SECTION 16485

CONTACTORS

PART 1  GENERAL

1.01  SUMMARY

A. Section Includes:

1. General purpose contactors.
2. Lighting contactors.

B. Related Sections:

1. Section 16160 - Cabinets and Enclosures
2. Section 16195 - Identification
3. Section 16010 - Load Shedding Requirements

1.02  REFERENCES

A. Specify Underwriters Laboratories (UL) listed equipment, assemblies and materials.

B. Where appropriate, refer to current ANSI and NEMA Standards for material ratings.


1.03  SUBMITTALS

A. Require submittals under the provisions of Section 16010 - Basic Electrical Requirements and 01300 - Submittals.

PART 2  PRODUCTS

2.01  MANUFACTURERS

A. Contactors:

1. ASCO
2. Zenith
3. General Electric (300 series)
4. Square D

2.02  EQUIPMENT

A. General Purpose Contactors:

1. Electrically or mechanically held as required by control function. 120V, 60Hz operating coil. NEMA size as required by function. Contacts 600V rated with
number of poles and amperage rating as required. Enclosure suitable for environment, see Section 16160 - Cabinets and Enclosures. Solderless screw pressure wire terminals.

B. Lighting Contactors:

1. Mechanically held with 120V or 277V, 60 Hz operating coils. Contacts 600V rated with amperage rating and number of poles as required by function. Enclosure suitable for environment, see Section 16160 - Cabinets and Enclosures. Solderless screw pressure wire terminals.

PART 3 EXECUTION

3.01 INSTALLATION

A. Locate contactors in indoor environments for more reliable operation.

B. Require marking of terminals and wires landing on terminals per Section 16195 - Identification, for control and power wiring.

C. Locate electrically held contactors where the eventual vibration and noise they will produce will not be objectionable to building occupants.

D. Use lighting contactors to control large groups of lighting equipment only where individual control would not be practical such as auditoriums, field houses, parking lots, etc. Individual control of areas is still preferred for energy conservation where it is practical, such as office areas, classrooms, etc.

E. Use a relay schedule when a large number of circuits is controlled by several relays. Include the following information in the schedule.

1. Contactor identification
2. Operator type (electrical or mechanical)
3. Contact configuration and rating
4. Circuit numbers or panel controlled
5. Enclosure rating
6. Control circuit
7. Voltage

END OF SECTION