

# Surge Protection

## Engineering Specification Submittal

**Model:** ZoneSentinel **Order Code:** 12104

### Applicable Standards

NEMA LSI - 1992	ANSI/IEEE C62.41
UL 1449 3rd Edition	ANSI/IEEE C62.45
UL 1283	

### General Electrical

SPD Category	Service Entrance/Sub-Panel
Nominal service voltage	277/480V
Maximum continuous operating voltage	320V
Remote indication	Isolated, NO/NC contacts, 60W DC, 120VA AC, 3A rated
Module diagnostics	Protection present
	Fault warning
	High voltage neutral to ground
	Green LED
	Red LED
	Green & Red LED

### Maximum Surge Current

Maximum Surge Current in per Protection Mode				Maximum Surge Current Per Phase
L-N	L-G	L-L	N-G	
50,000A	50,000A	100,000A	50,000A	100,000A

### Clamping Voltage

ANSI/IEEE C62.41 ANSI/IEEE C62.45 Clamping Voltage	B3 (500A) Ringwave	B3 (3,000A)	C3 (10,000A)
	700V	875V	1030V

### Agency Approvals

UL 1449 3rd Edition  
CE  
C-UL-US

Independent UL 1449 Suppressed Voltage Ratings				UL 3rd Edition VPR			
L-N	L-G	L-L	N-G	L-N	L-G	L-L	N-G
700V	700V	1400V	400V	1200V	1200V	1800V	1000V

**Physical and General Data:**

- Enclosure: NEMA 1, 2, 3, 3S, 4, 4X, 12, and 13. Transparent cover for maximum visibility and safety.
- Dimensions: 8" x 6" x 4" (20cm x 16cm x 10cm)
- Weight: Approx. 4 lbs.
- Operating Environment: -40°C to 85°C, 95% relative humidity (non-condensing)
- Construction: Ultra low impedance assembly. Modules are bolted to a corrosion resistant, tin plated copper bus bar. No plug-in modules in the surge path.
- Terminal Lugs: #2 AWG max wire size
- Mounting: 0.31" diameter holes (8.75" x 4.00") (enclosure can be easily drilled for cable access)
- Module Replacement: Remove four bolts, unplug remote indication connector and remove module. Estimated replacement time 2 minutes.
- Module Dimensions: 1.25" x 5.3" x 2.5" (3.2cm x 13.5cm x 6.4cm)

