SECTION 16131
ELECTRICAL CABINETS AND ENCLOSURES

PART 1 - GENERAL

1.1 SUMMARY
A. Section includes hinged cover enclosures, cabinets, terminal blocks, and accessories.

1.2 REFERENCES
A. NECA (National Electrical Contractors Association) - Standard of Installation.
B. NEMA ICS 4 (National Electrical Manufacturers Association) - Terminal Blocks.
C. NEMA 250 (National Electrical Manufacturers Association) - Enclosures for Electrical Equipment (1000 Volts Maximum).

1.3 SUBMITTALS
A. Section 01330 - Submittal Procedures.
B. Product Data: Submit manufacturer's standard data for enclosures, cabinets, and terminal blocks.

1.4 QUALIFICATIONS
A. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum three years documented experience

1.5 EXTRA MATERIALS
A. Section 01770 - Execution Requirements: Spare parts and maintenance products.
B. All enclosures of same kind to be keyed alike.

1.6 DELIVERY, STORAGE AND HANDLING
A. Materials: Materials shall be new and shall be delivered to the job site in the original packaging.

PART 2 - PRODUCTS

2.1 HINGED COVER ENCLOSURES AND CABINETS
A. Construction: NEMA 250, Type 1, 3R or 4 steel or stainless steel enclosures.
B. Covers: Steel, flush or surface type depending on design and location. Continuous hinge, held closed by flush latch operable by screwdriver, or key if location requires key for security.

C. Provide interior metal panel for mounting terminal blocks and electrical components; finish with white enamel.

D. Enclosure Finish: Manufacturer's standard enamel or color as required by design.

E. Size: Per design and location

F. Provide metal barriers to form separate compartments wiring of different systems and voltages.

G. Provide accessory feet for free-standing equipment.

2.2 TERMINAL BLOCKS

A. Terminal Blocks: NEMA ICS 4.

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

C. Signal and Control Terminals: Modular construction type, suitable for channel mounting, with tubular pressure screw connectors, rated 300 volts.

D. Provide ground bus terminal block, with each connector bonded to enclosure.

2.3 PLASTIC RACEWAY

A. Product Description: Plastic channel with hinged or snap-on cover.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install in accordance with NECA "Standard of Installation."

B. All cut edges shall be de-burred. Add protection for wiring as needed.

C. Install enclosures and boxes plumb. Anchor securely to wall and structural supports at each corner as specified elsewhere in Electrical specifications.

D. Install cabinet fronts plumb.

E. Label as required

3.2 CLEANING

A. Clean electrical parts to remove conductive and harmful materials.
B. Remove dirt and debris from enclosure.
C. Clean finishes and touch up damage.

3.3 EXISTING WORK

A. Remove abandoned cabinets, wiring, piping and enclosures, including above accessible ceiling finishes. Patch surfaces and remove any reference labels in panel. Any cabinets or enclosures which are to be reinstalled or reused shall be cleaned and repaired.

B. Ensure access to existing cabinets and enclosures and other installations which remain active and which require access. Modify installation or provide access panel as appropriate.

C. Extend existing cabinets and enclosures using materials and methods compatible with existing electrical installations or as specified.

END OF SECTION