

SECTION 16423

ENCLOSED LIGHTING CONTACTORS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes enclosed contactors for lighting and general purposes.

1.2 REFERENCES

- A. NECA (National Electrical Contractors Association) – Standard of Installation
- B. NEMA AB 1 – (National Electrical Manufacturers Association) – Molded Case Circuit Breakers
- C. NEMA FU 1 – Low Voltage Cartridge Fuses
- D. NEMA ICS 2 – Starters, Contactors, and Overload Relays Rated Not More Than 2000 Volts AC or 750 Volts DC
- E. NEMA ICS 5 – Industrial Control and Systems: Control Circuit and Pilot Devices.
- F. NEMA ICS 6 – Industrial Control and Systems: Enclosures
- G. NEMA KS 1 – Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
- H. NETA ATS (International Electrical Testing Association) – Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.

1.3 SUBMITTALS:

- A. Product Data: Submit dimensions, size, voltage ratings and current ratings.

1.4 CLOSEOUT SUBMITTALS

- A. Project Record Documents: Record actual locations and ratings of enclosed contactors.
- B. Operation and Maintenance Data: Submit instructions for replacing and maintaining coil and contacts.
- C. Section 01700 – Closeout and Turnover Procedures

1.5 QUALIFICATIONS

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

PART 2 - PRODUCTS

2.1 GENERAL PURPOSE CONTACTORS

- A. Products Description: NEMA ICS 2, AC general purpose magnetic contactor.
- B. Coil operating voltage: 120 volts, 60 Hertz
- C. Poles: As required to match circuit configuration and control function
- D. Product Features:
 - 1. Cover Mounted Pilot Devices: NEMA ICS 5, heavy-duty oil-tight type
 - 2. Selector Switch: ON/OFF/AUTOMATIC
 - 3. Indicating Light: Amber lens, led lamp
 - 4. Auxiliary Contacts: Two field convertible in addition to seal-in contact
 - 5. Control Power Transformers: 120 volt secondary, 150 VA minimum, in each enclosed contactor. Provide fixed primary and secondary, and bond unfused leg of secondary to enclosure.
- E. Combination Contactors: Combine contactors with thermal magnetic circuit breaker conforming to NEMA AB 1, with integral thermal and instantaneous magnetic trip in each pole.
- F. Enclosure: NEMA ICS 6, as required to meet conditions. Fabricate enclosure from steel finished with manufacturer's standard gray enamel.
 - 1. Interior Dry Locations: Type 1.
 - 2. Exterior Locations: Type 3R.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Install enclosed contactors where indicated, in accordance with NECA “Standard of Installation”
- B. Install enclosed contactors plumb. Provide supports in accordance with Section 16050.
- C. Height: 5 feet to operating handle
- D. Provide engraved plastic nameplates; refer to Section 16050 for product requirements and location.

3.2 FIELD QUALITY CONTROL

- A. Inspect and test in accordance with NETA ATS, except Section 4.
- B. Perform inspections and tests listed in NETA ATS, Section 7.16.1.

3.3 EXISTING WORK

- A. Disconnect abandoned enclosed contactors and remove abandoned enclosed contactors.
- B. Ensure access to existing enclosed contactors and other installations which remain active and which require access. Modify installation provide access panel as appropriate.
- C. Clean and repair existing enclosed contactors, which remain or are to be reinstalled.

END OF SECTION