**Littelfuse SB5000 Guideform Specification**

Personnel-level ground-fault protection shall be provided by the Littelfuse SB5000, a microprocessor-based ground-fault circuit interrupter (GFCI) with the protection and control functions listed below. Automatic self-checking functions according to UL 943 shall be included.

**Protective Capabilities:**

* UL 943 Listed as a Class A GFCI, with a fixed 6 mA trip level, or
* UL 943C Listed as a Class C (for 208 or 480V) or Class D (for 600V) Special-Purpose GFCI, with a fixed 20 mA trip level, or
* UL 943/UL 1053 Listed as an Equipment Ground-Fault Protection Device (EGFPD) with adjustable trip levels at 6, 10, 20, 30, 40, 50, 60, 70, 80, 90, and 100 mA
* Inverse time curve compliant according to UL 943 curve $T=\left(\frac{20}{I}\right)^{1.43}$
* Maximum clearing time of 20 ms for leakage current of 308 mA and above (for Class C and D)
* Discrete Fourier Transform (DFT) filtering algorithm utilized on all fault current measurements
* Manual reset after a ground-fault trip
* Selectable autoreset or manual reset for re-energization after a ground-fault trip and power loss
* Selectable autoreset or manual reset for re-energization after a power loss
* Two-stage ground-monitoring circuit compliant to CSA M421 Use of Electricity in Mines when terminated with a 5.6-V Zener termination; compatibility with a short-circuit termination is also provided (switch selectable on the device)
* Selectable autoreset or manual reset for a ground-monitoring fault
* Compatibility with Littelfuse 1N5339B, SE-TA6, SE-TA6-SM, and SE-TA6ASF-WL 5.6-V Zener termination devices
* Undervoltage, brown-out and contactor chatter detection
* High-temperature trip if unit is beyond safe operating temperature
* Software that is certified to meet UL 1998 Software in Programmable Components

**Electrical System:**

* Connection to 3-phase, 3-wire systems, plus system ground
* Connection to single-phase, 2-wire systems (no neutral), plus system ground

**Inputs and Outputs:**

* Test button
* Reset button
* Incoming and outgoing connections for Phase A, B, C, and system ground
* Auxiliary contact to indicate status of internal contactor
* Ground check output for connection to pilot/ground-check wire

**Front-Panel Indication:**

* LED indication of Power, Enable, Ground-Fault Trip, and Load Ground Status

**Hardware:**

* Load ratings of 32, 60, 80, or 100 A
* UL Rating operating temperature of -35 C to 66 C (-31 to 151 F)
* Maximum operating temperature of -35 C to 75 C (-31 to 167 F) for 32 and 60 A models
* Maximum operating temperature of -40 C to 75 C (-40 to 167 F) for 80 and 100 A models
* Operating altitude of 2,000 m above sea level
* Short-circuit current rating of 10,000 A (for 32 and 60 A models) or 50,000 A (for 80 and 100 A models) when used with proper branch overcurrent protection according to electrical code
* Enclosure dimensions of 11.25 in (285.6 mm) tall x 9.62 in (244.4 mm) wide x 4.71 in (119.6 mm) deep for 32 and 60 A models
* Enclosure dimensions of 15.09 in (383.4 mm) tall x 12.88 in (327.1 mm) wide x 5.5 in (137.4 mm) deep for 80 and 100 A models
* Lockable polycarbonate enclosure certified as NEMA 4X (Outdoor) and IP69K
* Conformally-coated circuit boards