

SECTION 26 27 40 - DISCONNECTS, STARTERS, CONTACTORS

PART 1 - GENERAL

1.1 RELATED WORK

- A. PROVIDE NEMA STANDARD EQUIPMENT, INCLUDING THOSE INCORPORATED AS AN INTEGRAL PART OF A FACTORY/SHOP PRE-FABRICATED PIECE OF EQUIPMENT. DO NOT USE IEC STANDARDS FOR EQUIPMENT.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE EQUIPMENT OF ONE OF THE FOLLOWING (FOR EACH TYPE AND RATING):
  1. ALLEN-BRADLEY CO.
  2. GENERAL ELECTRIC CO.
  3. SIEMANS/ITE
  4. SQUARE D CO.
  5. EATON

2.2 MATERIALS

A. DISCONNECT SWITCHES

1. PROVIDE DISCONNECT SWITCHES EQUAL TO SQUARE D TYPE HD, HEAVY DUTY, SAFETY TYPE, QUICK MAKE AND QUICK BREAK AND EXTERNALLY OPERATED.
2. PROVIDE FUSIBLE DISCONNECTS UNLESS NOTED OTHERWISE ON DRAWINGS OR DIRECTED OTHERWISE IN FIELD.
3. PROVIDE DISCONNECT SWITCHES BRACED FOR 200,000 A.I.C.
4. PROVIDE UNITS WITH FUSES OF CLASSES AND CURRENT RATINGS INDICATED, AND UL LISTED FOR USE AS SERVICE EQUIPMENT UNDER UL STANDARD 98 OR 869. SEE SECTION "FUSES" FOR FUSE SPECIFICATIONS. WHERE CURRENT LIMITING FUSES ARE INDICATED, PROVIDE SWITCHES WITH NON-INTERCHANGEABLE FEATURE SUITABLE ONLY FOR CURRENT LIMITING TYPE FUSES.
5. INSTALL DISCONNECT SWITCHES WITHIN SIGHT OF CONTROLLER POSITION UNLESS OTHERWISE INDICATED.

B. CONTACTORS

1. PROVIDE CONTACTORS EQUIPPED WITH EXTERNAL PILOT LIGHTS IN COVER, AND EXTERNAL HOA SELECTOR SWITCHES IN COVER.
2. WIRE CONTACTORS FOR LIGHTING APPLICATIONS SO THAT THE "AUTO" POSITION IS THE NORMAL ACTIVATED CONDITION (I.E. PHOTOCELL CONTROLLED, PHOTOCLOCK CONTROLLED, REMOTE SWITCH CONTROLLED, BAS CONTROLLED, ETC.); SO THAT THE "OFF" POSITION IS MANUAL OVERRIDE TO TURN LIGHTING OFF; AND SO THAT THE "HAND" POSITION IS MANUAL OVERRIDE TO TURN LIGHTING ON.
3. PROVIDE CONTACTORS WITH FIELD CONVERTIBLE N.O./N.C. CONTACTS AND DESCRIPTIVE NAMEPLATES.
4. PROVIDE CONTACTORS EQUAL TO SQUARE D CLASS 8903 (OR ALLEN-BRADLEY BUL. 500L-BA\*94 SERIES) FOR TUNGSTEN LIGHTING LOADS, BALLAST LIGHTING LOADS, AND SMALL RESISTANCE HEATING LOADS. PROVIDE CONTACTORS THAT ARE ELECTRICALLY OPERATED AND ELECTRICALLY HELD (EOEH). PROVIDE CONTACTORS IN FACTORY NEMA 1 ENCLOSURES, WITH 120V COILS (UNLESS INDICATED OTHERWISE ELSEWHERE OR OTHERWISE REQUIRED TO RENDER CONTROLS FULLY OPERABLE).
5. PROVIDE "DRY" CONTACTS RATED AT 30A, MINIMUM 250V (600V IF REQUIRED BY APPLICATION). PROVIDE NUMBER OF POLES (MINIMUM OF THREE POLES) AND NUMBER OF CONTACTORS AS REQUIRED FOR EACH APPLICATION. FIELD VERIFY COIL VOLTAGE RATINGS.
6. PROVIDE MAGNETIC (MECHANICALLY LATCHED) CONTACTORS EQUAL TO SQUARE D CLASS 8502 (OR ALLEN-BRADLEY BUL. 500-BA\*930 SERIES) FOR HEATING LOADS, CAPACITOR LOADS, TRANSFORMER LOADS, MOTOR LOADS, AND SIMILAR LOADS. PROVIDE CONTACTORS WITH FACTORY NEMA 1 ENCLOSURES, WITH 120V COILS (UNLESS INDICATED OTHERWISE ELSEWHERE OR OTHERWISE REQUIRED TO RENDER CONTROLS FULLY OPERABLE). PROVIDE STARTERS WITH HOLDING CIRCUIT CONTACTS (PROVIDE RELATED INTERLOCK WIRING). PROVIDE MAGNETIC CONTACTORS THAT ARE NEMA SIZE 1 MINIMUM. PROVIDE "DRY" CONTACTS RATED AT 30A, MINIMUM 250V (600V IF REQUIRED BY APPLICATION). PROVIDE NUMBER OF POLES (MINIMUM OF THREE POLES) AND NUMBER OF CONTACTORS AS REQUIRED FOR EACH APPLICATION. FIELD VERIFY COIL VOLTAGE RATINGS.

PART 3 - EXECUTION

3.1 INSTALLATION

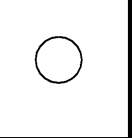
- A. PROVIDE UNITS WITH HORSEPOWER RATINGS SUITABLE TO THE LOADS. SIZE UNITS ACCORDING TO LOAD BEING SERVED OR AS NOTED ON DRAWINGS, WHICHEVER REQUIREMENT IS LARGER. INSTALL OVERLOADS AND FUSES AS NECESSARY TO FULFILL REQUIREMENTS OF EACH APPLICATION.
- B. FURNISH ADDITIONAL FUSES/OVERLOADS AMOUNTING TO 10 PERCENT OF FUSES PROVIDED, BUT NOT LESS THAN ONE SET OF 3 OF EACH KIND, FOR REQUIRED TYPES AND RATINGS.
- C. PROVIDE NEMA 3R ENCLOSURES FOR UNITS THAT ARE INSTALLED OUTDOORS, IN MOIST AREAS, AND IN OTHER ATMOSPHERES SUBJECT TO SIMILAR MOISTURE OR EXPOSURE.
- D. INSPECT OPERATING MECHANISMS FOR MALFUNCTIONING AND, WHERE NECESSARY, ADJUST UNITS FOR FREE MECHANICAL MOVEMENT. SUBSEQUENT TO COMPLETION OF INSTALLATION OF EQUIPMENT, ENERGIZE CIRCUITS AND DEMONSTRATE CAPABILITY AND COMPLIANCE WITH REQUIREMENTS. BEGIN BY DEMONSTRATING SWITCH OPERATION THROUGH SIX OPENING/CLOSING CYCLES WITH CIRCUIT UNLOADED. OPEN EACH SWITCH ENCLOSURE AND INSPECT INTERIORS, INSPECT MECHANICAL AND ELECTRICAL CONNECTIONS, INSPECT FUSE/OVERLOAD INSTALLATIONS, AND VERIFY ACCURACY OF TYPE AND RATING OF FUSES/OVERLOADS INSTALLED. CORRECT DEFICIENCIES THEN RETEST TO DEMONSTRATE COMPLIANCE. REMOVE AND REPLACE DEFECTIVE UNITS WITH NEW UNITS AND RETEST.

END OF SECTION

REVISIONS	BY

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New Building for  
**ARBY'S**  
 Store #8149  
 1058 Dunlawton Ave.  
 Port Orange, Florida

Date: 08. 24. 18  
 Scale: AS NOTED  
 Project Mgr: MPS  
 Drawn: MPS  
 Job: 18-082  
 Sheet

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