

Surge Protection Made Simple™ for LV Power Applications

UL Type 2 BSP LV Power Series for 48Vac/60Vdc, 75Vac/100Vdc, 120Vac/200Vdc

275Vac/350Vdc, 320Vac/420Vdc, 385Vac/500Vdc, 440Vac/585Vdc and 600Vac/dc LV Systems



Description

The Cooper Bussmann UL Type 2 48Vac/60Vdc, 75Vac/100Vdc, 120Vac/200Vdc, 275Vac/350Vdc, 320Vac/420Vdc, 385Vac/500Vdc, 440Vac/585Vdc and 600Vac/dc single 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 Power System Arresters

The features of these single-pole devices are for use as a single device or in combination with other devices for AC and DC voltage systems.

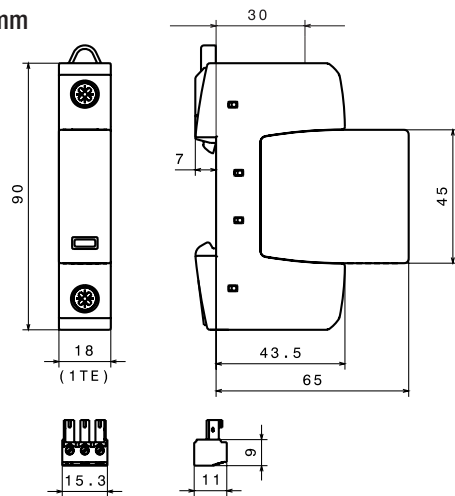
- Surge arrester according to UL 1449 3rd Edition, Type 2 Component Assembly helps meet UL 508A requirements*
- Proven MOV technology for reliable surge protection
- "Thermo Dynamic Control" SPD monitoring device ensures high reliability against surge events
- Module locking system with module release button make module replacement easy without tools
- Optional remote signaling of all protection modules make status monitoring easy and accurate in any monitoring scheme
- No upstream overcurrent protection necessary to make installation easier and more economical
- Vibration and shock tested according to EN 60068-2 to withstand harsh environments

Optional Remote Signaling Contact

The remote signaling contact versions have a floating changeover contact for use as a break or make contact for easy adoption in any monitoring application.

* Except as noted in data sheets.

Dimensions - mm



Shown with optional remote contact signaling



- BSPM1A48D60LV
- BSPM1A75D100LV
- BSPM1A150D200LV
- BSPM1A275D350LV
- BSPM1A320D420LV
- BSPM1A385D500LV
- BSPM1A440D585LV
- BSPM1A600D600LV



easyID™
Visual Status Indication

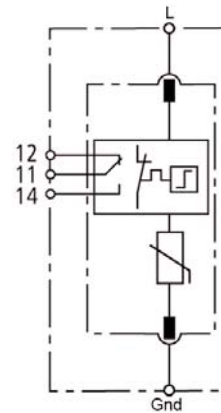


Remote Signal Contact Available



Non SCCR BSP LV Power Series

Circuit Diagrams



□ Thermal Disconnecter

□ MOV

- BSPMA48D60LV, BSPMA75D100LV, BSPMA150D200LV,
- BSPM1A275D350LV, BSPM1A320D420LV, BSPM1A385D500LV,
- BSPM1A440D585LV, BSPM1A600D600LV*

Shown with optional remote contact signaling

* For remote signaling contact, add "R" suffix to the part number.
E.g., BSPMA150D200LVR

Ordering Information - 48Vac/60Vdc to 275Vac/350Vdc

System Voltage		48Vac/60Vdc	75Vac/100Vdc	120Vac/200Vdc	275Vac/350Vdc
Catalog Numbers:	Without Remote Signaling	BSPM1A48D60LV	BSPM1A75D100LV	BSPM1A150D200LV	BSPM1A275D350LV
(Base + Modules)	With Remote Signaling	BSPM1A48D60LVR	BSPM1A75D100LVR	BSPM1A150D200LVR	BSPM1A275D350LVR
Replacement Modules		BPMA48D60LV	BPMA75D100LV	BPMA150D200LV	BPMA275D350LV
Specifications					
Max. continuous operating AC voltage [V _C]		48Vac	75Vac	150Vac	275Vac
Max. continuous operating DC voltage [V _C]		60Vdc	100Vdc	200Vdc	350Vdc
Nominal discharge current (8/20 μs) [I _n]		10kA	10kA	15kA	20kA
Max. discharge current (8/20 μs) [I _{max}]		25kA	40kA	40kA	40kA
Voltage protection level [V _{PP}]		≤ 0.3 kV	≤ 0.4kV	≤ 0.7kV	≤ 1.25kV
Voltage protection level at 5 kA [V _{PP}]		≤ 0.25kV	≤ 0.35kV	≤ 0.55kV	≤ 1kV
Temporary overvoltage (TOV)		70V / 5 sec.	90V / 5 sec.	175V / 5 sec.	335V / 5 sec
Agency Information*		- -	UL / cUL, CSA, KEMA	UL / cUL, CSA, KEMA	UL / cUL, CSA, KEMA

Ordering Information - 320Vac/420Vdc to 600Vac/dc

System Voltage		320Vac/420Vdc	385Vac/500Vdc	440Vac/585Vdc	600Vac/600Vdc
Catalog Numbers:	Without Remote Signaling	BSPM1A320D420LV	BSPM1A385D500LV	BSPM1A440D585LV	BSPM1A600D600LV
(Base + Modules)	With Remote Signaling	BSPM1A320D420LVR	BSPM1A385D500LVR	BSPM1A440D585LVR	BSPM1A600D600LVR
Replacement Modules		BPMA320D420LV	BPMA385D500LV	BPMA440D585LV	BPMA600D600LV
Specifications					
Max. continuous operating AC voltage [V _C]		320Vac	385Vac	440Vac	600Vac
Max. continuous operating DC voltage [V _C]		420Vdc	500Vdc	585Vdc	600Vdc
Nominal discharge current (8/20 μs) [I _n]		20kA	20kA	20kA	15kA
Max. discharge current (8/20 μs) [I _{max}]		40kA	40kA	40kA	30kA
Voltage protection level [V _{PP}]		≤ 1.5kV	≤ 1.75kV	≤ 2kV	≤ 2.5kV
Voltage protection level at 5 kA [V _{PP}]		≤ 1.2kV	≤ 1.35kV	≤ 1.7kV	≤ 2kV
Temporary overvoltage (TOV)		335V / 5 sec.	385V / 5 sec.	580V / 5 sec.	600V / 5 sec.
Agency Information*		UL / cUL, CSA, KEMA	UL / cUL, CSA, KEMA	UL / cUL, CSA, KEMA	UL / cUL, CSA, KEMA

Ordering Information - All Models

SPD according to EN 61643-11	Type 2
SPD according to IEC 61643-1	Class II
Response time [t _A]	≤ 25 ns
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 /1AWG stranded/25mm ² /2AWG 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
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 Catalog Numbers Above

* Standards information not applicable to DC ratings.

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

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