Cooper Bussmann® Quik-Spec™ Power Module™ Switch
PS All-In-One Module

How to configure Part Numbers

Step 1: Select Power Module™ Switch Amperage

<table>
<thead>
<tr>
<th>Rating (Amps)</th>
<th>Power Module Switch Catalog No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>PS3</td>
</tr>
<tr>
<td>60</td>
<td>PS6</td>
</tr>
<tr>
<td>100</td>
<td>PS1</td>
</tr>
<tr>
<td>200</td>
<td>PS2</td>
</tr>
<tr>
<td>400</td>
<td>PS4</td>
</tr>
</tbody>
</table>

Step 2: Select Needed Switch Components

<table>
<thead>
<tr>
<th>Component 1 (Required)</th>
<th>Ratings</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Power Transformer (CPT) Std. 100VA with PRI &amp; SEC Fuse (120V Secondary)</td>
<td>208Vac</td>
<td>T20</td>
</tr>
<tr>
<td></td>
<td>240Vac</td>
<td>T24</td>
</tr>
<tr>
<td></td>
<td>480Vac</td>
<td>T48</td>
</tr>
<tr>
<td></td>
<td>600Vac</td>
<td>T60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 2 (Required)</th>
<th>Ratings</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Safety Interface Relay (3PDT, 10 amp, 120V)</td>
<td>24Vac Coil</td>
<td>R2</td>
</tr>
<tr>
<td></td>
<td>120Vac Coil</td>
<td>R1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 3 (Optional)</th>
<th>Ratings</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key to Test Switch</td>
<td>120Vac</td>
<td>K</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 4 (Optional)</th>
<th>Ratings</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot Light – “ON”</td>
<td>Red</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>G</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 5 (Optional)</th>
<th>Ratings</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isolated Neutral Lug (Full Capacity)²</td>
<td>30-60A</td>
<td>N6</td>
</tr>
<tr>
<td></td>
<td>100A</td>
<td>N1</td>
</tr>
<tr>
<td></td>
<td>200A</td>
<td>N2</td>
</tr>
<tr>
<td></td>
<td>400A</td>
<td>N4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 6 (Required)</th>
<th>Ratings</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanically interlocked auxiliary contacts for hydraulic elevators with battery back-up (5 amp 120Vac rated)</td>
<td>2NO / NC</td>
<td>B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 7 (Optional)</th>
<th>Ratings</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Alarm Voltage Monitoring Relay (to monitor Shunt Trip Voltage)</td>
<td>Single-Pole</td>
<td>F1</td>
</tr>
<tr>
<td></td>
<td>Three-Pole</td>
<td>F3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 8 (Optional)</th>
<th>Ratings</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Enclosure (NEMA Type 1 enclosure standard)</td>
<td>NEMA 3R</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>NEMA 4</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>NEMA 12</td>
<td>Z</td>
</tr>
</tbody>
</table>

Catalog No. Construction

Example:
- 100A S.T. Switch 480V-3P = PS1
- 480-120V CPT = T48
- 120 Vac Coil Fire Safety Interface Relay = R1
- Pilot Light - “ON” (Green) = G
- Mechanical Interlock (2 NO & 2 NC) = B
- Voltage Monitoring Relay = F3

Catalog Number PS1T48R1GBF3

Standard Features
- 30-400 amp 600Vac 3-phase fused power switch
- 200,000 amp RMS short-circuit current rating
- Shunt trip 120V
- Control power terminal block
- Ground lug per NEC⁵
- Class J fuse mounting only¹
- Mechanically interlocked auxiliary contacts for hydraulic elevators with battery backup (5 amp 120Vac rated)

Optional Features
- Control power transformer with fuses and blocks
- Fire safety interface relay
- Key to test switch
- Pilot light – “ON”
- Isolated neutral lug²
- Fire Alarm Voltage Monitoring Relay (to monitor Shunt Trip Voltage)
- NEMA 3R, 4, and 12 enclosures available
- For added protection, use the Cooper Bussmann® SAMI™ fuse covers to improve maintenance personnel protection [OSHA 1910.335(A)(2)(ii)]³

Agency Information
- UL 98 Enclosed and Dead Front Switch - Guide 96NK3917, File E182262
- NEMA 1, UL 50, listed enclosure cUL per Canadian Standards C22.2, No. 0-M91-CAN/CSA C22.2, No. 4-M89 Enclosed Switch
- U.B.C. and C.B.C. Seismic Qualified, and I.B.C. Approved

¹ Class J fuses not included.
² Oversized 200% rated neutral option available where required by excessive non-linear loads.
³ Through 100A.
Quik-Spec™ Power Module™ Switch Catalog Numbering System

**Prefix**
- PS = Power Module Switch

**Control Transformer**
- T20 = 208 Volt
- T24 = 240 Volt
- T48 = 480 Volt
- T60 = 600 Volt

**Optional Key Test Switch**
- K = Key

**Optional Neutral Lug**
- N6 = 30-60A
- N1 = 100A
- N2 = 200A
- N4 = 400A

**Optional Fire Alarm Voltage Monitoring Relay (To Monitor Shunt Trip Voltage)**
- F1 = Single-Pole
- F3 = Three-Pole

**Optional Pilot Light ON**
- G = Green
- R = Red
- W = White

**Optional Auxiliary Contacts†**
- B = 2 NO/NC

**Fire Safety Interface Relay (3PDT, 10A, 12V)†**
- R1 = 120Vac Coil
- R2 = 24Vdc Coil

**Optional NEMA Enclosures (Type 1 Standard With No Suffix Designation Required)**
- U = Type 3R
- Z = Type 12
- Y = Type 4

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**Cooper Bussmann Quik-Spec™ Power Module™ Switch – Dimensions and Lug Data**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Amps</th>
<th>H</th>
<th>W</th>
<th>D1</th>
<th>D2</th>
<th>Lug Size</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS3</td>
<td>30</td>
<td>29.6”</td>
<td>17.3”</td>
<td>6.9”</td>
<td>11.2”</td>
<td>#14 - #8 Al or Cu</td>
<td>28.4”</td>
<td>10”</td>
</tr>
<tr>
<td>PS6</td>
<td>60</td>
<td>29.6”</td>
<td>17.3”</td>
<td>6.9”</td>
<td>11.2”</td>
<td>#14 - #2 Al or Cu</td>
<td>28.4”</td>
<td>10”</td>
</tr>
<tr>
<td>PS1</td>
<td>100</td>
<td>29.6”</td>
<td>17.3”</td>
<td>6.9”</td>
<td>11.2”</td>
<td>#8 - 1/0 Al or Cu</td>
<td>28.4”</td>
<td>10”</td>
</tr>
<tr>
<td>PS2</td>
<td>200</td>
<td>32.6”</td>
<td>21.3”</td>
<td>7”</td>
<td>11.3”</td>
<td>#6 - 250 kcmil Al or Cu</td>
<td>31.1”</td>
<td>17”</td>
</tr>
<tr>
<td>PS4</td>
<td>400</td>
<td>54.6”</td>
<td>26.5”</td>
<td>7.5”</td>
<td>12.7”</td>
<td>(2) 1/0 - 500 kcmil Al or Cu</td>
<td>53.3”</td>
<td>22”</td>
</tr>
</tbody>
</table>

*PS4 dimensions shown for TYPE 1 only. Contact Cooper Bussmann for availability of other types of enclosures.

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**Maximum Horsepower Rating of Switch – Sizing Based on Motor Type**

<table>
<thead>
<tr>
<th>Voltage/Phase</th>
<th>30A</th>
<th>60A</th>
<th>100A</th>
<th>200A</th>
<th>400A</th>
</tr>
</thead>
<tbody>
<tr>
<td>208Vac/3-Phase</td>
<td>PS3</td>
<td>PS6</td>
<td>PS1</td>
<td>PS2</td>
<td>PS4</td>
</tr>
<tr>
<td>PS3</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>40</td>
<td>75</td>
</tr>
<tr>
<td>PS6</td>
<td>5</td>
<td>10</td>
<td>20</td>
<td>40</td>
<td>75</td>
</tr>
<tr>
<td>PS1</td>
<td>10</td>
<td>25</td>
<td>40</td>
<td>75</td>
<td>150</td>
</tr>
<tr>
<td>PS2</td>
<td>15</td>
<td>30</td>
<td>50</td>
<td>100</td>
<td>200</td>
</tr>
</tbody>
</table>

The above table can be used for estimating switch size for motor loads based upon the motor horsepower. For general applications, excluding wound rotor and DC motors, NEC® 430.52 allows sizing at 175% of motor full load amps or the next standard size per NEC® 240.6. If sizing at 175% will not allow the motor to start, NEC® 430.52 will allow the fuses to be sized up to 225% of motor full load amps or the next size down.

**Note:** In sizing the fuses, the motor FLA, is per NEC® Table 430.250, not per nameplate information. Inrush currents of motors may vary, consult motor manufacturer data for correct sizing. On elevator applications, motor load plus auxiliary loads need to be considered. Follow elevator manufacturer’s recommendation for correct fuse sizing.

**Standard Shunt Trip Ratings: 30-100A, 200A & 400A**

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Max Inrush</th>
<th>Max Ontime</th>
<th>Momentary Inrush</th>
</tr>
</thead>
<tbody>
<tr>
<td>120Vac, 60Hz</td>
<td>4 amps</td>
<td>1.5 cycles</td>
<td>140VA</td>
</tr>
</tbody>
</table>

Will handle up to 447VA inrush.
**OPTIONS R1 & F1**

**TYPICAL CONTROL WITH WIRING OPTIONS FOR FIRE SAFETY INTERFACE**

![Diagram of a typical control with wiring options for fire safety interface]

**OPTIONS F1: FIRE ALARM VOLTAGE MONITORING RELAY**

![Diagram of a voltage monitoring relay with wiring options]

**NOTE:** CONTACTS FOR FR ARE SHOWN IN DE-ENERGIZED POSITION.

TO MONITOR THE VOLTAGE THE CONTROL WIRING MEET NFPA 72-2002 SECTION 6.19.4.4

**B CONTACTS**

![Diagram of B contacts with wiring options]

**NOTE:** WHEN B CONTACTS ARE PRESENT, CONTACTS ARE ALSO PRESENT. SHOWN WITH MAIN SWITCH IN CLOSED POSITION.

**A CONTACTS:** BATTERY LOWERING

- MECHANICALLY INTERLOCKED AUXILIARY CONTACT A

TO CONNECT THE BATTERY LOWERING FOR HYDRAULIC ELEVATOR, CONNECT TO POINTS NC AND COM.

**NOTE:** MECHANICALLY INTERLOCKED AUXILIARY CONTACTS ARE SHOWN FOR THE MAIN SWITCH IN CLOSED POSITION.

REQUIRED FOR HYDRAULIC ELEVATORS WITH AUTO RECALL AND LOWERING TO MEET NFPA 72-2002 SECTION 6.19.4.4

**VOLTAGE MONITORING WITH OPTIONS F1 & B CONTACTS**

![Diagram of voltage monitoring with options F1 & B contacts]

**B CONTACTS ARE FACTORY BONDED TO COM FR WITH AN ORANGE COLORED JUMPER TO BYPASS THE VOLTAGE SUPERVISORY SIGNAL WHEN THE SWITCH IS MOVED TO THE "OFF" POSITION. FIELD CONNECTION OF EOL RESISTOR IS REQUIRED BETWEEN NC FR AND BC FOR THIS FEATURE TO FUNCTION. IF A SUPERVISORY SIGNAL IS REQUIRED WHEN THE SWITCH IS TURNED TO THE OFF POSITION, THE EOL RESISTOR MAY BE CONNECTED BETWEEN COM FR AND NC FR. REMOVAL OF THE JUMPER IS ALLOWED IF THE AUTHORITY HAVING JURISDICTION DOES NOT REQUIRE THIS FUNCTIONALITY.

TO MONITOR THE VOLTAGE THE CONTROL WIRING MEET NFPA 72-2002 SECTION 6.19.4.4

**LEGEND:**

- **FACP:** FIRE ALARM CONTROL PANEL.
- **NOFA:** NORMALLY OPEN FIRE ALARM CONTROL INPUT.
- **SHUNT TRIP:** ISOLATED FOR REMOTE TRIP OF SWITCH WHICH IS ACTIVATED BY THE CLOSING OF THE FIRE ALARM CONTACTS OR KEY TEST SWITCHON, OPTION N.
- **SHUNT TRIP:** FIRE ALARM INTERFACE RELAY THAT IS OPERATED AT ISOLATING FROM SECONDARY OF TRANSFORMER, NO ADDITIONAL POWER NEEDED.
- **CONTROL RELAY:** CONTROL RELAY USED TO ISOLATE THE NOFA CONTACTS FROM THE DUTY OF THE SHUNT TRIP.
- **B:** FIRE ALARM VOLTAGE MONITORING RELAY USED TO MONITOR THE STATUS OF CONTROL VOLTAGE FROM A REMOTE LOCATION (B, FIRE ALARM CONTROL PANEL).
- **PL:** PILOT LIGHT TO VISUALLY INDICATE THE PRESENCE OF VOLTAGE ON THE OUTSIDE OF THE SHUNT ENCLOSURE.
- **CPT:** CONTROL POWER TRANSFORMER USED TO STEP DOWN CONTROL VOLTAGE TO ISOLATE FROM POWER SHUNT TRIP COIL.
- **SW AUX:** A OR B CONTACTS NORMALLY CLOSED CONTACT WHEN SWITCH IS CLOSED, OPENS AS POWER SWITCH OPENS.
- **KEY TEST:** KEY TO TEST SWITCH USED TO OPERATE SHUNT TRIP FROM THE OUTSIDE OF THE SHUNT ENCLOSURE. CAN BE USED FOR TROUBLESHOOTING AND INSPECTION.
- **MECHANICALLY INTERLOCKED AUXILIARY CONTACT** - CONTACT USED TO DISABLE BATTERY LOWERING Devices.

**- TERMINAL BLOCK CONNECTION POINT**

**- PREWIRE CONNECTION POINTS**

**WHERE LOCAL AUTHORITIES HAVING JURISDICTION PERMIT, FIELD REMOVAL OF THE BLUE WIRE IDENTIFIED BY "**" MARKER IS REMOVED FROM NC TERMINAL.**
Typical Control with Wiring Options for Fire Safety Interface (Options R1 & F3)

**OPTIONS R1 & F3**

Typical Control with Wiring Options for Fire Safety Interface

**OPTIONS F3 FIRE ALARM VOLTAGE MONITORING RELAY**

- **NOTE:** Contacts for FR are shown in de-energized position.

**TO MONITOR THE VOLTAGE THE CONTROL WIRING TO MEET NFPA 72-2002 SECTION 6.19.4**

- **FOR SPECIAL WIRING OF MULTIPLE SWITCHES TO AVOID FEEDBACK FROM PARALLELING CONTACTS SEE LADDER DIAGRAM.**

**OPTIONS R1 - FIRE ALARM INTERFACE RELAY THAT IS OPERATED AT 120VAC FROM SECONDARY OF TRANSFORMER. NO ADDITIONAL POWER NEEDED.**

**A CONTACTS: BATTERY LOWERING MECHANICALLY INTERLOCKED AUXILIARY CONTACT A**

- **NOTE:** Mechanically interlocked auxiliary contacts are shown for the main switch in closed position.

**B VOLTAGE MONITORING WITH B CONTACTS**

- **B CONTACTS ARE FACTORY BONDED TO COM FR WITH AN ORANGE COLORED JUMPER TO Bypass the Voltage Supervisory Signal when the switch is moved to the "OFF" position. Field connection of EOL resistor is required between NC FR and NC B for this feature to function. If a supervisory signal is required when the switch is turned to the "OFF" position, the EOL resistor may be connected between COM FR and NC B. Removal of the jumper is allowed if the authority having jurisdiction does not require the functionality.**

**LEGEND**

- **FACP - FIRE ALARM CONTROL PANEL**
- **NOFA - NORMALLY OPEN FIRE ALARM CONTACT INPUT**
- **NDA - NORMALLY CLOSED FIRE ALARM CONTACT INPUT**
- **PL - Pilot Light to Visually Indicate Presence of Voltage on Outside of Switch Enclosure**
- **OPT - Control Power Transformer Used to Step Down Line Voltage to 120vAC to Power Shunt Trip Code, SN Aux., - A DB Contacts, Normally Closed Contact When Switch is Open, Opens as Power Switch Opens.**
- **KEY TEST - Key-To-Test Switch Used to Operate Shunt Trip From the Outside of Switch Enclosure, Can Be Used for Trouble-Shooting and Inspection, Mechanically Interlocked Auxiliary Contact - Contact Used to Disable Battery Lowering Device.**

**AUXILIARY SWITCH LOGIC**

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NC</th>
<th>NC</th>
<th>NC</th>
<th>NC</th>
<th>NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLOSING</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>TRIPPED</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>OPEN</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
OPTION R2 & F1
TYPICAL CONTROL WITH WIRING OPTIONS FOR FIRE SAFETY INTERFACE

OPTION F1: FIRE ALARM VOLTAGE MONITORING RELAY

VOLTAGE MONITORING

NOTE: CONTACTS FOR FR ARE SHOWN IN DE-ENERGIZED POSITION.

TO MONITOR THE VOLTAGE THE CONTROL WIRING TO VISIT NFPA 72-2002 SECTION 6.15.4

OPTION F1: FIRE ALARM VOLTAGE MONITORING RELAY

VOLTAGE MONITORING

NOTE: CONTACTS FOR FR ARE SHOWN IN DE-ENERGIZED POSITION.

TO MONITOR THE VOLTAGE THE CONTROL WIRING TO VISIT NFPA 72-2002 SECTION 6.15.4

B CONTACTS

NOTE: WHEN B CONTACTS ARE PRESENT, A CONTACTS ARE ALSO PRESENT.

SHOWN WITH MAIN SWITCH IN CLOSED POSITION

A CONTACTS: BATTERY LOWERING MECHANICALLY INTERLOKED AUXILIARY CONTACT A

BATTERY LOWERING

TO CONNECT THE BATTERY LOWERING FOR HYDRAULIC ELEVATOR, CONNECT TO POINTS NC AND COM.

NOTE: MECHANICALLY INTERLOKED AUXILIARY CONTACTS ARE SHOWN FOR THE MAIN SWITCH IN CLOSED POSITION.

REQUIRED FOR HYDRAULIC ELEVATORS WITH AUTO RECALL AND LOWERING TO MEET NEC 2005 SECTION 690.91 (c)

VOLTAGE MONITORING WITH B CONTACTS

B CONTACTS ARE FACTORY BONDED TO COM FR WITH AN ORANGE, COLORED JUMPER TO BYPASS THE VOLTAGE SUPERVISION SIGNAL WHEN THE SWITCH IS MOVED TO THE "OFF" POSITION. FIELD CONNECTION OF EOL RESISTOR IS REQUIRED BETWEEN NC FR AND NC B FOR THIS FEATURE. TO FUNCTION, IF A SUPERVISION SIGNAL IS REQUIRED WHEN THE SWITCH IS TURNED TO THE OFF POSITION. THE EOL RESISTOR MAY BE CONNECTED BETWEEN COM FR AND NC FR. REMOVAL OF THE JUMPER IS ALLOWED IF THE AUTHORITY HAVING JURISDICTION DOES NOT REQUIRE THIS FUNCTIONALITY. TO MONITOR THE VOLTAGE THE CONTROL WIRING TO VISIT NFPA 72-2002 SECTION 6.15.4

KEY TEST

CONTACTS SHOWN FOR MAIN SWITCH OPEN, NORMAL STATUS

LEGEND

FACP - FIRE ALARM CONTROL PANEL
NO FA - NORMALLY OPEN FIRE ALARM CONTROL INPUT
NOFFA - NORMALLY OPEN FIRE ALARM CONTACTS SUPPLIED FROM THE FIRE ALARM SYSTEM TO INITIATE THE SHUNT TRIP
SHUNT TRIP - SOLID STATE FOR REMOTE TRIP OF SWITCH WHICH IS ACTIVATED BY THE CLOSING OF THE FIRE ALARM CONTACTS OR THE TEST SWITCH, OPTION R1 - FIRE ALARM INTERFACE RELAY THAT IS OPERATED AT 120VAC FROM SECONDARY OF TRANSFORMER NO ADDITIONAL POWER NEEDED
NC - CONTROL RELAY USED TO ISOLATE THE NO/A CONTACTS FROM THE DUTY OF THE SHUNT TRIP
FR - FIRE ALARM VOLTAGE MONITORING RELAY USED TO MONITOR THE STATUS OF CONTROL VOLTAGE FROM A REMOTE LOCATION (i.e., FIRE ALARM CONTROL PANEL).
PL - PLOT LIGHT TO VISUALLY INDICATE PRESENCE OF VOLTAGE ON OUTSIDE OF SWITCH ENCLOSURE
CPT - CONTROL POWER TRANSFORMER USED TO STEP DOWN THE VOLTAGE TO 120VAC TO POWER SHUNT TRIP COIL
SN A - A OR B CONTACTS, NORMALLY CLOSED CONTACT WHEN SWITCHES CLOSED, OPERATE AS POWER SWITCH DRIVES
KEY TEST - KEY TO TEST SWITCH USED TO OPERATE SHUNT TRIP FROM THE OUTSIDE OF SWITCH ENCLOSURE, CAN BE USED FOR TROUBLE-SHOOTING AND INSPECTION, MECHANICALLY INTERLOKED AUXILIARY CONTACT - CONTACT USED TO DISABLE BATTERY LOWERING DEVICES
■ - TERMINAL BLOCK CONNECTION POINT
Ω - PRE-WIRED CONNECTION POINTS.
NOTE: TERMINAL 1 IS NOT PRESENT WHEN OPTION K IS ABSENT.
Section 16XXX – Power Module Switch  
(Elevator) (Computer Room) (Emergency Systems)

Part 1 – General

1.01 Description
A. Work of this section shall conform to the requirements of the Contract Documents.

1.02 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.

1.03 Related Systems
A. (Reference other sections of the specification which cover Elevator installation)

1.04 Codes
A. All work shall be performed in accordance with the latest edition of applicable standards, codes and laws.
   1. NFPA-70 (NEC®) 2008 Edition- Section 620.51(A)-(C), 620.62, 620.91(C)
   3. ANSI/ASME A17.1-2007 - Section 2.8.3.3.2
   4. NFPA-72 2007 Edition - Section 6.16.4.4

1.05 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

1.06 Substitutions
A. Substitutions shall comply with the requirements of the General Conditions and General Requirements. The names of manufacturers and model numbers have been used to establish types of equipment and standards of quality. A submittal shall contain sufficient information to prove compliance with Contract Documents. This includes compliance with all pertinent sections of codes and standards as specified above.

1.07 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 as required by (reference fuse specification section).

Part 2 – Products

2.01 Manufacturers
A. Cooper Bussmann® Power Module™ Switch – PS

2.02 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 amp 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 shall be ______ volts with a 120V secondary. It shall also contain an isolation relay (3PDT, 10 amp, 120V). The coil of the isolation relay shall be ______ (120Vac or 24Vdc). 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 24Vdc coil is selected, a separate 24Vdc source and contact must be provided by the Fire Alarm Safety System.)

The module shall contain the following options:
   _____ Key to Test Switch
   _____ "ON" Pilot Light (Green, Red or White)
   _____ Isolated Full Capacity Neutral Lug
   _____ 1P NC Mechanically Interlocked Auxiliary Contact
         (required for hydraulic elevators with automatic recall)
   _____ Fire Alarm Voltage Monitoring Relay (Needed to comply with NFPA 72)
   _____ NEMA ___ Enclosure (NEMA 1 standard), 12, 3R or 4) (through 200A)

Complete catalog number for the Power Module Switch shall be ______

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 120Vac 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

3.01 Installation
A. All material installation shall be in accordance with manufacturers recommendations and the provisions of applicable codes.
B. Fuses shall not be installed until equipment is ready to be energized.