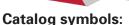
Effective December 2015 Supersedes June 2011

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







- BSPM\_TN
- BSPM\_TNR
- BSPG\_NPE
- BSPG\_NPER

# **Description**:

Eaton's Bussmann™ series one-pole IEC Class II modular surge arresters for TN and TT systems feature local *easy*ID<sup>™</sup> 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.

#### **TN** system arresters

The features of these single-pole devices are for use as a single device or in combination with other devices.





Remote contact signaling available

> easyID™ local visual status indication

> > • 600

### Systems types

### Agency information

- CSA (420V, 500V TT/TN and 585V TN systems)

#### Mounting

• 35mm DIN-Rail

#### Warranty

· Five years

# **TT System Arrester**

Provides a current arresting means between neutral conductor and protective conductor in TT systems, this device helps ensure fulfilling the requirements for protection of personnel and equipment in "3+1" and "1+1" circuits.

BUSSMANN

### **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

- 275
- 320
- 385



- TN

- TT

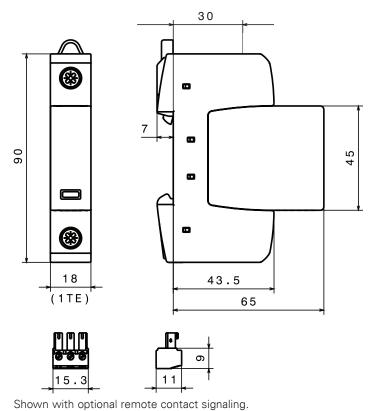
- CE



RoHS compliant

# 440

## **Dimensions - mm:**

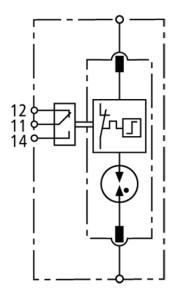


# Module circuit diagrams:

Shown with optional remote contact signaling

MOV Thermal disconnector Gas discharge tube (single)

BSPM1275TN(R) BSPM1320TN(R) BSPM1385TN(R) BSPM1440TN(R) BSPM1600TN(R)



BSPG1255NPE(R)

# **Ordering information:**

System voltage (50-60Hz) / poles		230V/1	230V/1	230V/1	400V/1	480V/1	230V/1*	
Max. Continuous Operating Voltage (MCOV) $\left[ U_{c}\right]$ AC (50-60Hz)		275V	320V	385V	440V	600V	255V	
Catalog numbers (base + modules)	W/O remote signaling	BSPM1275TN	BSPM1320TN	BSPM1385TN	BSPM1440TN	BSPM1600TN	BSPG1255NPE	
	W/ remote signaling	BSPM1275TNR	BSPM1320TNR	BSPM1385TNR	BSPM1440TNR	BSPM1600TNR	BSPG1255NPER	
Replacement modules		BPM275IEC	BPM320IEC	BPM385IEC	BPM440IEC	BPM600IEC	BPG255NPE	
Specifications								
Line system type		TN / TT	TN / TT	TN/TT	TN	TN	TT	
Max. continuous operating DC voltage [U <sub>c</sub> ]		350V	420V	500V	585V	600V	_	
		≤ 1.5kV	≤ 1.5kV	≤ 1.75kV	≤ 2kV	≤ 2.5kV	≤ 1.5kV	
Voltage protection level $[U_p]$	at 5kA	≤ 1kV	≤ 1.2kV	≤ 1.35kV	≤ 1.7kV	≤ 2kV	_	
Max. mains-side overcurrent protection		125A gG	125A gG	125A gG	125A gG	100A gG	_	
Short-circuit withstand capability for max. mains-side overcurrent protection (I <sub>srce</sub> )		50kA <sub>ms</sub>	25kA <sub>rms</sub>	25kA <sub>rms</sub>	25kA <sub>rms</sub>	25kA <sub>rms</sub>	_	
Temporary Overvoltage (TOV) [U <sub>T</sub> ]	Withstand	335V / 5 sec.	335V / 5 sec.	440V / 120 min.	580V / 5 sec.	700V / 5 sec.	1200V / 200 ms	
	Safe failure	440V / 120 min.	440V / 120 min.	_	765V / 120 min.	915V / 120 min.	_	
Response time $[t_{a}]$		≤ 25 ns	≤ 25 ns	≤ 25 ns	≤ 25 ns	≤ 25 ns	≤ 100 ns	
Follow current extinguishing capability [I <sub>n</sub> ]		_	_	_	_	_	100A <sub>rms</sub>	
Lightning impulse current (10/350µs) [I <sub>imn</sub> ]		_	_	_	_	_	12kA	
Nominal discharge current (8/20µs) [I]]		20kA	20kA	20kA	20kA	15kA	20kA	
Max. Discharge current (8/20µs) [I <sub>max</sub> ]		40kA	40kA	40kA	40kA	30kA	40kA	
Agency information		KEMA	KEMA, CSA	KEMA, CSA	KEMA, CSA	KEMA, CSA	KEMA	
Capacity		1 mod., DIN 43880						
SPD according to		EN 61643-11 Type	e 2, IEC 61643-11	Class II				
Operating environment $[T_{U}]$		-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, U	L 94V0					
Location category		Indoor						
Degree of protection		IP20						
Product warranty		Five years**						
Remote contact signaling								
Contact signaling type		Changeover cont	act					
Switching capacity (volts/amps)	AC	250V/0.5A	250V/0.5A					
	DC	250V/0.1A; 125V	250V/0.1A; 125V/0.2A; 75V/0.5A					
	Conductor ratings and cross-sectional area		60/75°C max. 1.5mm²/14AWG solid/flexible					
Conductor ratings and cross-sectional are	ea	60/75°C max. 1.5	imm²/14AWG solic	l/flexible				

\* 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.

# Recommended Bussmann series back up fuses

	TT / TN system NH fuse catalog numbers				
DIN fuse size	275, 320, 385, 440V	600V			
00	125NHG00B	100NHG00B-690			
0	125NHG0B	—			
01	125NHG01B	—			
1	125NHG1B	100NHG1B-690			
02	125NHG02B	_			

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