

### Two-Stage Protection



① CHSP installed at the service entrance panel.

② SurgeTrap™ surge traps and strips located where sensitive electronics are plugged in.

### Plug-On Surge Protection

- Type CHSA**—For use on single-phase 120/240 Vac systems. The CHSA easily plugs into a single-phase Type CH loadcenter and occupies two 3/4-inch (19.1 mm) pole spaces, similar to a two-pole Type CH breaker. When installed properly, it provides surge protection for the entire loadcenter. If internal components are damaged, the CHSA LED visual indicators will signal the need for a replacement. This device is suitable for service entry locations when installed in accordance with NEC® guidelines
- Type BRSURGE**—For use on single-phase 120/240 Vac systems. This easily plugs into a single-phase Type BR loadcenter and occupies two 1-inch (25.4 mm) pole spaces similar to a two-pole Type BR breaker. When installed properly, it provides surge protection for the entire loadcenter. If internal components are damaged, the BRSURGE LED visual indicators will signal the need for replacement. This device is suitable for service entry locations when installed in accordance with NEC guidelines
- Type CLSURGE**—For use on single-phase 120/240 Vac systems. CLSURGE easily plugs into a single-phase Type BR loadcenter and occupies two 1-inch (25.4 mm) pole spaces similar to a two-pole Type BR breaker. When installed properly, it provides surge protection for the entire loadcenter. If internal components are damaged, the CLSURGE LED visual indicators will signal the need for replacement. This device is suitable for service entry locations when installed in accordance with NEC guidelines. This unit is also classified by UL for use in select GE, ITE/Siemens and Crouse-Hinds panels
- Type CHQSA**—For use on single-phase, 120/240 Vac systems. This unit easily plugs into a Square D single-phase loadcenter Type QO® and occupies two 3/4-inch (19.1 mm) pole spaces similar to a two-pole Type QO breaker. When installed properly, it provides surge protection for the entire loadcenter. If internal components are damaged, the CHQSA LED visual indicators will signal the need for a replacement. This device is suitable for service entrance locations installed in accordance with NEC guidelines. This device is UL classified to be used in place of Square D Type QO surge arresters (refer to Pub-23974)
- Type BRSURGECSA**—For use on single-phase 120/240 Vac systems. This easily plugs into a single-phase Type BR loadcenter and occupies two 1-inch (25.4 mm) pole spaces similar to a two-pole Type BR breaker. When installed properly, it provides surge protection for the entire loadcenter. If internal components are damaged, the BRSURGECSA LED visual indicators will signal the need for replacement. This device is suitable for service entry locations when installed in accordance with Canadian Electrical Code. This device is CSA® listed to be used in a Type BR loadcenter

### Type 3 Point-of-Use Surge Protection

Point-of-use surge protectors such as surge receptacles are installed within 30 ft of conductor length from the service panel and are designed to offer premium surge protection for specific electronics while providing innovative features to enhance user convenience.

### Standards and Certifications

- CHSPT1 Products: UL 1449 3rd Edition Type 1
- CHSPT2 Products: UL/cUL® 1449 3rd Edition Type 2
- CHSPCABLE: UL 6500, cUL
- NEMA® 3R Enclosure for CHSPCABLE: UL 50 Enclosure
- BRSURGE, CHSA, BRSURGECSA, CHQSA, CLSURGE: UL 1449 3rd Edition plug-in type; Type 2 SPD



# 2.1

## Surge Protection

### Surge Protection Devices and Lightning Arresters

2

#### SPD Type 2 Plug-On Surge Protection—UL 1449 3rd Edition

##### Product Features

- Convenient surge protection for the loadcenter

Catalog Number	Description	Connection	Voltage	Phase	Frequency (Hz)	MCOV <sup>①</sup>	VPR <sup>②</sup>	I <sub>n</sub> <sup>③</sup>	SCCR <sup>④</sup>	Surge Current Capacity, Per Phase Rating <sup>⑤</sup>
<b>BRSURGE</b>	<b>BRSURGE</b> UL for use in a single-phase Type BR loadcenter.	Plug on to the loadcenter bus; see instructions.	120/240 Vac	Single	60	150 V L1–N, 300 V L–L	600 V L1–N, 1000 V L–L	3 kA	10 kA	18 kA
										
<b>CLSURGE</b>	<b>CLSURGE</b> This unit is classified by UL for use in select GE, ITE/Siemens and Crouse-Hinds panels (refer to Pub. No. 5655B65H01 for additional details).	Plug on to the loadcenter bus; see instructions.	120/240 Vac	Single	60	150 V L1–N, 300 V L–L	600 V L1–N, 1000 V L–L	3 kA	10 kA	18 kA
										
<b>CHSA</b>	<b>CHSA</b> UL and CSA for use in a Type CH loadcenter.	Plug on to the loadcenter bus; see instructions.	120/240 Vac	Single	60	150 V L1–N, 300 V L–L	600 V L1–N, 1000 V L–L	3 kA	10 kA	18 kA
										
<b>BRSURGECSA</b>	<b>BRSURGECSA</b> CSA for use in an Eaton Type BR loadcenter.	Plug on to the loadcenter bus; see instructions.	120/240 Vac	Single	60	150 V L1–N, 300 V L–L	600 V L1–N, 1000 V L–L	3 kA	10 kA	18 kA
										
<b>CHQSA</b>	<b>CHQSA</b> This device is UL classified to be used in place of Square D Type QO surge arresters (refer to Pub-23974).	Plug on to the loadcenter bus; see instructions.	120/240 Vac	Single	60	150 V L1–N, 300 V L–L	600 V L1–N, 1000 V L–L	3 kA	10 kA	18 kA
										

##### Notes

- ① MCOV: Maximum Continuous Operating Voltage that may be applied to the device per mode.
- ② VPR: Voltage Protection Rating is the measured limiting voltage after a surge event.
- ③ I<sub>n</sub>: Nominal Discharge Current is the current that the device can withstand for 15 impulses.
- ④ SCCR: The amount of current the product can withstand under short-circuit conditions.
- ⑤ Surge Current Capacity: The maximum one-time surge current rating per phase.

For warranty details, go to [www.eaton.com/surgetrap](http://www.eaton.com/surgetrap).