SECTION 26 28 15 – POWER MODULE SWITCH (ELEVATOR)

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Provide Elevator Power Module Switch(es), fuses and accessories as required and specified on Contract Drawings to distribute electrical power to all Elevators.

1.2 CODES

A. All work shall be performed in accordance with the latest edition of applicable standards, codes and laws.

1. NFPA 70 B 1999 Section 620-51 A-C, 620-62, 620-91(c).
2. Canadian Electric Code Part I 38-034(3).
3. ANSI/ASME A17.1 B 1996 Section 102.2(4).
4. BOCA 3006.2.3.
5. NFPA 72 B 1999 Section 3-9.4.4.

1.3 STANDARDS

A. Except as modified by governing codes, all equipment shall be manufactured in accordance with the latest applicable standards:

1. Enclosed Switches, UL 98 and CSA - C22.2 No. 4.

1.4 SUBMITTALS

A. Submit Shop Drawings and product data under the provisions of the General Conditions.

B. Product Data: Provide Manufacturer’s catalog information showing dimensions, configurations, and methods of mounting and installation.

C. Submit listing of all types, sizes and quantity of fuses which will be installed including the location of each.

D. Spare fuses shall be supplied and turned over to the Owner. (Refer to Division 26 “Fuses.”)

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Bussmann - Power Module Switch – PS.

B. Littelfuse - Power-Switch - LPS Series.

2.2 GENERAL CONDITIONS & REQUIREMENTS

A. Provide Power Module Switch in a single NEMA enclosure with all necessary relay(s), control transformer and other options (as listed below), and as shown on Drawings. The Power Module Switch shall be constructed, listed, and certified to the standards as listed in above. The Power Module Switch shall have an ampere rating as shown on the Contract Drawings, and shall include a horsepower rated fusible switch with shunt trip capabilities. The ampere rating of the switch shall be based upon Elevator Manufacturer requirements and utilize Class J Fuses (provided separately). It shall include as an accessory, a 100VA control power transformer with primary and secondary fuses. The primary voltage rating shall match the connected voltage with a 120-volt secondary. It shall also contain an isolation relay (3PDT, 10amp, 120V). The coil of the isolation relay shall be coordinated with fire alarm system connection by the Electrical Contractor (120V AC or 24V DC). A normally open dry contact shall be provided by the Fire Alarm Safety System to energize the isolation relay and activate the shunt trip solenoid (140VA inrush at 120V). (Note: if 24V DC coil is selected, a separate 24V DC source and contact must be provided by the Fire Alarm Safety System). A voltage monitoring relay to monitor the shunt trip shall also be provided and be connected to the fire alarm system to provide a trouble signal at the fire alarm panel if voltage is not present.

B. Module shall contain the following options:

1. The Key to Test Switch, “On” Pilot Light (Green, Red or White), 1P NC Mechanical Interlock (required for hydraulic elevators with automatic recall), Fire Alarm Voltage Monitoring Relay (Needed to comply with NFPA 72), NEMA 1Enclosure.
2. The module shall have been successfully tested to a short circuit rating with Bussmann Low-Peak Class J fuses at 200,000 amps RMS Symmetrical. All switches shall have shunt trip capabilities at 120V AC from remote fire safety signal. Branch feeders shall be selectively coordinated and fed with an upstream supply overcurrent protective device at a minimum of 2:1 size ratio utilizing Low-Peak (Class J, RK1, or L) fuses.

PART 3 - EXECUTION

3.1 INSTALLATION

A. All material installation shall be in accordance with Manufacturer’s recommendations and the provisions of applicable codes.

B. Fuses shall not be installed until equipment is ready to be energized.

C. Provide wiring and connection from Elevator Power Module Switch to Fire Alarm System.

3.2 IDENTIFICATION

A. Provide switch and fuse identification as listed in Division 26 “Electrical Identification.”

END OF SECTION 26 28 15