

Surge Protection Made Simple™ for Telecom Applications IEC Class III Surge Arresters for 24Vac/dc to 230Vac/dc LV Systems



Description

The Cooper Bussmann® IEC Class III 24Vac/dc, 48Vac/dc, 60Vac/dc, 120Vac/dc and 230Vac/dc, 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.

LV System Arresters

The features of these two-pole devices are for use in combination with other devices for AC and DC voltage systems.

Remote Signaling Contact

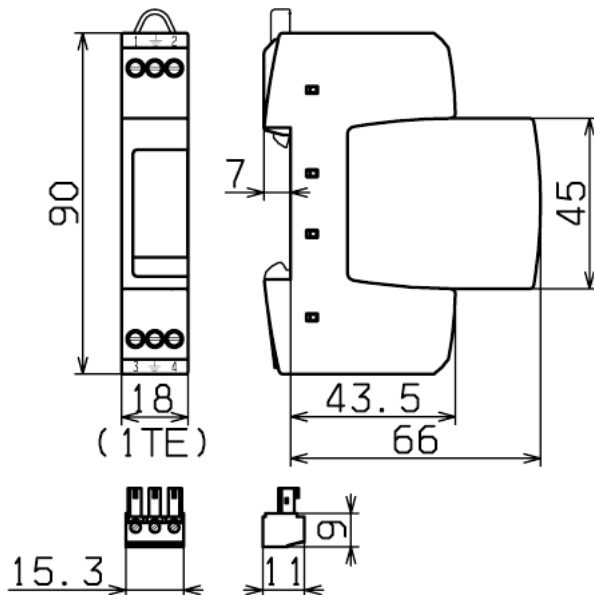
The three-pole terminal remote signaling contact versions have a floating changeover contact for use as a break or make contact, according to circuit concept.



- BSPH2A24D24LV(R)
- BSPH2A48D48LV(R)
- BSPH2A60D60LV(R)
- BSPH2A150D150LV(R)
- BSPH2A230D230LV(R)



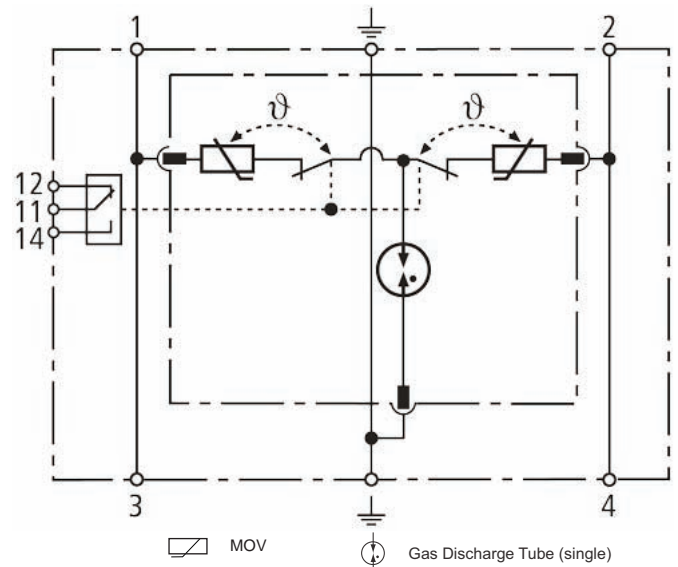
Dimensions - mm



Shown with optional remote contact signaling

Module Circuit Diagrams >

Shown with optional remote contact signaling



- BPHA24D24LV
- BPHA48D48LV
- BPHA60D60LV
- BPHA150D150LV
- BPHA230D230LV

Ordering Information						
System Voltage		24Vac/dc - 2	48Vac/dc - 2	60Vac/dc - 2	120Vac/dc - 2	230Vac/dc - 2
Max Continuous operating AC voltage (MCOV) [U _c]		30Vac/dc	60Vac/dc	75Vac/dc	150Vac/dc	255Vac/dc
Catalogue Numbers: (Base + Modules)	Without Remote Signaling	BSPH2A24D24LV	BSPH2A48D48LV	BSPH2A60D60LV	BSPH2A150D150LV	BSPH2A230D230LV
	With Remote Signaling	BSPH2A24D24LVR	BSPH2A48D48LVR	BSPH2A60D60LVR	BSPH2A150D150LVR	BSPH2A230D230LVR
Replacement Modules		BPHA24D24LV	BPHA48D48LV	BPHA60D60LV	BPHA150D150LV	BPHA230D230LV
Specifications						
Line System Type		LV	LV	LV	LV	LV
Nominal AC voltage [UN]		24V	48V	60V	120V	230V
Max continuous operating AC Voltage [U _c]		30V	60V	75V	150V	255V
Max continuous operating DC Voltage [U _c]		30V	60V	75V	150V	255V
Nominal load current AC [I _L]		25A	25A	25A	25A	25A
Nominal discharge current (8/20 μs) [I _n]		1kA	1kA	2kA	2kA	3kA
Total discharge current (8/20 μs) [I _{L+N+PE}] [I _{total}]		2kA	2kA	4kA	4kA	5kA
Combined impulse [U _{oc}]		2kV	2kV	4kV	4kV	6kV
Combined impulse [L+N+PE] [U _{oc} total]		4kV	4kV	8kV	8kV	10kV
Voltage protection level [L-N] [U _p]		≤ 180V	≤ 350V	≤ 400V	≤ 640V	≤ 1250V
Voltage protection level [L/N-PE] [U _p]		≤ 630V	≤ 730V	≤ 730V	≤ 800V	≤ 1500V
Temporary overvoltage (TOV) [L-N] [U _T]		--	--	--	--	335V / 5 sec.
Temporary overvoltage (TOV) [L/N-PE] [U _T]		--	--	--	--	400V / 5 sec.
Temporary overvoltage (TOV) [L+N-PE] [U _T]		--	--	--	--	1200V + U ₀ / 20
TOV characteristics [L-N]		--	--	--	--	Withstand
TOV characteristics [L/N-PE]		--	--	--	--	Withstand
TOV characteristics [L+N-PE]		--	--	--	--	Failure
SPD according to EN 61643-11		Type 3				
SPD according to IEC 61643-1		Class III				
Response time [L-N] [t _A]		≤ 25 ns				
Response time [L-N-PE] [t _A]		≤ 100 ns				
Max. mains-side overcurrent protection		25A gL/gG or C 25A				
Short-circuit withstand capability for mains-side overcurrent protection with 25A gL/gG		6kA _{rms}				
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.)		0.5mm ² /18AWG solid/flexible				
Cross-sectional area (max.)		4mm ² /10AWG solid/2.5mm ² /12AWG flexible				
For mounting on		35mm DIN rail per EN 60715				
Enclosure material		Thermoplastic, UL 94V0				
Location category		Indoor				
Degree of protection		IP20				
Capacity		1 Mod, 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 Signals Terminals		60/75°C Max. 1.5mm ² /14AWG Solid/Flexible				
Ordering Information		Order from Catalogue Numbers Above				

* Standards information not applicable to DC ratings.

** 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
000	25NHG000B
00	125NHG00B
0	125NHG0B
01	125NHG01B
02	125NHG02B

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