

Company Switch Specification Document

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes:

1. Company Switch Specifications

B. Related Sections:

1. Division 00 – Bidding Requirements
2. Division 01 – General Requirements
3. Section 26 00 00 – Electrical: Basic Requirements

1.2 QUALITY ASSURANCE

A. Referenced Standards:

1. Underwriters Laboratories, Inc.
 - a. UL 891 Listed – Transfer Switch Equipment

1.3 QUALIFICATIONS

A. General

1. Company Switch manufacturer shall provide a complete factory assembled Company Switch.

1.4 SUBMITTALS

A. Shop Drawings

1. Product technical data:
 - a. Product dimensions with front and side elevation views
 - b. Enclosure type
 - c. Connection details and cable entry locations
 - d. Assembly ratings including amperage, voltage, and number of poles

1.5 WARRANTY

A. Factory Warranty

1. Company Switches shall be covered by a manufacturer's warranty for a period of one (1) year from date of shipment from the manufacturer.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Power Assemblies, LLC.
- B. No Substitutions

2.2 COMPANY SWITCHES

A. GENERAL

1. A Company Switch is defined as CAM style female connectors and grounding terminals enclosed within an enclosure with main switching means, with or without overcurrent protection, for the distinct purpose of connecting a load.
2. In the event the Contractor is furnishing the Company Switch, the Contractor shall be responsible for the equipment until it has been installed, inspected, tested and accepted in accordance with the requirements of the specifications.

3. Company Switches shall be PowerTEK™ Series as manufactured by Power Assemblies LLC.

B. CONSTRUCTION

1. All equipment shall be new.
2. Company Switch enclosure shall be NEMA Type 3R/12
 - a. Unit shall be constructed of 0.075" carbon steel, seamless, continuously welded, and ground smooth. Enclosure will have a flange trough collar around all sides of door opening(s). Units will have a top and bottom door.
 - b. Enclosure will have mounting holes in back of enclosure for wall mounting and mounting hardware with sealing washers and hole plugs shall be included.
 - c. Unit will have stainless steel concealed hinges with removable and interchangeable door(s) capability, quarter-turn latching mechanisms on all forward facing doors, oil & water resistant gasketing and will include ground stud(s) on door(s) and body for grounding.
 - d. Unit shall also include an interior panel for CAM type connector feeder cables.
 - e. CAM type female connectors (outlets) shall be UL/CSA listed single-pole and rated at 400 amps at 600VAC. CAM type female connectors shall be color coded to visualize appropriate voltages. CAM type female connectors shall be provided for each phase in the appropriate configuration to support required amperage and provided for neutral if required.
 - f. The ground CAM type connectors shall be bonded to the enclosure and a sufficient ground provided for the connection of the facility grounding conductor.
 - g. Units shall include phase lights to indicate power available on the LOAD side of the switch or circuit breaker. Lights shall be protected by fuses.
 - h. Unit shall be provided with (Molded Case Switch/Standard 80% Rated Thermal Magnetic Circuit Breaker/100% Rated Thermal Magnetic Circuit Breaker)
 - i. All units with circuit breakers shall be rated at 65kAIC at 240VAC and will be equipped with through-the-door rotary operator to prevent opening cabinet while the overcurrent device is in the CLOSED position.
 - j. All bus shall be of copper material.
 - k. Keyholes shall be provided in the bottom of the enclosure for cable entry. In addition, the bottom door section shall be lockable with key for added level of protection.
3. Black powder coating inside and out.
4. Sub-panels may be powder coated black, white or bare aluminum.

C. ENCLOSURE

1. Mount: Wall Mount
2. Material: Carbon Steel
3. Finish: Black Power Coat
4. Additional Requirements
 - a. NEMA Type 3R/12
 - b. UL Listed/CSA Type 3R and 12

PART 3 – EXECUTION

3.1 INSTALLATION

A. Procedures for Installation

1. Prior to installation of Company Switch, Contractor shall examine the areas and conditions under which the Company Switch is to be installed and notify the Engineer in writing if unsatisfactory conditions exist.
2. Company Switch shall be installed as shown on the drawings. In addition, the installation shall:
 - a. Meet the requirements of local codes, the National Electrical Code and National Electrical Contractors Association's "Standard of Installation."
 - b. Only use copper wire conductors for all field wiring.
 - c. All terminations must be torqued according to the label provided.