

Surge Protection Made Simple™ for Wind Power Applications

IEC Class II Surge Arresters for 230 Volt, TN & TT Systems



Description

The Cooper Bussmann® IEC Class II 230 volt, two-pole, modular surge arresters feature local, *easyID™* visual indication and optional remote contact signaling. The unique module locking system 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 Arrester

The features of these two-pole device are for use as a single device.

TT System Arrester

For use as a single device in a 1-phase TT system.

Remote Signaling Contact

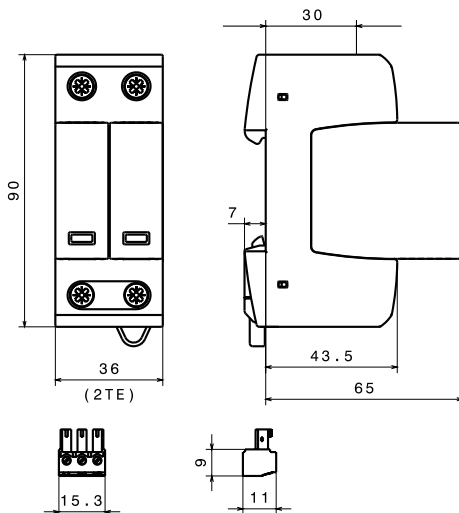
The three-pole terminal remote signaling contact versions have a floating changeover contact for use as a break or make contact, according to circuit concept.



BSPM2230WE(R)
BSPH2230WE(R)



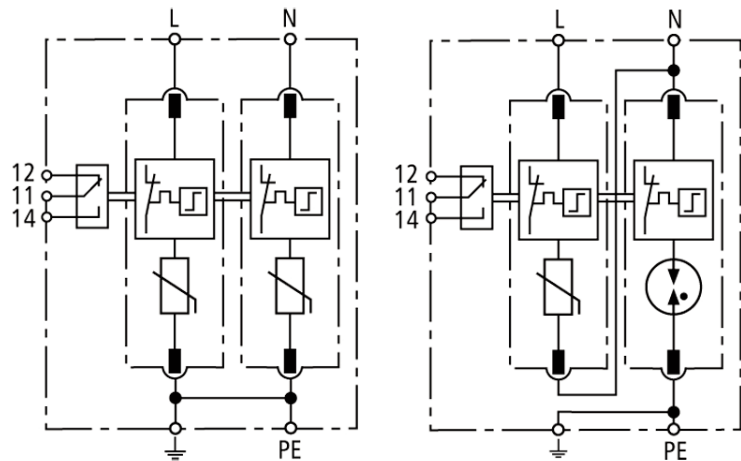
Dimensions - mm



Shown with optional remote contact signaling

Module Circuit Diagrams -

Shown with optional remote contact signaling



BSPM2230WE(R)

BSPH2230WE(R)

MOV Thermal Disconnector Gas Discharge Tube (single)

Ordering Information			
System Voltage/Poles		230V/2	230V/2
Max Continuous Operating AC Voltage (MCOV) [U _c]		275V	275/255V
Catalogue Numbers (Base + Modules)	Without Remote Signaling	BSPM2230WE	BSPH2230WE
	With Remote Signaling	BSPM2230WER	BSPH2230WER
Replacement Modules	MOV	BPM275WE	BPM275WE
	Spark Gap	--	BPSNPEWE*
Specifications			
Line System Type		TN	TT
Max. Continuous Operating AC Voltage [L-N] [U _c]		--	275V
Max. Continuous Operating AC Voltage [N-PE] [U _c]		--	255V
Nominal Discharge Current (8/20μs)[I _n]		20kA	20kA
Max. Discharge Current (8/20μs)[I _{max}]		40kA	40kA
Lightning Impulse Current (10/350μs) [N-PE] [I _{imp}]		--	12kA
Voltage Protection Level [U _p]		≤1.25kV	--
Voltage Protection Level at 5kA [U _p]		≤1kV	--
Voltage Protection Level [L-N] [U _p]		--	≤1.25kV
Voltage Protection Level [L-N] at 5kA [U _p]		--	≤1kV
Voltage Protection Level [N-PE] [U _p]		--	≤1.5kV
Follow Current Extinguishing Capability [N-PE] [I _{fi}]		--	100A _{rms}
Response Time [L-N] [t _A]		--	≤25ns
Response Time [N-PE] [t _A]		--	≤100ns
Response Time [t _A]		≤25ns	--
Max. Mains-Side Overcurrent Protection		125A gL/gG	125A gL/gG
Short-Circuit Withstand Capability for Max. Mains-Side Overcurrent Protection		50kA _{rms}	50kA _{rms}
Temporary Overvoltage (TOV) [U _T]		335V/5sec.	--
Temporary Overvoltage (TOV) [L-N] [U _T]		--	335V/5sec.
Temporary Overvoltage (TOV) [N-PE] [U _T]		--	1200V/200ms
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	
Capacity		2 Mods., DIN 43880	
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		Orders from Catalogue Numbers Above	

* N-PE Surge arrester for location between neutral conductor and protective conductor in TT systems.

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

Recommended Cooper Bussmann Back-Up Fuse Link	
DIN fuse size	NH fuse part number
00	125NHG00B

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.