SurgeProtect For Remote Monitors

Ensure Your Remote Monitoring Units (RMUs) and Rectifiers Are Safe From Electrical Surge Events

Use the Surge Arrester, SurgeFuse and SurgeDetector individually or together to keep your equipment operational with less downtime.

High Energy Surge Arrester (HESA) – Our HESA is designed with a full 40 kA surge capability, four times the level of traditional secondary surge arresters. It incorporates Metal Oxide Varistors to ensure superior energy handling for long service life even in the most severe conditions, and is fully enclosed in a stainless steel housing.

SurgeFuse – This powerful device is installed between rectifier outputs and RMU inputs. When a surge event exceeds the HESA’s capabilities, SurgeFuse intentionally breaks to stop the electrical current from damaging the RMU.

SurgeDetector – This device detects and logs high energy surge events. Users can track surge events over time using their RMUs over via Bullhorn Web. HESAs can degrade over time, so it is critical to understand the number of surge occurrences to determine when replacement is necessary.

Order surge products on our online store 24/7
## SurgeProtect for Remote Monitors: Technical Specifications

### High Energy Surge Arrester

#### Performance Test Characteristics

<table>
<thead>
<tr>
<th>Description</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-current, short duration:</td>
<td>2 discharges of 40 kA crest, 4/10 µs</td>
</tr>
<tr>
<td>Low-current, Long-duration:</td>
<td>20 surges of 75 A-2000 microsecond duration</td>
</tr>
<tr>
<td>Duty Cycle:</td>
<td>22 operations of 5 kA crest, 8/20 µs current wave</td>
</tr>
</tbody>
</table>

#### Insulation Withstand Voltages

<table>
<thead>
<tr>
<th>Arrester Rating</th>
<th>1.2/50 Impulse (kV Crest)</th>
<th>1 min Dry (kV rms)</th>
<th>10 Sec Wet (kV rms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All ratings:</td>
<td>10</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

#### Protective Characteristics

<table>
<thead>
<tr>
<th>Arrester Rating (V rms)</th>
<th>Maximum Continuous Operating Voltage (v rms)</th>
<th>Maximum Energy Capability (Joules / Phase)</th>
<th>Front of Wave Protective Level (kV Crest)</th>
<th>8/20 µs Current Maximum Discharge Voltage (kV Crest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>240</td>
<td>240</td>
<td>3405</td>
<td>1.8</td>
<td>1.5</td>
</tr>
</tbody>
</table>

1. Tests were performed in accordance with applicable sections of IEEE Std C62.11™ - 1993 standard (Metal Oxide Surge Arresters for Alternating Current Power Circuits).  
2. Based on a current impulse, which results in a discharge voltage cresting in 0.5 µs.

#### SurgeFuse

- Insertion Resistance: <1 ohm
- Maximum Current: 100 mA
- Open Transient Level: >3kV

#### SurgeDetector

- Trigger Current / Maximum Current: at least ±20A / > ±4kA
- Negative Pulse Width: 400-600mS
- Current Waveform: 8/20µs typical
- Isolation: at least 8kV
- Typical / Maximum Bias Voltage: 3.0-3.3Vdc / 5.0V
- Size: 2 X 1.25 X 0.5 inches
- Maximum Bias Current / Resistance: 10µA / 33k ohms
- Output High / Low Voltage: 2.6V minimum / .3V maximum