

# 1-Pole IEC Class I coordinated lightning current arresters for 75V to 1000V TN and TT wind power systems





### Catalog symbol:

- BSPG1230WE
- BSPG1230WER
- BSPM\_WE
- BSPM\_WER

# **Description:**

Eaton's Bussman<sup>TM</sup> series of one-pole IEC Class II modular surge arresters feature local, <code>easyIDTM</code> visual indication and optional remote contact signaling. The unique module locking system on the 75 to 690 volt arresters fixes the protection module to the base part. 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 and 1-phase TT system arresters

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

#### TT system arresters

Provide a current arresting means between neutral conductor and protective conductor in TT systems. These devices help ensure fulfilling the requirements for protection of personnel and equipment in "3+1" and "1+1" circuits.

#### 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

 75Vac to 1000Vac (see ordering information table for details)

#### System types

- TN
- TT

# **Agency information**

- CE
- CSA
- KEMA
- · RoHS compliant

# Mounting

35mm DIN-Rail

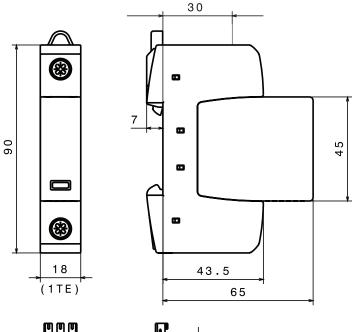
#### Warranty

· Five years



# **Dimensions - mm:**

# 75V to 690V



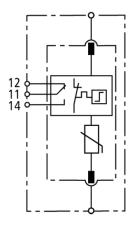


Shown with optional remote contact signaling.



¬☐ Thermal disconnecter

Mov

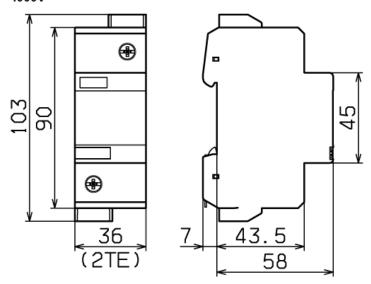


BSPM175WE(R) BSPM1400WE(R) BSPM1690WE(R)

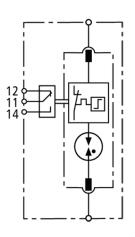


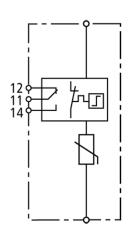


1000V



Shown with optional remote contact signaling.





BSPG1230WE(R)

BSPM11000WE(R)

# **Ordering information:**

System voltage (50-60Hz)	/ poles	75V / 1	230V / 1	400V / 1	400V†/690V†† / 1	1000V / 1	
Max. Continuous Operating (MCOV) [U <sub>c</sub> ] AC (50-60Hz)	Voltage	75V	255V	440V	600V	1000V	
Catalog numbers (base + modules)	W/ remote signaling	BSPM175WE	BSPG1230WE	BSPM1400WE	BSPM1690WE	BSPM11000WE	
	W/ remote signaling	BSPM175WER	BSPG1230WER	BSPM1400WER	BSPM1690WER	BSPM11000WER	
Replacement modules		BPM75WE	BPG255NPEWE*	BPM440WE	BPM750WE	N/A	
Specifications							
Line system type		TN /TT	TT	TN /TT	TN /TT	TN / TT	
Max. continuous operating DC voltage $[U_c]$		100V	_	585	600V	1000V	
Rated varistor voltage AC [U <sub>mov</sub> ]		_	_	_	750V	1000V	
Nominal discharge current (8/20µs) [In]		10kA	20kA	20kA	15kA	15kA	
Max. discharge current (8/20µs) [I <sub>max</sub> ]		40kA	40kA	40kA	25kA	30kA	
Follow current extinguishing capability $[I_{\rm fi}]$		_	100 Arms	_	_	_	
Lightning impulse current (1	0/350µs) [I <sub>imp</sub> ]	_	12kA	_	_	_	
Voltage protection level	[U <sub>p</sub> ]	≤ 0.4kV	≤ 1.5kV	≤ 2.0kV	≤ 3kV	≤ 4.2kV	
	[U <sub>p</sub> ] at 5kA	≤ 0.35kV	_	≤ 1.7kV	≤ 2.5kV	≤ 3.5kV	
Response time [t <sub>A</sub> ]		≤ 25 ns	≤ 100 ns	≤ 25 ns	≤ 25 ns	≤ 25 ns	
Max. mains-side overcurrent protection		125A gG	_	125A gG	100A gG	100A aM**	
Short-circuit withstand capability for max. mains-side overcurrent protection (I <sub>SCCB</sub> )		50kA <sub>rms</sub>	_	25kA <sub>rms</sub>	25kA <sub>rms</sub>	25kA <sub>rms</sub>	
Temporary Overvoltage	Withstand	90V / 5 sec.	1200V / 200ms	580V / 5 sec.	900V / 5 sec.	1000V / 5 sec.	
$(TOV)[U_T]$	Safe failure						
Agency information		KEMA, CSA	KEMA	KEMA, CSA	KEMA, CSA	_	
Capacity (DIN 43880)		1 Mod.	1 Mod.	1 Mod.	1 Mod.	2 Mod.	
SPD according to		EN 61643-11 Type 2, IEC 61643-11 Class II					
Operating environment [T <sub>II</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.	35mm²/ 2AWG stranded-25mm²/ 4AWG flexible					
Mounting		35mm DIN-Rail per	EN 60715				
Enclosure material		Thermoplastic, UL 9	94V0				
Location category		Indoor					
Degree of protection		IP20 (built-in)					
Product warranty		Five years***					
Remote contact signaling							
Remote contact signaling type		Changeover contact					
Switching capacity	AC	250V / 0.5A					
(volts/mps)	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					
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# Recommended Bussmann series NH DIN back up fuses

Size	Fuse catalog number	
00	100NHG00B-690	
00	125NHG00B-690	

<sup>\*</sup> N-PE surge arrester for location between neutral conductor and protective conductor in TT systems.

\*\* 125A gG @ 690Vac.

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

† 400V [L-N]

†† 690V [L-L]

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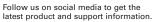
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