

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.

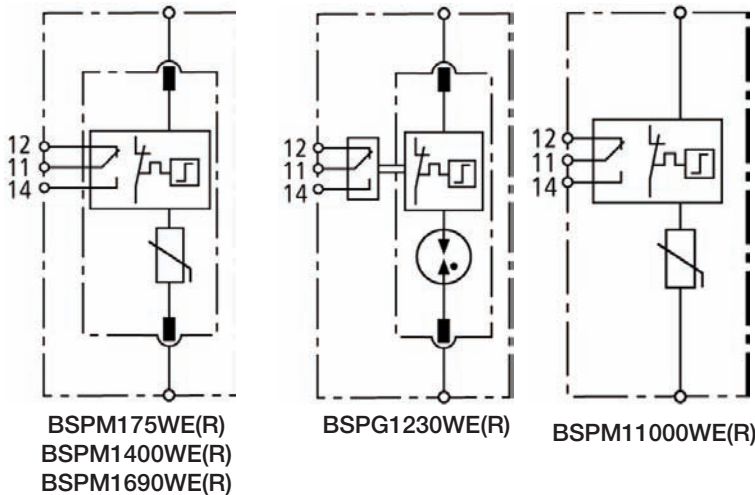
TT System Arrester

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.

Module Circuit Diagrams - Shown with optional remote contact signaling



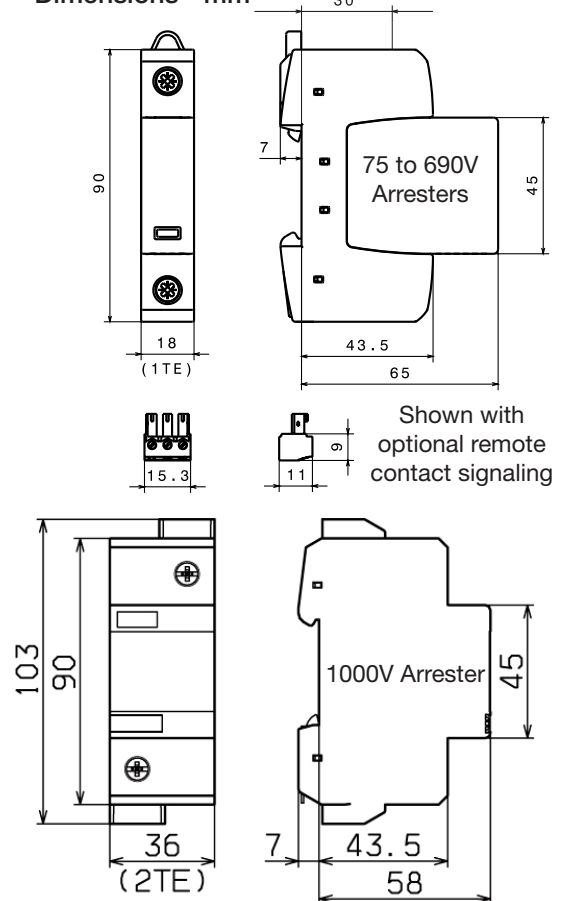
MOV Thermal Disconnector Gas Discharge Tube (single)



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



Dimensions - mm



Ordering Information						
System Voltages/Poles		75V/1	230V/1	400V/1	690V/1	1000V/1
Max. Continuous Operating AC Voltage (MCOV) [U _C]		75V	255V	440V	600V	1000V
Catalogue Numbers (Base + Modules)	Without Remote Signaling	BSPM175WE	BSPG1230WE	BSPM1400WE	BSPM1690WE	BSPM11000WE
	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	--	585V	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]		--	100A _{rms}	--	--	--
Lightning Impulse Current (10/350μs) [I _{imp}]		--	12kA	--	--	--
Voltage Protection Level [U _p]		≤0.4kV	≤1.5kV	≤2kV	≤3kV	≤4.2kV
Voltage Protection Level at 5kA [U _p]		≤0.35kV	--	≤1.7kV	≤2.5kV	≤3.5kV
Response Time [t _A]		≤25ns	≤100ns	≤25ns	≤25ns	≤25ns
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/5sec.	1200V/200ms	580V/5sec.	900V/5sec.	1000V/5sec.
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, UL94V0				
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 Catalogue 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

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

© 2011 Cooper Bussmann
www.cooperbussmann.com