Two-pole IEC Class II surge arresters for TN and TT systems

**Catalog symbols:**
- BSPM2275TN
- BSPM2275TNR
- BSPH2275TT
- BSPH2275TTR

**Description:**
Eaton's Bussmann™ series two-pole IEC Class II modular surge arresters for TN and TT systems feature local easyID™ visual status indication and optional remote contact signaling. The unique module locking system fixes the protection module to the base. Modules can be easily replaced without tools by simply depressing the release buttons. Integrated mechanical coding between the base and protection module ensures against installing an incorrect replacement module.

**TT System Arrester**
The features of these single-pole devices are for use in single-phase 230 volt TT and TNS systems (“1-1” circuit).

**Optional remote contact signaling**
The three-pole terminal remote contact signaling option has a floating changeover contact for use as a break or make contact, according to circuit concept.

**Specifications:**
- **System volts**
  - 230
- **System types:**
  - TN
  - TT
- **Agency information**
  - CE
  - KEMA
  - RoHS compliant
- **Mounting**
  - 35mm DIN-Rail
- **Warranty**
  - Five years
2-Pole IEC Class II surge arresters for 230 volt TN and TT systems

**Dimensions - mm:**

![Dimensions diagram]

**Circuit diagrams:**

Shown with optional remote contact signaling.

- MOV
- Thermal disconnector
- Gas discharge tube (single)

**Recommended Bussmann series back up fuses**

<table>
<thead>
<tr>
<th>DIN fuse size</th>
<th>NH fuse catalog number</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>125NHG00B</td>
</tr>
<tr>
<td>0</td>
<td>125NHG0B</td>
</tr>
<tr>
<td>01</td>
<td>125NHG01B</td>
</tr>
<tr>
<td>02</td>
<td>125NHG02B</td>
</tr>
</tbody>
</table>
## Ordering information:

<table>
<thead>
<tr>
<th>System Voltage (50-60Hz) / Poles</th>
<th>230V/2</th>
<th>230V/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Continuous Operating Voltage (MCOV) ([U_c]) AC (50-60Hz)</td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>[L-N]</td>
<td>275V</td>
<td>—</td>
</tr>
<tr>
<td>[N-PE]</td>
<td>275V</td>
<td>255V</td>
</tr>
</tbody>
</table>

### Catalog numbers (base + modules)

- W/O remote signaling: BSPM2275TN, BSPH2275TT
- W/ remote signaling: BSPM2275TNR, BSPH2275TTR

### Replacement modules

- MOV Technology: BPM275IEC, BPM275IEC
- Spark gap technology: BPSNPEIEC*

### Specifications

#### Lightning impulse current (10/350µs) \([I_{imp}]\) [N-PE] \([I_{imp}]\)

- \([L-N]\) — 12kA
- \([N-PE]\) — 100A

#### Voltage protection level \([U_p]\)

- \([L-N]\) — \(\leq 1.5kV\)
- \([L-N]\) at 5kA — \(\leq 1kV\)
- \([N-PE]\) — \(\leq 1.5kV\)

#### Follow current extinguishing capability \([N-PE]\) \([I_{fi}]\)

- \(\leq 25\) ns

#### Response time \([t_{A}]\)

| \([L-N]\) | \([N-PE]\) |
| — | — |
| \(\leq 25\) ns | \(\leq 100\) ns |

#### Temporary overvoltage (TOV) \([U_t]\)

| \([L-N]\) | \([N-PE]\) |
| — | — |
| Withstand 335V / 5 sec. | — |
| Safe failure 440V / 120 min. | — |
| Withstand 335V / 5 sec. | — |
| Safe failure 440V / 120 min. | — |

SPD according to EN 61643-11 Type 2, IEC 61643-11 Class II

- Nominal discharge current (8/20µs) \([I_{n}]\) 20kA
- Max. discharge current (8/20µs) \([I_{max}]\) 40kA
- Max. mains-side overcurrent protection 125A
- Short-circuit withstand capability for max. mains-side overcurrent protection \([I_{ssw}]\) 50kA
- Nominal AC voltage \([U_{n}]\) 230V
- Operating environment \([T_{op}]\) -40°C to +80°C, 5% to 95% RH
- Operating state/fault indication Green (good) / Red (replace)
- Number of ports 1
- Cross-sectional area Min. 1.5mm²/14AWG solid/flexible
- Max. 35mm²/2AWG stranded — 25mm²/4AWG flexible
- Mounting 35mm DIN-Rail per EN 60715
- Enclosure material Thermoplastic, UL 94V0
- Location category Indoor
- Degree of protection IP20
- Capacity 2 mods., DIN 43880
- Agency information KEMA
- Product warranty Five years**

### Remote contact signaling

- Contact signaling type Changeover contact
- Switching capacity (volts/amps) AC 250V/0.5A, DC 250V/0.1A; 125V/0.2A; 75V/0.5A
- Conductor ratings and cross-sectional area 60/75°C Max. 1.5mm²/14AWG solid/flexible
- Ordering information Order from catalog numbers above

* N-PE surge arrester for location between neutral conductor and protective conductor in TT systems.

** See Eaton Bussmann series SPD limited warranty statement (3A1502) for details at www.cooperbussmann.com/surge.
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