

Installation Reference

Topic: AC Voltage Transient & Noise Suppressor, PN 321003

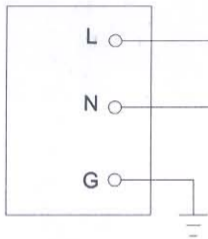
If your order included a sensitive electronic device that operates on AC power, then UFS included this transient & noise suppressor to protect it from harmful spikes in the incoming AC power. Electronic devices such as PLC's, TigerMag EP flow meters, and other types of electronic equipment can benefit from protection against harmful high voltage spikes.

1. See the product data sheet and the installation notes for this device
2. It is rated up to 240 VAC (single phase) incoming power and can deliver up to 2.5 amps.
3. If you believe the voltage or current demand is higher than 240 VAC or 2.5 amps, then contact UFS corporation for a different device.

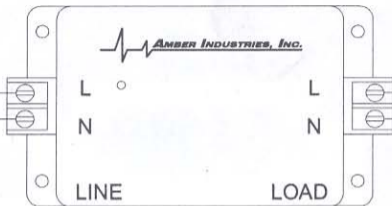
For more information see the original manual that came with the equipment or contact UFS using the information at top of the page.

SUGGESTED WIRING DIAGRAM FOR CLASSIC OEM SERIES

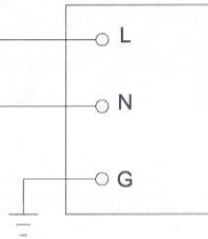
SUPPLIED POWER



SUPPRESSOR MODULE



EQUIPMENT



LED NOT INCLUDED ON BASIC VERSION

LED "ON" INDICATES POWER ON AND PROTECTION PRESENT

VER. A: LED "OFF" INDICATES PROTECTION FAILURE AND SUPPLIED POWER REMOVED FROM EQUIPMENT

VER. B: LED "OFF" INDICATES SECONDARY PROTECTION FAILURE AND SUPPLIED POWER TO EQUIPMENT STILL ON.

CLASSIC SERIES

AC POWER TRACKING SPIKE AND TRANSIENT SUPPRESSOR

The models in the **CLASSIC SERIES** are tracking voltage suppressors that protect against transients, spikes, surges, notches, and other power line noise before they can get into your sensitive and expensive equipment.

This series offers protection with both normal mode (line-to-line) units and common mode (line-to-ground) units. These units effectively track the input sinusoid and react repeatedly and virtually instantaneously to suppress any transients lasting 100 microseconds or less.

Each model is easily connected by screw terminals or wire leads, and is designed for the manufacturer or end user to mount conveniently inside equipment.



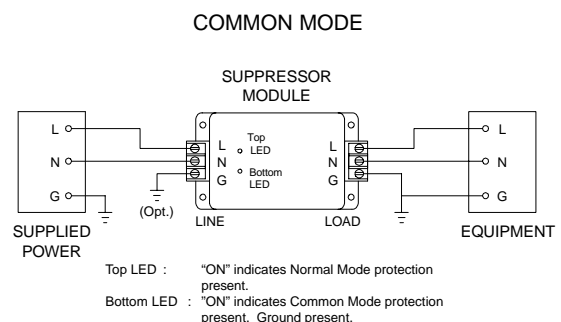
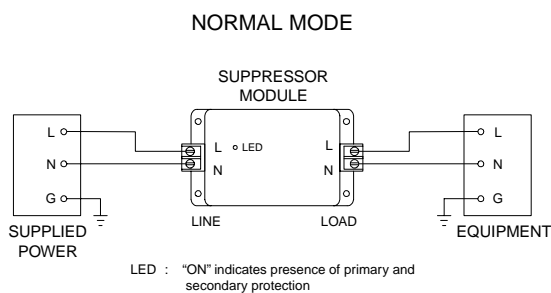
FEATURES

- Attenuates spikes and fills notches
- Operates at all points on the sinusoid
- Nanosecond response time
- Two stage protection
- LED indicators (Ver. A & Ver. B only)
 - Transient protection indicator
 - Ground detection indicator (CM only)
- 10 year limited warranty
- Applicable Standards
 - IEEE std 587-80 A & B
 - IEEE std C62.41-1991
 - IEC 1000-4-5-1995 (IEC 801-5)
- Agency Approval (Ver. A and Ver. B)
 - UL-1449 2nd Ed. Recognized (File# E103476)
 - CSA Certified by UL to CSA C22.2
 - CE Certified to IEC 61643-1

SPECIFICATIONS

- Operational Voltage:** 0 to 150 VAC / 0 to 300 VAC
40 to 80 Hz Single Phase
- Operational Current:** Units from 1 Amp up to 15 Amps
- Transient Reduction:** 40db from 40KHz to 100MHz
95db @ 1MHz (typical)
- Response Time:** less than 5ns
- Temperature Range:** -40°C to +70°C operating
-40°C to +85°C storage
- Over Temperature Protection:**
 - Basic version: No temperature protection
 - Ver. A: Unit removes power from load and turns LED off.
 - Ver. B: Unit removes secondary protection and turns LED off. Power to load stays on.

SUGGESTED WIRING DIAGRAM



PRODUCT ORDERING INFORMATION

AI - - -

Voltage Rating

- 1 : 120 VAC
- 2 : 240 VAC

Current Rating

- 01 : 1.0 Amp (Case A, B, C)
- 02 : 2.5 Amps (Case C)
- 05 : 5.0 Amps (Case C)
- 07 : 7.5 Amps (Case D, E)
- 15 : 15 Amps (Case F, G)

Version

- Blank : No temperature protection and no LED.
- A** : LED turns off and power is removed if failure occurs.
- B** : LED turns off and power stays on if failure occurs.

Options

- Blank : No options
- MF** : Mounting Feet
- WL** : Wire Leads

Mode

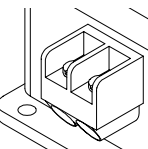
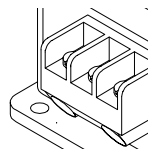
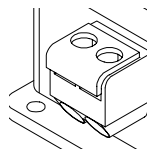
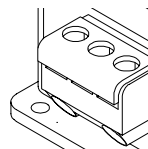
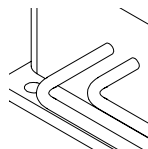
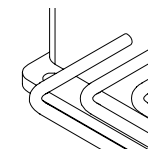
- Blank : Normal Mode
- CM** : Common Mode

Example:

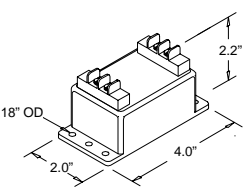
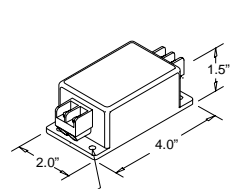
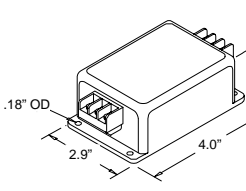
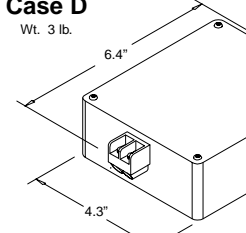
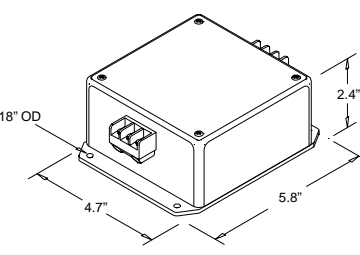
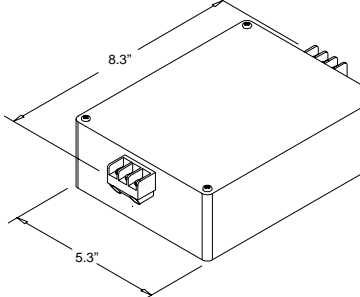
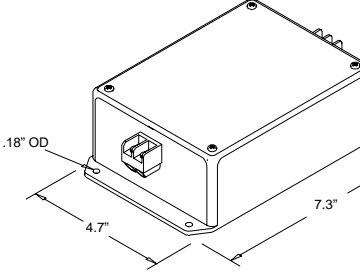
AI-101A-WL : 120 VAC, 1.0 Amp, Ver. A, Wire Leads

AI-207-CM-MF-WL : 240 VAC, 7.5 Amps, Common Mode, Mounting Feet, Wire Leads

TERMINAL STYLES AND OPTIONS

STANDARD		FINGER GUARDS		WIRE LEADS	
NORMAL MODE	COMMON MODE	NORMAL MODE	COMMON MODE	NORMAL MODE	COMMON MODE
					
Terminals use #6-32 screws		Optional Finger Guards are available. Not available on Case A		Wire size is 18 AWG up to 14AWG Wire cut to 6"	

CASE SIZE AND WEIGHT

<p>Case A Wt. 1/2 lb.</p>  <p>Mounting Hole Placement: 3.50" x 1.30" (0.65" spacing)</p>	<p>Case B Wt. 1/2 lb.</p>  <p>Mounting Hole Placement: 3.50" x 1.30"</p>	<p>Case C Wt. 1 lb.</p>  <p>Mounting Hole Placement: 4.40" x 2.15"</p>	<p>Case D Wt. 3 lb.</p>  <p>Mounting Hole Placement: 4.40" x 2.15" 6-32 Threaded inserts on bottom for mounting</p>
<p>Case E Wt. 3 lb.</p>  <p>Mounting Hole Placement: 5.25" x 3.50" Replaces Case D for Mounting Feet option</p>	<p>Case F Wt. 5 lb.</p>  <p>Mounting Hole Placement: 5.63" x 4.06" 6-32 Threaded inserts on bottom for mounting</p>	<p>Case G Wt. 5 lb.</p>  <p>Mounting Hole Placement: 6.75" x 3.50" Replaces Case F for Mounting Feet option</p>	