nVent | GARDNER BENDER

We connect and protect

nVent GARDNER BENDER Spike Stopper

Whole Home Surge Protection

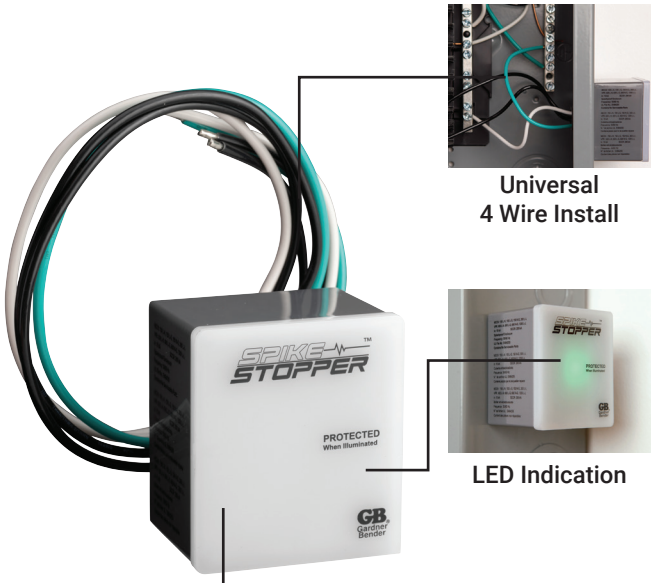
nVent.com/GardnerBender

Spike Stopper

nVent Gardner Bender's new Home Surge Protection Device Protects sensitive electronics and appliances in your home.

c UL us LISTED
1449
Edition 5
Assembled in North America

- Easy Installation – Installed at main electrical panel to protect appliances
- Fits all Manufacturers' Panels
- Economical surge protection solution
- Compact Design
- Multiple Residential Installation Locations: electrical panels and disconnects, condensing units, furnaces, heat pumps, irrigation and pool pumps
- Compliant to NEC 2023, Articles 242 And 230.67



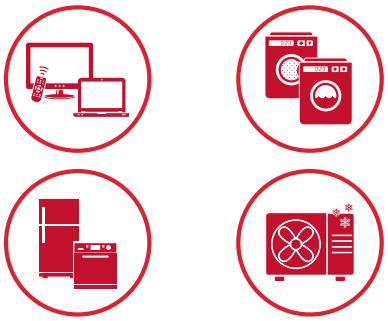
Universal
4 Wire Install

LED Indication

Smallest,
compact design

ER3M-1025-1S1
Cut Case Display

PROTECT APPLIANCES FROM POWER SURGES INCLUDING:



- Electronics
- Washers & Dryers
- Stoves & Refrigerators
- HVAC
- & more

FEATURES

- 75 kA Total Protection
- Voltage: 120/240VAC, Split Phase, 3W+G
- 10 kA Short-Circuit Current Rating
- Meets Type 1 and Type 2 SPD requirements
- MCOV: 150V L-N, L-G, N-G and 300V L-L
- VPR: 700V L-N, N-G and 1200V L-L, L-G
- In: 10 kA
- Frequency: 50-60Hz
- UL Type 4 Enclosure – Liquid-tight
- **5 YEAR WARRANTY**
  $75,000 equipment protection
- Includes 1/2" locknut required for installation

ITEM #	UPC	ITEM DESCRIPTION	COLOR	QTY/CARD	MASTER PACK QTY.
ER3M-1025-1S1	032076954086	Whole Home Surge Protection Device	Grey	1	4

PROTECTS AGAINST COMMON VOLTAGE SURGE CAUSES:

Lightning | Faulty wiring and/or connections | Damage to power lines | Switching of electrical loads

75 kA
TOTAL PROTECTION

10 kA
SHORT-CIRCUIT CURRENT RATING

Surge Protection 101

SPDs are designed to respond fast and virtually eliminate surges, providing greater protection to residential equipment.




SURGE PROTECTION

Surges & spikes can be generated internally or externally, & only a solid protection system will ensure the most effective power quality.

Only 20% of damaging surges come from external sources like lightning; the other 80% comes from within the facility. A common source for surges generated inside a building is a device that switches power on & off.

For example, every time a motor cycles on and off, very fast, high frequency events called Ring Wave Transient Voltage Surges are produced in the electrical system. Over time they do cumulative, and often unseen damage to sensitive medical equipment, drives, motors and the microprocessors prevalent in today's digital environment.

Ring Waves are often ignored since they require dedicated technology to be properly mitigated. SSI's proprietary Surge Protective Devices (SPDs) have been designed to reduce the 20% of external events like lightning while our Advanced Filtering Technology effectively mitigates the other 80%. Our customers experience return on investment in as few as 6 months.

SURGE PROTECTION DEVICES (SPDS)

What is the primary purpose of a surge protective device? It is simply to reduce the transient voltage surge energy (let through voltage) to a level that is not damaging to the load equipment. In today's electrical environments that means lower let through voltages.

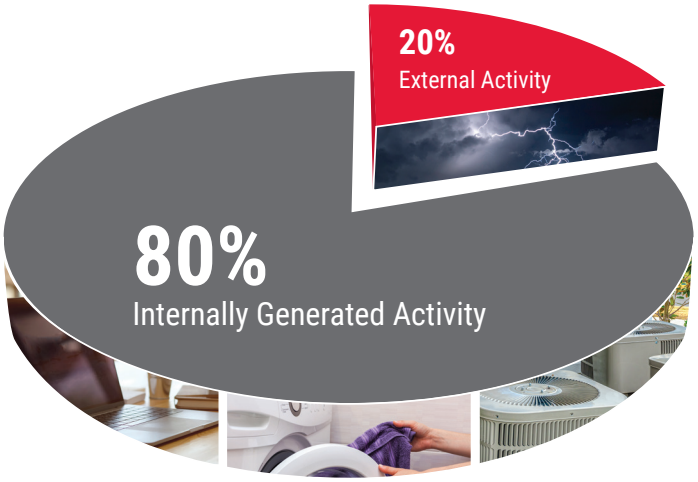
Transient voltage surges occur every day in every electrical environment, where they are causing damage. Sometime this damage is catastrophic, but mostly it is cumulative. Either way, it is often dismissed as "normal wear & tear" on equipment!

Transients damage sensitive electronics & microchips contained in residential equipment such as...

- TVs
- Mobile devices
- Ranges & Refrigerators
- Washer/Dryers
- Microwaves
- HVAC systems
- Water heaters

Where do surges come from?

Surges & spikes can be generated internally or externally.



- **EXTERNAL EVENTS** are both planned and unplanned. Others are spontaneous and uncontrolled.
- **INTERNAL EVENTS:** Everyday operation of typical equipment inside your home creates electrical surge activity that causes cumulative damage!

Figures based on nationwide averages

Source: General Electric "Current Scene," a bulletin of circuit protection technology

Transient voltage surges occur every day in every electrical environment, where they are causing damage. Sometime this damage is catastrophic, but mostly it is cumulative. Either way, it is often dismissed as "normal wear and tear" on equipment!

INTERNAL SOURCES

- TVs
- Power Tools
- Computers
- Ranges & Refrigerators
- Washer/Dryers
- Microwaves
- Hair dryers
- HVAC systems
- Water heaters
- Fluorescent Lighting

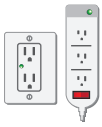
EXTERNAL SOURCES

- Lightning
- Utility Switching
- Power Outages
- Utility Relay Operation
- External Capacitor Banks
- Animals
- Fallen Trees

2023 CODE UPDATE All new and renovated homes are required to be protected by Listed and Approved Type1 or Type 2 Surge Protective Devices

Type 1 - **Permanently connected** Surge Protective Device. Protects against external and internal surges. May be installed **inside** or **outside** the home.

Type 2 - **Permanently connected** Surge Protective Device installed in or next to, breaker box. Protects against **internal** and **external** surges.



Type 3 - **Point of use** Surge Protective Device. **Must be used in conjunction with Type 1 or Type 2 SPD** to meet 2020 code requirements.

USE TYPE 1, 2 AND 3 SPDS FOR THE BEST LEVEL OF PROTECTION

NEC 2023 CODE REQUIRES SURGE PROTECTION FOR ALL NEW DWELLING UNITS

States that have adopted the NEC 2023 code include:

Alaska, Arkansas, California, Colorado, Connecticut, Delaware, Georgia, Iowa, Louisiana, Maine, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, North Carolina, North Dakota, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont, Washington, West Virginia, Wyoming

nVent

Our powerful portfolio of brands:
CADDY ERICO HOFFMAN ILSCO RAYCHEM SCHROFF

nVent-GAR_NPA_088_0724_Home Surge Brochure