



HAZARDOUS AREA HUMIDITY/TEMPERATURE TRANSMITTER

Intrinsically Safe or Explosion-Proof Models



The Series HHT Hazardous Area Humidity/Temperature Transmitter takes accurate measurements in the harshest of environments. The explosion-proof model is offered with 4 to 20 mA output for humidity only. The intrinsically safe version is offered with 4 to 20 mA output for humidity and temperature, and do require an intrinsically safe barrier to meet hazardous area approvals.

It is important to develop a routine schedule for replacing the RH/temperature sensor (part number A-451). The sensor should be replaced annually or sooner depending on application conditions.

FEATURES/BENEFITS

- FM approved explosion-proof and intrinsically safe models
- Integral LCD option
- Replaceable calibrated sensor for long term use in harsh environments
- Dual temperature and relative humidity output models

APPLICATIONS

- Process monitoring
- Offshore HVAC monitoring
- Dust and grain handling

ACCESSORIES			
Model	Description		
KFD0-SCS-EX1.55® A-287	Loop powered galvanic isolator Mounting bracket for pipe or surface mounting (Includes bracket and two 2" U-bolts)		
A-450 A-451	Replacement sintered filter Replacement 2% sensor		

SPECIFICATIONS

Relative Humidity Range: 0 to 100%

Temperature Range: -40 to 140°F

(-40 to 60°C).

Accuracy: ±2% 10 to 90% RH, ±0.9°F at

[108.74]

1/2 NPT

72°F (±0.3°C at 25°C). Hysteresis: ±1%.

Repeatability: ±0.1% typical. Temperature Limits: -40 to 140°F

(-40 to 60°C).

Storage Temperature: -40 to 176°F

(-40 to 80°C).

Compensated Temperature: -40 to

140°F (-40 to 60°C).

Power Requirements: For intrinsically safe models HHT-IX, 9.5 to 28 VDC. For explosion-proof models HHT-EX. 16.5 to 28 VDC.

Output Signal: 4 to 20 mA, 2 channels for humidity/temperature models (loop power on RH).

Response Time: 15 s.

Electrical Connections: Screw terminal block.

Conduit Connection: 1/2 female NPT.

Drift: < 1% RH/year.

13-23/32 [347.98] 2-23/32

[69.06] 1/2 NPT

> RH Sensor: Capacitance polymer. Temperature Sensor: Solid state band

Housing Material: Aluminum. Display: Optional 2 line alpha numeric.

8 characters/line. Temperature display is °F/°C selectable.

Display Resolution: RH: 0.1%; Temperature: 0.1°F (0.1°C).

Weight: 2 lb 8 oz (1134 g). Enclosure Rating: NEMA 4X (IP66). Models HHT-EX: FM Explosion- Proof, Class I Div. 1 Group B. C. D. Class II Div. 1 Group E, F, G, Class III Div. 1; Models

HHT-IX: FM Intrinsically Safe, Class I Div. 1 Group A, B, C, D, Class II Div. 1 Group E, F, G, Class III Div. 1 T4. Agency Approvals: CE. FM.

MODEL CHART			
Model	Protection	Description	Display
HHT-IU HHT-IT HHT-EU-LCD	Explosion-proof	Humidity Humidity/temperature	No No No Yes Yes