

# Surge Protection Made Simple™ for IEC Applications

## IEC Class II Surge Arrester for 120/240 and 230/400 Volt, 3-Pole TNC Systems



### Description

The Cooper Bussmann® IEC Class II 120/240 volt and 230/400 volt, three-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.

120 Volt models are offered with a MCOV rating of 150 volts.

230 Volt models are offered with a MCOV rating of 275 or 385 volts.

### TNC System Arresters

The features of these three-pole devices are for use in TN-C 120/240 volt or 230/400 volt systems ("3-0" circuit) against surges.

### 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.



**BSPM3150TNC(R)**  
**BSPM3275TNC(R)**  
**BSPM3385TNC(R)**



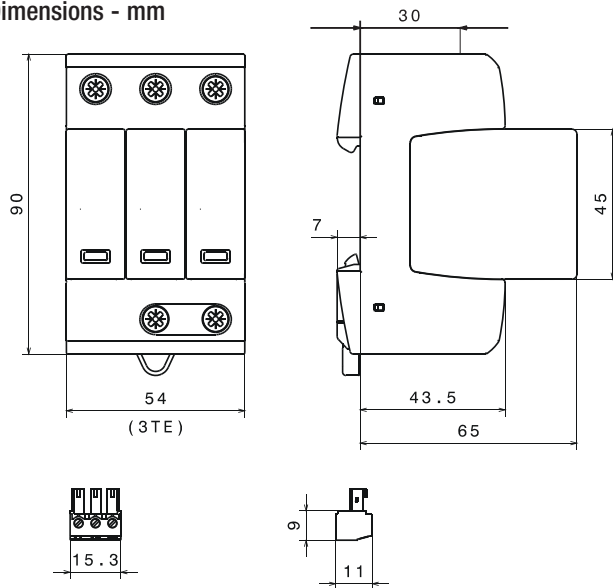
*easyID*™  
Visual Status Indication



Remote Signal Contact Available

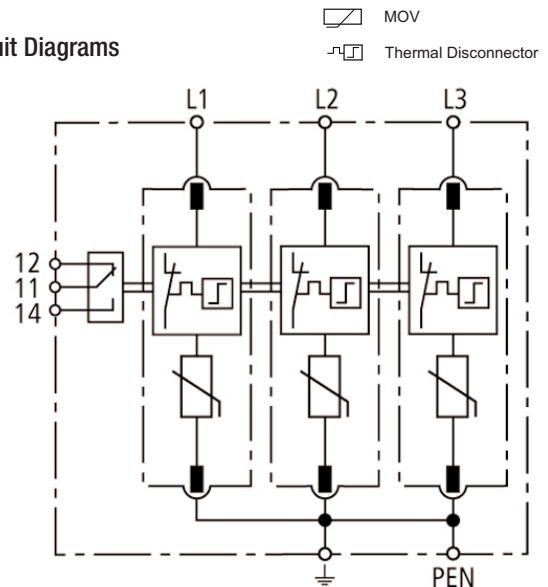


### Dimensions - mm



Shown with optional remote contact signaling

### Circuit Diagrams



**BSPM3150TNC(R), BSPM3275TNC(R), BSPM3385TNC(R)**

Shown with optional remote contact signaling

ORDERING INFORMATION				
System Voltage/Poles		120V/3	230V/3	230V/3
Max. Continuous operating AC voltage (MCOV) [U <sub>C</sub> ]		150V	275V	385V
Catalog Numbers:	Without Remote Signaling	BSPM3150TNC	BSPM3275TNC	BSPM3385TNC
	With Remote Signaling	BSPM3150TNCR	BSPM3275TNCR	BSPM3385TNCR
Replacement Module	MOV technology	BPM150IEC	BPM275IEC	BPM385IEC
SPECIFICATIONS				
Nominal AC voltage [U <sub>N</sub> ]		120/240V	230/400V	230/400V
Voltage protection level [U <sub>p</sub> ]		≤ 0.7kV	≤ 1.25kV	≤ 1.75kV
Voltage protection level at 5kA [U <sub>p</sub> ]		≤ 0.55kV	≤ 1kV	≤ 1.35kV
Short-circuit withstand capability for max. mains-side overcurrent protection		50kA <sub>rms</sub>	50kA <sub>rms</sub>	25kA <sub>rms</sub>
Temporary overvoltage (TOV) [U <sub>T</sub> ]		175V/5 sec	335V/5 sec.	385V/5 sec
Standards Information		- -	KEMA	- -
Nominal discharge current (8/20 μs) [I <sub>n</sub> ]		15kA	20kA	20kA
Max. Discharge current (8/20 μs) [I <sub>max</sub> ]			40kA	
SPD according to EN 61643-11			Type 2	
SPD according to IEC 61643-1			Class II	
Response time [t <sub>A</sub> ]			≤ 25 ns	
Max. mains-side overcurrent protection			125A gL/gG	
TOV characteristics			withstand	
Operating temperature range [T <sub>U</sub> ]			-40°C to +80°C	
Operating state/fault indication			Green (good)/Red (replace)	
Number of ports			1	
Cross-sectional area (min.)			1.5mm <sup>2</sup> /14AWG solid/flexible	
Cross-sectional area (max.)			35mm <sup>2</sup> /2AWG stranded-25mm <sup>2</sup> /4AWG flexible	
Mounting			35mm DIN rail per EN 60715	
Enclosure material			Thermoplastic, UL 94V0	
Location category			Indoor	
Degree of protection			IP20	
Capacity			3 mods., DIN 43880	
Product Warranty			Five Years*	
REMOTE CONTACT SIGNALING				
Remote Contact Signaling Type			Changeover Contact	
AC Switching Capacity (Volts/Amps)			250V/0.1A	
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 <sup>2</sup> /14AWG Solid/Flexible	
Ordering Information			Order from Catalog Numbers Above	

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

Recommended Cooper Bussmann Back Up Fuses	
DIN Fuse Size	NH Fuse Part Number
00	125NHG00B
0	125NHG0B
01	125NHG01B
02	125NHG02B

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