### SECTION 16476 ENCLOSED CIRCUIT BREAKERS

### PART 1 GENERAL

# 1.1 SECTION INCLUDES

A. Enclosed molded case circuit breakers.

### **1.2 REFERENCES**

A. FS W-C-375 - Circuit Breakers, Molded Case, Branch Circuit and Service.

B. NEMA AB 1 - Molded Case Circuit Breakers.

# **1.3 SUBMITTALS**

A. Submit product data under provisions of Section 01300.

B. Include circuit breaker and current limiter ratings, trip current and let-through current curves, outline dimensions, and terminal lug sizes.

# PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Square D.
- B. General Electric.
- C. Cutler Hammer.
- D. Siemens/ITE.

# 2.2 MOLDED CASE CIRCUIT BREAKER

A. Circuit Breaker: NEMA AB 1.

# 2.3 RATINGS:

A. Ratings: NEMA AB 1; as scheduled.

# 2.4 TERMINAL LUGS

A. Size: NEMA AB 1. As scheduled and suitable for copper.

#### 2.5 CURRENT LIMITERS

- A. Current Limiter: Designed for application with molded case circuit breaker.
- B. Coordinate limiter size with trip rating of circuit breaker to prevent nuisance tripping and to achieve interrupting current rating specified for circuit breaker.
- C. Provide interlocks to trip circuit breaker and to prevent closing circuit breaker when limiter compartment cover is removed or when one or more limiter is not in place or has operated.

# 2.6 ENCLOSURE

A. Enclosure: NEMA AB 1; Type as required to meet conditions of installation unless indicated on the Drawings.

- B. Fabricate enclosure from steel.
- C. Finish using manufacturer's standard enamel color.

# 2.7 ACCESSORIES

- A. Provide accessories as scheduled, to NEMA AB 1.
- B. Shunt Trip Device: 120 volts, AC.

- C. Under voltage Trip Device: 120 volts, AC.
- D. Auxiliary Switch: 120 volts, AC.
- E. Alarm Switch: 120 volts, AC.
- F. Electrical Operator: 120 volts, AC.
- G. Handle Lock: Include provisions for padlocking.
- H. Provide mechanical trip device.

# PART 3 EXECUTION

# 3.1 EXAMINATION

- A. Verify that surfaces are ready to receive work.
- B. Verify field measurements are as shown on Drawings.
- C. Verify that required utilities are available, in proper location, and ready for use.
- D. Beginning of installation means installer accepts conditions.

### **3.2 INSTALLATION**

A. Install enclosed circuit breakers where shown on Drawings, in accordance with manufacturer's instructions.

# 3.3 ADJUSTING

- A. Adjust work under provisions of Section 01650.
- B. Adjust trip settings so that circuit breakers coordinate with other overcurrent protective devices in circuit.
- C. Adjust trip settings to provide adequate protection from overcurrent and fault currents.

# 3.4 FIELD QUALITY CONTROL

- A. Perform field inspection and testing under provisions of Section 01400.
- B. Inspect and test each circuit breaker to NEMA AB 1.
- C. Inspect visually and perform several mechanical ON-OFF operations on each circuit breaker.
- D. Verify circuit continuity on each pole in closed position.

# END OF SECTION