# **Surge Suppressor**

#### **Packaging**

Qty. Description

- 1 Non-Metallic Hub
- 1 12" Piece of Non-Metallic Flexible Conduit
- 1 Surge Suppressor

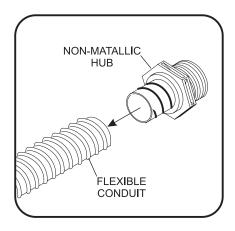
### **Installation of Conduit to Suppressor**



WARNING! Surge suppressor wires should be as short as possible.

DO NOT EXTEND THE LENGTH OF THE SURGE SUPPRESSOR WIRES.

- NOTE: Do not cut any surge suppressor wires until it has been installed.
- NOTE: Do not install hub on panel or equipment until conduit has been measured and cut.
  - 1. Cut conduit to the shortest length possible to securely fit over each hub a minimum of 2" (51 mm).
  - 2. Twist the conduit onto the extra hub. Refer to *Figure 1*.



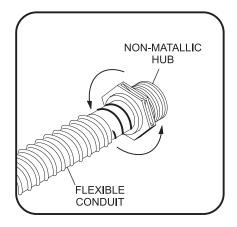


Figure 1

3. Slide conduit with hub attached over the wires of the suppressor. Refer to *Figure 2*.

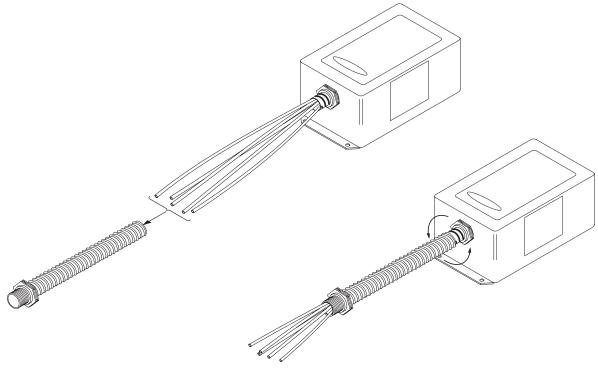


Figure 2

- 4. Twist the conduit and hub onto the hub of the suppressor. Refer to *Figure 2*.
- 5. Ensure that both ends of the conduit fit snug on each hub.

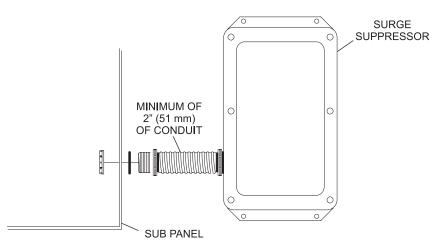
### **Installation of Suppressor**

1. Install the suppressor using the four mounting screws.

#### **Vertical Installation**

For vertical installation the hub is mounted on the side of the surge suppressor. The minimum amount of flexible conduit used is approximately 2" (51 mm). Refer to *Figure 3*.





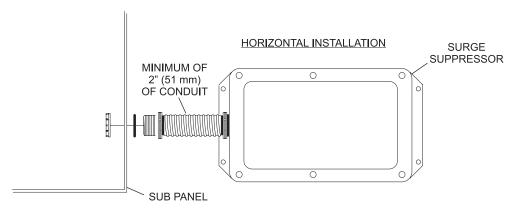


Figure 3

#### **Horizontal Installation**

For horizontal installation the hub is mounted on the top of the surge suppressor. The minimum amount of flexible conduit used is approximately 2" (51 mm). Refer to *Figure 3*.

## Wiring the surge suppressor into the electrical System



WARNING! Surge suppressor wires should be as short as possible. DO NOT ALLOW THE LENGTH OF THE SURGE SUPPRESSOR WIRES TO BE LONGER THAN 12".

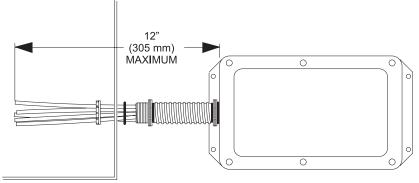
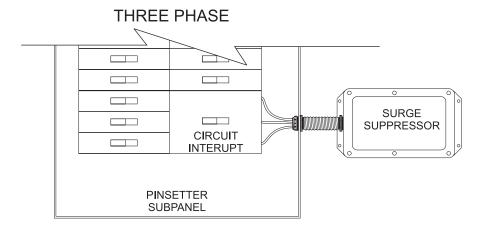


Figure 4

Table of Maximum Suggested Operating Voltages and Model Colors										
Nominal System Voltage	Model Number	Phase To Neutral	Phase to Phase	Phase to Ground	*Neutral to Ground	Phase A	Phase B	Phase C	Neutral	Ground
1S1 - 120/240	57-861917-001	132 V	264 V	132 V	<132 V	Black 1	Black 2	-	White	Green
3Y1 - 120/208	57-861915-001 47-862103-001	132 V	264 V	132 V	<132 V	Black 1	Black 2	Black 3	White	Green
3Y22 - 220/380	57-861919-001 47-862104-001	242 V	418 V	242 V	<242 V	Black 1	Black 2	Black 3	White	Green
3N2-240NN	57-861918-001		264V	264V		Black 1	Black 2	Black 3		Green
3D1 - 120/240	57-861916-001 47-862105-001	To Neutral	To Low Legs	To Ground	<132 V	Black 1	Red	Black 3	White	Green
		PHASE B 229V	PHASE B 264 V	PHASE B 229 V						
		PHASE A/C 132 V	PHASE A/C 164 V	PHASE A/C 132 V						

- 1. Carefully layout the wires keeping them as straight as possible. (Wires may be slow twisted together thereby reducing RF-impedence)
- 2. Connect the GREEN ground wire from/to the surge suppressor to the system Ground bus bar.
- 3. Connect the WHITE neutral wire (if applicable) from/to the surge suppressor to the system Neutral bus bar.

4. Connect the power wires or "hot" wires (see table above) from/to the surge suppressor to the Phase conductors or buses of the electrical systems through any required circuit interrupts (fuses or breakers) described above. Refer to *Figure 5*.





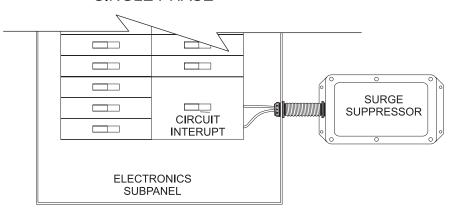


Figure 5

- 5. Upon replacing front cover of suppressor, certain models allow various lid rotations (90 to 180 Degrees) for improved label orientation (model specific).
- NOTE: Before energizing, measure the voltage again to insure it is within the levels described in the table above. Immediate failure of the surge suppressor will occur if installed on voltage higher than described in table.

## **Apply Power to Surge Suppressor**

The LED indicator lights should be illuminated. If they are not, remove power from the surge suppressor and contact supplier.