Introduction
Eaton’s Magnum™ SB is a low voltage insulated-case power circuit breaker family, designed for the performance and economic requirements of UL® 891 switchboards. The Magnum SB is a UL 1066 listed insulated-case power circuit breaker. Magnum SB breakers have a fixed instantaneous trip of $18 \times I_n$ needed to clear a fault in three cycles, a switchboard class requirement. Their short-time withstand and interruption ratings are optimized for 480 Vac. Fixed internal instantaneous trips are also included, which is characteristic of most UL 489 molded-case circuit breakers used in switchboard applications. Magnum SB breakers are designed to provide excellent application flexibility, a full line of accessories common to all Magnum breakers, and a high level of safety and reliable performance, all while meeting the specific needs of your application.

Product characteristics
- Switchboard class
- Up to 635 Vac
- Three- and four-pole configurations
- Drawout and fixed mounted
- 200A to 6000A continuous current
- 50 kA to 150 kA interrupting ratings
- Short-time withstand up to 100 kA

Performance
- 100% rated at full continuous current
- Three frame sizes to facilitate compact enclosure options
- High withstand breakers for maximum coordination
- Current limiting Magnum SB fuseless fast-opening breakers with high interrupting ratings and low energy let-through for reduced arc flash

Protection, coordination, information and diagnostics with the Digitrip™ trip unit family
- Microprocessor-based rms sensing
- Basic to programmable overcurrent protection and alarms
- Ampere and power metering, power quality
- Local display for information and diagnostics
- Communicates with translators to common protocols, such as Modbus®, INCOM™ and PROFIBUS®
- Zone selective interlocking for improved coordination
- Arclight Reduction Maintenance System™ technologies for arc flash reduction
- Breaker health monitoring

Safety
- ANSI, UL, CSA® and NEMA® certifications and approvals
- Arc flash reduction solutions
- Closed door levering and control access

Maintenance, modification and service
- UL-approved field-installable accessories
- Common to all frame sizes
- Easy to add or replace accessories and renewal parts at the point of use
- Primary disconnecting contacts are mounted on the breaker for ease of inspection and replacement
- Eaton Electrical Services & Systems is available for startup and support
Amperes Breaker Type Frame Type

<table>
<thead>
<tr>
<th>Amperes</th>
<th>Narrow Frame (800A–2000A)</th>
<th>Standard Frame (800A–3000A)</th>
<th>Double Frame (3200A–5000A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>16.80 (426.7)</td>
<td>16.80 (426.7)</td>
<td>16.80 (426.7)</td>
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<tr>
<td>Drawout</td>
<td>21.00 (533.4)</td>
<td>21.00 (533.4)</td>
<td>21.00 (533.4)</td>
</tr>
</tbody>
</table>

Frame Dimensions in Inches (mm)

<table>
<thead>
<tr>
<th>Height</th>
<th>Three-Pole</th>
<th>Four-Pole</th>
<th>Depth</th>
<th>Three-Pole</th>
<th>Four-Pole</th>
<th>Width</th>
<th>Three-Pole</th>
<th>Four-Pole</th>
</tr>
</thead>
<tbody>
<tr>
<td>2500</td>
<td>16.60 (426.7)</td>
<td>16.60 (426.7)</td>
<td>14.60 (370.8)</td>
<td>14.60 (370.8)</td>
<td>16.20 (411.5)</td>
<td>12.50 (317.5)</td>
<td>17.00 (431.8)</td>
<td></td>
</tr>
<tr>
<td>3000</td>
<td>21.00 (533.4)</td>
<td>21.00 (533.4)</td>
<td>18.70 (475.0)</td>
<td>18.70 (475.0)</td>
<td>13.30 (337.8)</td>
<td>12.50 (317.5)</td>
<td>17.00 (431.8)</td>
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</tr>
<tr>
<td>3500</td>
<td>21.00 (533.4)</td>
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<td>18.70 (475.0)</td>
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<td>17.00 (431.8)</td>
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<tr>
<td>4000</td>
<td>21.00 (533.4)</td>
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<td>18.70 (475.0)</td>
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Magnum SB Switchboard Class UL 1066 Insulated-Case Low Voltage Power Circuit Breaker

<table>
<thead>
<tr>
<th>Frame Amperes</th>
<th>Interrupting at 254 Vac</th>
<th>Interrupting at 508 Vac</th>
<th>Interrupting at 635 Vac</th>
<th>Short-Time Withstand Rating</th>
<th>Fixed Internal Inst. Trip</th>
<th>Available Current Sensor and Rating Plugs for Digitrip RMS Trip Unit (establishes breaker in rating)</th>
</tr>
</thead>
<tbody>
<tr>
<td>800 SBN-508</td>
<td>50</td>
<td>50</td>
<td>35</td>
<td>30</td>
<td>18 x I</td>
<td>200, 250, 300, 400, 600, 800, 1200, 1600, 2000, 2500, 3000, 4000, 6000, 8000, 12000, 16000, 20000</td>
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<tr>
<td>800 SBN-608</td>
<td>65</td>
<td>65</td>
<td>42</td>
<td>35</td>
<td>18 x I</td>
<td>200, 250, 300, 400, 600, 800, 1200, 1600, 2000, 2500, 3000, 4000, 6000, 8000, 12000, 16000, 20000</td>
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Printed in USA
Publication No. PA01301018E / Z9223
October 2009

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877-ETN-CARE (877-386-2273)
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