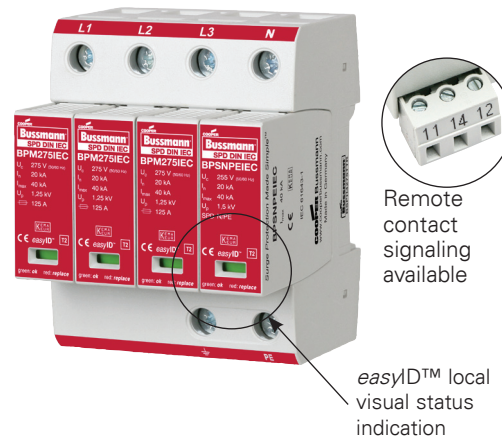


## Four-pole IEC Class II surge arresters for TN-S and TT systems



Remote contact signaling available

easyID™ local visual status indication

### Catalog symbols:

- BSPM4275TNS
- BSPM4275TNSR
- BSPH\_TT
- BSPH\_TTR

### Description:

Eaton's Bussmann™ series four-pole IEC Class II modular surge arresters 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.

These 230 volt models are offered with MCOV ratings of 275, 320 or 385V.

### TN-S system arrester

The features of these four-pole devices are for use in TN-S 230/400 volt systems ("4-0" circuit) against surges.

### TT system arrester

The features of these four-pole devices are for use in TT and TN-S 230/400 volt systems ("3+1" circuit) against surges.

### 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-S
- TT

#### Agency information

- CE
- KEMA
- RoHS compliant

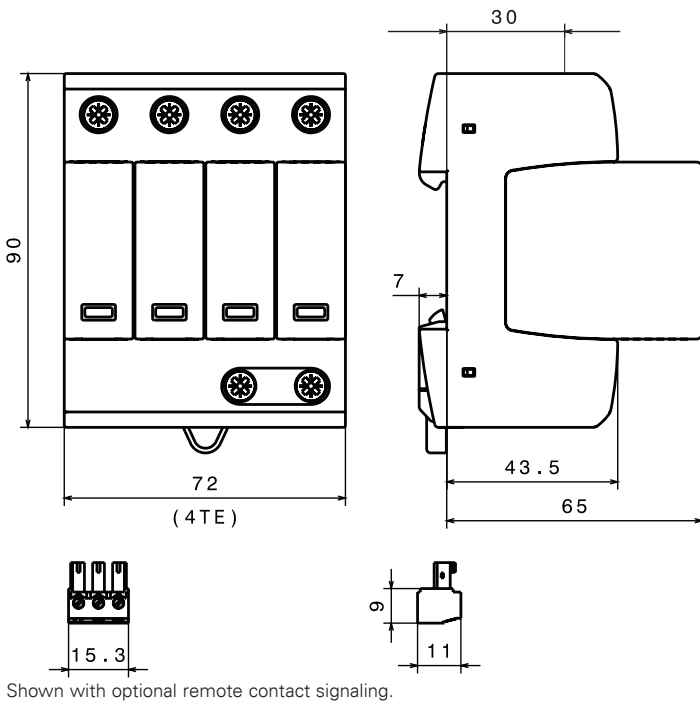
#### Mounting

- 35mm DIN-Rail

#### Warranty

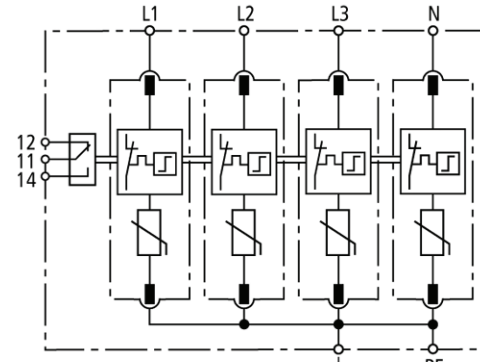
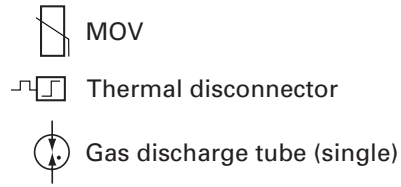
- Five years

**Dimensions - mm:**

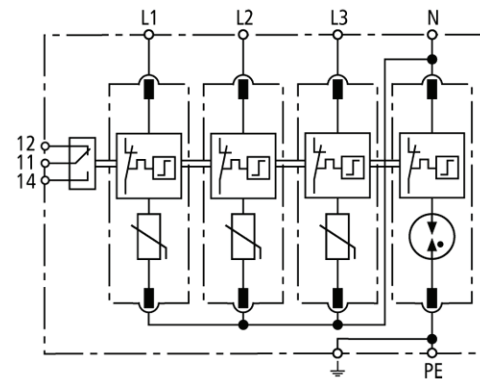


**Module circuit diagrams:**

Shown with optional remote contact signaling.



BSPM4275TNS(R)



BSPH4275TT(R)  
BSPH4320TT(R)  
BSPH4385TT(R)

**Recommended Bussmann series back up fuses**

| DIN fuse size | NH fuse catalog number |
|---------------|------------------------|
| 00            | 125NHG00B              |
| 0             | 125NHG0B               |
| 01            | 125NHG01B              |
| 02            | 125NHG02B              |

**Ordering information:**

| System voltage (50-60Hz)/poles   |                      | 230/400V / 4 | 230/400V / 4 | 230/400V / 4 | 230/400V / 4 |
|--|----------------------|--------------|--------------|--------------|--------------|
| Max. Continuous Operating Voltage (MCOV) [U <sub>c</sub> ]<br>AC (50-60Hz) | [L-N]                | 275V         | —            | —            | —            |
|  | [N-PE]               | —            | 275V         | 320V         | 385V         |
| Catalog numbers (base + modules)   | W/O remote signaling | BSPM4275TNS  | BSPH4275TT   | BSPH4320TT   | BSPH4385TT   |
|  | W/ remote signaling  | BSPM4275TNSR | BSPH4275TTR  | BSPH4320TTR  | BSPH4385TTR  |
| Replacement modules  | MOV technology       | BPM275IEC    | BPM275IEC    | BPM320IEC    | BPM385IEC    |
|  | Spark gap technology | —            | BPSNPEIEC*   | BPSNPEIEC*   | BPSNPEIEC*   |

| Specifications   |              |   |                     |                     |                     |                |
|--|--------------|---|---------------------|---------------------|---------------------|----------------|
| Lightning impulse current (10/350μs) [N-PE] [I <sub>imp</sub> ]                                    |              | —   | 12kA                | 12kA                | 12kA                |                |
|  |              | ≤ 1.5kV   | —                   | —                   | —                   |                |
|  | at 5kA       | ≤ 1kV   | —                   | —                   | —                   |                |
| Voltage protection level [U <sub>p</sub> ]   | [L-N]        | —   | ≤ 1.5kV             | ≤ 1.5kV             | ≤ 1.75kV            |                |
|  | [L-N] at 5kA | —   | ≤ 1kV               | ≤ 1.2kV             | ≤ 1.35kV            |                |
|  | [N-PE]       | —   | ≤ 1.5kV             | ≤ 1.5kV             | ≤ 1.5kV             |                |
| Follow current extinguishing capability [N-PE] [I <sub>fr</sub> ]                                  |              | —   | 100A <sub>rms</sub> | 100A <sub>rms</sub> | 100A <sub>rms</sub> |                |
|  |              | ≤ 25 ns   | —                   | —                   | —                   |                |
| Response time [t <sub>A</sub> ]  | [L-N]        | —   | ≤ 25 ns             | ≤ 25 ns             | ≤ 25 ns             |                |
|  | [N-PE]       | —   | ≤ 100 ns            | ≤ 100 ns            | ≤ 100 ns            |                |
| Temporary overvoltage (TOV) [U <sub>p</sub> ]  | Withstand    | 335V / 5 sec.   | —                   | —                   | —                   |                |
|  |              | 440V / 120 min.   | —                   | —                   | —                   |                |
|  | Safe failure | 335V / 5 sec.   | 335V / 5 sec.       | 335V / 5 sec.       | 440V / 120 min      |                |
|  |              | 440V / 120 min  | 440V / 120 min      | 440V / 120 min      | —                   |                |
|  | [L-N]        | Withstand   | —                   | 1200V / 200 ms      | 1200V / 200 ms      | 1200V / 200 ms |
|  |              | Safe failure  | —                   | 1200V / 200 ms      | 1200V / 200 ms      | 1200V / 200 ms |
| [N-PE]   | Withstand    | —   | 1200V / 200 ms      | 1200V / 200 ms      | 1200V / 200 ms      |                |
| Short-circuit withstand capability for max. mains-side overcurrent protection (I <sub>scCR</sub> ) |              | 50kA <sub>rms</sub>   | 50kA <sub>rms</sub> | 25kA <sub>rms</sub> | 25kA <sub>rms</sub> |                |
| SPD according to   |              | EN 61643-11 Type 2, IEC 61643-11 Class II                           |                     |                     |                     |                |
| Nominal AC voltage [U <sub>N</sub> ]   |              | 230 / 400V  |                     |                     |                     |                |
| Nominal discharge current (8/20μs) [I <sub>n</sub> ]   |              | 20kA  |                     |                     |                     |                |
| Max. discharge current (8/20μs) [I <sub>max</sub> ]  |              | 40kA  |                     |                     |                     |                |
| Max. mains-side overcurrent protection   |              | 125A gG   |                     |                     |                     |                |
| TOV characteristics  |              | Withstand   |                     |                     |                     |                |
| Operating environment [T <sub>U</sub> ]  |              | -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.         | 1.5mm <sup>2</sup> /14AWG solid/flexible                            |                     |                     |                     |                |
|  | Max.         | 35mm <sup>2</sup> /2AWG stranded — 25mm <sup>2</sup> /4AWG flexible |                     |                     |                     |                |
| Mounting   |              | 35mm DIN-Rail per EN 60715  |                     |                     |                     |                |
| Enclosure material   |              | Thermoplastic, UL 94V0  |                     |                     |                     |                |
| Location category  |              | Indoor  |                     |                     |                     |                |
| Degree of protection   |              | IP20  |                     |                     |                     |                |
| Capacity   |              | 4 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. 1.5mm <sup>2</sup> /14AWG solid/flexible |  |  |  |
| Ordering information                       |    | Order from catalog numbers above                      |  |  |  |

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

\*\* See Eaton's Bussmann series SPD limited warranty statement (3A1502) for details at [www.cooperbussmann.com/surge](http://www.cooperbussmann.com/surge).