SECTION 16120

CABINETS AND ENCLOSURES

PART 1 - GENERAL

1.01 CONDITIONS

A. The Requirements of the General Conditions and Special Conditions apply to the Work of this Section as if fully repeated herein.

1.02 WORK INCLUDED

A. Hinged cover enclosures.

B. Cabinets.

C. Terminals blocks and accessories.

1.03 QUALITY ASSURANCE

A. Reference Standards:

1. ANSI - American National Standards Institute.

   a. ICS 1 Industrial Control and Systems.

   b. ICS 4 Terminal Blocks for Industrial Control Equipment and Systems.

   c. ICS 6 Enclosures for Industrial Control Equipment and Systems.

2. NEMA - National Electrical Manufacturer's Association.

   a. 250 Enclosures for Electrical Equipment (1000 Volts Maximum).

1.04 SUBMITTALS

A. Refer to Division 1 and Section 16000.

B. Submit product data under provisions of Section 16000.

C. Shop Drawings for Equipment Panels: Include wiring schematic diagram, wiring diagram, outline drawing and construction diagram as described in ANSI/NEMA ICS 1.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Hinged Cover Enclosures:

1. Construction: NEMA 250; Type 1, 3R, or 4, steel as shown.

2. Finish: Manufacturer's standard enamel finish.

3. Covers: Continuous hinge, held closed by flush latch operable by key.

4. Panel for Mounting Terminal Blocks or Electrical Components: 14 gauge steel, white enamel finish.

B. Cabinets:

1. Cabinet Boxes: Galvanized steel, sizes as shown. Provide where shown three-quarters inch (3/4") thick plywood backboard painted fire retardant matte white, for mounting terminal blocks.

2. Cabinet Fronts: Steel, flush or surface type where shown with concealed trim clamps, concealed hinge and flush lock keyed to match branch circuit panelboard; finish in gray baked enamel.

3. Provide matching full skirt to floor for surface mounted terminal cabinets.

C. Terminal Blocks and Accessories:

1. Terminal Blocks: ANSI ICS 4; UL listed.

2. Power Terminals: Unit construction type, closed-back type with tubular pressure screw connectors, rated 600 volts.

3. Signal and Control Terminals: Modular construction type, channel mounted; tubular pressure screw connectors, rated 300 volts.

D. Fabrication:

1. Shop assemble enclosures and cabinets housing terminal blocks or electrical components in accordance with ANSI ICS 6.

2. Provide conduit hubs or knockouts on enclosures as required.

3. Provide protective pocket inside front cover with schematic diagram, connection diagram, and layout drawing of control wiring and component within enclosure.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install cabinets and enclosures plumb; anchor securely to wall and structural supports at each corner, minimum.

B. Provide accessory feet for free-standing equipment enclosures.

C. Install trim plumb.

END OF SECTION