

### Model: 277-3Y-M3-4-06-C-H

## Installation Instructions

### Please read the following before installing your Rayvoss Transient Voltage Surge Suppression System:

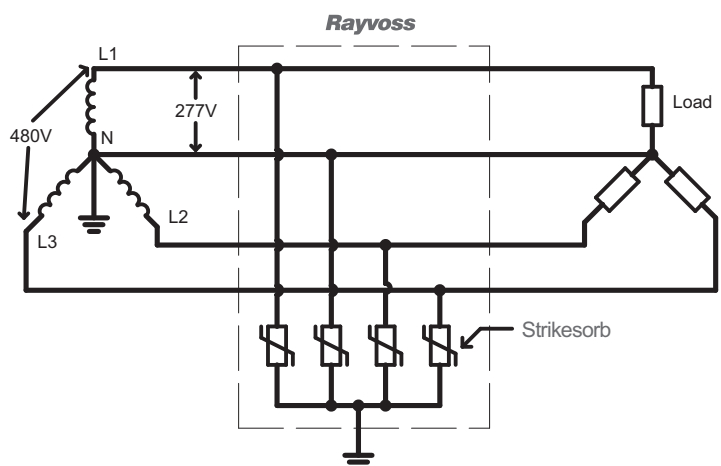
- Verify the system voltage and configuration on the label is appropriate for the application.
- Risk of Electric Shock – Installation and maintenance should be performed by qualified personnel only.
- Disconnect from energized circuits before installing or servicing.
- Installation should conform to all applicable national and local codes.
- This product has a NEMA 4 rating. To maintain this rating, appropriately rated fittings must be used for installation.
- The maximum size conductor allowed in this product is #2 AWG.
- This product should be installed behind a maximum 100A rated fused disconnect or circuit breaker.
- The enclosure door must be closed and secured prior to applying power to the unit.

### Product Specifications

Nominal Voltage.....	277/480V Three Phase Wye
Maximum Continuous Operating Voltage (MCOV) (L-G).....	350V
Suppressed Voltage Rating per UL 1449 2nd Ed. (L-G, N-G).....	1200V
Suppressed Voltage Rating per UL 1449 2nd Ed. (L-L, L-N).....	2000V
Maximum Surge Current $I_{max}$ (8/20 $\mu$ s) NEMA LS-1 (L-G, N-G).....	140kA
Maximum Lightning Current $I_{imp}$ (10/350 $\mu$ s) IEC 61643-1 (L-G, N-G).....	7.5kA
Let Through Voltage Level for surge current 10kA (8/20) (L-G, N-G).....	1025V
Long Duration Surge Performance 500A square waveform 2ms IEEE C62.11.....	250 hits
Response Time.....	< 1ns
Operating Temperature.....	-40...+85°C
Environmental Protection.....	NEMA 4 - IP65
Enclosure Dimensions.....	12" x 12" x 8 1/2"

### General Interconnection Diagram

Suitable for use on a circuit capable of delivering not more than 200,000 rms symmetrical amperes, 350 Vrms maximum (Phase to Ground), when protected by a Listed Class J, Class R, or Class T fuse or a circuit breaker rated at 100A or less.



For additional information:

**Raycap Inc.**  
 www.raycapinc.com  
 Toll Free: 877 455 7737



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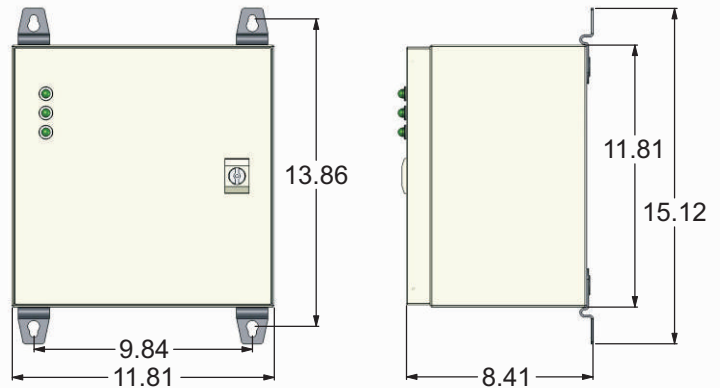
**Raycap**

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#### Mounting

This product should be mounted on a solid, flat surface capable of supporting 35 pounds. The mounting hole locations are shown in the diagram to the right.

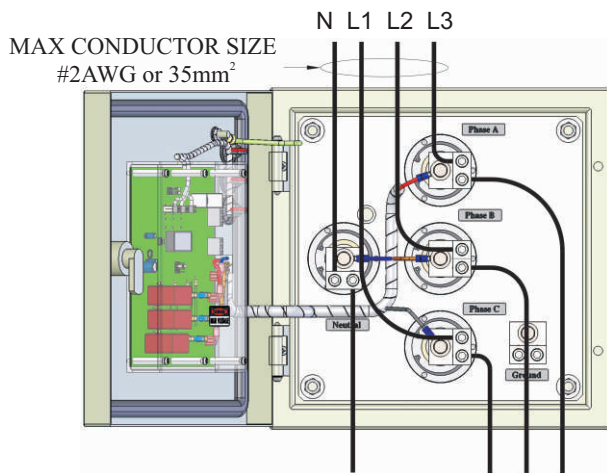
**Warning:** Do not use the mounting lugs to make the safety and protection ground.



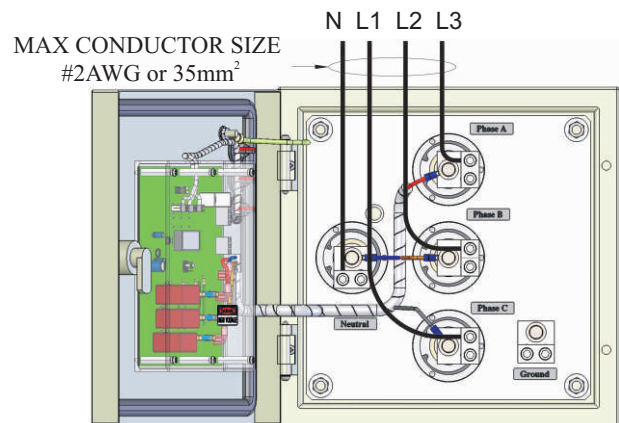
#### Connection Methods

This product may be installed in-line or in parallel. The two diagrams below show the different methods.

##### In-Line Connection



##### Parallel Connection (T-Connection)



**NOTE:**  
Ground conductor not shown for clarity.

**When installing in a T-Connection:**  
To ensure maximum performance of this product, the installation should use the largest gauge, shortest, and straightest conductors feasible.

#### Grounding

The ground connection should be made to the ground terminal mounted inside the Rayvoss unit. The connection should be made using a short, straight cable to the power ground or to the main ground bar at the installation location.

#### Optional Features

This model includes individual LED phase indication and Form C relay contacts for remote alarming. Normal operation is indicated by the illumination of the green LEDs. In the event of a fault or loss of power, the LEDs will turn off. The Form C relay contacts may be configured to notify a remote alarm system of a problem using either the normally open or normally closed contact.

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