RSA-TTH2A / RSA-TTH3 / RSA-TTH4A Temperature & Humidity Transmitter

RSA-TTH2A

RSA-TTH3A   RSA-TTH4A

Install Flange

RSA-TTH3AA   RSA-TTH4A
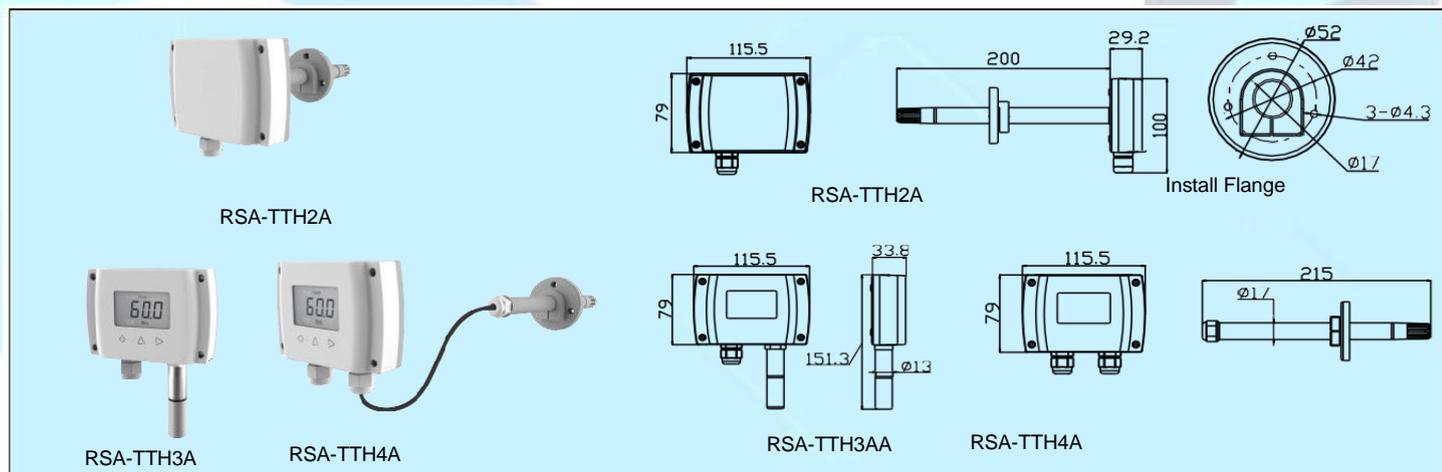
Applications & Features

- Humidity and temperature transmitters RSA-TTH2A (duct), RSA-TTH3A(outside) and RSA-TTH4A(remote) are designed for environment monitoring and controlling in industrial and commercial buildings.
- High performance digital sensors and circuits, ensure accurate measurement and temperature compensation
- Digital technology applied, multiple outputs optional, over voltage and reverse polarity protection, high reliability and anti-interference capability
- LCD display temperature and humidity alternatively
- LCD & function keys can set parameters and calibrate output, so the product can be a stand alone controller
- Good long term stability and reliability
- 100% field changeable sensor without re-calibration
- Fast response
- High protection rate up to IP65

Specifications

Relative Humidity
   Sensor: Digital polymer
   Range: 0~100%RH
   Output: see models
   Accuracy: 2%, 3%, (25°C, 20~80%RH)
   Hysteresis: <±1%RH
   Response time: <10s (25°C, in slow air)
   Drift: <±0.5%RH / year
Temperature
   Sensor: Digital temperature sensor or RTD/thermistor
   Range: 0~50°C, 0~100°C, -40~60°C, or others
   Output: see models
   Accuracy: transmitter: ≤±0.4°C @ 5~60°C or
      0.3°C @ 5~60°C
      RTD or thermistor: typical 0.2~0.4°C@ 25°C, see models

Power: Current: 18.5~35VDC (R$_{load}$=500Ω)
         8.5~35VDC (R$_{load}$=0Ω)
   Voltage: 16~28VAC/ 16~35VDC
Output Load: ≤500Ω (current), ≥2KΩ (voltage)
Relay output: 2×SPST, 3A/30VDC, 3A/250VAC
Display and keys: 4 digits LCD, with unit indication, backlight (4-20mA N/A), 3 touch keys, see more details on LCD & Keys operation
Work Temp.: -30~70°C(LCD:0~50°C)
         5~95%RH (Non condensing)
Housing: Fireproof ABS housing, UHMW-PE filter(RSA-TTH2A/ RSA-TTH4A), SS probe and sintered filter(RSA-TTH3A)

Protection: IP65
Weight: RSA-TTH2A:360g; RSA-TTH3A:270g; RSA-TTH4A:430g
Approval: CE

Models

| Model							Description
Model	RSA-TTH2						Duct mount Temp./RH transmitter
	RSA-TTH3						Outside air Temp./RH transmitter
	RSA-TTH4						Remote mount Temp./RH transmitter
RH Accuracy		2					±2%RH(0.3°C)
		3					±3%RH(0.4°C)
RH Output			1				0-10VDC(3 wires)
			2				4-20mA(2 wires)
			8				RS485/Modbus
Temp. Output				0			No
				1			0-10VDC(3 wires)
				2			4-20mA(2 wires)
				3			PT1000, ±0.2°C@25°C
				4			PT100, ±0.2°C@25°C
				5			NTC20K,±0.4°C@25°C
				6			Ni 1000, ±0.4°C@25°C
				7			NTC10K-II, 0.4°C@25°C
				8			RS485/Modbus
				9			NTC10K-III,0.4°C@25°C
				A			NTC10K-A, 0.4°C@25°C
Temp. Range					0		No
					1		0-50°C
					2		0-100°C
					3		-40-60°C
					7		others
Relay						0	No
						1	2×SPST(4-20mA N/A)
LCD & Keys						0	No
						1	LCD
						2	LCD & Keys

*1. RSA-TTH2A, RSA-TTH3A, RSA-TTH4A series current products are powered by RH circuit, so the RH circuit must be powered. Otherwise it could not work.

*2. Only when the temperature output is 1 or 2, the temperature range 1-7 is applicable. Otherwise, always use 0 as temperature range selection.

*3. See resistance table on page 1 of this catalog.

Connection:

Different models have different electrical terminals. Please wire specific model according to the wiring diagram inside the front cover.
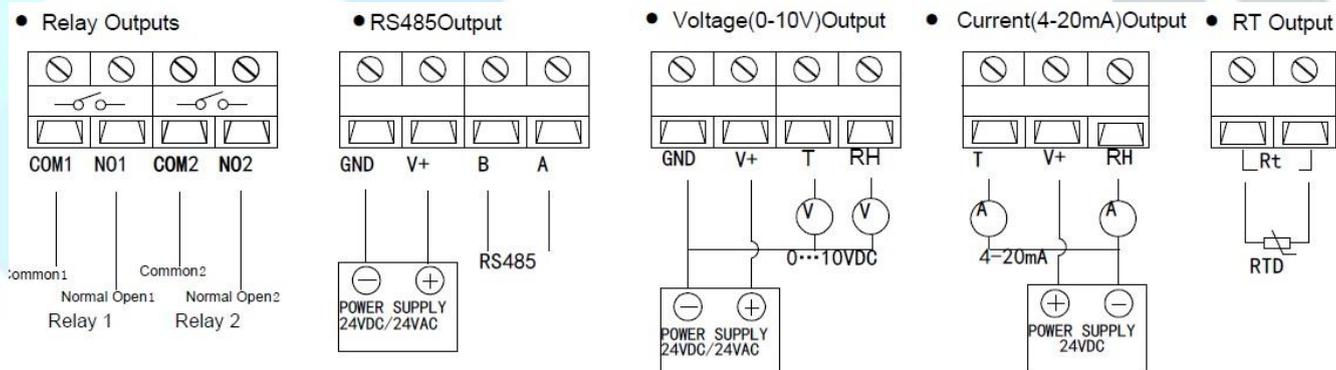
Current 4-20mA Output: terminal RH loop should be connected, otherwise the transmitter can not work.

Installation:

RSA-TTH2A Flange mount   RSA-TTH2A/RSA-TTH4A Flange mount holes   RSA-TTH3A/RSA-TTH4A Surface mount holes

Flange mount for the remote probe of RSA-TTH4A   RSA-TTH4A Surface mount   RSA-TTH3A Surface mount
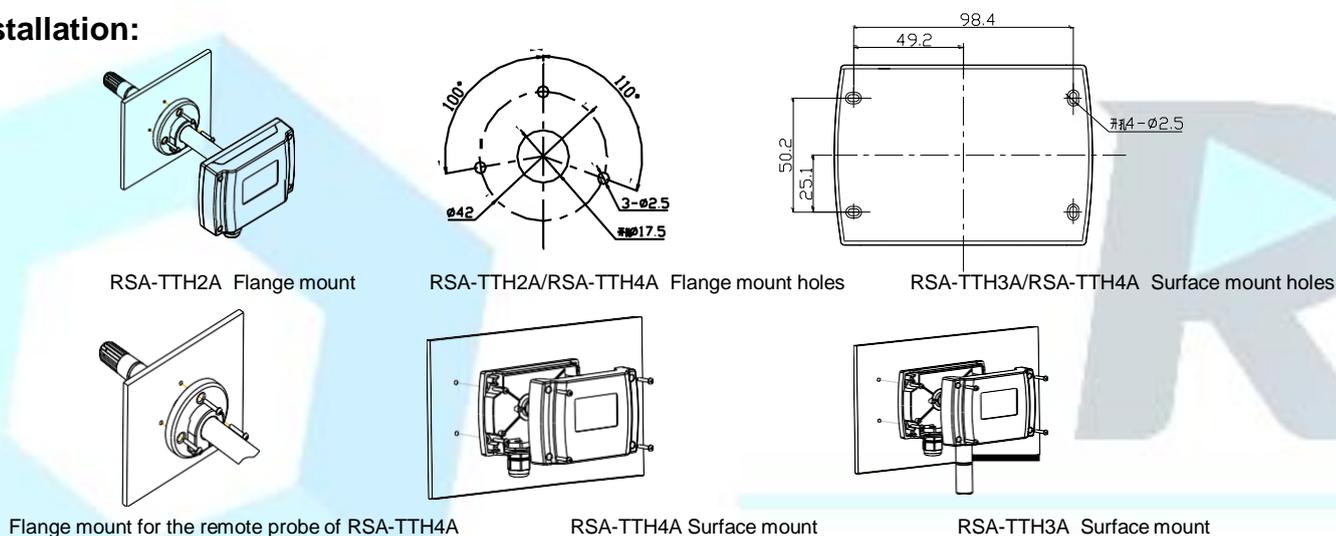
- The install flange kit is recommended for installing the RSA-TTH2A. The depth being inserted can be adjusted. Install the kit on the duct with 3 screws, and use another screw to tighten the probe and the whole RSA-TTH2A. the duct hole(ϕ17.5mm) should be air-tight after installation.
- RSA-TTH3A/RSA-TTH4A housing should be installed vertically on the wall, with the sensor probe downward. It should be far away from any
  heat/cool sources. If needed, there should be a shield to prevent the sensor from direct sun light and rain. Drill 4 holes on the wall according to the dimensions. Install the RSA-TTH3A/RSA-TTH4A base with the 4 screws after remove the front cover. RSA-TTH4A remote probe can also be installed with flange kit, same as RSA-TTH2A.
- Open the front cover, install the drain on the base and take the wires from DDC/PLC, etc. into the base through the drain, then finish wiring according to the diagram inside the cover and restore the front cover. Make sure to install the drain with the base and the base with the front cover all completely air-tight (there are two seal rings between the drain and the base, and the front cover and the base), to prove the whole housing can meet up to IP65.

Attention:

It should be power OFF during installing and wiring. When using 24VAC, it is strongly recommended to power the unit with independent transformer. If sharing a 24VAC transformer with other equipments such as controllers, transmitters or actuators, please make sure the terminals 24V and GND are connected correctly. Otherwise, it will perhaps reduce serious damages.

Warranty :

- It has limited warranty for eighteen (18) months after the production date.
- It does not extend to any unit that has been subjected to misuse or accident.
- It is, in any event, strictly limited to the replacement or repair of the product itself.

RSA SENSORS - ATENDIMENTO

R SA
Sensors
www.rsa-sensors.com.br
RSA SENSORES,CONTROLES,
VÁLVULAS, ATUADORES E
EQUIPAMENTOS

ESCANEAR O QR CODE COM CAMERA DO
CELULAR, PARA CHAMAR NO WHATS APP
SAC: (11)979936574