

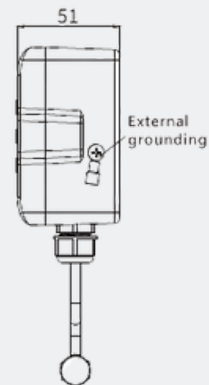
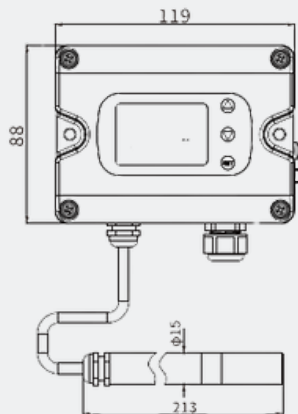
## Overview

**TxTHH99** sensor ensures high-precision temperature and humidity measurement for industrial and climate control applications. Its split probe withstands up to 180°C, offering long-term stability, anti-pollution, and strong EMI resistance. The durable metal design enhances reliability in harsh conditions.

## Features

- **Durable Build:** Full metal shell for harsh environments.
- **Wide Range:** Operates from -40 to 180°C.
- **High Accuracy:** Full-range temperature & humidity calibration.
- **Reliable Sensors:** Withstand high temperatures with stable humidity repeatability.
- **Long-Term Stability:** Core coating resists pollution.
- **Customizable:** Optional LCD display, buttons, and alarms.

## Dimensions



## TxTHH99

### High-temperature Temperature & Humidity Sensor



## Applications

- Industrial climate control
- High-temp environments (up to 180°C)
- HVAC systems
- Cleanrooms & labs
- Food & pharma storage
- Manufacturing processes
- Incubation & drying rooms

Specifications

High-temperature Temperature & Humidity Sensor

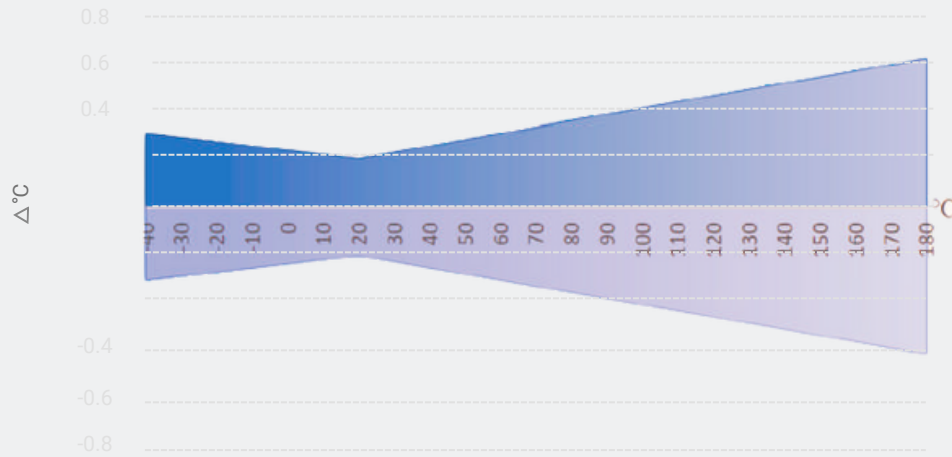
Relative humidity

Sensing element	High temp & humidity sensitive capacitor
Range	0%~100%RH
Output	RS485/Modbus, 0~10VDC, 4~20mA
Accuracy	≤90%RH@20°C ±2%RH      >90%RH@20°C ±2.3%RH
Response time	≤10s

Temperature

Sensing element	PT1000
Probe operating temperature	0-100%
Output	4~20mA, 0~10VDC, RS485/Modbus
Accuracy	±0.2°C @ 20°C (See accuracy curve chart)
Power Supply	15-35VDC / 24VAC ±20%
Output Load	≤500Ω (Current type), ≥10KΩ (Voltage type)
Material	ADC12, SUS304
Operating Temperature (Electronics with LCD)	-20 to 60°C
Relay	2x SPDT (3A-30VDC / 250VAC)
Protection Level	IP65, CE

## Digital sensor temperature accuracy curve



## INSTALLATION DIAGRAM

### Air Duct Installation

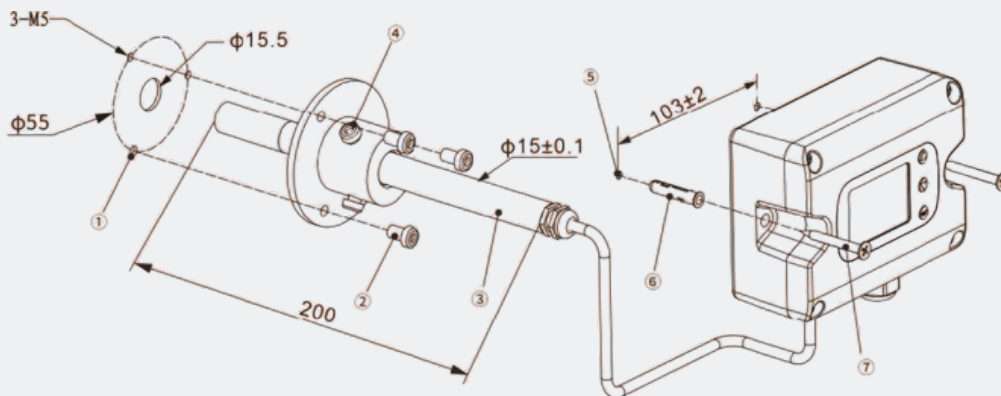
1. Open holes in the air duct.
2. Install the flange in place & Lock the screws to secure the flange.
3. Install the air pipe and adjust its size as needed.
4. Lock the screws to secure the air pipe firmly.

### Sensor Box Installation

5. Open holes at the designated location for the sensor box.
6. Insert the expansion tube into the holes.
7. Install the sensor body in place & Lock the screws to ensure stability.

### Grounding Method Selection

- Option 1: Use the internal PCB's reserved grounding terminal for grounding.
- Option 2: If the device is separated from the grounding wire, connect the grounding wire to the reserved grounding position outside the shell.



**Selection Code:**

Code and description		Remark
TxTHH99	High-temperature Temperature & Humidity Sensor	Model
V10	0~10VDC(3-wire)	Output
A	4~20mA(2-wire)	
RS	RS485/Modbus	