mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Surge Protection Made Simple[™] for Wind Power Applications IEC Class I Coordinated Lightning Current Arresters with High Follow Current for 400-690 Volt, TNC, TNS & IT Systems



Description

The Cooper Bussmann[®] IEC Class I 400 and 690 Volt, onepole lightning current arresters feature local, *easy*ID[™] visual indication and optional remote contact signaling.

440V and 760V maximum continuous operating voltage arresters protect installations against surges and direct lightning strikes.

System & Application

TNC 400V/690V: 3x BSPS1400WE(R)

TNS 400/690V: 4x BSPS1400WE(R)

IT 690V: 3x BSPS1690WER

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



Shown with optional remote contact signaling

Circuit Diagrams - Shown with optional remote contact signaling



Creepage Discharge Spark Gap

COOPER Bussmann

Spark Gap Trigger

BSPS1400WE(R) BSPS1690WER



| Ordering Information | | | |
|--|---|---|--|
| System Voltage/Poles | 400V/1 | 690V/1 | |
| Max Continuous Operating AC Voltage (MCOV) [U _C] | 440V | 760V | |
| Catalogue Numbers Without Remote Signaling | BSPS1400WE | | |
| With Remote Signaling | BSPS1400WER | BSPS1690WER | |
| Specifications | | | |
| Line System Type | TNC, TNS, IT | TNC, TNS, IT | |
| Lightning Impulse Current (10/350µs) [limp] | 35kA | 25kA | |
| Specific Energy [W/R] | 306.25kJ/ohms | 156.25kJ/ohms | |
| Nominal Discharge Current (8/20µs) [In] | 35kA | 25kA | |
| Voltage Protection Level [Up] | ≤2.5kV | ≤4kV | |
| Follow Current Extinguishing Capability AC [I _{fi}] | 50kA _{rms} | 25kA _{rms} | |
| Follow Current Limitation/Selectivity | no tripping of 32A gL/gG fuse up to 50kA _{rms} (prosp.) | no tripping of 32A gL/gG fuse up to 25kA _{rms} (prosp.) | |
| Response Time [t _A] | ≤100ns | ≤100ns | |
| Max. backup fuse (L) up to $I_{K} = 25 kA_{rms}$ (ta $\leq 5s$) | | 250A gL/gG | |
| Max. Backup Fuse (L) up to $I_{K} > 25 kA_{rms}$ | | 100A gL/gG | |
| Max. Backup Fuse (L) up to $I_{K} = 50 kA_{rms}$ (t _a ≤ 0.2 s) | 500A gL/gG | | |
| Max. Backup Fuse (L) up to $I_{K} = 50 kA_{rms}$ (t _a \leq 5 s) | 250A gL/gG | | |
| Max. Backup Fuse (L) for I _K > 50kA _{rms} | 160A gL/gG | | |
| Max. Backup Fuse (L-L') | 125A gL/gG | 125A gL/gG | |
| Short-Circuit Withstand Capability for Max. Mains-Side Overcurrent Protection | 50kA _{rms} | 25kA _{rms} | |
| Temporary Overvoltage (TOV) [UT] | 690V / 5sec | 1000V / 5 sec | |
| Cross-Sectional Area (L, L', 🛓) [min.] | | 100mm ² solid/flexible | |
| Cross-Sectional Area (L, L', N/PEN) [min.] | 100mm ² solid/flexible | | |
| Cross-Sectional Area (L, N/PEN) [max.] | 50mm ² /1AWG stranded/35mm ² / 2AWG flexible | | |
| Cross-Sectional Area (L, 🚊) [max.] | | 50mm ² /1AWG stranded/35mm ² / 2AWG flexible | |
| Cross-Sectional Area (L) [max.] | 50mm ² /1AWG stranded/35mm ² / 4AWG flexible | 50mm ² /1AWG stranded/35mm ² / 4AWG flexible | |
| SPD According to EN 61643-11 | Type 1 | | |
| SPD According to IEC 61643-1 | Class I | | |
| TOV Characteristics | Withstand | | |
| Operating Temperature Range (parallel connection) [TUP] | -40°C to +80°C | | |
| Operating Temperature Range (series connection) [TUS] | -40°C to +60°C | | |
| Operating State/Fault Indication | Green (good) / Red (replace) | | |
| Number of Ports | 1 | | |
| Mounting | 35mm DIN rail per EN 60715 | | |
| Enclosure Material | Thermoplastic, UL94V0 | | |
| Place of Installation | Indoor | | |
| Degree of Protection | IP20 | | |
| Capacity | 2 Mods., DIN 43880 | | |
| Product Warranty | Five Years* | | |
| Remote Contact Signaling | | | |
| Remote Contact Signaling Type | emote 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. 1.5mm²/ 14AWG Solid/Flexible | | |
| Ordering Information | Order from Catalogue Number Above | | |

| Recommended Cooper Bussmann NH DIN Size Back Up Fuse Links | | |
|--|--|--|
| Size | NH Fuse Part Number | |
| 000 | 100NHG000B-690 (max L) up to $I_{K} > 25kA_{rms}$ | |
| 00 | 125NHG00B-690 (max L-L') | |
| 01 | 160NHG01B-690 (max L) for $I_{K} > 50kA_{rms}$ | |
| 02 | 250NHG02B-690 (max L) up to I _K = 25kA _{rms} (t _a \leq 5 s) | |
| 02 | 250NHG02B-690 (max L) up to I_K $$ = 50kArms $$ (t_a \leq 5 s) $$ | |
| 3 | 500NHG3B-690 (max (L) up to I_K = 50kA_{rms}~(t_a \le 0.2~s) | |

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

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