

Surge Protection Made Simple™ for Wind Power Applications IEC Class II Surge Arresters for 75-1000 Volt, TN & TT Systems



Description

The Cooper Bussmann® IEC Class II 75, 230, 400, 690 and 1000 volt, one-pole, 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 System Arresters (also 1-Phase TT systems)

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

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.

Remote Signaling Contact

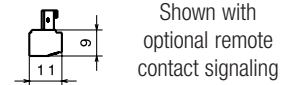
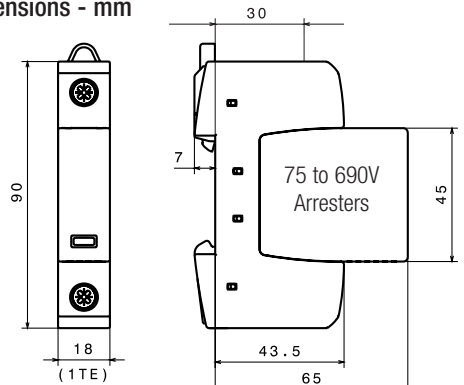
The three-pole terminal remote signaling contact versions have a floating changeover contact for use as a break or make contact, according to circuit concept.



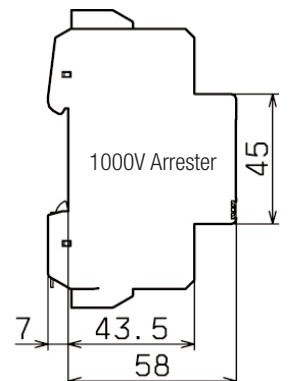
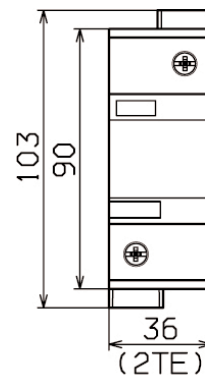
BSPM175WE(R)
BSPG1230WE(R)
BSPM1400WE(R)
BSPM1690WE(R)
BSPM11000WE(R)



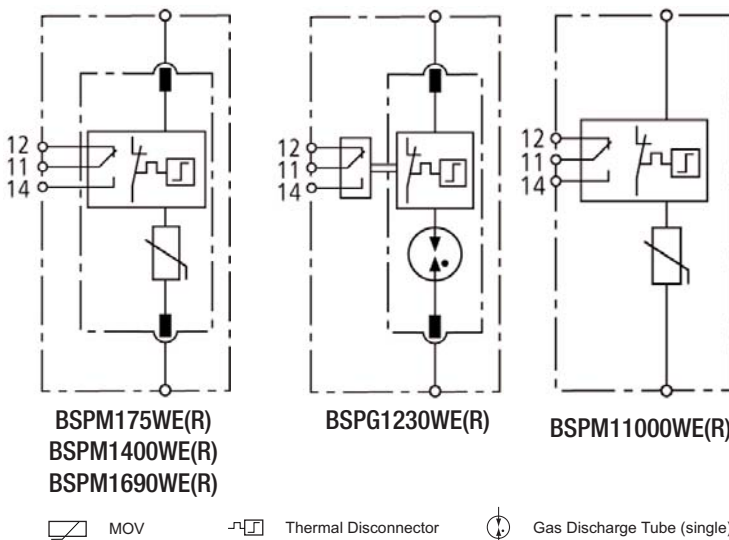
Dimensions - mm



Shown with optional remote contact signaling



Module Circuit Diagrams - Shown with optional remote contact signaling



Ordering Information						
System Voltage/Poles	75V/1	230V/1	400V/1	690V/1	1000V/1	
Max. Continuous operating AC voltage (MCOV) [U _C]	75V	255V	440V	600V	1000V	
Catalog Numbers:	Without Remote Signaling	BSPM175WE	BSPG1230WE	BSPM1400WE	BSPM1690WE	BSPM11000WE
(Base + Modules)	With 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 (8/20 μs) [I _n]	10kA	20kA	20kA	15kA	15kA	
Max. Discharge Current (8/20 μs) [I _{max}]	40kA	40kA	40kA	25kA	30kA	
Follow Current Extinguishing Capability [I _f]	--	100 A _{rms}	--	--	--	
Lightning Impulse Current (10/350 μs) [I _{imp}]	--	12kA	--	--	--	
Voltage Protection Level [U _p]	≤ 0.4kV	≤ 1.5kV	≤ 2.0kV	≤ 3kV	≤ 4.2kV	
Voltage Protection Level at 5kA [U _p]	≤ 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 gL/gG	--	125A gL/gG	100A gL/gG	100A aM**	
Short-Circuit Withstand Capability for Max. Mains-side Overcurrent Protection	50kA _{rms}	--	25kA _{rms}	25kA _{rms}	25kA _{rms}	
Temporary Overvoltage (TOV) [U _T]	90V / 5 sec.	1200V / 200ms	580V / 5 sec.	900V / 5 sec.	1000V / 5 sec.	
Standards Information	KEMA	KEMA	KEMA	KEMA	--	
Capacity	1 Mod., DIN 43880	1 Mod., DIN 43880	1 Mod., DIN 43880	1 Mod., DIN 43880	2 Mod., DIN 43880	
SPD According to EN 61643-11	Type 2					
SPD According to IEC 61643-1	Class II					
TOV Characteristics	Withstand					
Operating Temperature Range [T _U]	-40°C to +80°C					
Operating State/Fault Indication	Green (good) / Red (replace)					
Number of Ports	1					
Cross-Sectional Area (min.)	1.5mm ² /14AWG solid/flexible					
Cross-Sectional Area (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					
Standards Information	KEMA					
Product Warranty	Five Years***					
Remote Contact Signaling						
Remote Contact Signaling Type	Changeover Contact					
AC Switching Capacity (Volts/Amps)	250V/0.5A					
DC Switching Capacity (Volts/Amps)	250V/0.1A; 125V/0.2A; 75V/0.5A					
Conductor Ratings and Cross-Sectional Area for Remote Contact Signal Terminals	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 gL/gG @ 690Vac.

*** See Cooper Bussmann SPD Limited Warranty Statement (3A1502) for details at www.cooperbussmann.com/surge.

Recommended Cooper Bussmann Back Up Fuses	
DIN Fuse Size	NH Fuse Part Number
00	100NHG00B-690
00	125NHG00B-690

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