Introduction

Since 1980, Eaton’s Innovative Technology has provided Surge Protective Devices (SPDs) to power quality equipment users around the world. Whatever your electrical surge protection need may be, Eaton’s Innovative Technology has a Surge Protective Device to fill it!

General Features

- Peak Surge Current — 40, 80, 160 kA per phase
- ANSI/IEEE C62.41 Location Categories — A, B and C
- Application — ac power service entrances, branch panels and/or individual equipment
- Warranty — Ten-Year Free Replacement
- Unit Listings — UL®1449 Second Edition, cUL, UL 1283 filter, CE
- Manufacturer Qualifications — ISO® 9001:1994 Quality System Certification BSI FM 30833

Mechanical and Electrical Features

- Enclosure — Powder Coated Steel, NEMA® Type 1 (IP20)
- Mounting — Threaded conduit fitting and/or multi-point mounting feet
- Connection — #10 (6 mm²) stranded wire
- Weight — ≈5 lbs (2.2 kg)
- Operating Temperature — -40°F (-40°C) to +140°F (+60°C)
- Protection Modes — Full Mode: L-N (normal mode), L-G, N-G (common mode)
- Input Power Frequency — 47 – 420 Hz (50 – 60 Hz for ATN® models)
- Response Time — <1 nanosecond
- Capacitance — Up to 30 nF with EQX, up to 1.5 µF with EQXN
- Diagnostics — Green LED indicators, Dry Relay (Volt-Free) contacts (contact rating 60 W or 125 VA, 125 Vac at 0.5 Amp or 30 Vdc at 1 Amp)
- Circuit Interrupt Requirement — Reference installation instructions for details

Maximum EMI/RFI Attenuation — Mil-Std-220

<table>
<thead>
<tr>
<th>Frequency (kHz)</th>
<th>1 kHz</th>
<th>10 kHz</th>
<th>100 kHz</th>
<th>1 MHz</th>
<th>10 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Attenuation Frequency</td>
<td>0 dB</td>
<td>8.5 dB</td>
<td>30 dB</td>
<td>23 dB</td>
<td>6.8 dB</td>
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</table>

Optional Features and Equipment

- Active Tracking Network (ATN®) — EQXxxN
- Flush Mount Plate (ZPLATE-4)
### Performance Data

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>A1 Ring Wave 2 kV, 67 A 180° Phase Angle</td>
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<td></td>
<td>A1 Ring Wave 2 kV, 67 A 90° Phase Angle</td>
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<tr>
<td></td>
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<td></td>
<td>All Modes B3/C1 Impulse 6 kV, 3 kA 90° Phase Angle</td>
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<tr>
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<td></td>
<td></td>
<td>All Modes C3 Impulse 20 kV, 10 kA 90° Phase Angle</td>
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<td></td>
<td>UL 1449-2 Suppressed Voltage Ratings</td>
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<tr>
<td>1P101</td>
<td>Single-Phase 2w + grnd</td>
<td>100, 110, 120, 127</td>
<td>150</td>
<td>330</td>
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<tr>
<td>1P201</td>
<td>Single-Phase 2w + grnd</td>
<td>200, 208, 220, 230, 240, 277</td>
<td>320</td>
<td>670</td>
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<tr>
<td>1S101</td>
<td>Split-Phase 3w + grnd</td>
<td>100/200, 110/220</td>
<td>150/300</td>
<td>330</td>
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<tr>
<td>3D101</td>
<td>3-Phase (\Delta) (Hi-Leg) 4w + grnd</td>
<td>120/240</td>
<td>150/300</td>
<td>330</td>
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<tr>
<td>3Y101</td>
<td>3-Phase Y/Star 4w + grnd</td>
<td>100/175, 110/190</td>
<td>120/208, 127/220</td>
<td>150/300</td>
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<tr>
<td>3Y201</td>
<td>3-Phase Y/Star 4w + grnd</td>
<td>220/380, 230/400</td>
<td>320/640</td>
<td>670</td>
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<tr>
<td>NN201</td>
<td>3-Phase (\Delta) 3w + grnd</td>
<td>200, 208, 220, 230, 240</td>
<td>320</td>
<td>400</td>
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</tbody>
</table>

**Note:** Test environment: All tests performed with 6" lead length, positive polarity. Voltages are peak ±10%. Measurements are taken from zero reference per NEMA LS-1.

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Printed in USA
Form No. PS0100600E / Z9990
March 2007