



HAZARDOUS LOCATIONS

EXPLOSION PROOF / INTRINSICALLY SAFE HUMIDITY & TEMPERATURE TRANSMITTER HHT SERIES

DESCRIPTION

The Dwyer HHT Series explosion proof / intrinsically safe humidity transmitter is designed for rugged industrial use. Approved by FM for hazardous location, this system provides safe, reliable, and accurate humidity and/or temperature measurement with 4-20 mA outputs. Two models have a digital display.

FEATURES

- Available with digital display
- Intrinsically safe with KFD0-SCS-Ex1.55 barrier



HHT

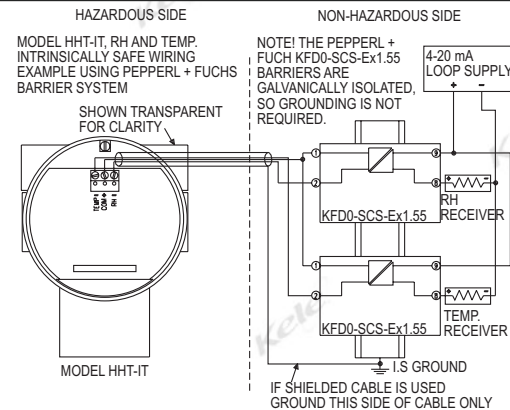
Dwyer®



CAUTION: Intrinsically safe devices require the use of an intrinsic safety barrier when applied in hazardous locations. Provide wiring and grounding in accordance with manufacturer's instructions. When the Model HHT is combined with the KFD0-SCS-Ex1.55 intrinsic safety barrier, total cable capacitance must be limited to 0.22 μ F, and inductance must be limited to 4.0 mH (equivalent to 2700'/823m maximum Belden® #8760 18/2 shielded cable 0.18 μ H/FT, 44 pF/FT).

CAUTION: Conduit seals **MUST** be installed within code-required distance from the enclosure to maintain explosion proof rating. For Group B and C atmospheres, conduit seals must be within 2" (5 cm) of the enclosure regardless of less stringent code requirements. **NOTE:** When using the temperature option, both humidity and temperature loops must be connected to operate.

WIRING



SPECIFICATIONS

Supply Voltage	16.5 to 28 VDC
Explosion proof	9.5 to 28 VDC
Intrinsically Safe	$\pm 2\%$ RH from 10 to 90% RH
Accuracy	4-20mA, 375 Ω @ 24VDC (-Eu)
Signal Output (1 or 2)	Vmax=28V, Imax= 100mA, Ci= 62nF, Li= 7.7 μ H, Pi= 651mW
Entity Parameters	
Area	
Explosion proof	Class I, Div. 1, Groups B, C, D; Class II, Div. 1, Groups E, F, G; Class III, Div. 1, Class I, Div. 1, Groups A, B, C, D; Class II, Div. 1, Groups E, F, G; Class III, Div. 1
Intrinsically Safe	
Response Time	15 seconds

Sensor Type	Capacitive
RH	Solid state
Temperature	1/2" FNPT
Conduit Connection	Duct probe: 1/2" MNPT
Mounting	LCD Display
Display	NEMA 4X, Aluminum
Enclosure Rating	0% to 100% RH
RH Sensor Range	
Temperature Sensor Range	-40° to 140°F (-40° to 60°C)
Wiring	Terminals
Weight	2.5 lb (1.1 Kg)
Approvals	FM, CE
Warranty	1 year

ORDERING INFORMATION

MODEL	DESCRIPTION
HHT-IU	10 inch Intrinsically safe Humidity transmitter
HHT-IT	10 inch Intrinsically safe Humidity and Temperature transmitter
HHT-IT-LCD	10 inch Intrinsically safe Humidity and Temperature transmitter with display
HHT-EU	10 inch Explosion proof Humidity transmitter
HHT-EU-LCD	10 inch Explosion proof Humidity transmitter with display

RELATED PRODUCTS

GFF-50	1/2" galvanized mounting flange
KFD0-SCS-Ex1.55	Intrinsic safety barrier, 4-20 mA two-wire transmitters
EYM-50	1/2" size, 1.06" turning radius, 1 oz Kwiko cement required, Malleable Iron construction
DCPA-1.2	Power supply, 120 VAC In to 24 VAC/24 VDC Out
A-287	Separate pipe/wall mounting hardware kit for TTE & HHT Series
DCP-1.5-W	Power supply, 24 VAC IN to 24 VDC OUT