

# Airpax Series 6600 Thermostat

The Airpax Series 6600 is a miniature bimetallic snap acting thermostat which provides accurate and reliable sensing and switching in a single device. It provides fast, positive responses and excellent repeatability with lamp switching capability at 48VDC over its operating temperature range of 40°C to 120°C (104°F to 248°F). The temperature is pre-set at the factory and non-adjustable in the field.

The single-pole/single-throw switch assembly is operated by a bimetallic element with a positive snap action available in either normally closed, open on rising temperature or normally open, close on rising temperature configurations.

The Series 6600 Thermostat has been designed around the standard 8-pin N8A Dual Inline Package, making it ideally suited for use on printed circuit boards. Its size and shape conserves space on crowded P.C. boards and can be installed using auto-insertion equipment. The device is sealed to withstand wave soldering and board washing operations.

Typical uses include turning on an indicator light, sounding an audible alarm, switching on a control circuit to send a message to a display screen, or even switching a circuit to shut down a system upon sensing over temperature.

Applications include computers and computer peripherals, aircraft, automotive, and test equipment.

The 6600 Thermostat product is temperature tested in a computer controlled automated test equipment air-oven. Due to the ideal conditions under which it is tested, independent customer testing may be necessary to ensure that the correct calibration is utilized in the application.

It is the customer's responsibility to determine whether the product is proper for customer's use and application.



# AIRPAX®

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## SPECIFICATIONS

- **Contact Resistance:** 50 Milliohms max.
- **Contact Ratings:** (see \*Special Requirements)  
Approved per VDE 0631/12.83
 

Cycles	Voltage	Amps (resistive)
30,000	48 VDC Test, Class I	1 A
30,000	120 VAC Test, Class I	1 A
100,000	5 VDC Test, Class II	0.02 A

Cycles	Voltage	Amps (resistive)
30,000	48 VDC	1 A
30,000	120 VAC	1 A
100,000	5 VDC	0.001 A
100,000	5 VDC	0.02 A
- **Ambient Temperature Range:** -55°C to 160°C
- **Contact Operations:** Either open on rise or close on rise
- **Operating Temperature Range:** 40°C (104°F) to 120°C (248°F)
- **Standard Operating Temperature Tolerance:** ±5°C (±9°F) Nominal operating temperature settings in 5°C (9°F) increments
- **US Patent No:** 4,620,175
- **Short Term Exposure Limit:** 260°C (500°F), 10 sec.
- **Long Term Exposure Limit:** -55°C (-67°F) to 160°C (320°F)
- **Dielectric Strength:** 1480 VAC 60Hz, 1 second terminals to case
- **Insulation Resistance:** 100 Megohms at 500VDC
- **Contact Bounce - make:** 3 ms max.
- **Weight:** Approximately 0.45 grams

- **Seal:** Epoxy sealed for wave soldering and cleaning. Moisture proof per Airpax Spec. S-722 (unit will not leak while submerged in 9" of water for a minimum of two minutes).
- **Chemical Resistance:** Both the base and the unit are resistant to water, salt, alcohol, ammonia, trichlorethane, and most other organic solvents.
- **Vibration:** Per Mil-Std-202, Method 204D, Test Condition D, 10-2,000 Hz.
- **Shock:** Per Mil-Std-202, Method 213, Test Condition C, 100 G's, 6 milliseconds, ½ sine wave.
- **Resistance to Soldering Heat:** Per Mil-Std-202F, Method 210A, Test Condition E.
- **Mechanical Life:** 1KK operations

## MATERIALS

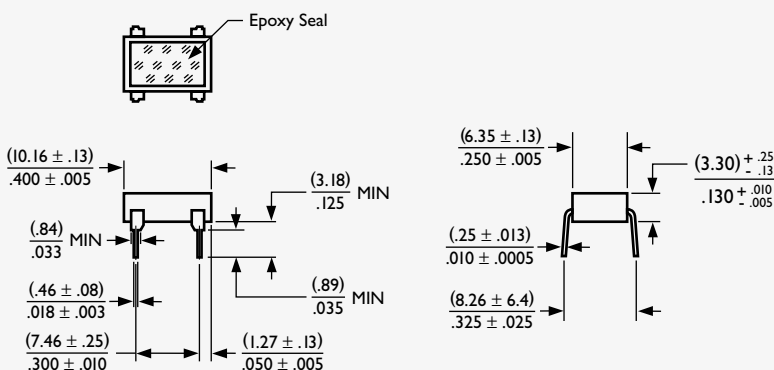
- **Seal:** High temperature epoxy
- **Base:** PPS (Polyphenylene Sulfide), 94 VO rated
- **Terminals:** 65% Copper, 18% Nickel
- **Contacts:** Gold-plated or overlay, silver cross bar
- **Bracket:** Nickel-plated copper or high pressure laminated plastic

\***Special Requirements:** Please consult factory for special part number if VDE, surface mount and/or tape and reel is required. (Note: Tape and reel available with surface mount only)

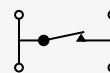
**Temperature Calibration** is checked at Airpax with precision test equipment traceable to the US National Institute of Standards and Technology and Proven Methods. Because customer checking methods may differ, a typical variance allowed for correlation is ±2°F (±1.1°C).

## Airpax 6600 Series Thermostats

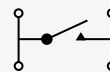
### Standard 8 PIN D.I.P. Configuration\*



PIN Number Identification Does Not Appear on Part

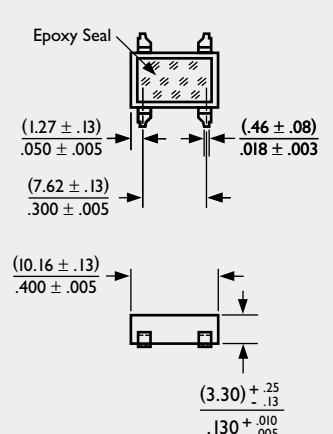


Schematic For  
Open on Rise  
Operation

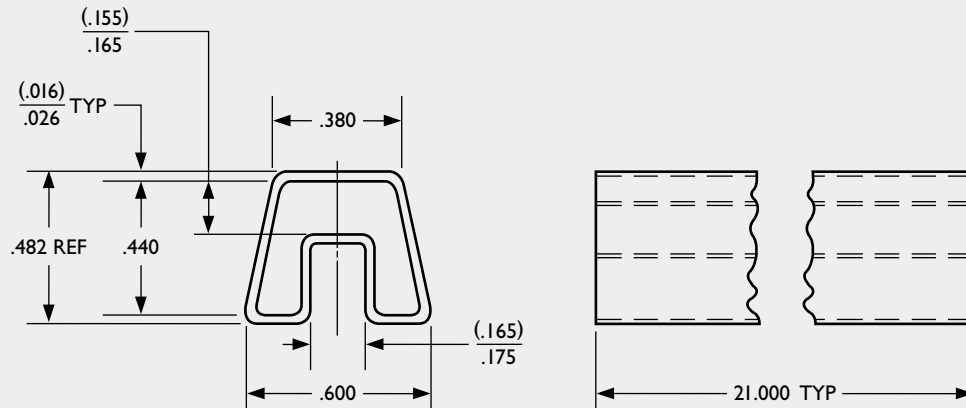


Schematic For  
Close on Rise  
Operation

### Surface Mount Configuration\*







**Packaging:** (standard)

All samples and production orders will be shipped in plastic, industry standard DIP tubes.

*This information is subject to change without notice.*

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