



INFRARED DEW POINT & GRAINS TRANSMITTER 9002

Amphenol
Advanced Sensors

DESCRIPTION

The **Amphenol Advanced Sensors VaporStat Model 9002** is an absolute humidity transmitter that measures the amount of water vapor in the air with adversity to temperature variations. The moisture level is then calculated as dew point and transmitted simultaneously as 0-10 VDC and 4-20 mA. A display and keyboard are incorporated for local indication and parameter adjustment. A contact closure is also incorporated with keyboard entries for set point and differential. The **Model 9002** is wall-mounted and available with accessories for duct and OSA applications.



9002



9002 and
T1508 Enclosure

APPLICATION

The **Model 9002** sampling chamber measures the infrared light absorbed by the moisture in the air and processes it as dew point or grains of moisture per pound of dry air. The 0-10 VDC or 4-20 mA output ranges are selected at the keyboard and displayed on the LCD readout. A control contact energizes at the set point entered on the keyboard. The **Model 9002** is ideally suited for local alarm and signaling for clean room controls, desiccant system controls, paper mill controls, and textile process controls as well as condensation prevention.

FEATURES

- Dew point accuracy $\pm 3.6^{\circ}\text{F}$ ($\pm 2^{\circ}\text{C}$)
- 0-10V and 4-20 mA output
- Digital display or blank cover
- Patented infrared absorption platform
- Gold-plated element for durability
- Built-in keyboard for range adjust
- Elevation correction via keyboard
- Tamper-resistant keyboard cover
- 10-minute field calibration with gas

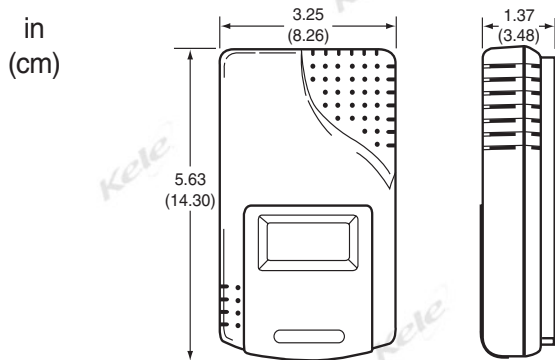
SPECIFICATIONS			
Accuracy	Dew point: $\pm 3.6^{\circ}\text{F}$ (2.0°C) @ 77°F	Keypads	Four-key menu control
Supply Voltage	24 VAC, $\pm 25\%$, 2.75 VA	Life Expectancy	15 years
Signal Output	simultaneous outputs: 0-10V @ 1000 Ω min 4-20 mA @ 500 Ω max	Display	Two-line, 1/2" (1.27 cm) LCD
Relay Output	SPDT, 2A @ 24 VAC	Output Range Adjust	Within 0° to 80°F (-17 to 26°C)
Measurement Range	Dew point: 27° to 80°F (-3° to 27°C)	Operating Humidity	0% to 98%
Sensing Technology	Nondispersive infrared	Operating Temperature	32° to 120°F (0° to 50°C)
Calibration	In field with nitrogen gas	Warranty	18 months
Adjustments	Setpoint: Adjustable, full range Differential: Adjustable, full range		
Altitude Limits	Correctable to 5000' (1524m)		



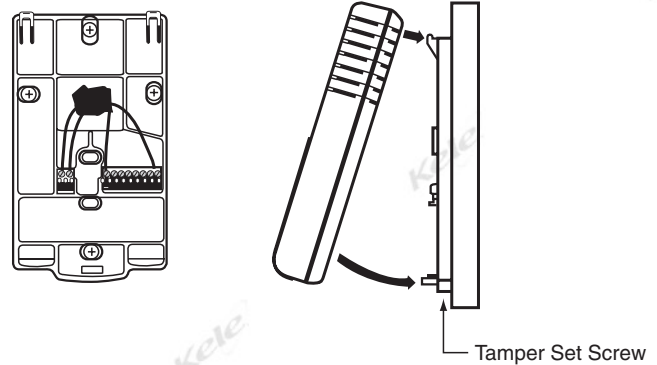
HUMIDITY

INFRARED DEW POINT & GRAINS TRANSMITTER 9002

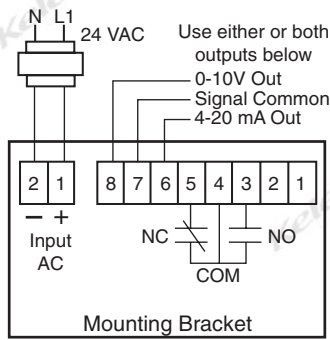
DIMENSIONS



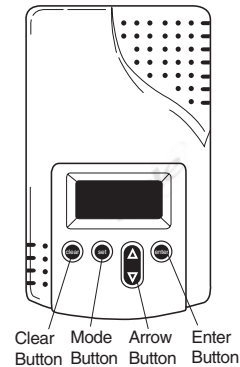
MOUNTING



WIRING



CONTROLS



SETUP

FACTORY OUTPUT SETTINGS

Dew point, 0° to 80°F (-22° to 25°C) @ sea level
 Moisture = 0-140 grains per lb of dry air @ sea level
 Relay on @ 50°F (10°C), off @ 59°F (15°C)

CHANGING SETTINGS

1. Press mode and clear at the same time for five seconds to enter the adjust mode.
2. Press mode key to display item to change: elevation, dew point, grains, or relay.
3. Use arrow keys to select ranges.
4. Press enter to confirm selection.
5. Press clear to finish and return to normal display.

ORDERING INFORMATION

MODEL
9002

DESCRIPTION
Dew point and grains 0-10 VDC/4-20 mA transmitter and SPDT contact

T1508
T1551
691-K0A

RELATED PRODUCTS
Duct-mount accessory enclosure
OSA-mount accessory enclosure
Control transformer, 120:24 VAC, 40 VA, Class 2

PAGE

979