

HERMATIC

SURGE PROTECTIVE DEVICE
ANSI/UL1449 3rd EDITION

LE
SWITCH

CC8280
2 POLE

HERMATIC
Consumable Surge Module

POWER

PROTECTION

ON: PROTECTED
OFF: REPLACE

POWER

PROTECTION

ON: PROTECTED
OFF: REPLACE

POWER

PROTECTION

ON: PROTECTED
OFF: REPLACE

ON
OFF

OFF

WARNING Risk of Electric Shock

- Turn Module Power Switch to "OFF" position before replacing Consumable Surge Modules. Module Power Switch is NOT used as an over-current protection device (OCPD).
- Mettre l'interrupteur d'alimentation de module en position d'arrêt (OFF) avant de changer les modules anti-surintensité consommables. L'interrupteur d'alimentation de module ne sert PAS de dispositif de protection contre les surintensités.

WARNING Risk of Electric Shock

- Disconnect power to unit at power source before servicing internal wiring for installation or maintenance. Replace hood/cover after servicing or installation. Service to be performed by qualified personnel only.



Surge Protection

An estimated \$250-\$500 million* a year is lost from property damage caused by power surges and spikes. Surge Protection is one of the most overlooked safeguards. Most people protect their electronics but leave more valuable equipment unsecured from surges and spikes. Don't be the next victim. Safeguard your equipment with Intermatic Surge Protection. Intermatic offers a complete line of surge protective devices for single family residences, commercial office spaces, HVAC/R equipment, pools and spas. It covers everything from irrigation and farm equipment to pumps, lighting fixtures, traffic lights, and motors. Why take the costly risk? Invest in peace of mind with Intermatic surge protective devices.

Every modern facility is a strong candidate for surge protection. Intermatic has a broad line of Service Entrance, Panelboard and Point-of-Use Surge Protection that is capable of protecting all types of facilities, such as Industrial Manufacturing, Commercial Office Space, Healthcare Facilities, Institutional Buildings, Government Buildings and Campuses, Hospitality, Retail Space, and Single or Multifamily Residences.

* National Lightning Detection Network

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Causes of Power Disturbances

Electrical disturbances and downtime cost North American companies and residents more than \$26 billion every year. Lightning and fluctuations in utility power (caused by grid switching, for example) are often suspected to be the main culprits. However, the overwhelming cause of power disturbances is actually from transient voltage surges from equipment inside a facility. In fact, it is estimated that 65% of all transient voltage surges are generated from inside sources, while only 35% come from outside.* Triggers of transient surges can range from the stopping and starting of motors, appliances and electronics, to even the simple action of switching lights ON and OFF.

** NEMA Surge Protection Institute*

What Requires Surge Protection?

Every process and appliance within a building is controlled by electrical equipment and electronic components. Virtually all devices that are powered by electricity are vulnerable. The following types of systems will benefit from surge protection:

- Home Theater Systems
- Computers/Peripherals/Servers
- HVAC/R Systems and Controls
- Electronically Commutated Motors
- Pool and Spa Systems and Controls
- Smart phones/Tablets/Gaming Systems
- Charging Equipment for Hybrid and Electric Cars
- Variable Frequency Drives
- Security and Fire Alarm Systems
- Programmable Logic Controllers
- Network Servers/Routers/Modems
- Lighting Ballasts
- Uninterruptible Power Supplies
- Home Automation Controls
- Pumps, Motors and Related Equipment with Electronic Controls or Starters
- Telecom Equipment
- Generator Automatic Transfer Switches (ATS)



ANSI/UL 1449 3rd Edition Surge Protection Compliance

UL 1449 2nd Edition underwent a major revision requiring additional safety testing at medium-fault current levels for Transient Voltage Surge Suppressors (TVSS). UL 1449 3rd Edition was published in September 2006 with compliance required by September 2009. The major differences are:

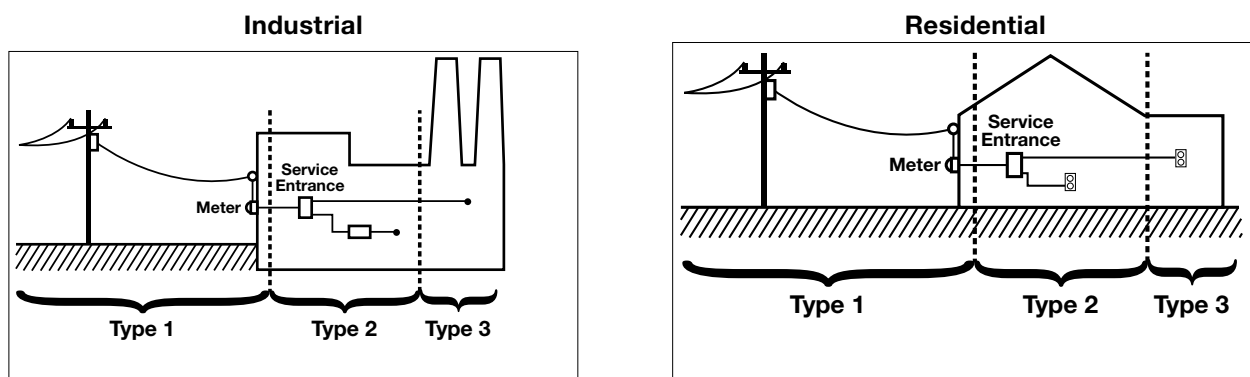
- UL 1449 3rd Edition is now an American National Standard (ANSI)
- Change in terminology from Transient Voltage Surge Suppressors to Surge Protective Devices (SPD)
- Voltage Protection Rating (VPR) is now tested at 6 kV/3 kA
- Nominal Discharge Current (In) is a new addition

Terminology Change

The full title of UL 1449 2nd Edition is, “UL Standard for Safety for Transient Voltage Surge Suppressors, UL 1449”. The new title of UL 1449 3rd Edition is, “UL Standard for Safety for Surge Protective Devices, UL 1449.” “Surge Protective Devices” is a more general description and covers devices beyond what we formerly called TVSS. The term SPD also covers what are referred to as Secondary Surge Arrestors.

UL 1449 3rd Edition gives four designations to surge protective devices depending on where in the electrical system the device is connected.

- Type 1** — Permanently connected device installed before or after the service disconnect overcurrent device and intended to be installed with no external overcurrent protective device. This type of SPD most closely relates to devices that were called secondary surge arrestors prior to 3rd Edition.
- Type 2** — Permanently connected device installed after the service disconnect overcurrent device. This type of SPD most closely relates to devices that were called transient voltage surge suppressors prior to 3rd Edition.
- Type 3** — Point of use SPDs that are installed with a minimum of 30 feet of conductor length from the service panel. These 30 feet of conductor length does not include conductors used to attach the SPD. Some examples of Type 3 SPDs are cord connected, direct plug-in and receptacle type SPDs.



Voltage Protection Rating (VPR)

The measured limiting voltage test in UL 1449 3rd Edition uses a 6 kV/3 kA combination wave surge to determine the Voltage Protection Rating (VPR) of the SPD. This test is similar to the Suppressed Voltage Rating (SVR) as performed in UL 1449 2nd Edition. The key difference between the tests in 2nd Edition and 3rd Edition is that the magnitude of the current used for the test is six times greater in 3rd Edition versus 2nd Edition. This much higher current level will mean that the Voltage Protection Rating (VPR) will likely be significantly higher.

Nominal Discharge Current (In)

The addition of the nominal discharge current test is new to UL 1449 3rd Edition. The nominal discharge current value is selected by the manufacturer and can be either 10 kA or 20 kA for a Type 1 SPD or 3 kA, 5 kA, 10 kA or 20 kA for Type 2 SPDs. The SPD is tested by being subjected to a total of 15 impulses of the manufacturer-selected nominal discharge current.

Joule Ratings

Many end-users look at Joule ratings to determine which surge protector to purchase. Unfortunately, Joule ratings can be misleading according to IEEE research. When a surge protector is submitted for third party agency testing, a Joule rating is not a tested parameter. Joule ratings are an unreliable measurement for determining a product's surge protection capacity because there is no clear standard for energy ratings of SPDs on Joules.

Typical Surge Protective Device (SPD) Applications



Entertainment
Home Theaters, TV,
Stereos



Home Office,
Computers, Tablets,
Printers



Home Automation,
Thermostats, Security,
Lighting



HVAC, Generators,
Solar



Pool & Spa
Equipment, Water
Heater, Landscape
Lighting

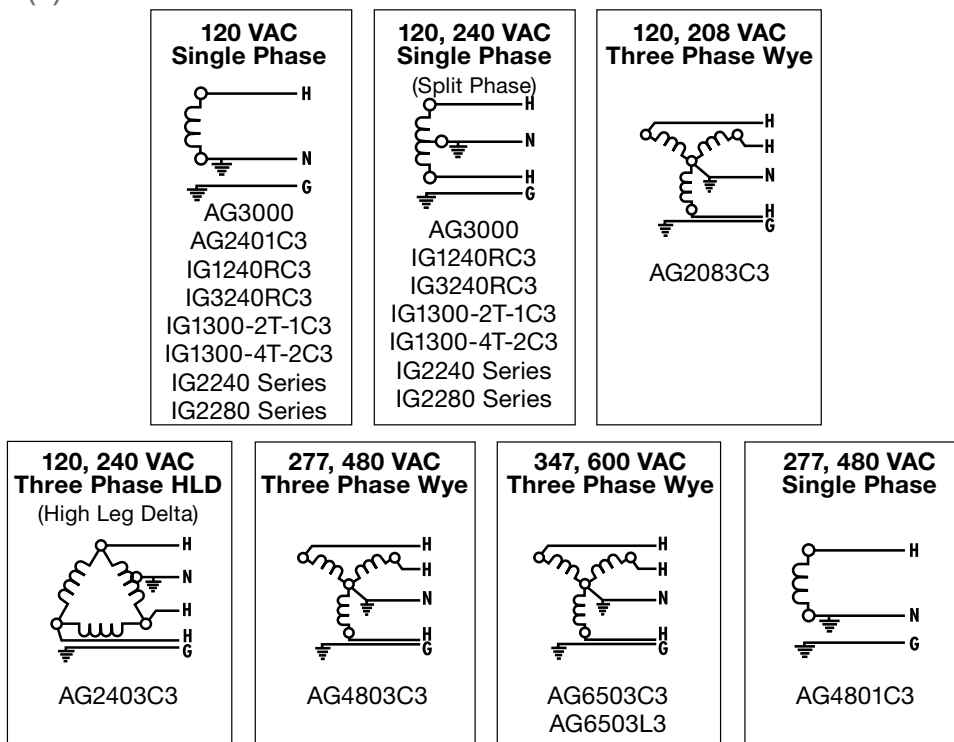


Mini-split, Furnace/
Air Handler, Boilers



Common Voltage Configurations

The wiring diagrams below illustrate the common voltage configurations for Intermatic surge products. Locate the desired voltage configuration and surge protector part number, and then go to the applicable product page to order the desired item(s).



Note: All SPDs protect against surges that travel along the electrical pathway and are not applicable to direct lightning strikes that travel down non-electrical paths. Be sure to have at least a 20 A dual pole breaker(s) to help prevent the circuits from shorting. Type 1 SPDs are normally mounted before panels, which would not include a breaker.

Surge Glossary

Maximum Continuous Operating Voltage (MCOV): The maximum RMS voltage that may be applied to each mode of a surge protection device. (Listed on the product)

Modes Of Protection: Electrical paths within a system which an SPD offers defense against surge events. Examples of protection include, Line to Neutral (L-N), Line to Ground (L-G), Line to Line (L-L) and Neutral to Ground (N-G). (Listed on the product)

Nominal Discharge Current (In): Peak value of the current through the SPD having a current wave shape of 8/20 where the SPD remains functional after 15 surges. (Listed on the product)

Nominal System Voltage: The voltage level at which a system normally operates. Nominal system voltages include, but are not limited to, 120, 208, 240, 277, 347, 480, 600 VAC. (Listed on the product)

Short Circuit Current Rating (SCCR): The measurement of how much current the electrical system can supply during a fault condition. This value determines where an SPD may be installed. (Listed on the product)

Surge: A sudden and sharp increase of current or voltage within electric circuits.

Surge Protective Device (SPD): A device used to limit a surge on equipment by diverting or limiting it. SPDs were previously known as Transient Voltage Surge Suppressors or secondary surge arresters.

Voltage Protection Rating (VPR): The value assigned by UL which specifies the measured limited voltage value of the SPD. VPR rating is formally known as the "suppressed voltage rating". (Listed on the product)

Surge Protection

Type 1 or 2 SPD for Residential and Light Commercial



IG2240-IMS



IG2280-OM



IG2240-P



US SPD Type1
Canada SPD Type 2

Ratings	
Service Voltage	120/240 VAC, 50-60 Hz
Phase	Single
Modes of Protection	6 (L1-N, L2-N, L1-G, L2-G, N-G, L1-L2)
Surge Protection Technology	TPMOV®
Operating Temperature	-31° F to 185° F (-35° C to 85° C)
# of Leads / Length	4 / 18"
Lead Gauge	#10 AWG
Dimensions H x W x D	See page 109 for dimensions
Product Warranty	10-year
Connected Equipment Warranty	10-year/\$25,000

Accessories	In* (kA)	SCCR** (kA)	
Replacement Consumable Module for IG2240 Series	10 kA	10 kA	IG120RSM10
Replacement Consumable Module for IG2280 Series	20 kA	100 kA	IG120RSM20
Flush Mount Kit for IG2240-IM, IG2240-IMS, IG2280-IM			IG2200-FMK



IG120RSM10



IG2200-FMK

Surge Protective Device with Consumable Modules

IG2200 Series

The Surge Protective Device (SPD) with Consumable Modules provides coverage of your customer's big investment equipment, from appliances and computers, to HVAC equipment and TVs. This innovative SPD uses Consumable Modules with LED lights for quick and easy indication when protection has been compromised. A blue light indicates the SPD unit is ON and a green light indicates surge protection is active. Trusted, state-of-the-art TMOV® (Thermally Protected Metal Oxide Varistor) surge protection technology eliminates the potentially hazardous failure modes that are commonly associated with standard MOV technology. Type 1 applications include outdoor installations before service entrances and utility meter cabinets. Type 2 applications include installations after service entrances. UL Listed to ANSI/UL 1449 3rd edition.

Applications

- Residential • Light Commercial

Features

- 6 Modes of protection
- TMOV® surge protection technology
- Module Power Switch, included on select models, enables convenient disconnection of power at the SPD when replacing Consumable Modules
- Includes three Consumable Modules with LED power and protection status lights
- Consumable Modules replace quickly and easily, eliminating the need to install a new SPD unit
- Tamper-proof Consumable Module doors, will only open when Consumable Module is being inserted
- Type 3R Rainproof Enclosure for indoor/outdoor applications in plastic or metal
- 10-year product warranty
- \$25,000 connected equipment warranty for 10 years on appliances and electronics

Model #	SPD Type	In* (kA)	SCCR** (kA)	MCOV†	VPR‡	Module Power Switch
Type 3R Rainproof, Plastic Enclosure						
IG2240-PS	1 or 2	10	10	L-N, N-G 150 L-L, L-G 300	L-L 1500 L-G 1500 L-N 800 N-G 700	Yes
	2	20	100	L-N, N-G 150 L-L, L-G 300	L-L 1200 L-G 1500	No
IG2240-P	2	10	10		L-N 800 N-G 700	No
Type 3R Rainproof, Metal Enclosure						
IG2240-OMS	1 or 2	10	10	L-N, N-G 150 L-L, L-G 300	L-L 1500 L-G 1500 L-N 800 N-G 700	Yes
	2	20	100	L-N, N-G 150 L-L, L-G 300	L-L 1200 L-G 1500	No
IG2240-OM	2	10	10		L-N 800 N-G 700	No
Type 1 Indoor, Metal Enclosure						
IG2240-IMS	1 or 2	10	10	L-N, N-G 150 L-L, L-G 300	L-L 1500 L-G 1500 L-N 800 N-G 700	Yes
	2	20	100	L-N, N-G 150 L-L, L-G 300	L-L 1200 L-G 1500	No
IG2240-IM	2	10	10		L-N 800 N-G 700	No

*Nominal Discharge Current

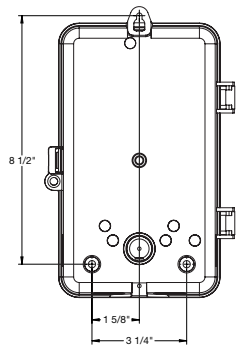
**Short Circuit Current Rating

†Maximum Continuous Operating Voltage

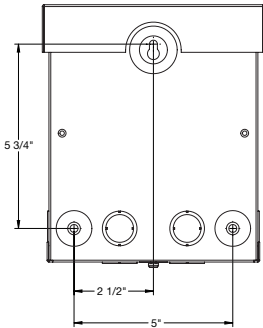
‡Voltage Protection Rating

Dimensions for IG 2200 Series

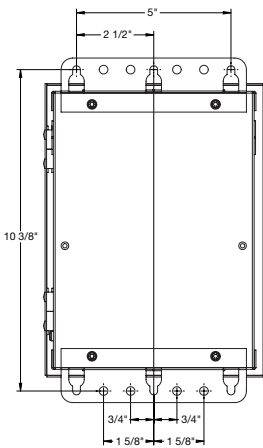
Plastic Indoor/Outdoor Enclosure



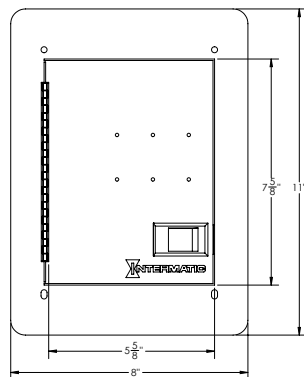
Metal Outdoor Enclosure



Metal Indoor Enclosure

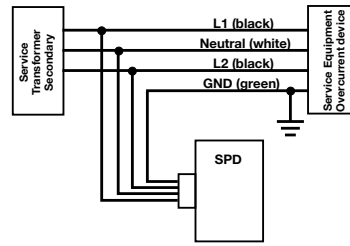


Flush Mount Kit



Type 1 Installation

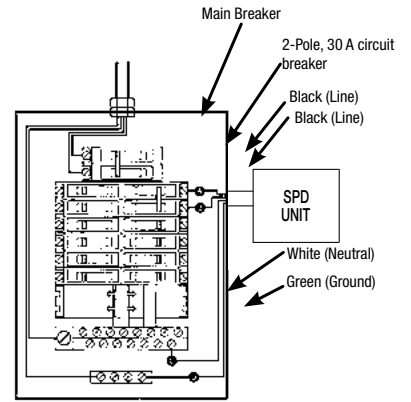
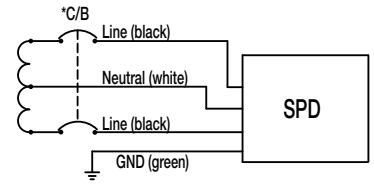
120/240 VAC Single-Phase



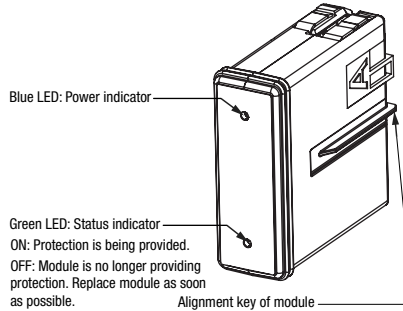
Type 2 Installation

120/240 VAC Single-Phase

*2 Pole 30 A circuit breaker in Service Panel.



Replaceable Consumable Module



ON: Protection is being provided.
OFF: Module is no longer providing protection. Replace module as soon as possible.

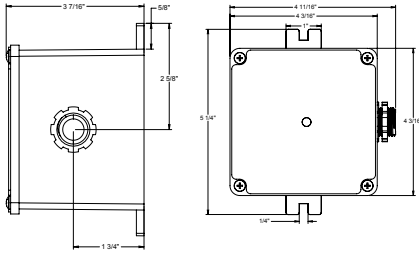
Surge Protection

Type 1 or 2 SPD for Residential and Light Commercial



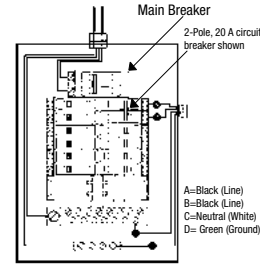
IG3240RC3

Dimensions

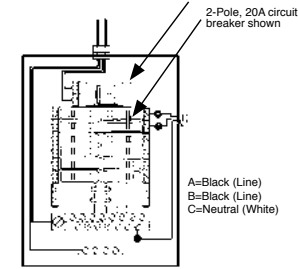


Type 2 Installation

IG1240RC3/IG3240RC3



IG1200RC3



Type 1 or Type 2 SPD

IG Series

The IG Series Surge Protective Devices (SPD) are designed for a variety of applications. A green LED indicator provides status of protection. Trusted, state-of-the-art TPMOV® (Thermally Protected Metal Oxide Varistor) surge protection technology eliminates the potentially hazardous failure modes that are commonly associated with standard MOV technology. Type 1 applications include outdoor installations before service entrances and utility meter cabinets. Type 2 applications include installations after service entrances. CSA certified to ANSI/UL 1449 3rd edition.

Applications

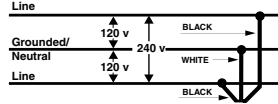
- Residential • Light Commercial

Features

- Three or six modes of surge protection depending on model
- TPMOV® surge protection technology
- Green LED indicator provides status of protection
- Type 3R rainproof enclosure for indoor/outdoor applications in plastic or metal
- 3, 5 or 10-year product warranties
- \$7,500, \$10,000 or \$25,000 connected equipment warranties on appliances and electronics

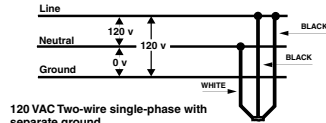
Type 1 Installation

IG1200RC3



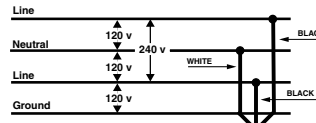
120/240 VAC Three-wire with grounded neutral. Found at Service entrances and Meter Cans.

IG1200RC3



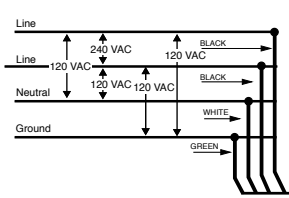
120 VAC Two-wire single-phase with separate ground. Found at connections for individual pieces of equipment such as pumps and single-phase motors. NOTE: Both Black wires connect to Line.

IG1200RC3



120/240 VAC Three-wire with separate ground. Found in Main Disconnect Switches, Main Distribution panels, Load Centers Sub panels and equipment locations.

IG1240RC3/IG3240RC3



Model #	Modes of Protection	MCOV*	VPR**	No. of Leads/Length	Lead Gauge	Product Warranty	Connected Equip Warranty
Type 3R Rainproof, Plastic							
IG1200RC3	3 (L1-N, L2-N, L1-L2)	L-N/G 150 L-L 300	L-L 1200 L-N/G 700	3 / 30"	#12 AWG	3-Year	3-Year/\$7,500
	6 (L1-N, L2-N, L1-G, L2-G, N-G, L1-L2)	L-N, N-G 150 L-L, L-G 300	L-L 1200 L-G 1200 L-N 700 N-G 700	4 / 30"	#12 AWG	5-Year	5-Year/\$10,000
Type 3R Rainproof, Metal							
IG3240RC3	6 (L1-N, L2-N, L1-G, L2-G, N-G, L1-L2)	L-N, N-G 150 L-L, L-G 300	L-L 1200 L-G 1200 L-N 700 N-G 700	4 / 30"	#12 AWG	10-Year	10-Year/\$25,000

*Maximum Continuous Operating Voltage

**Voltage Protection Rating



Ratings	
Service Voltage	120/240 VAC, 50-60 Hz
Phase	Single
SPD Type	1 or 2
In† (kA)	20
SCCR†† (kA)	50
Surge Protection Technology	TPMOV®
Operating Temperature	-31° F to 185° F (-35° C to 85° C)
Dimensions	See dimension drawings above

Accessories

Flush Mount Kit for IG1200RC3 / IG1240RC3 IG1240FMP33

Flush Mount Kit for IG3240RC3 IG3240FMP33



IG1240FMP33



IG3240FMP33

† Nominal Discharge Current †† Short Circuit Current Rating

Point-of-Use Surge Strips

IG Series

Type 3 Point-of-Use Surge Protective Devices (SPD) are designed for heavy industrial use with 3 modes of surge protection (L-N, L-G, N-G). Features a 15 A resettable breaker and #14 AWG SJT power cord with molded plug. CSA certified to ANSI/UL 1449 3rd edition.

Applications

- Commercial • Industrial

Features

- 3 Modes of protection
- Metal Oxide Varistor (MOV) surge protection technology
- 15 A resettable breaker
- #14 AWG SJT power cord with molded plug
- LED protection indicator
- Extruded aluminum housing
- 5-year product warranty
- \$5,000, \$10,000, or \$25,000 connected equipment warranties on appliances and electronics

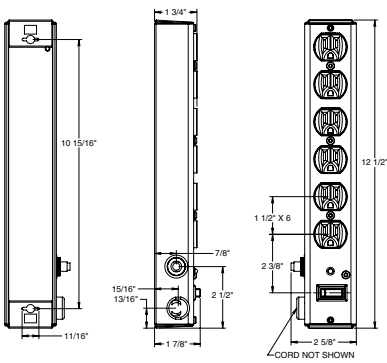


IG112463

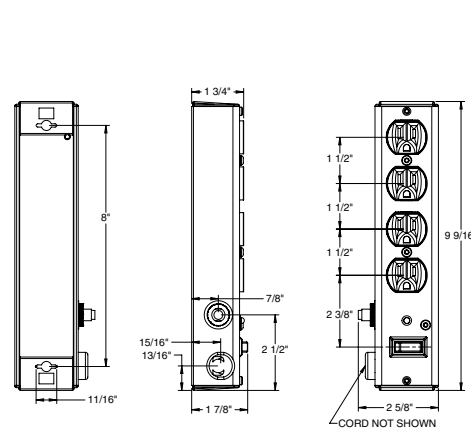


IG112663

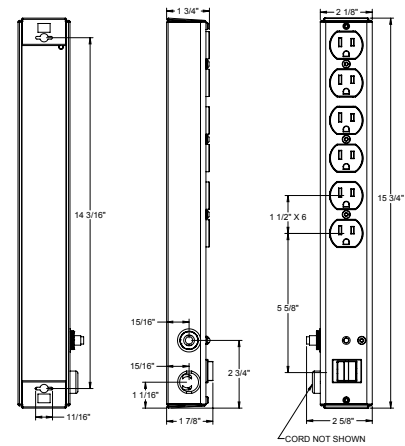
Dimensions



Dimensions for IG112663, IG112663BLK10



Dimensions for IG112463



Dimensions for IG20663, IG206153, IG20B123, IG2012B153

Model #	Voltage Protection Rating	Cord Length	Outlets	Illuminating ON/OFF Switch	EMI/RFI Noise Filtration	Color	Product Warranty	Connected Equipment Warranty
IG112463	L-N 700	6'	4	Yes	No	White	5-Year	5-Year/\$10,000
IG112663	L-G 600	6'	6	Yes	No	White	5-Year	
IG112663BLK10	N-G 600	10'	6	Yes	No	Black	5-Year	
	L-N 400	6'	6	No	Yes	White	5-Year	5-Year/\$25,000
	L-G 400	15'	6	No	Yes	White	5-Year	
	N-G 500							
IG20B123	L-N 700	6'	6	No	Yes	White	5-Year	5-Year/\$5,000
IG2012B153	L-G 600	15'	6	No	Yes	White	5-Year	
	N-G 600							

Accessories

Mounting Bracket Plate for all IG strips; Extruded Aluminum Alloy; 6" x 1 15/16" (152 mm x 50 mm) 24EG5133



24EG5133



Ratings	
Service Voltage	125 VAC, 15 A, 60 Hz
SPD Type	3
MCOV*	130
Surge Protection Technology	MOV
Operating Temperature	-4° F to 104° F (-20° C to 40° C)
Dimensions	6" x 1 15/16" (152 mm x 50 mm)
Product Warranty	5-year limited

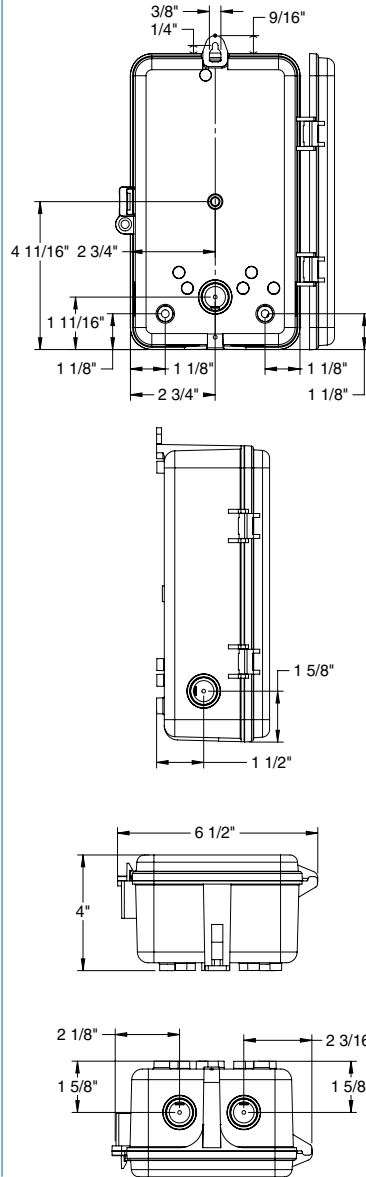
*Maximum Continuous Operating Voltage

Surge Protection

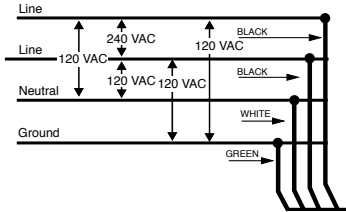
Type 2 SPD - Includes Telephone and Coax Line



Dimensions



Wiring Diagrams



Type 2 SPD Panel Guard

IG1300 Series

The IG1300 Series provides protection for telephone and coax lines in addition to AC Power. Trusted, state-of-the-art TPMOV® (Thermally Protected Metal Oxide Varistor) surge protection technology eliminates the potentially hazardous failure modes that are commonly associated with standard MOV technology. A green LED indicator provides status of protection. The IG1300 Series Surge Protective Devices are designed for Type 2 applications for installations after service entrances. CSA certified to ANSI/UL 1449, 3rd edition, UL 497A for phone line, and UL 497B for coax cable.

Applications

- Residential • Light Commercial

Features

- Six modes of protection for AC SPD
- TPMOV® surge protection technology for AC SPD
- Green LED indicator provides status of protection
- Provides telephone (analog phone line, modem, or DSL) and coax line protection (cable TV, cable Internet, or Satellite TV)
- Type 3R plastic rainproof enclosure for indoor/outdoor installations
- UL 497A is for telephone protection
- UL 497B is for coax protection
- 5-year product warranty
- \$10,000 connected equipment warranty for 5 years on appliances and electronics



Ratings	
Service Voltage	120/240 VAC, 50-60 Hz
Phase	Single
SPD Type	2
Modes of Protection	6 (L1-N, L2-N, L1-G, L2-G, N-G, L1-L2)
In (kA)*	20
SCCR (kA)**	50
Surge Protection Technology	TPMOV® (AC only)
Operating Temperature	-31° F to 185° F (-35° C to 85° C)
# of Leads / Length	4 / 24"
Lead Gauge	#12 AWG
Dimensions H x W x D	6 1/2" x 4" x 10" (165 mm x 102 mm x 254 mm)
Product Warranty	5-year
Connected Equipment Warranty	5-year/\$10,000

*Nominal Discharge Current
**Short Circuit Current Rating

Model #	Enclosure	No. of Telephone Lines Protected	No. of Coax Lines Protected	MCOV†	VPR‡
IG1300-2T-1C3	Type 3R Plastic	2	1	L-N, N-G 150	L-L, L-G 1200
		4	2	L-L, L-G 300	L-N, N-G 700

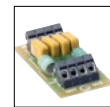
†Maximum Continuous Operating Voltage

‡Voltage Protection Rating

Accessories

Spare telephone/modem/DSL Internet protection module for IG1300-2T-1C3

IG2T



IG2T

Coax or Telephone Line Protective Devices

IG Series

The IG Series Telephone Line or Coax Cable Protective Devices are designed for indoor or outdoor installations. Listed to UL 497A for phone line and UL 497B for coax cable.

Applications

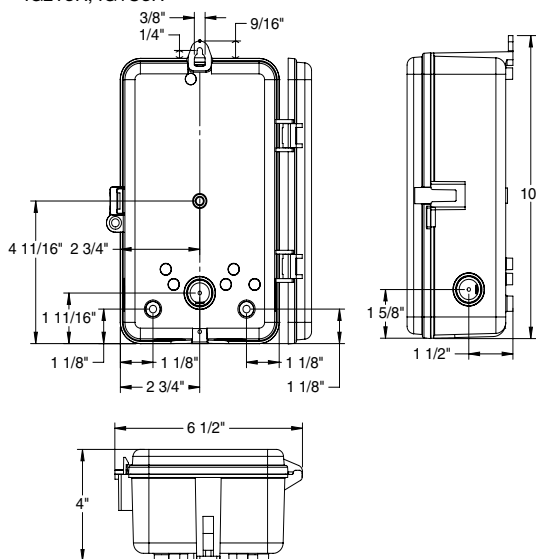
- Residential • Light Commercial

Features

- Modes of protection: Tip-to-ground, tip-to-ring, and ring-to-ground for telephone models
- Provides telephone (analog phone line, modem, or DSL) and coax line protection (cable TV, cable Internet, or satellite TV)
- #24 to #16 AWG for telephone models
- Type F Thread for coax models
- Gas tube protection
- UL 497A is for telephone protection
- UL 497B is for coax protection
- 5-year product warranty
- \$10,000 connected equipment warranty for 5 years on appliances and electronics

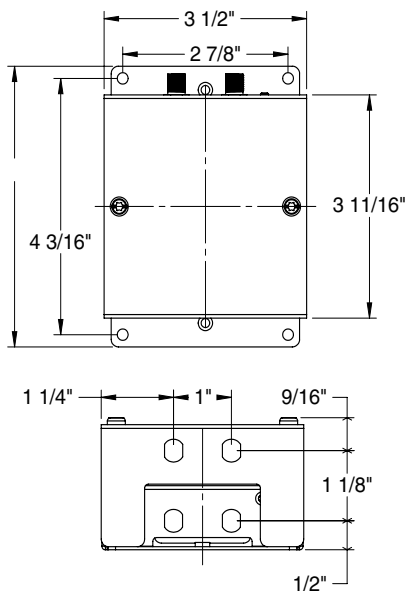
Dimensions

IG2T3R, IG1C3R



IG2TM

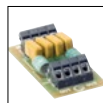
IG1CM, IG2TM, IG4TM



Model #	Enclosure	No. of Telephone Lines Protected	Wire Configuration	No. of Coax Lines Protected	Modes of Protection	Surge Technology
IG2TM	Type 1 Indoor, Metal	2	4	–	Tip-to-Ground,	Gas Tube Protection 350 VDC Breakdown
		4	8	–	Tip-to-Ring, Ring-to-Ground	
IG2T3R	Type 3R Rainproof, Plastic	2 (Expandable Up to 12)	4 (Up to 24 Wire)	–	–	Gas Tube Protection 90 VDC Breakdown
	Type 1 Indoor, Metal	–	–	1 (Expandable Up to 2)	–	
IG1C3R	Type 3R Rainproof, Plastic	–	–	1 (Expandable Up to 6)	–	–

Accessories

2 Spare Telephone/Modem/DSL Internet Protection Modules for IG1CM, IG1CM3R	IG2T
1 Spare Coax Cable Protection Module for IG1CM, IG1CM3R	IG1C



IG2T



IG1C

Surge Protection

Type 1 or 2 SPD for Light Commercial and Outdoor



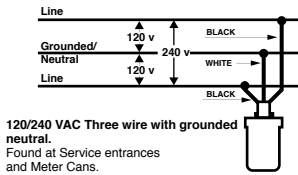
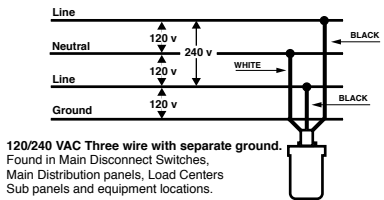
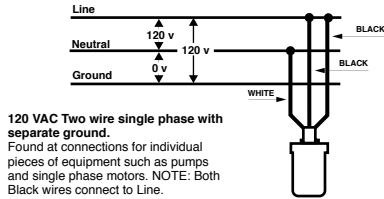
AG2401C3

Type 1 or 2 SPD

AG Series

The AG Series Surge Protective Devices (SPD) are designed for a variety of applications. Trusted, state-of-the-art TPMOV® (Thermally Protected Metal Oxide Varistor) surge protection technology eliminates the potentially hazardous failure modes that are commonly associated with standard MOV technology. A green LED indicator provides status of protection. Type 1 applications include outdoor installations before service entrances and utility meter cabinets. Type 2 applications include installations after service entrances. Outdoor applications include irrigation equipment, farm equipment, pumps, lighting fixtures, traffic signaling devices, HVACR controls, and motors. UL Listed to ANSI/UL 1449 3rd edition or CSA certified to ANSI/UL 1449 3rd edition.

Wiring Diagrams for AG2401C3



Ratings	
SPD Type	1 or 2
In ¹ (kA)	20
SCCR ² (kA)	50
Surge Protection Technology	TPMOV®
Operating Temperature	-31° F to 185° F (-35° C to 85° C)
Dimensions H x Dia	4 3/8" x 3" (106 mm x 76 mm)
Product Warranty	1-year

¹Nominal Discharge Current
²Short Circuit Current Rating

Applications

- Light commercial • Outdoor applications
- 3-Phase rooftop HVAC units

Features

- Three or six modes of protection
- TPMOV® surge protection technology
- Green LED protection indicator
- Type 4X watertight, plastic enclosure for outdoor installations
- UV-resistant polycarbonate housing
- 1/2" threaded nipple for 7/8" nominal conduit knockout
- 1-year product warranty

Model #	Service Voltage	Modes of Protection	MCOV**	VPR***	Lead Length	Lead Gauge
Single Phase Models						
AG2401C3*	120/240 VAC	3 (L1-N, L2-N, L1-L2)	L-L 300 L-G 150 L-N 150	L-L 1200 L-G 700 L-N 700	18"	#12 AWG
	277/480 VAC		L-L 640 L-G 320 L-N 320	L-L 2000 L-G 1200 L-N 1200	18"	#10 AWG (Black, White) #6 AWG (Green)
Three Phase Models						
AG2083C3	208 VAC	6 (L1-N, L2-N, L3-N, L1-L2, L1-L3, L2-L3)	L-L 300 L-G 150 L-N 150	L-L 1200 L-G 700 L-N 700	18"	#12 AWG
	277/480 VAC		L-L 640 L-G 320 L-N 320	L-L 2000 L-G 1200 L-N 1200	18"	#12 AWG
AG6503C3*	347/600 VAC		L-L 840 L-G 420 L-N 420	L-L 2500 L-G 1500 L-N 1500	18"	#10 AWG
AG6503L3*	347/600 VAC		L-L 840 L-G 420 L-N 420	L-L 2500 L-G 1500 L-N 1500	36"	#10 AWG
	120/208/240 VAC High Leg Delta		L1/L3-NG 150 L2-NG 270 L1-L3 300 L1/L3-L2 420	L1/L3-NG 700 L2-NG 1000 L1-L3 1200 L1/L3-L2 1500	18"	#12 AWG

*CSA and UL Recognized
**Maximum Continuous Operating Voltage
***Voltage Protection Rating

Accessories

Mounting Bracket AG1BRKT for AG Series



AG1BRKT

Wiring Diagrams

For more details on model numbers /wiring diagrams / ratings scan the QR code with your smartphone or tablet.



HVAC Surge Protective Device

AG3000

Power surges are the silent killer for home appliances and HVAC equipment. Most homeowners protect their electronics, but leave more valued equipment unprotected. Surges can wipe out equipment and leave you searching for answers. Search no more. The easy-to-install AG3000 Surge Protective Device (SPD) is the perfect add-on for HVAC equipment.

A green LED indicator provides status of protection. Trusted, state-of-the-art TPMOV® (Thermally Protected Metal Oxide Varistor) technology eliminates the potentially hazardous failure modes that are commonly associated with standard MOV technology. UL Listed to ANSI/UL 1449 3rd edition.

Applications

- Air handlers • Furnace • Central air conditioner
- Mini-Splits • Hydronic heating • Heat pumps

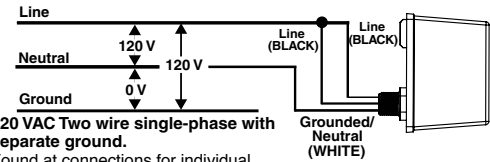
Features

- Three modes of protection
- TPMOV® surge protection technology
- Green LED indicator provides status of protection
- Type 4X watertight and UV resistant plastic enclosure
- 3-year product warranty
- \$7,500 connected equipment warranty for 3 years

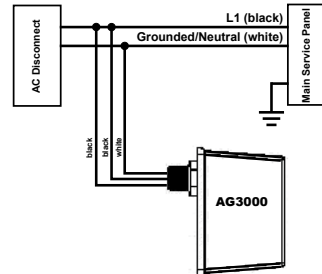


AG3000

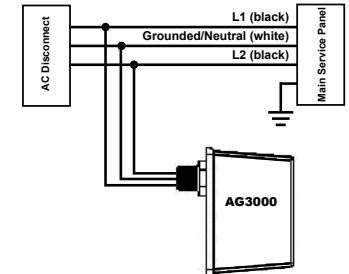
Wiring Diagrams



AG3000 Wiring Diagram - Type 1
120 VAC



AG3000 Wiring Diagram - Type 1
240 VAC



Model	Enclosure
AG3000	Type 4X Watertight



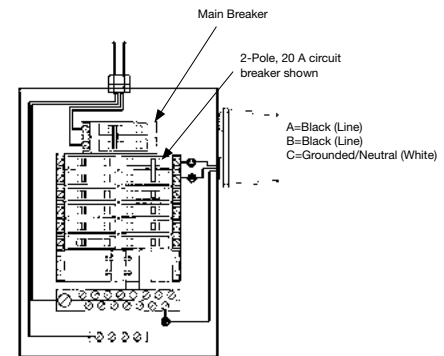
Ratings	
Service Voltage	120/240 VAC, 50-60 Hz
Phase	Single
SPD Type	1 or 2
MCOV	L-N 150, L-L 300
In (kA)*	10
SCCR**	20
VPR‡	L-L 900, L-N/G 600
Modes of Protection	3 (L1-N, L2-N, L1-L2)
Surge Protection Technology	TPMOV®
Operating Temperature	-40° F to 158° F (-40° C to 70° C)
No. of Leads / Lead Length	3 / 18"
Lead Gauge	#10 AWG
Dimensions H x W x D	3 7/8" x 1 5/8" x 4 3/16" (98 mm x 41 mm x 106 mm)
Product Warranty	3-year
Connected Equipment Warranty	3-year/\$7,500

*Maximum Continuous Operating Voltage

**Nominal Discharge Current

**Short Circuit Current Rating

‡Voltage Protection Rating



Dimensions

