



# Residential Whole House Surge Suppression - Single Phase 120/240V

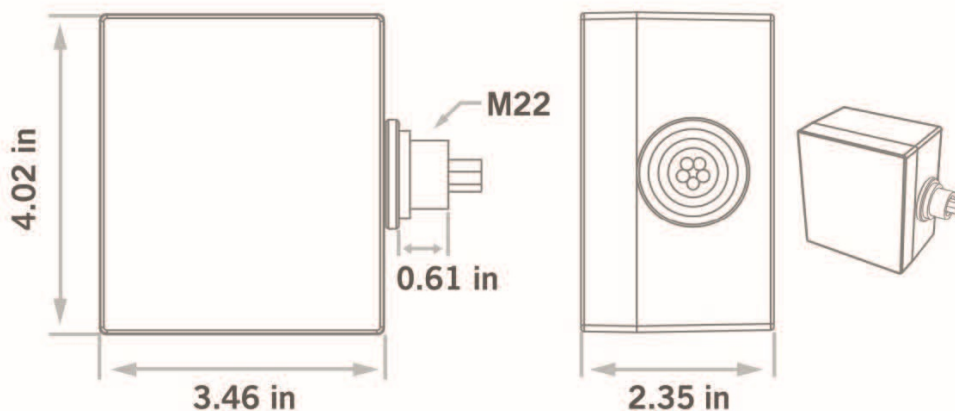
MORRIS CAT#: 89128



## Features:

- I<sub>max</sub> 100kA 8/20  $\mu$ s
- UL1449 4th Edition Type 1 Listed Common mode suppression
- Thermal fused metal oxide varistor (MOV) suppression within series
- Gas-Tube technology for maximum surge protection and zero leakage
- Light emitting diode's (LED) visual protection status indicator
- Real time diagnostics per phase and by LED audible alarm
- Maximum surge current capacity of 100,000 surge Amps
- Indoor/Outdoor IP66 NEMA 6 rated enclosure NEMA 6 exceeds NEMA 4 or 4X In 20 kA; SCCR 200 kA
- Meets requirements of UL 96A Lighting Protection Master Label
- Hardwired connection #12 AWG 36" leads
- Audible Alarm protection status indicator
- Product is approved to be installed inside of circuit panel
- UL Listed

## Dimensions:





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**Technical Specifications:**

Voltage: 120/240V

System Wiring: Single Phase

Protection Rating: 700V

Operating Current: <10mA

Frequency: 50/60Hz

Nominal Discharge Current per Mode: 20kA

Maximum Discharge Current Per Phase: 100kA

Short Circuit Current Rating: 150kA

EMI/RFI Filtering: 1283 Electromagnetic Interference Filter (-40

dB) Thermal Disconnecter: Internal to each Component

Overload Disconnecter: Internal to each Device

Failure Indicators: LED & Audible Alarm

**Operating Temperature:**

-40 to +185°F

**Construction:**

Housing: Cast Aluminum

**Mounting:** Nipple Mount**Listings:** UL

**IP Rating:** IP66 NEMA 6 rated enclosure NEMA 6 exceeds

NEMA 4 or 4X In 20 kA; SCCR 200 kA

**Installation Location:** Indoor/Outdoor

Carton Qty: 1

**Warranty:**

Morris Products carries a 3 year warranty from date of purchase against defects in materials and workmanship (assuming normal and proper usage).

### Service Entrance Rated Type 1 - UL 1449 4th Edition

#### Installation Instructions

1. Confirm device is rated for your system by metering the system voltages and compare the results to the SPD's specifications listed on the product label.
2. Turn off all power supplying installation location.
3. Install according to your specific installation application, using the appropriate diagram examples shown.
4. Install on 20A-60A breaker. Verify lug on breaker provides solid connection to SPD wiring.
5. Install in accordance with all pertinent articles of the National Electric Code.
6. Confirm that the electrical terminals used to attach this device are identified for these conductors.
7. Keep conductor lengths as short as possible with no sharp bends or kinks.
8. Do not loop or coil wires.
9. Ensure that a high quality ground is in place.
10. Turn on all power supplying this equipment.
11. Verify all diagnostic indicators are illuminated and no audible alarm is present.

#### Installation Notes

- Designed to allow installation inside an electrical panel using optional mounting bracket or double-sided tape.
- Designed to allow installation inside of a finished wall using optional flush mount cover.

#### Diagnostic Operation

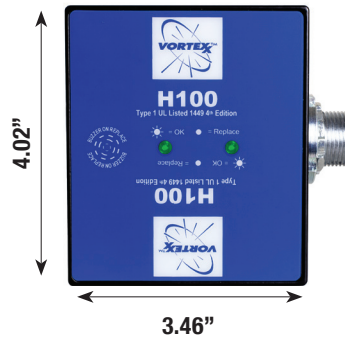
- LED ON = Normal operation
- LED OFF (one or more) = Fault, check phase, check voltage & connections. If OK, replace unit.
- Audible Alarm ON = check phase

**\* WHEN INSTALLING TYPE 1 SURGE PROTECTOR ON MAIN LUGS, USE THE UL LISTED FLAT BLADE TERMINALS PROVIDED.**

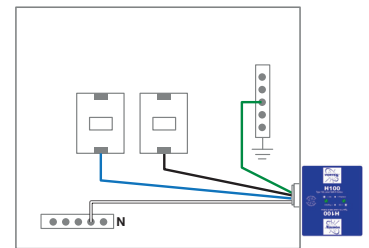
**IMPORTANT: FLAT BLADE TERMINALS MUST BE INSTALLED UNDER MAIN CONDUCTOR AND NOT BETWEEN THE CONDUCTOR AND LUG SCREW TERMINAL TO CONFORM TO PROPER INSTALLATION STANDARDS. USE ONLY THE TERMINALS SUPPLIED, IF TERMINALS ARE DAMAGED OR MISSING CONTACT PSP PRODUCTS INC. FOR REPLACEMENTS.**



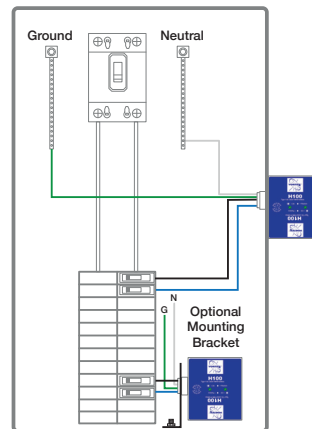
**Important:** Risk of electrical shock. This device should only be installed by a licensed electrician only, abiding by all local and national electrical codes.



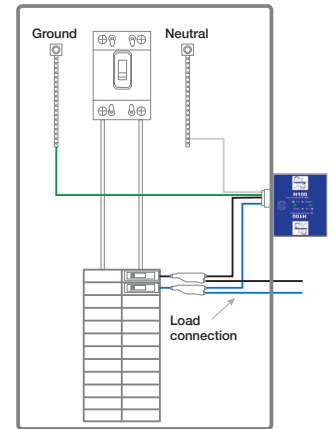
**\* Diagram A Type 1 Disconnect (Breaker not required)**



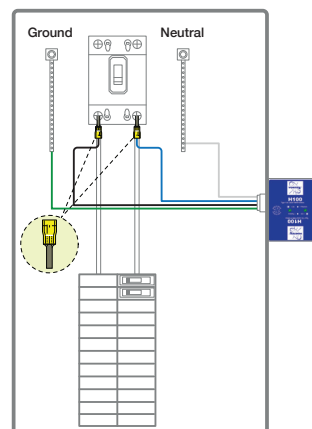
**Diagram B Type 2 Main Panel (Breaker Required)**



**Diagram C Type 2 Main Panel (3-Way Connector) (Breaker Required)**



**Diagram D Type 1 Main Panel (Breaker Not Required)**



**Diagram E Type 1 Generator Transfer Switch (Breaker Not Required)**

