the cover. Finish to be gray baked enamel.

E. A directory label shall be provided with circuits identified as indicated on the schedule

##### **2.03 INTERIORS**

A. NEMA PB1: [Type 1] [Type 3R] as shown on the drawings.

B. Bus bar connections to the branch circuit breakers shall be the distributed phase type and shall accept plug-on circuit breakers. 300-400 A load centers shall accept a 150 A maximum bolt-on breaker in addition to plug-on types.

C. Short Circuit Current Ratings

[22,000] [ ] ampere rms symmetrical short circuit ratings shall be provided per the schedule. This rating shall be established by manufacturer testing of a representative load center with branch circuit breakers installed.

##### **2.04 SHORT CIRCUIT CURRENT RATINGS**

A. [NEMA AB 1] [Federal Specification W-C-375]

B. Circuit breakers shall be Square D type QO (plug-on) thermal magnetic trip, with an integral crossbar to ensure simultaneous opening of all poles in multi-pole circuit breakers.

C. Circuit breakers shall have an overcenter, tripfree, toggle-type operating mechanism with quick-make, quick-break action and positive handle indication.

D. Handles shall have ON, OFF, and "Tripped" positions. In addition, trip indication shall include a VISI-TRIP indicator appearing in the window of the circuit breaker case (through 125 amperes).

E. Circuit breakers shall be UL Listed in accordance with UL standard 489 with current ratings as noted on the plans. Interrupting ratings shall be selected to provide the required load center short circuit current rating.

F. Single-pole, 15 and 20 ampere circuit breakers intended to switch fluorescent lighting loads on a regular basis shall have the SWD marking.

G. Two- and three-pole circuit breakers 15-60 amperes intended for use with air conditioning, heating, and refrigeration equipment having motor group combinations and marked as such shall have the HACR marking.

H. Provide UL Class A ground fault interrupter circuit breakers where scheduled on drawings.

I. The following special application circuit breakers or circuit breaker accessories shall be provided where shown on the [schedule] [drawings]:

1. Circuit breakers with remote control switching capability
2. Circuit breakers for use on high intensity discharge lighting systems
3. Key operated circuit breakers
4. Switch neutral circuit breakers
5. Shunt trip, auxiliary switch, or alarm switch accessories

### **PART 3 EXECUTION**

**NOT USED**