USER MANUAL

RV5700/HD4817TV

RH/°C-TRANSMITTER

4-20MA OUTPUT

TO MEASURE = TO KNOW

RV5700/HD4817TV

RH/°C-TRANSMITTER

NIEUWKOOP

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The RV5700/HD4817TV transmitter is designed for temperature and humidity control in **conditioning and ventilation applications (HVAC/BEMS)** in the following sectors: pharmacy, museums, clean rooms, ventilation ducts, industrial and civil sectors, crowded places, canteens, auditoria, gyms, high-density farms, greenhouses, etc.

Technical specifications

Relative Humidity

Sensor	Capacitive
Measuring range	0....100% RH
Accuracy @ T=15...35ºC	±1.5% RH (0...90%RH), ±2.0%RH (90...100%RH)
Accuracy @ rest of T range	±(1.5%+1.5% of the measure)%RH
Repeatability	0.4%RH
Sensor working temperature	-20...+80ºC

Temperature

Sensor	NTC 10kΩ
Measuring range	-20...+80ºC
Accuracy	±0.3ºC (0...+70ºC)
	±0.4ºC (-20...0ºC, +70...+80ºC)
Repeatability	0.05ºC

Output

Relative Humidity	4....20 mA (0....100%RH), R_L <500Ω
	22 mA outside the measuring range
Temperature	4....20 mA (-20....80ºC), R_L <500Ω
	22 mA outside the measuring range

Power supply and electrical connections

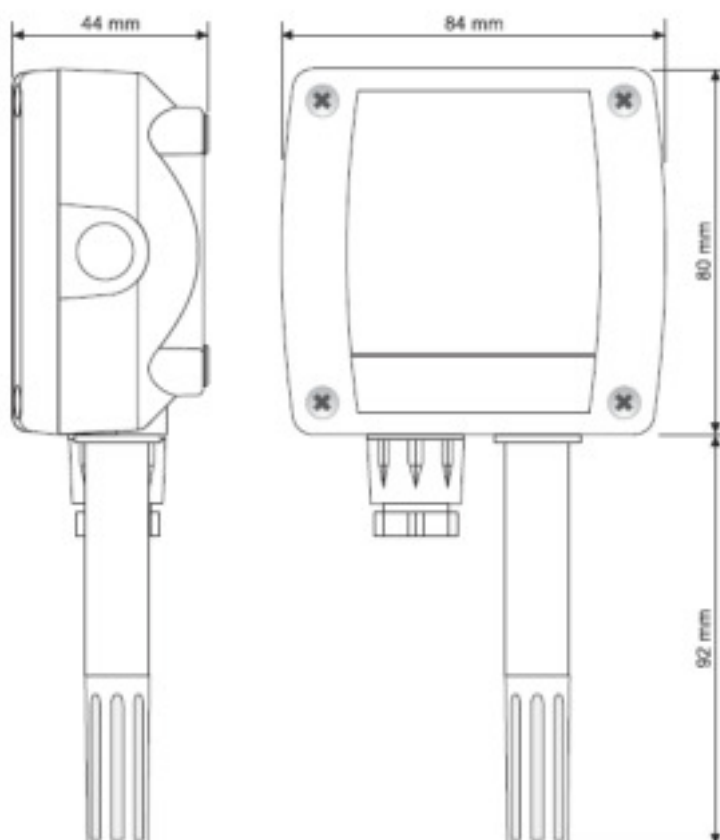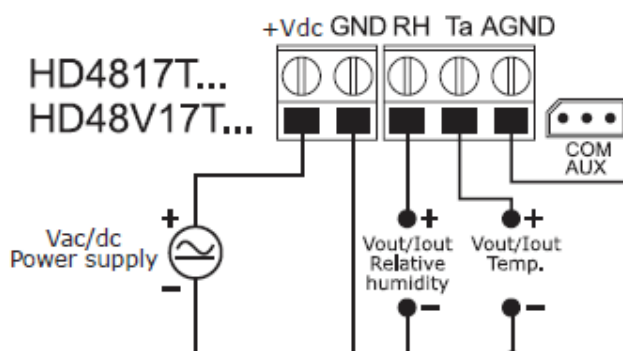|	
Power supply	18...40Vdc or 24Vac ±10%
Consumption	- 4 mA@24V(models with voltage output)
	- 4 mA@24V with open output, 20 mA@24V with 12mA output (models with current output)
	- 2 mA@24V models with serial RS485 output
Electrical connections	Screw type terminal block, max. 1.5mm², M16 cable gland for input cable

General Characteristics

Standard filter	PBT and 10 μm stainless steel grid protection (P8) 20 μm PTFE (P7) only for extended range
Working temperature	Electronics = -20...+60ºC, Storage = -20...+80ºC
Electronics protection class	IP66
Materials	ABS, polycarbonate
Weight	approx. 120 gr.
Case dimensions	80x84x44 (lxwxh)

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Electrical connections

Power the instrument as shown in the below connection schemes, the power supply terminals are marked as +Vcc and GND.

The output signal is available between:

RH% and AGND, Ta and AGND terminals for the RV5700/HD4817TV transmitter.

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