



# SHOCK BLOCK® SB5000 IN COMMERCIAL GARAGES, SERVICE BAYS, & MAINTENANCE SHOPS



## An Easy Fix for a Safer Workplace

In Commercial Garages, Service Bays, and Maintenance Shops, the frequent use of portable equipment creates situations where shock is more likely to occur. The NEC 210.8[B] code requires GFCI protection for any plug and cord equipment that is 208 V, 3-phase and 100 A or below. Plug-in equipment for use in welding, grinding, cutting, and drilling, fall into this category and must be protected with a GFCI. The Littelfuse SB5000 will meet this code requirement for your service shop, but the protection doesn't stop at 208 V. The Littelfuse Shock Block is also offered as Special Purpose GFCI protection all the way up to 600 V—personnel protection for all situations.

## The Littelfuse Shock Block SB5000 is the only GFCI on the market that:

- reduces unnecessary tripping by following an inverse trip time and using DFT filtering;
- includes NEMA 4X and IP69K enclosure ratings well suited for harsh environments; and
- has advanced ground-check features with Zener termination options, which can identify a crushed cable before the equipment is energized

## No-Nuisance Code Preparedness

- Shock Block is the most comprehensive UL 943 listed GFCI on the market, allowing service shops to be ahead of the game when it comes to code compliance.
- Using state-of-the-art technology, Shock Block handles 60–100 A loads without nuisance tripping.
- Reliable for 20–50 A applications where traditional GFCI types may not be practical due to excessive and unwanted tripping.

## Description

Available with Class A, C, D and EGFPD options, the SB5000 can be used in a wide range of applications. It offers proactive ground check on every model and helps increase efficiency and safety with a no-nuisance approach to personnel protection.

## Features & Benefits

FEATURE	BENEFIT
UL 943 inverse time trip curve	Inverse time detection circuit protects people while also reducing unnecessary trips
DFT (Discrete Fourier Transform) filtering algorithm	Eliminates nuisance trips due to harmonics
Minimum trip time < 20 msec	Reduces the risk of ventricular fibrillation for leakage current of 250 mA and above
Fixed 6 mA (UL 943) or 20 mA (UL 943C) trip level	UL Listed GFCI and personnel protection for industrial and commercial loads up to 100 A
Selectable trip levels (EGFPD)	The settings below 20 mA provide extra safety. The settings above 20 mA can provide partial range personnel protection for loads with higher nominal leakage currents.
Two-stage ground monitor with Zener termination that meets UL 943C, CSA M421	Proactively protects from shock by tripping if continuity of ground wire between Shock Block and load is broken
Flexible configuration	Selectable manual reset or auto reset for brownout, power up, and ground monitor interruptions to fit safety protocols
Conformal coating	Internal PWB is conformally coated to protect against corrosion and moisture
Auxiliary contact	Alerts your SCADA system if the Shock Block is energized or tripped
Automatic self-test	The Shock Block will continuously test itself and will trip if there is an internal failure
GFCI Class A, C, D and EGFPD options in one series	Simplified planning and operator familiarity for multiple applications/requirements



Expertise Applied | Answers Delivered

## Design Your System For Safety

Damaged “working ground” leads or improper setup can allow welding current to take alternate paths through facility structure, ground conductors, and conduit fittings. When this stray current runs through conduit or control panels,

it causes the conductors to heat up and melt insulation. Use the SB5000’s built in ground monitoring to make sure the effective ground-fault current path stays intact and proactively prevents future shock hazards from occurring.



## Ordering Information

Example catalog number from desired options

**SB5060-021-0**

SERIES PREFIX	LOAD		VOLTAGE		TRIP LEVEL		
	RATING		RATING	OPTION CODE	RATING	UL CATEGORY	OPTION CODE
	32		208 V	0	20 mA (fixed)	UL 943C Class C or D SPGFCI	0
	60		480 V	2	6–100 mA (adjustable)	UL 943/1053 EGFPD	1
	80		600 V	3	6 mA (fixed)	UL 943 Class A GFCI	2
	100						

For more information, visit [Littelfuse.com/ShockProtection](https://www.littelfuse.com/ShockProtection)

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