

## Features

- 200kA 8/20µs primary protection – rated for service entrance applications
- NEMA-4X enclosure – for harsh environments
- Internal high interrupt capacity fusing – for added safety
- Modular design – allows easy replacement of surge modules
- Built in disconnect and fusing eliminates need for external fusing
- Transient Discriminating (TD) Technology – provides increased service life
- Optional Filter and Surge Counter – for enhanced protection
- UL®1449 Ed. 3 Listed

## Transient Discriminating Service Entrance Suppressor

The SES200 series of Transient Voltage Surge Suppressors deliver specification grade performance and features at an affordable price. The versatile and compact design provides high quality protection for a wide variety of commercial and industrial applications where sensitive electronic equipment is to be protected.

Internal electronics continuously monitor SPD protection, and the status is displayed on 5 segment LED bar graphs. Alarm contacts for remote monitoring are a standard feature.

The SES200 provides up to 200kA 8/20µs per mode of surge material, making it ideal for the protection of service entrance panels and helping to ensure a long operational life under severe lightning conditions.

The replaceable surge modules provide protection to L-N and N-G modes, delivering effective protection from both common mode and differential transients in single phase and three phase WYE systems. Models for grounded delta power systems provide L-L protection.

Transient Discriminating (TD) Technology, which meets the safety standards of UL® 1449 Edition 3, provides a superior life by eliminating the common temporary over-voltage failure mode of most SPDs.

The SES is designed to mount adjacent to the service entrance panel with the connection being made via a small length of conduit.



SES200 metal enclosure option



SES200 without filter or surge counter options

**Note:** Ensure that installation of this model of the SES200 is not exposed to direct sunlight as solar radiation may cause internal temperatures to exceed the maximum specified and damage will result to the surge protective modules. A sun shield should be fitted if this unit is to be installed outdoors and exposed to sunlight.

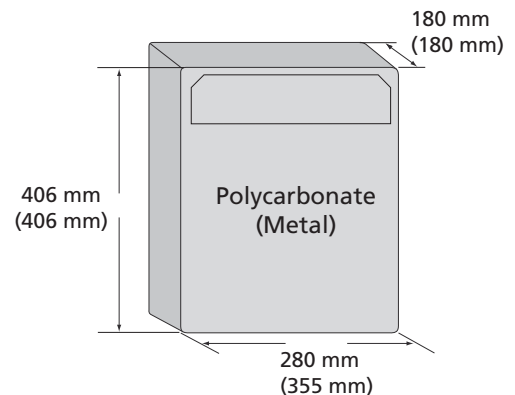
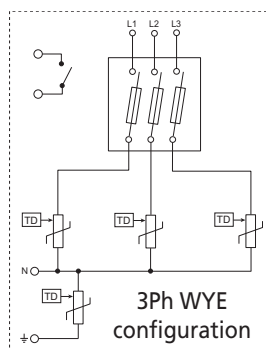
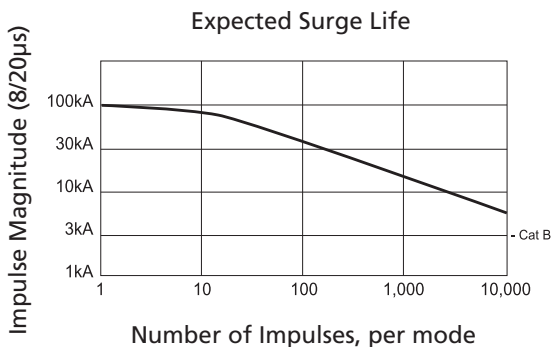


Transient Discriminating  
Service Entrance Suppressor

Model	SES200 120/208	SES200 120/240	SES200 240DHG	SES200 240D	SES200 277/480	SES200 120/208CM	SES200 120/240CM	SES200 240DCM	SES200 277/480CM
Nominal Voltage, U <sub>n</sub>	120/208 V	120/240 V	120/240 V	220/240 V	277/480 V	120/208 V	120/240 V	220/240 V	277/480 V
Distribution System	3Ph Y 4W+G	1Ph 3W+G	3Ph Δ 4W+G	3Ph Δ 3W+G	3Ph Y 4W+G	2Ph 3W+G		3Ph Δ 3W+G	3Ph Y 4W+G
System Compatibility <sup>(1)</sup>	TN-C, TN-S, TN-C-S								
Max Cont. Operating Voltage, U <sub>c</sub>	170/295 VAC	170/340 VAC	170/400 VAC	400 VAC	400/692 VAC	170/295 VAC	170/340 VAC	400 VAC	400/692 VAC
Stand-off Voltage	240/415 V	240/480 V	240/415 V	275 V	480/831 V	240/415 V	240/480 V	275 V	480/831 V
Frequency	50/60 Hz								
Operating Current @ U <sub>n</sub>	25 mA								
Aggregate Surge Rating	200kA (8/20μs per line)								
Impulse Current, I <sub>imp</sub>	20 kA 10/350 μs								
Max Discharge Current, I <sub>max</sub>	100 kA 8/20 μs								
Nominal Discharge Current, I <sub>n</sub>	80 kA 8/20 μs								
Protection Modes	All modes protected			L-L	All modes protected			L-L	All modes protected
Technology	MOV/Silicon with over-current fusing TD Technology								
Short Circuit Current Rating	200 kAIC								
Voltage Protection Level, U <sub>p</sub>	L-N 600 V @ 3 kA 800 V @ 20 kA	L-N 800 V @ 3 kA 1.0 kV @ 20 kA	L-L 800 V @ 3 kA 1.0 kV @ 20 kA	L-N 800 V @ 3 kA 1.0 kV @ 20 kA	L-N 800 V @ 3 kA 1.0 kV @ 20 kA	L-N 600 V @ 3 kA 800 V @ 20 kA	L-L 800 V @ 3 kA 1.0 kV @ 20 kA	L-N 800 V @ 3 kA 1.0 kV @ 20 kA	L-N 800 V @ 3 kA 1.0 kV @ 20 kA
Filtering						-40 dB @ 100 kHz			
Status <sup>(2)</sup>	5 segment LED bar graph per phase					5 segment LED bar graph per phase, surge counter			
Dimensions H x D x W: mm (in)	406 x 180 x 280 (15.98 x 7.09 x 11.02)					406 x 180 x 355 (15.98 x 7.09 x 13.98)			
Weight: kg (lbs)	8 (17.64)					13 (28.66)			
Enclosure	IP66 (NEMA-4X), Polycarbonate					IP66 (NEMA-4), Metal (Steel)			
Connection	3mm <sup>2</sup> to 35mm <sup>2</sup> (#12AWG to #2AWG)								
Mounting	Wall mount								
Back-up Overcurrent Protection	Fused disconnect included in enclosure								
Temperature	-10°C to 60°C (14°F to 140°F)								
Humidity	0 % to 90 %								
Approvals	NOM, UL <sup>®</sup> 1449 Ed. 3 Listed Type 1/2								
Surge Rated to Meet	ANSI <sup>®</sup> /IEEE <sup>®</sup> C62.41.2 Cat A, Cat B, Cat C ANSI <sup>®</sup> /IEEE <sup>®</sup> C62.41.2 Scenario II, Exposure 3, 100 kA 8/20 μs, 10 kA 10/350 μs UL <sup>®</sup> 1449 Ed. 3 In 20 kA mode								

(1) Grounded systems only. SES200 240D should not be used on high leg or underground systems.

(2) Normally open contact, 250V~10A, ≤1.5 mm<sup>2</sup> (#16AWG) connecting wire.



ANSI is a registered trademark of the American National Standards Institute. IEEE is a registered trademark of the Institute of Electrical and Electronics Engineers, Incorporated. NEMA is a registered trademark of the National Electrical Manufacturers Association. UL is a registered trademark of Underwriters Laboratories, Inc.

**WARNING**  
ERICO products shall be installed and used only as indicated in ERICO's product instruction sheets and training materials. Instruction sheets are available at [www.erico.com](http://www.erico.com) and from your ERICO customer service representative. Improper installation, misuse, misapplication or other failure to completely follow ERICO's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death.

Copyright ©2009 ERICO International Corporation. All rights reserved.  
CADDY, CADWELD, CRITEC, ERICO, ERIFLEX, ERITECH, and LENTON are registered trademarks of ERICO International Corporation.