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
- Description — Type 66 Punchdown block-mounted, secondary, telephone- or data-line overvoltage/current surge protection devices
- Application — Secondary data or telecom protection for voice grade applications, 10 Mbps Ethernet and high-speed Token Ring networking installations. Each bridging module protects one pair
- Warranty — 5-Year Free Replacement
- Listings — UL® 497A
- Designed to — Commercial Building Telecomm. Wiring Standard ANSI/EIA/TIA-568
- Manufacturer Qualifications — ISO® 9001: 1994 Quality System Certification BSI FM 30833

Mechanical and Electrical Features
- Enclosure — Molded Plastic
- Connection — Press fit onto punchdown block tabs. Press fit for ground onto available ground strips.
- Weight — ≈1 lb (0.4 kg)
- Operating Temperature — -40°F (-40°C) to +185°F (+85°C)
- Circuit Design — Solid-state voltage protection, coupled with fusing for protection against high current
- Data Rate — Up to CAT 3 / 10 Mbps / 10Base-T digital, up to 100 MHz analog
- Protection Modes — Tip-Ground, Ring Ground
- Response Time — <1 nanosecond
- Maximum Continuous Operating Current — 350 mA
- Operating Voltage Ranges — 19 V – 131 V

Performance Data

<table>
<thead>
<tr>
<th>Model</th>
<th>Standoff Voltage</th>
<th>dc Breakover Voltage</th>
<th>Suggested Application</th>
<th>IEC 10 x 700 Impulse</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>500 V</td>
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<tr>
<td>BC-27</td>
<td>19 V</td>
<td>27 V</td>
<td>Voice, Low-Speed Data Transmission</td>
<td>40, 70 L-G, L-L</td>
</tr>
<tr>
<td>BC-68</td>
<td>50 V</td>
<td>68 V</td>
<td>Voice, Token Ring LAN, 10Base-T LAM</td>
<td>80, 160 L-G, L-L</td>
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<td>BC-140</td>
<td>102 V</td>
<td>140 V</td>
<td>Voice, Token Ring LAN, 10Base-T LAM</td>
<td>130, 200 L-G, L-L</td>
</tr>
<tr>
<td>BC-180</td>
<td>131 V</td>
<td>180 V</td>
<td>Voice, Token Ring LAN, 10Base-T LAM</td>
<td>180, 200 L-G, L-L</td>
</tr>
</tbody>
</table>

Application Guide: Choosing the Right Bridge Clip
1. Measure the peak dc signal voltage of the telecom/data equipment.
2. Measure the peak ac voltage of the telecom/data equipment (Vrms x 1.41).
3. Add the values obtained in (1) and (2) to determine peak voltage requirements.
4. Match the peak voltage requirement to the appropriate Bridge Clip. Select the Bridge Clip based on the standoff voltage. For example, equipment with 36 Vdc peak signal voltage and peak ac voltage of 95 V would require a BC-180 (36 + 95 = 131).
5. If desired, connect the selected Bridge Clip modules to a 6-unit (I.T. Model BC-GB6) or 25-unit (I.T. Model BC-GB25) Grounding Strip.

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