

One-pole IEC Class II surge arresters for TN and TT systems

RoHS



Remote contact
signaling available

easyID™ local
visual status
indication

Catalog symbols:

- BSPM_TN
- BSPM_TNR
- BSPG_NPE
- BSPG_NPER

Description:

Eaton's Bussmann™ series one-pole IEC Class II modular surge arresters for TN and TT systems feature local *easyID™* visual status indication and optional remote contact signaling. The unique module locking system fixes the protection module to the base. 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 arresters

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

TT System Arrester

Provides a current arresting means between neutral conductor and protective conductor in TT systems, this device helps ensure fulfilling the requirements for protection of personnel and equipment in "3+1" and "1+1" circuits.

Optional remote contact signaling

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

Specifications:

System volts

- 275
- 320
- 385
- 440
- 600

Systems types

- TN
- TT

Agency information

- CE
- CSA (420V, 500V TT/TN and 585V TN systems)
- KEMA
- RoHS compliant

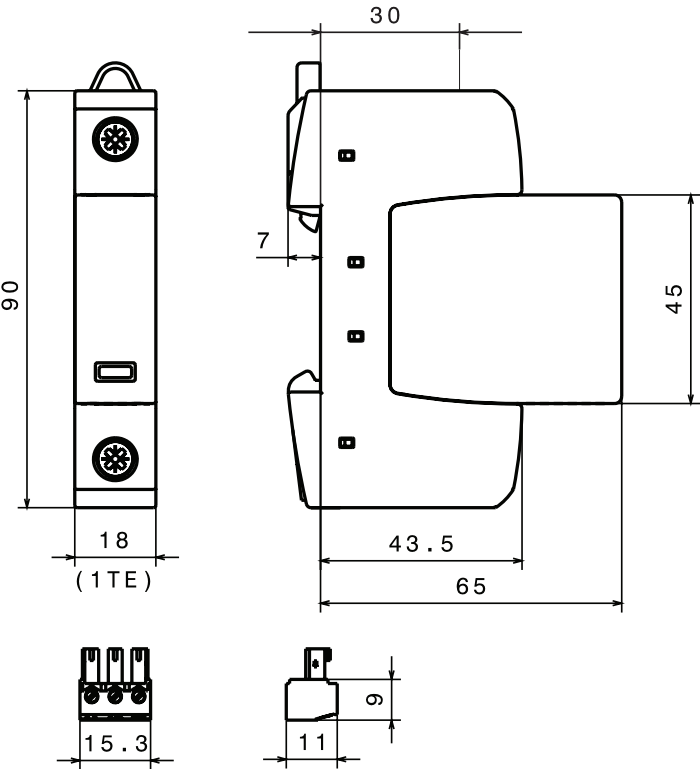
Mounting

- 35mm DIN-Rail

Warranty

- Five years

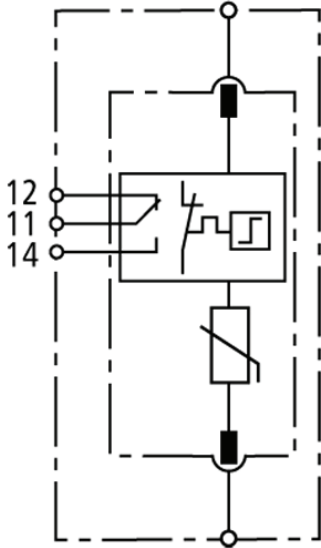
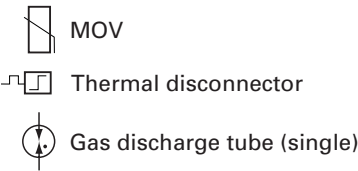
Dimensions - mm:



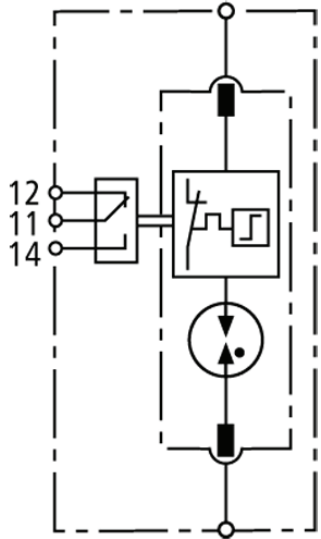
Shown with optional remote contact signaling.

Module circuit diagrams:

Shown with optional remote contact signaling



- BSPM1275TN(R)
- BSPM1320TN(R)
- BSPM1385TN(R)
- BSPM1440TN(R)
- BSPM1600TN(R)



- BSPG1255NPE(R)

Ordering information:

System voltage (50-60Hz) / poles		230V/1	230V/1	230V/1	400V/1	480V/1	230V/1*
Max. Continuous Operating Voltage (MCOV) [U _c] AC (50-60Hz)		275V	320V	385V	440V	600V	255V
Catalog numbers (base + modules)	W/O remote signaling	BSPM1275TN	BSPM1320TN	BSPM1385TN	BSPM1440TN	BSPM1600TN	BSPG1255NPE
	W/ remote signaling	BSPM1275TNR	BSPM1320TNR	BSPM1385TNR	BSPM1440TNR	BSPM1600TNR	BSPG1255NPER
Replacement modules		BPM275IEC	BPM320IEC	BPM385IEC	BPM440IEC	BPM600IEC	BPG255NPE
Specifications							
Line system type		TN / TT	TN / TT	TN / TT	TN	TN	TT
Max. continuous operating DC voltage [U _c]		350V	420V	500V	585V	600V	—
Voltage protection level [U _p]		≤ 1.5kV	≤ 1.5kV	≤ 1.75kV	≤ 2kV	≤ 2.5kV	≤ 1.5kV
	at 5kA	≤ 1kV	≤ 1.2kV	≤ 1.35kV	≤ 1.7kV	≤ 2kV	—
Max. mains-side overcurrent protection		125A gG	125A gG	125A gG	125A gG	100A gG	—
Short-circuit withstand capability for max. mains-side overcurrent protection (I _{SCCR})		50kA _{rms}	25kA _{rms}	25kA _{rms}	25kA _{rms}	25kA _{rms}	—
Temporary Overvoltage (TOV) [U _T]	Withstand	335V / 5 sec.	335V / 5 sec.	440V / 120 min.	580V / 5 sec.	700V / 5 sec.	1200V / 200 ms
	Safe failure	440V / 120 min.	440V / 120 min.	—	765V / 120 min.	915V / 120 min.	—
Response time [t _A]		≤ 25 ns	≤ 25 ns	≤ 25 ns	≤ 25 ns	≤ 25 ns	≤ 100 ns
Follow current extinguishing capability [I _f]		—	—	—	—	—	100A _{rms}
Lightning impulse current (10/350μs) [I _{imp}]		—	—	—	—	—	12kA
Nominal discharge current (8/20μs) [I _n]		20kA	20kA	20kA	20kA	15kA	20kA
Max. Discharge current (8/20μs) [I _{max}]		40kA	40kA	40kA	40kA	30kA	40kA
Agency information		KEMA	KEMA, CSA	KEMA, CSA	KEMA, CSA	KEMA, CSA	KEMA
Capacity		1 mod., DIN 43880					
SPD according to		EN 61643-11 Type 2, IEC 61643-11 Class II					
Operating environment [T _U]		-40°C to +80°C, 5% to 95% RH					
Operating state/fault indication		Green (good) / Red (replace)					
Number of ports		1					
Cross-sectional area	Min.	1.5mm²/14AWG solid/flexible					
	Max.	35mm²/2AWG stranded — 25mm²/4AWG flexible					
Mounting		35mm DIN-Rail per EN 60715					
Enclosure material		Thermoplastic, UL 94V0					
Location category		Indoor					
Degree of protection		IP20					
Product warranty		Five years**					
Remote contact signaling							
Contact signaling type		Changeover contact					
Switching capacity (volts/amperes)	AC	250V/0.5A					
	DC	250V/0.1A; 125V/0.2A; 75V/0.5A					
Conductor ratings and cross-sectional area		60/75°C max. 1.5mm²/14AWG solid/flexible					
Ordering information		Order from catalog numbers above					

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

** See Eaton Bussmann series SPD limited warranty statement (3A1502) for details at www.cooperbussmann.com/surge.**Recommended Bussmann series back up fuses**

DIN fuse size	TT / TN system NH fuse catalog numbers	
	275, 320, 385, 440V	600V
00	125NHG00B	100NHG00B-690
0	125NHG0B	—
01	125NHG01B	—
1	125NHG1B	100NHG1B-690
02	125NHG02B	—

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