

# **AIRPAX**

## **Dimensions**

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***OWNERS MANUAL***

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# Airpax Dimensions, Inc.

## **Transient Voltage Surge Suppressor**

OWNERS MANUAL for Model:

# **ADI-250/SUP**

# TRANSIENT VOLTAGE SURGE SUPPRESSOR MODEL ADI-250/SUP

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## SAFETY NOTES

**PLEASE READ THIS AS WELL AS THE REST OF THIS MANUAL FOR YOUR SAFETY.**

During installation and maintenance the 250VDC buss should be disengaged at the external disconnect switch. Since materials used in this device can produce harmful fumes, especially during/after a large transient; use caution when opening the enclosure. Eye protection is always prudent when working in an industrial environment.

## I. GENERAL INFORMATION

### INTRODUCTION:

The ADI model 250 is a single stage high energy clamping protector. The purpose is to clamp high voltage pulses occurring on a 250 volt DC buss to a predictable level to protect down-stream electronics. The primary source of this transient energy occurs when turning off inductive loads such as DC lifting magnets. The magnitude can be a few thousand volts for milliseconds.

## SPECIFICATIONS: ADI-250/SUP

DC Input- 190 to 300V, 250 nominal at up to 25 Amperes  
Response Time - nanoseconds  
Maximum Continuous DC Voltage - 337.5  
Dissipation - 50W normal mode  
Maximum Clamping Voltage @ 200 Amperes for 300uS = 900 volts  
Fail Safe (short) - 60A Fuse opens  
Energy Dissipation - 100,000 Joules peak  
Instant Recovery  
Operating Temperature- 0° to 50° C (32° to 122° F)  
Enclosure- 16"W x 20"H x 10"D steel, wall mounted NEMA 13 enclosure.  
Weight- 55 LBS.

## II. INSTALLATION: See Figure 1

### MOUNTING:

Bolt securely to a rigid system.

### WIRING:

Use normal electrical wiring practice.

Provide external switch/fuse box for the 250VDC input-disconnect in a convenient location.

Insure this switch is kept OFF during installation.

Punch housing for DC in/DC out dust-tight connectors.

Wire to internal in/out terminal block.

## III. MAINTENANCE:

Please review safety notes. Since materials used in this device can produce harmful fumes, especially during/after a large transient; use caution when opening the enclosure.

### FUSE:

Replace using Bussmann SC-60.

### CLEANING:

Periodically remove any dust that may have penetrated the housing using clean compressed air.

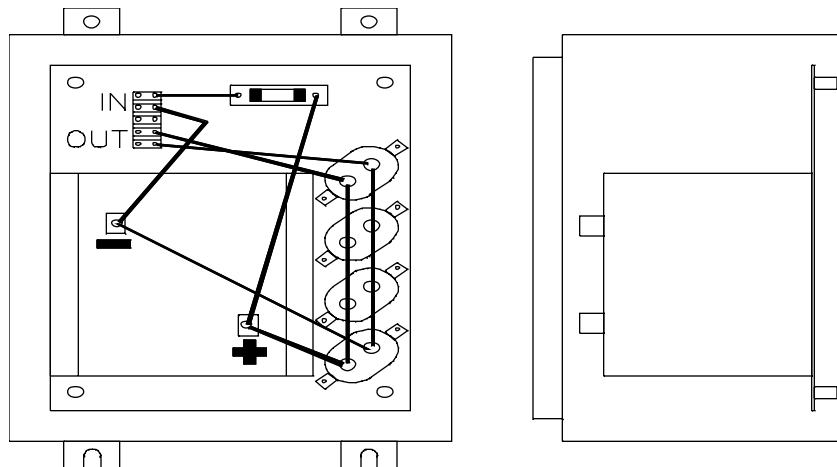


Figure 1

## Limited Warranty Terms & Conditions

### SHIPPING TERMS

F.O.B. St. Paul Minnesota. Freight prepaid and billed, subject to prior credit approval.

### MINIMUM ORDER

\$50.00 Net Price

### LOSS OR DAMAGE

Loss or damage in transit are the responsibility of the carrier. Any claim should be filed with the delivering transport company. Invoice, Bill of Lading and Delivery receipt with damage noted therein must accompany any claims for freight damage. Claims for shortage and lost shipments must be made in writing to Airpax Dimensions, St. Paul, MN within 10 days of date of shipment. Claims not reported within this time frame will not be honored.

### PRICES

Prices are subject to change without notice. All orders are subject to acceptance at the factory. We reserve the right to invoice prices in effect at time of shipment.

### TERMS

Net 30 days with approved credit, credit card or C.O.D.

### RETURN GOODS POLICY

- o No returned materials will be accepted without an accompanying Returned Materials Authorization Number (RMA) from the factory.
- o Credit will be issued for returned goods to the original purchaser within 60 days of purchase, provided the inverter is returned to Dimensions unused and not mounted. The amount of credit will be issued at Dimensions discretion based on the condition of the product.
- o Customer must be in good standing with Dimensions.
- o Inverters that are discontinued, high-voltage (over 24vdc), special-order or used are excluded and will not be eligible for credit. Non-inverter items such as cable assemblies, fuses and fuse holders, will not be eligible for credit
- o Support components supplied by Dimensions vendors will be covered under that manufacturer's credit return policy.
- o Customer pays return freight.

**PLEASE SHIP AUTHORIZED RETURNS TO:** Airpax Dimensions, Inc. / 4467 White Bear Parkway / St. Paul, MN 55110  
**Return Freight Prepaid**

### LIMITED WARRANTY

Airpax Dimensions, Inc. extends the following warranty to the original purchaser of those goods subject to the qualifications indicated.

Dimensions warrants to the original purchaser for use that the goods or any component thereof manufactured by Dimensions will be free from defects in workmanship for a period of 1 year from the date of purchase, provided such goods are installed, maintained and used in accordance with Dimensions and the original manufacturer's written instructions.

Components not manufactured by Dimensions, but used within the assembly provided by Dimensions, are subject to the warranty period as specified by the individual manufacturer of said component, provided such goods are installed, maintained and used in accordance with Dimensions and the manufacturer's written instructions.

Dimensions sole liability and the Purchaser's sole remedy for a failure of goods under this limited warranty and for any and all claims arising out of the purchase and use of the goods, shall be limited to the repair or replacement of the goods that do not conform to this warranty.

To obtain repair or replacement service under the limited warranty, the purchaser must contact the factory for a Return Material Authorization (RMA). Once obtained, send the Return Material Authorization Number along with the defective part or goods to: Airpax Dimensions, Inc., 4467 White Bear Parkway, St. Paul, MN 55110, freight prepaid.

THERE ARE NO EXPRESS WARRANTIES COVERING THESE GOODS OTHER THAN AS SET FORTH ABOVE. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO ONE YEAR FROM DATE OF PURCHASE.

DIMENSIONS ASSUMES NO LIABILITY IN CONNECTION WITH THE INSTALLATION OR USE OF THE PRODUCT, EXCEPT AS STATED IN THIS LIMITED WARRANTY. DIMENSIONS WILL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

### WARNING: LIMITATIONS ON USE

Dimensions products are not intended for use in connection with Life Support Systems and for Avionic use. Dimensions makes no warranty or representation in connection with their products for such uses.