

## **PART 1 - GENERAL**

### **1.1 SHOP DRAWINGS AND PRODUCT DATA**

- .1 Submit shop drawings and product data in accordance with Section 01 33 00 - Submittal Procedures.

## **PART 2 - PRODUCTS**

### **2.1 BREAKERS GENERAL**

- .1 Bolt-on moulded case circuit breaker, quick- make, quick-break type, for manual and automatic operation with temperature compensation for 40°C ambient.
- .2 Common trip breakers: with single handle for multiple applications.
- .3 Magnetic instantaneous trip elements in circuit breakers to operate only when value of current reaches setting. Trip settings on breakers with adjustable trips to range from 5 to 10 x current rating.
- .4 Circuit breakers with interchangeable trips as indicated.
- .5 Circuit breakers to have interrupting rating (momentary RMS symmetrical) with minimum rating to match switchboard or panel board.

### **2.2 THERMAL MAGNETIC BREAKERS**

- .1 Moulded case circuit breaker to operate automatically by means of thermal and magnetic tripping devices to provide inverse time current tripping.
- .2 Provide ground fault interrupter type for circuits so marked.

### **2.3 MAGNETIC BREAKERS**

- .1 Moulded case circuit breaker to operate automatically by means of magnetic tripping devices to provide instantaneous tripping for short circuit protection.

## **2.4 SOLID STATE TRIP BREAKERS**

- .1 Moulded case circuit breaker to operate by means of a solid state trip with associated current monitors and self-powered shunt trip to provide inverse time current trip under overload conditions, and long time, short time and instantaneous tripping for phase and ground fault short circuit protection. Trip unit shall have independent adjustable long time and short time pick-up and delay, instantaneous pick-up, ground fault pick-up, ground fault delay.

## **2.5 MANUFACTURERS**

- .1 Acceptable manufacturers: Cutler-Hammer, Square D, Siemens.

# **PART 3 - EXECUTION**

## **3.1 INSTALLATION**

- .1 Install circuit breakers as indicated.

**END OF SECTION**