Effective December 2015 SupersedesDecember 2010

# 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 *easy*ID<sup>™</sup> visual satus 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.

#### **TN System Arresters**

The features of these single-pole devices are for use in single-phase 230 volt TN systems ("2-0" circuit).



#### **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).

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#### **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

## Systen types:

- TN
- TT

#### Agency information

- CE
- KEMA
- · RoHS compliant

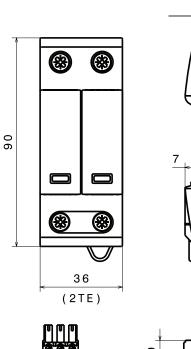
#### Mounting

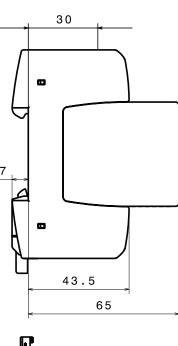
• 35mm DIN-Rail

#### Warranty

· Five years

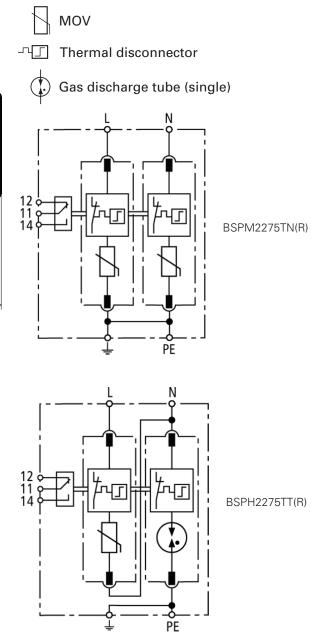
## **Dimensions - mm:**





### **Circuit diagrams**:

Shown with optional remote contact signaling.



Shown with optional remote contact signaling.

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11

## **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			230V/2	230V/2
Max. Continuous Operating Voltage (MCOV) [U <sub>c</sub> ] AC (50-60Hz)			275V	
		[L-N]	_	275V
		[N-PE]		255V
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) [N-PE] [I <sub>imp</sub> ]			_	12kA
Voltage protection level $[U_p]$			≤ 1.5kV	_
		at 5kA	≤ 1kV	_
		[L-N]	—	≤ 1.5kV
		[L-N] at 5kA		≤ 1kV
		[N-PE]	_	≤ 1.5kV
Follow current extinguishing capability [N-PE] [I <sub>ff</sub> ]			_	100A <sub>rms</sub>
Response time [t <sub>A</sub> ]			≤ 25 ns	
		[L-N]	_	≤ 25 ns
		[N-PE]	_	≤ 100 ns
		Withstand	335V / 5 sec.	
		Safe failure	440V / 120 min	
Temporary overvoltage (TOV) $[U_{\tau}]$	[L-N]	Withstand	_	335V / 5 sec.
		Safe failure		440V / 120 min.
	[N-PE]	Withstand	_	1200V / 200 ms
SPD according to			EN 61643-11 Type 2, IEC 61	1643-11 Class II
Nominal discharge current (8/20µs) [l,]			20kA	
Max. discharge current (8/20µs) [I <sub>max</sub> ]			40kA	
Max. mains-side overcurrent protection			125A gG	
Short-circuit withstand capability for max. mains-side overcurrent protection (I <sub>scra</sub> )			50kA <sub>rms</sub>	
Nominal AC voltage $[U_{\rm N}]$			230V	
Operating environment [T <sub>i</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.	1.5mm²/14AWG solid/flexible	
		Max.	35mm <sup>2</sup> /2AWG stranded — 25mm <sup>2</sup> /4AWG flexible	
			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	
		AC	250V/0.5A	
Switching capacity (volts/amps)		DC	250V/0.5A 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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Eaton 1000 Eaton Boulevard Cleveland, OH 44122 Eaton.com

Bussmann Division 114 Old State Road Ellisville, MO 63021 United States Eaton.com/bussmannseries

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