

Relative Humidity and Temperature Transmitters and Control Devices



HTC78

(For Intense Humidity Environment Of 90% And Above)

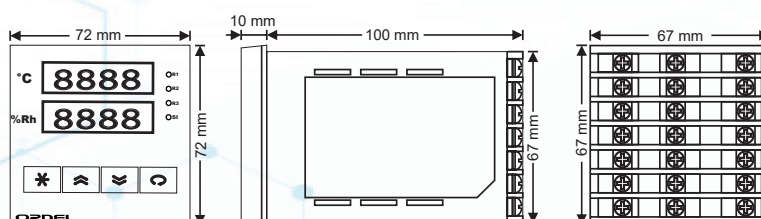
HTC78 Series devices are electronic devices that measure the relative humidity and temperature data of 90% and above in industrial environments and enable this measurement to be sent to another system by converting it to a standard analog signal. They are ergonomic devices whose compliance with international standards, reliability and ease of use have been ensured at the design stage. For this reason, they are devices that can be used easily and preferred for many different applications in many sectors.

Device Features

- 2 pcs 4 Digit Numeric Display
- 2 pcs Led Display
- 2 pcs Analog Output (0/4-20mA, 0/2-10V)
- 3 pcs Relay Output or Logic Output (24V)
- RS485 Communication Interface
- 100-240Vac Universal or 24Vac/dc Supply
- Isolation Between Input/Output Modules
- 2 Different Protective Filter Options
- On Panel Montage
- 40°C....+120°C Sensor Temperature Range
- Graduall Sensor Heating Function
- Sensor Error Detection and Redirection
- ON/OFF Control
- 4 Different Relay Options
- Adjustable Scale for Analog Outputs
- Standard MODBUS RTU Communication Protocol
- 100 ms Sampling and Control Cycle

4

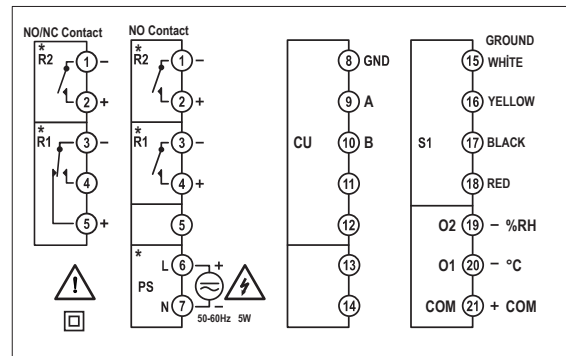
Device Dimensions



Technical Specifications

Supply Voltage (PS)	100-240Vac/dc +10%, -15% 24Vac/dc +10%, -20%
Power Consumption	5W, 8VA
Measurement Range	Temperature : -40...+120°C Relative Humidity : 0...100%Rh
Analog Outputs	Current : 0/4-20mA (RL≤500Ω) Voltage : 0/2-10V (RL≥1MΩ)
Relay Outputs (R1,R2,R3)	Contact : 250Vac 5 A Logic Output : 24Vdc, 20 mA
Contact Lifetime	No load : 10.000.000 switching 250V, 3A at Resistive Load : 100.000 switching
Resolution	Temperature : 0,1°C Relative Humidity : 0,1%Rh
Accuracy	Temperature : +/-1°C (-20°C...+70°C) +/-2°C (-40°C...+120°C) Relative Humidity : +/-2%Rh (10%Rh...90%Rh) +/-4%Rh (0%RH...100%RH)
Repeatability	Temperature : +/-0,1°C Relative Humidity : +/-0,1%Rh
Sampling Period	100 ms
Environment Temperature	Device : -10°C...+60°C Sensor : -40°C...+120°C
Storage Temperature	-20°C...+70°C
Memory	100 Year, 1000.000 Renewable
Dimensions	Width = 72 mm Height = 72 mm Depth = 110 mm
Panel Cutting Dimensions	68+/-0,5 mm x 68+/-0,5 mm
Weight	292 gr

Device Connection



4

Product Code

HTC78 - / 0 / 2 / / / / / 0

Supply Voltage :

- 0 = 100-240Vac (Universal)
- 1 = 24 Vac/dc

Communication Interface :

- 0 = N/A
- 3 = RS485 Communication Unit

Analog Outputs :

- 0 = N/A
- 1 = 0/4-20 mA Current Output
- 2 = 0/2-10V Voltage Output

Sensor Rod Length :

- 1 = 10 cm
- 2 = 20 cm
- 3 = 30 cm

Filter Type :

- 2 = PTFE (Teflon)

Temperature Range :

- 0 = 0...+60 °C
- 1 = -40...+60 °C
- 2 = -40...+120 °C

R1 Output Module :

- 0 = N/A
- 1 = NO Contact
- 2 = 24V Logic Output (for SSR Driving)
- 3 = NO/NC Contact

R2,R3 Output Modules :

- 0 = N/A
- 1 = NO Contact
- 2 = 24V Logic Output (for SSR Driving)

Sensor Connection :

- 0 = N/A
- 1 = Flange
- 2 = 1/2" Fixed Raccord
- 3 = 1/2" Adjustable Raccord