Unmatched performance for critical power needs

Eaton's automatic transfer switch is designed to provide unmatched performance, reliability and versatility for critical standby power applications. The switches can be equipped with the ATC-300+ or ATC-900 controllers to match your application needs. A bypass isolation transfer switch may be used to provide emergency power to life safety and other critical loads where maintenance of the main transfer switch, without interruption of power to the load, is either desirable or required.

Electrical ratings
- Operating temperature: –20° to +70°C (–4° to +158°F)
- Ratings: 100, 150, 200, 225, 260, 400, 600, 800, 1000, 1200, and 1600 A
- Two-, three- or four-pole (fourth pole is fully rated)
- Up to 600 Vac, 50/60 Hz
- NEMA® 1, 3R, 12, 4X
- UL® 1008 Listed
- CSA® C22.2 No. 178 Certified

Industrial design highlights
- Standard front access on all ratings
- Entry: Top, bottom or both
- Isolated compartments
- Field-selectable multi-tap transformer panel permits operation on a wide range of system voltages

Standard features
- Source available contacts
  - S1/S2 present 2NO and 2NC
- Switch position contacts
  - S1/S2 position 1NO and 1NC
- Source sensing S1 and S2
  - Undervoltage/underfrequency
  - Overvoltage/overfrequency
  - Three-phase rotation protection
  - Three-phase voltage unbalance
- Pretransfer signal contacts 1NO/1NC
- Go to Source 2 (emergency)
- Field-programmable time delays
  - Time delay engine start
  - Time delay normal to emergency
  - Time delay emergency to normal
  - Time delay engine cool-down
  - Time delay emergency fail

Optional features
- Available UL 1448 Third Edition surge protection device (SPD)
- Eaton IQ and Power Xpert® multifunction power quality metering
- Automatic transfer mode with selectable non-automatic/automatic retransfer mode
- Modbus® RTU via RS-485
- Remote annunciation with control
- Open in-phase transition, time delay neutral or in-phase with a default to time delay neutral transfer
- ATC-900 Controller
  - Includes Modbus RTU via RS-485
  - Includes four programmable inputs/outputs
  - Includes two plant exercisers
  - Includes LCD color display with easy navigation tools to settings and event logs
  - Expandable I/O (up to 20 I/O total)
  - Optional integrated load metering
  - Optional EtherNet TCP/IP communications
  - Service entrance side cabinet with circuit breaker (normal side)
Bypass isolation switch features

**Front access**
Front access is a standard feature. Source 1 (NORMAL) and Load connections are set up as standard top entry and Source 2 (EMERGENCY) connections as bottom entry. These connections are located in their own separate compartments. These connections can be relocated in the field if necessary.

**Multi-tap transformer**
The industry-exclusive multi-tap system voltage selector allows the transfer switch to be applied on most system voltages by proper insertion of the selector plug.

**Dual drawout ATS and bypass contactor**
The ATS and the bypass drawout power contactor designs are identical and interchangeable. This standard feature allows the user the ability to withdraw, maintain or swap contactor assemblies, providing redundancy of ATS and bypass functions from one contactor assembly to the other of a similar frame size.

**Improved safety**
The unique Eaton design includes separation between control and power components. The ATS and bypass isolation contactors are mounted in separate compartments with protective barriers between them. This design prevents the possibility of contact with the rear-mounted power connections to the contactors. In addition, the top and bottom entries have separate compartment doors.

**Ease of maintenance**
Transfer to the bypass power contactor is easily initiated and controlled via door-mounted controls. After the transfer to the bypass contactor is complete, the ATS contactor is easily racked out with the compartment door closed. The ATS contactor may then be tested in the racked-out position.

**Ease of transfer**
The Eaton design allows the operator to make a quick and simple transfer from the ATS power contactor to the bypass contactor by initiating the electrically operated transfer via a two-position switch. Door-mounted indicating lights confirm that a successful transfer has taken place.

**Dual ATS capability**
The controller on conventional bypass isolation switches only controls the ATS contactor. The Eaton design allows the switch controller to remain active in both the ATS and the bypass modes, thus providing control to either contactor.

This ability of the controller to remain active and control the bypass isolation contactor provides “N+1” redundancy of a second fully functioning ATS, a feature unique to Eaton.
**Contactor-Based Transfer Switch 100–1600A—NEMA 1 in Inches (mm) and Approximate Shipping Weight**

<table>
<thead>
<tr>
<th>Switch Rating</th>
<th>Enclosure Seismic</th>
<th>Standard Terminals</th>
<th>Metric Conversion</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>100–200A 480V</td>
<td>78.07 (1983.0)</td>
<td>30.00 (762.0)</td>
<td>29.30 (744.2)</td>
<td></td>
</tr>
<tr>
<td>225–400A 480V</td>
<td>78.07 (1983.0)</td>
<td>30.00 (762.0)</td>
<td>29.30 (744.2)</td>
<td></td>
</tr>
<tr>
<td>225–400A 600V</td>
<td>90.00 (2286.0)</td>
<td>40.00 (1016.0)</td>
<td>28.97 (735.8)</td>
<td></td>
</tr>
<tr>
<td>600A 480V</td>
<td>90.00 (2286.0)</td>
<td>40.00 (1016.0)</td>
<td>28.97 (735.8)</td>
<td></td>
</tr>
<tr>
<td>800–1200A 480V</td>
<td>90.00 (2286.0)</td>
<td>40.00 (1016.0)</td>
<td>28.97 (735.8)</td>
<td></td>
</tr>
<tr>
<td>800–1200A 600V</td>
<td>90.00 (2286.0)</td>
<td>40.00 (1016.0)</td>
<td>28.97 (735.8)</td>
<td></td>
</tr>
<tr>
<td>1600A 480V</td>
<td>90.00 (2286.0)</td>
<td>40.00 (1016.0)</td>
<td>40.00 (1016.0)</td>
<td></td>
</tr>
</tbody>
</table>

1. For seismic applications, it is necessary to use 5–13 UNC Grade or better hex head bolts and washers torqued to 50 lbs-ft.
2. NEMA 12 and 4X dimensions are 90.00 inches H x 46.00 inches W x 38.00 inches D (2286.0 mm H x 1168.4 mm W x 965.2 mm D). NEMA 4X enclosures are 304SS standard with an optional upgrade to 316SS.
3. Same number of terminals per phase will be supplied.
4. For NEMA 3R dimensions, add 18.29 inches (464.6 mm).
5. For NEMA 3R dimensions, add 18.59 inches (472.2 mm).
Automatic Bypass Isolation Contactor-Based Transfer Switch Catalog Numbering System

**Type**
- BI = Bypass isolation open transition
- CB = Bypass isolation closed transition

**Logic**
- 3 = ATC-300+
- 9 = ATC-900

**Mechanism**
- C3 = Time delay neutral (TDN) only
- C5 = In-phase/TDN transfer

**Amperes**
- 0100 = 100A
- 0150 = 150A
- 0200 = 200A
- 0224 = 225A
- 0260 = 260A
- 0400 = 400A
- 0600 = 600A
- 0800 = 800A
- 1000 = 1000A
- 1200 = 1200A
- 1600 = 1600A

**Voltage**
- B = 208V, 60 Hz
- E = 600V, 60 Hz
- G = 220V, 50 Hz
- H = 380V, 50 Hz
- K = 600V, 50 Hz
- O = 415V, 50 Hz
- W = 240V, 60 Hz
- X = 480V, 60 Hz

**Enclosure**
- S = NEMA 1
- R = NEMA 3R
- J = NEMA 12
- D = NEMA 4X

**Certification**
- U = UL 1008 Listed

**ATC Features**
<table>
<thead>
<tr>
<th>Features</th>
<th>ATC-300+</th>
<th>ATC-900</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic transfer control, time delays, programmable set points and plant exerciser</td>
<td>Standard</td>
<td>Standard</td>
</tr>
<tr>
<td>LCD display</td>
<td>Standard</td>
<td>Color</td>
</tr>
<tr>
<td>Time stamped history and event log</td>
<td>Standard</td>
<td>Standard</td>
</tr>
<tr>
<td>Transfer control for manual retransfer and Source 2 inhibit</td>
<td>Optional</td>
<td>Standard</td>
</tr>
<tr>
<td>RS-485 communications</td>
<td>Optional</td>
<td>Standard</td>
</tr>
<tr>
<td>Ethernet communication</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>USB port</td>
<td>—</td>
<td>Standard</td>
</tr>
<tr>
<td>Diagnostic event summary and details with pre/post event data capture</td>
<td>—</td>
<td>Standard</td>
</tr>
<tr>
<td>Preferred source</td>
<td>—</td>
<td>Standard</td>
</tr>
<tr>
<td>Built-in configurable I/O with optional ability to expand up to 20 I/O</td>
<td>—</td>
<td>Standard</td>
</tr>
<tr>
<td>Integrated load metering</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Load management with selective load shed</td>
<td>—</td>
<td>Optional</td>
</tr>
<tr>
<td>Three-source ATS—master/slave control</td>
<td>—</td>
<td>Optional</td>
</tr>
</tbody>
</table>

**Bypass Isolation Diagram**

**UL 1008 Withstand and Close-On Ratings (kA)**

<table>
<thead>
<tr>
<th>UL 1008 Rating (A)</th>
<th>480 Volts</th>
<th>600 Volts</th>
<th>Rating When Used with Upstream Fuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>30 50</td>
<td>22 35</td>
<td>200 600</td>
</tr>
<tr>
<td>150</td>
<td>30 50</td>
<td>22 35</td>
<td>200 600</td>
</tr>
<tr>
<td>200</td>
<td>30 50</td>
<td>22 35</td>
<td>200 600</td>
</tr>
<tr>
<td>225</td>
<td>30 50</td>
<td>42 65</td>
<td>200 600</td>
</tr>
<tr>
<td>260</td>
<td>30 50</td>
<td>42 65</td>
<td>200 600</td>
</tr>
<tr>
<td>400</td>
<td>30 50</td>
<td>42 65</td>
<td>200 600</td>
</tr>
<tr>
<td>600</td>
<td>50 65</td>
<td>42 65</td>
<td>200 600</td>
</tr>
<tr>
<td>800</td>
<td>50 65</td>
<td>42 65</td>
<td>200 600</td>
</tr>
<tr>
<td>1000</td>
<td>50 65</td>
<td>42 65</td>
<td>200 600</td>
</tr>
<tr>
<td>1200</td>
<td>50 65</td>
<td>42 65</td>
<td>200 600</td>
</tr>
<tr>
<td>1600</td>
<td>50 65</td>
<td>42 65</td>
<td>200 480</td>
</tr>
</tbody>
</table>

Note: 1600A is rated for 480V and below.

Eaton is a registered trademark. All other trademarks are property of their respective owners.