# Bussmann<sup>®</sup>

## Surge Protection Made Simple<sup>™</sup> for IEC Applications IEC Class I Combined Lightning, Current and Surge Arrester for 230/400 Volt, 3-Pole TNC Systems



#### Description

The Cooper Bussmann<sup>®</sup> IEC Class I 230 Volt, three-pole, modular combined lightning, current and surge arresters feature local, *easy*ID<sup>™</sup> 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.

230 Volt models are offered with a MCOV rating of 255 volts.

#### **TNC System Arrester**

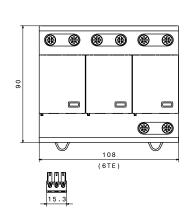
The features of these three-pole devices are for use in TN-C 230/400 Volt systems ("3-0" circuit) against surges.

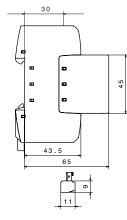
#### **Remote Signaling Contact**

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.



#### **Dimensions - mm**





BSPS3255TNC(R)

Shown with optional remote contact signaling

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Shown with optional

remote contact signaling



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### This Product Is Obsolete No recommended replacement is available

Ordering Information				
System Voltage/Poles	230/400V/3			
Max. Continuous operating AC voltage (MCOV) [U <sub>C</sub> ]	255V			
Catalog Numbers: Without Remote Signaling	BSPS3255TNC			
With Remote Signaling	BSPS3255TNCR			
Replacement Module Spark Gap Technology	BPS255IEC			
Specifications				
SPD according to EN 61643-11/ IEC 61643-1	Type 1/Class I			
Energy-coordinated protection effect with regard to the terminal equipment	Type 1 + Type 2			
Energy-coordinated protection effect with regard to the terminal equipment ( $\leq$ 5m)	Type 1 + Type 2 + Type 3			
Nominal AC voltage [U <sub>N</sub> ]	230/400V			
Lightning impulse current (10/350 µs) [L1+L2+L3-PEN] [I <sub>total</sub> ]	75kA			
Specific energy [L1+L2+L3-PEN] [W/R]	1.40 MJ/ohms			
Lightning impulse current (10/350 µs) [L-PEN] [l <sub>imp</sub> ]	25kA			
Specific energy [L-PEN] [W/R]	156.25kJ/ohms			
Nominal discharge current (8/20 µs) [In]	25/75kA			
Voltage protection level [U <sub>P</sub> ]	≤ 1.5kV			
Follow current extinguishing capability AC [Ifi]	50kA rms			
Follow current limitation/Selectivity	no tripping of a 20A gL/gG fuse up to 50kA rms (prosp.)			
Response time [t <sub>A</sub> ]	≤ 100 ns			
Max. Backup fuse (L) up to $I_{\rm K} = 50$ kA rms				
Max. Backup fuse (L) for $I_K > 50$ kA rms	200A gL/gG			
Max. Backup fuse (L-L)	125A gL/gG			
Temporary overvoltage (TOV) [UT]	440V/5 sec.			
TOV characteristics	withstand			
Operating temperature range [parallel]/[continuity] $[T_{11}]$	-40°C to +80°C/-40°C to +60°C			
Operating state/fault indication	green (good)/red (replace)			
Number of ports				
Cross-sectional area (L1, L1', L2, L2', L3, L3', PEN, 🚽 ) [min.]	10mm <sup>2</sup> solid/flexible			
Cross-sectional area (L1, L2, L3, PEN) [max.]	50mm <sup>2</sup> /1AWG stranded-35mm <sup>2</sup> /2AWG flexible			
Cross-sectional area (L1', L2', L3', $\pm$ ) [max.]				
Joss-sectional area (L1 , L2 , L3 , _≤) [max.] Mounting	35mm²/2AWG stranded-25mm²/4AWG flexible			
	35mm DIN rail per to EN 60715			
Enclosure material	Thermoplastic, UL 94V0			
Location category	Indoor			
Degree of protection	IP20			
Capacity	6 mods., DIN 43880			
Standards Information	KEMA			
Product Warranty	Five Years*			
Remote Contact Signal				
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. 1.5mm²/14AWG Solid/Flexible			
Ordering Information	Order from Catalog Numbers Above			

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

Recommended Cooper Bussmann NH DIN Size Back Up Fuses			
Size	NH Fuse Part Number	Size	NH Fuse Part Number
00	125NHG00B (max L-L)	02	125NHG02B (max L-L)
0	125NHG0B (max L-L)	02	200NHG02B (max L lk >50kA)
01	125NHG01B (max L-L)	2	315NHG2B (max L ≤50kA)
1	200NHG1B (max L lk >50kA)	03	315NHG03B (max L ≤50kA)

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