Ferraz Shawmut’s Engineered Switches offer modular industrial control panels featuring a fusible shunt trip to allow for remote disconnection. An array of available options allows for maximum functionality to be built into a single compact panel.

Panels built for elevator applications feature control transformers (fusing both primary and secondary sides), a fire safety interface relay with a fire alarm voltage monitoring relay and mechanically interlocked auxiliary contacts.

Use of Ferraz Shawmut’s Amp-Trap 2000® AJT Class J fuses permits easy selectivity coordination, while providing the panel and its components with superior current limitation and the ability to withstand high fault conditions. AJT fuses provide added system reliability since no maintenance or periodic testing is required as with other electromechanical overcurrent devices.

### FEATURES/BENEFITS:
- Fused switch – provides high current limitation and short circuit withstand
- Padlockable handle – allows panel to be locked with switch in the off position ensuring load side power isolation during servicing
- Shunt trip – allows for remote tripping of the main line power prior to the application of water in elevator
- Sprinkler system applications

### HIGHLIGHTS:
- 3-Pole Fused Switch
- 120 VAC Shunt Trip
- Class J fuse block (fuses not included)
- Ground Lug as per NEC
- Control Power brought to terminals
- Modular components
- NEMA 1 Industrial
- Enclosure Standard

### APPLICATIONS:
- Elevators
- Building emergency systems
- Data processing rooms
- Miscellaneous fusible shunt trip applications

### OPTIONAL FEATURES:
- Industrial Control circuit transformer
- Primary (208, 240, 480 or 600 VAC)
- Fire safety relay for control interface (3PDT Relay, choice of Coil Voltage: 120 VAC, 24 VDC or 24VAC)
- Oil-tight Key Switch to test 2 position selector switch.
- Oil-tight Power enabled power light (choice of colors: Red, Green, White or Yellow)
- Isolated neutral lug – 100%. Oversized 200% for excessive Non-Linear loads.
- Auxiliary and Alarm Contacts are both Form C contacts. The Auxiliary contacts change state when the switch is in the on position. Alarm contacts change state when the switch is in the tripped position. The Alarm contact is located in place of the second auxiliary contact.
- NEMA 12, 3R, 4 or 4X enclosure available.

### RECOMMENDED FUSE USAGE:
ES Series .............................................use with AJT, A4J, HSJ

### RATINGS
- 600 VAC: 30A, 60A,
- 100A, 200A & 400A
- Withstand rating: 200kA I.R.

### APPROVALS
- UL 1087 Molded-Case Switch
- UL 50
- NEMA 1, 12, 3R, 4, 4x
- UL512
- UL/cUL Listed Panel

Gross Automation (877) 268-3700 · www.ferrazshawmutsales.com · sales@grossautomation.com
An example of an Engineered Switch Catalog number is listed below with the ordering process detail.

**ES2T20R1KRN2A2**

Select fusible shunt trip switch:

<table>
<thead>
<tr>
<th>Ampacity Rating</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>ES3</td>
</tr>
<tr>
<td>60</td>
<td>ES6</td>
</tr>
<tr>
<td>100</td>
<td>ES1</td>
</tr>
<tr>
<td>200</td>
<td>ES2</td>
</tr>
<tr>
<td>400</td>
<td>ES4</td>
</tr>
</tbody>
</table>

Select options:

1. Options must be selected in above order for part number to be valid.
2. Elevator panels must include a control transformer, fire safety relay with voltage monitoring and mechanical interlocked auxiliary contact.
3. Options 1, 2, and 6 are required. Options 3, 4, 5, and 7 are optional.

**Fusible Shunt Trip Switch Maximum Horsepower Ratings based on Motor Load**

<table>
<thead>
<tr>
<th>FLA %</th>
<th>30 AMP</th>
<th>60 AMP</th>
<th>100 AMP</th>
<th>200 AMP</th>
<th>400 AMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>5</td>
<td>3</td>
<td>10</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>175</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>225</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>30</td>
</tr>
</tbody>
</table>

150...Light duty maximum allowable motor horsepower based on Class J fuses

175...General duty maximum allowable motor horsepower based on Class J fuses

225...Heavy duty maximum allowable motor horsepower based on Class J fuses

Horsepower values in the above table are intended for estimating the size of the switch only. For light duty applications size switch for a minimum of 1.5 times the motors full load amps. Medium or General duty applications size for a minimum of 1.75 times the full load amps of the motor. For Heavy Duty applications use a maximum of 2.25 times the full load amps of the motor.

**Engineered Switches**

**Fusible Shunt Trip**

**Connect Switches**
FUSIBLE SHUNT TRIP SWITCH
120 VAC Fire Safety Control Interface

FUSIBLE SHUNT TRIP SWITCH
24 VDC Fire Safety Control Interface