



Features

- Universal Input For Temperature & rH
- Water Level Switch Input
- PID or On-Off Control for Temperature & rH
- Optional Serial Communication Port
- Compressor Control Output with Time Delay
- Universal supply voltage (90 to 270 VAC)
- Programmable Alarm for Temperature & rH
- 24 VDC Available on Request

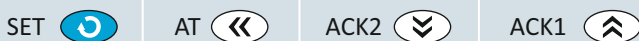
Technical Specifications

Display Specification

Digits	Dual 8 Digits 7 Segment LED Display
LED Indication	DH - Dry Heater Output Status WH - Wet Heater Output Status CP - Compressor Output Status TA - Temperature Alarm Status HA - Humidity Alarm Status D - Water Level Error Condition
Height	0.39" PV (White) 0.24" SV (Green)

Keys

4 Controlling keys for configuration and operation



Certification

None

Input Specification

Temperature Input	RTD - Pt-100 0-20 mA, 4-20 mA, 0-1 VDC, 0-10 VDC
Humidity Input	0-20 mA, 4-20 mA, 0-1 VDC 0-3.3 VDC, 0-5 VDC, 0-10 VDC, RH-20, RH-35
Resolution	1°C, 0.1°C, 0.01°C, 0.001°C
Accuracy	0.3% FS
Temperature Unit	°C
Sampling Rate	250msec

Auxiliary Supply Specification

Supply Voltage	90 - 270 VAC (24 VDC Available on Request)
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Make In India



Accurate



Reliable



Affordable



User Friendly

Environmental Specification

Temperature	Operating - 0 to 50°C
Storage	-20° to 75°C
Humidity	95% RH (Non-condensing)

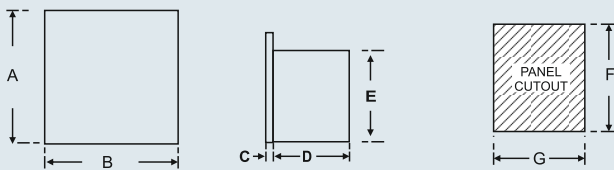
General Description

Weight (Gms)	200
Enclosure	Molded ABS
Color	Black
Accessories	1 Pair of Mounting clamp
Terminal Cable Size	Barrier Type terminal cable Size (2.5 mm ²)

Output Specification

Dry Heater Output	SSR Drive
Wet Heater Output	SSR Drive
Compressor Output	Relay / SSR Drive (Factory Set)
Relay	5A @ 250 VAC / 30 VDC
SSR Drive	12 VDC @ 30mA

Mechanical Dimensions



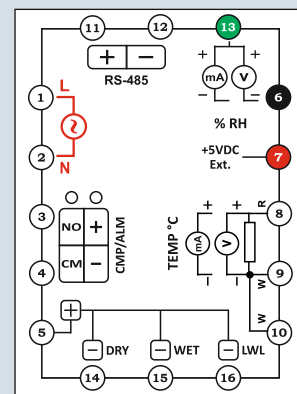
Mechanical Dimensions

Dim Model	A	B	C	D	E	F	G
RHTC-400	50	50	3	70	45	45	45

Functional Specification

Control Action	PID Control / ON-OFF
Control Logic	Heat / Cool
Proportional Band	0.5 to 99.9°C
Integral Time	0 to 3600 sec
Derivative Time	0 to 300 sec
Cycle Time	1.0 to 100.0 sec
Output Power Limit	0 to 100%
Compressor Delay	0 to 500 sec
Compressor Function	Auto / ON / OFF
Alarm Modes	Low / High / Deviation / Band
Digital Input 1	Water Level
Serial Communication	RS-485 / Half Duplex
Protocol	Modbus RTU
Excitation Voltage	5V / 10V / 12V / 24V (Jumper Selectable)

Terminal Diagram



RHTC-44

Order Code : RHTC-400

Size	O/P1 - Dry	O/P2 - Wet	O/P3 - Comp / Alarm	Communication	Excitation	Supply
4 (48X48X87)	0 (None)	0 (None)	0 (None)	0 (None)	05 (05 VDC)	A(90~270 VAC)
	2 (SSR)	2 (SSR)	1 (Relay)	B (RS-485)		D (24 VDC)
			2 (SSR)			

Example : RHTC-400-221-B05A

Size	O/P1 - Dry	O/P2 - Wet	O/P3 - Comp / Alarm	Communication	Excitation	Supply
4	2	2	1	B	05	A
4 (48X48X87)	2 (SSR)	2 (SSR)	1 (Relay)	B (RS-485)	05 (05 VDC)	A(90~270 VAC)

Temperature Input

Sensor Input	Range	Resolution	Accuracy
Pt-100 (RTD)	-100 ~ 450°C	1°C	±1°C
Pt-100 (RTD.1)	-99.9 ~ 450.0°C	0.1°C	±0.3°C
0 ~ 20 mA	-1999 TO 9999	1 / 0.1 / 0.01 / 0.001°C	} ± 0.1 % of Full Scale
4 ~ 20 mA	-1999 TO 9999	1 / 0.1 / 0.01 / 0.001°C	
0 ~ 1 VDC	-1999 TO 9999	1 / 0.1 / 0.01 / 0.001°C	
0 ~ 10 VDC	-1999 TO 9999	1 / 0.1 / 0.01 / 0.001°C	

rH Input

Sensor Input	Range	Resolution	Accuracy
0 ~ 20 mA	-1999 TO 9999	1 / 0.1 / 0.01 / 0.001	} ± 0.1 % of Full Scale
4 ~ 20 mA	-1999 TO 9999	1 / 0.1 / 0.01 / 0.001	
0 ~ 1 VDC	-1999 TO 9999	1 / 0.1 / 0.01 / 0.001	
0 ~ 3.3 VDC	-1999 TO 9999	1 / 0.1 / 0.01 / 0.001	
0 ~ 5 VDC	-1999 TO 9999	1 / 0.1 / 0.01 / 0.001	
0 ~ 10 VDC	-1999 TO 9999	1 / 0.1 / 0.01 / 0.001	
RH20	0.0 to 100.0	1 / 0.1 / 0.01 / 0.001	
RH35	0.0 to 100.0	1 / 0.1 / 0.01 / 0.001	