

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

RoHS



Remote contact signaling available

easyID™ local visual status indication

Catalog symbol:

- BSPG1230WE
- BSPG1230WER
- BSPM_WE
- BSPM_WER

Description:

Eaton's Bussman™ series of one-pole IEC Class II modular surge arresters feature local, easyID™ 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

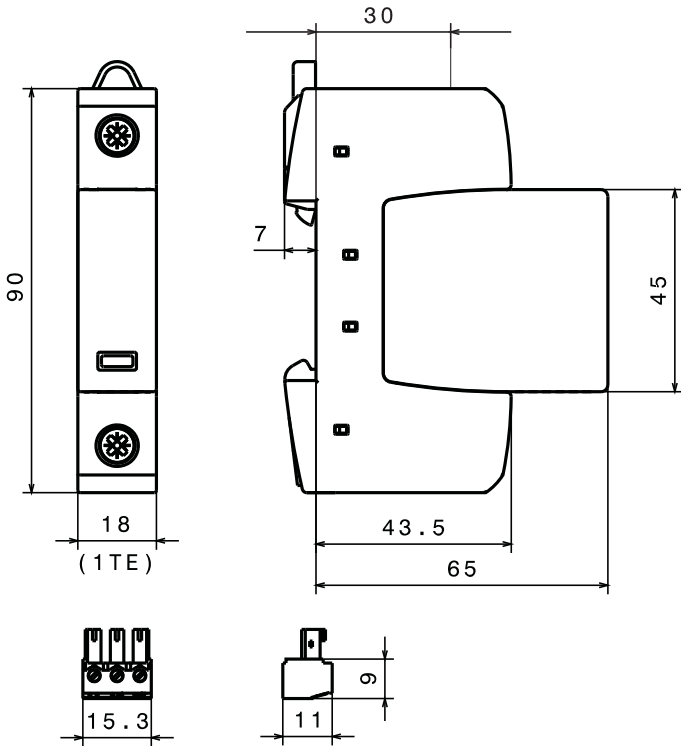
- 35mm DIN-Rail

Warranty

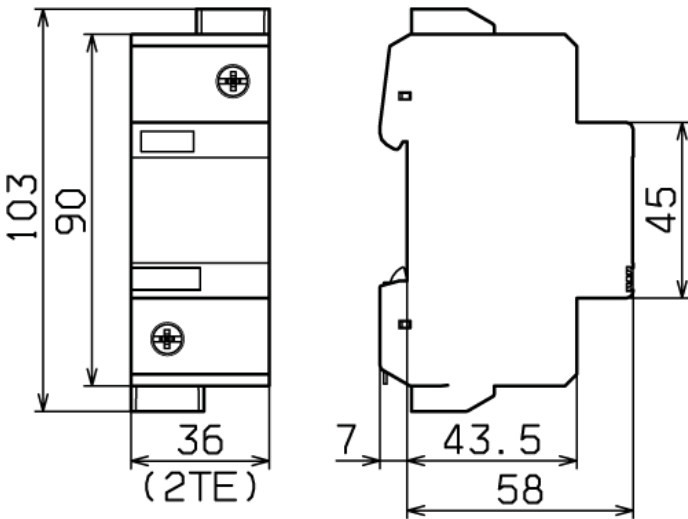
- Five years

Dimensions - mm:

75V to 690V

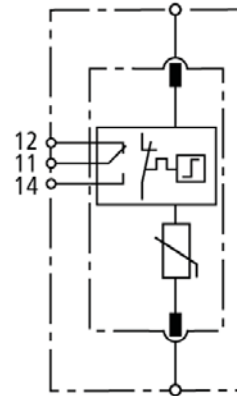
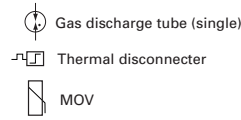


1000V

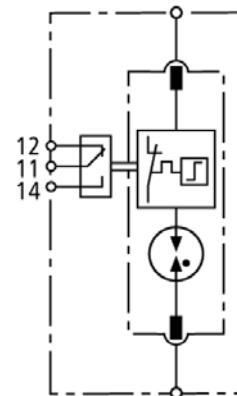


Module circuit diagrams:

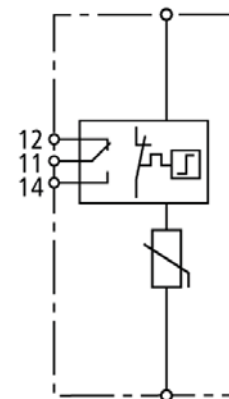
Shown with optional remote contact signaling.



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



BSPG1230WE(R)



BSPM11000WE(R)

Shown with optional remote contact signaling.

Ordering information:

System voltage (50-60Hz) / poles		75V / 1	230V / 1	400V / 1	400V†/690V†† / 1	1000V / 1
Max. Continuous Operating Voltage (MCOV) [U _c] AC (50-60Hz)		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 _{mov}]		—	—	—	750V	1000V
Nominal discharge current (8/20μs) [I _n]		10kA	20kA	20kA	15kA	15kA
Max. discharge current (8/20μs) [I _{max}]		40kA	40kA	40kA	25kA	30kA
Follow current extinguishing capability [I _f]		—	100 Arms	—	—	—
Lightning impulse current (10/350μs) [I _{imp}]		—	12kA	—	—	—
Voltage protection level		[U _p] ≤ 0.4kV	≤ 1.5kV	≤ 2.0kV	≤ 3kV	≤ 4.2kV
		[U _p] at 5kA ≤ 0.35kV	—	≤ 1.7kV	≤ 2.5kV	≤ 3.5kV
Response time [t _a]		≤ 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 _{scCR})		50kA _{rms}	—	25kA _{rms}	25kA _{rms}	25kA _{rms}
Temporary Overvoltage (TOV) [U _T]		Withstand	90V / 5 sec.	1200V / 200ms	580V / 5 sec.	900V / 5 sec.
		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 _v]		-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 ² / 14AWG solid / flexible			
		Max.	35mm ² / 2AWG stranded-25mm ² / 4AWG flexible			
Mounting		35mm DIN-Rail per EN 60715				
Enclosure material		Thermoplastic, UL 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 (volts/mps)		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 ² / 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.
 ** 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]

Recommended Bussmann series NH DIN back up fuses

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

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