AMBETRONICS

TEMPERATURE & HUMIDITY TRANSMITTER

Magnetic Wand for Programming

Magnetic Wand for Programming

Features

- Highly accurate Digital technology sensor gives fast and reliable output.

- Temperature range is -40°C to +100°C with accuracy of ± 0.5 °C.

- Relative Humidity range is 0% RH to 100%RH with accuracy of ± 2%RH.

- Long term stable output for both Temperature and Relative Humidity.

- Digital Display of Temperature & Relative Humidity on Seven Segment Display

- Standard 4-20mA signal outputs with configurable range.

- Easy handling & programming with 3 keys

- Password protected programming with password changing facility.

- Software calibration for both Temperature & Relative Humidity.

- Flash Memory for Data security in the event of power failure.

- Optional 2 Nos. Alarm relay contacts with two configurable Alarm levels & one relay for fail safe relay.

- Optional Isolated RS-485 communication port with MODBUS RTU Protocol.

- Compact size, can be easily installed.

Applications

- Clean Rooms

- Server Room

- Pharmaceutical

- Hospitals / Labs

- Walk-in-cooler

- Greenhouse Breeding

- Warehouse / Cold Room

- Indoor Air Quality (IAQ)

- Air Condition Room

- Energy Management System (EMS)

TECHNICAL SPECIFICATIONS

General

Sensor Type	:	Capacitive Polymer Sensor
Range	:	For Temperature = -40°C to 100°C
		For Relative Humidity = 0 % RH to 100% RH
Display	:	2-Line, 4-Digit 13mm (H) Seven Segment Display.
		8 LEDs to indicate status of instrument.
Control Action	:	i) Two independent Alarm set points with Latch & Non-latch facility.
	:	ii) User selectable Hysteresis
Setting	:	By using Magnetic wand for Flameproof model

Performance

Measurement	:	± 0.5°C for Temperature
Accuracy		± 2% RH for Relative Humidity
Response Time	:	Approx 5 Seconds

Electrical

Supply Voltage	:	18 to 36 VDC; Typically 24VDC.
Power Consumption	:	Less than 3.5 Watts
Cable	:	3 Wires (1.5 mm²) Flexible or Armoured Shielded Cable.

Error Monitoring

- During Sensor Break / Open, the Display shows 'SEnS oPEn' & output current will be as per Upscale / Downscale.
- During Over Range the Display Shows 'OVER' & Under range Display Shows 'UNDER' and output current will be as per Upscale/Downscale.
- Upscale current = 21mA
- Down scale current = 3.7mA

Environmental

Operating Temperature	:	-15°C to +55°C
Humidity	:	Less than 95% Non-Condensing.

Output Signal

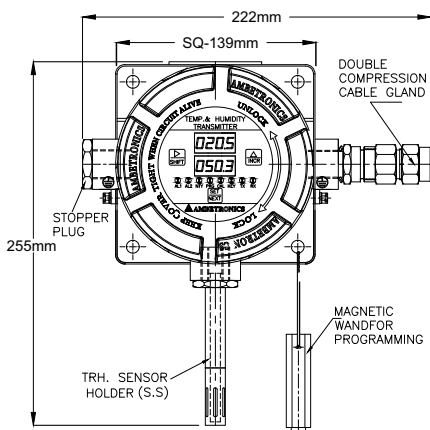|		
Standard	:	Two 4-20mA Current Outputs with configurable range selection, one each for Temperature & Relative Humidity Respectively
Optional	:	Three SPDT Relays (one for failsafe and two for Alarm Condition) of rating "120VAC/2A, 24VDC/2A"
Optional	:	Isolated RS-485 Communication port with MODBUS RTU protocol.

Accessories (Optional)

- C€ certified 24 VDC Power supply.
- Canopy Mounting stand.
- RS-232 to RS-485 convertor
- RS-485 to USB convertor
- SCADA Software.
- Flameproof, Weatherproof IP66 Hooter Cum Flasher - Model No.: HCF/FLP/2C
- CIMFR CERTIFICATE NO. : IN/CIMFR/TR19/4378 Dt. : 13/12/2019
- PESO CERTIFICATE NO.   : P468728/3 Dt. : 21/02/2020
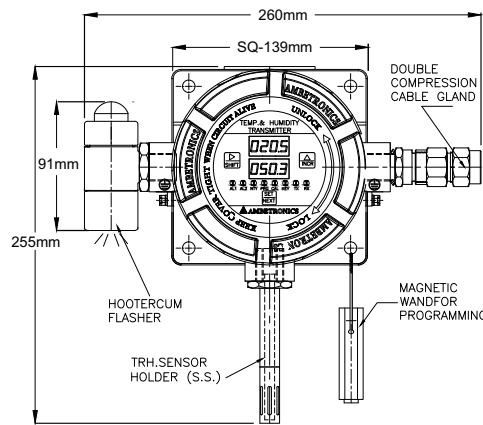
Flameproof Housing

Degree of Protection Class	:	IP-66
• CIMFR CERTIFICATE NO.	:	IN/CIMFR/TR19/4071 Dt. : 13/12/2019
• PESO CERTIFICATE NO.	:	P468728/2 Dt. : 21/02/2020
Housing Material	:	Cast Aluminium LM6 alloy or Stainless Steel
Cable Entry	:	Flameproof, Weatherproof IP66 Double Compression Cable Gland - Model No.: CG/FLP/2C M20 x 1.5 (P) & M25 x 1.5(P), ½" NPT & ¾" NPT
• CIMFR CERTIFICATE NO.	:	CIMFR/TC/P/1313 Dt. : 19/09/2018
• PESO CERTIFICATE NO.	:	P431645/2 Dt. :19/11/2019
Dimension	:	i) 255mm (H) with sensor holder x 223mm (W) with stopper plug & cable gland x 125mm (D)
		ii) 255mm (H) with sensor holder x 263mm (W) with Hooter cum Flasher & cable gland x 125mm (D)
Mounting	:	Wall Mounting / Stand Mounting / Duct Mounting
Weight	:	Approx 2.53 Kg

FLAMEPROOF ENCLOSURE DIMENSIONAL DETAILS

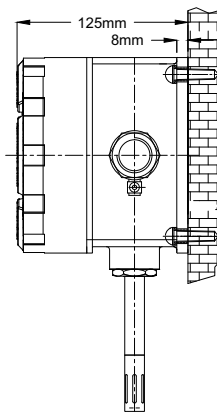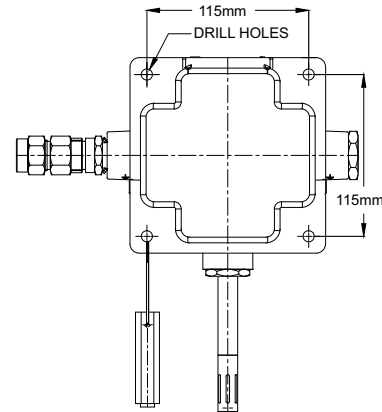FRONT VIEW WITHOUT HOOTER

FRONT VIEW WITH HOOTER

SIDE VIEW

BACK VIEW

ORDERING INFORMATION

TRH — A — B — C — D — E — F

- **A) Model No.** 1)-554
- **B) Enclosure** 1) FLP (Flameproof)
- **C) Retransmission Output** 1) None 2) 4 to 20mA
- **D) Relay Output** 1) None 2) 3 Relays
- **E) Communication Port** 1) None 2) RS-485 Serial Port
- **G) Sensor Housing** 1) Stainless Steel (SS-316)

* Before placing order please Refer the above ordering information or Contact us for assistance.

Manufactured by :

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Specifications subject to change without any prior notice

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