



## Features

- RTD Input for both Cascade & Cabinet System.
- On - Off Control Loops for Cascade & Cabinet.
- Programmable Time Delay for Both the Compressors
- Programmable Alarms (Low/ High/ Band/ Deviation)
- Relay Output for Cascade, Cabinet & Alarm
- Optional Serial Communication Port
- Universal supply voltage (90 to 270 VAC)
- 24 VDC Available on Request

## Technical Specifications

### Display Specification

Digits	Dual 4 Digits 7 Segment LED Display
LED Indication	OUT 1 - Cascade Output Status OUT 2 - Cabinet Output Status ALM 1 - Cascade Alarm Status ALM 2 - Cabinet Alarm Status
Height	0.80" PV (White) 0.56" SV (Green)

### Keys

4 Controlling keys for configuration and operation

SET SHIFT ACK1 ACK2

### Auxiliary Supply Specification

Supply Voltage	90 - 270 VAC (24 VDC Available on Request)
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### Functional Specification

Control Action	ON-OFF
Control Logic	Cool
Delay Time (For Cascade & Cabinet)	0 to 500 sec
Hysteresis (For Cascade & Cabinet)	0.1 to 100.0°C
Alarm Modes	Low / High / Deviation / Band
Serial Communication	RS-485 / Half Duplex
Protocol	Modbus RTU

### Certification

None



Make In India



Accurate



Reliable



Affordable



User Friendly

## Output Specification

Output 1 (cascade)	Relay / SSR Drive (factory Set)
Output 2 (Cabinet)	Relay / SSR Drive (Factory Set)
Alarm Output (OP3)	Relay / SSR Drive (Factory Set)
Relay	5A @ 250 VAC / 30 VDC
SSR Drive	12 VDC @ 30mA

## Input Specification

Sensor Input	RTD - Pt-100
Resolution	Pt-100 - 0.1°C
Accuracy	0.3% FS
Temperature Unit	°C
Sampling Rate	250msec

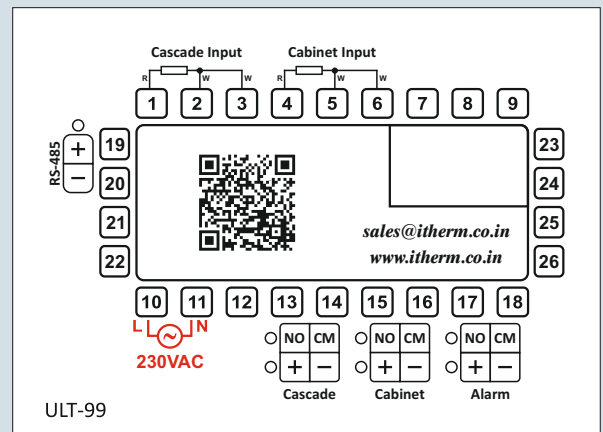
## Environmental Specification

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

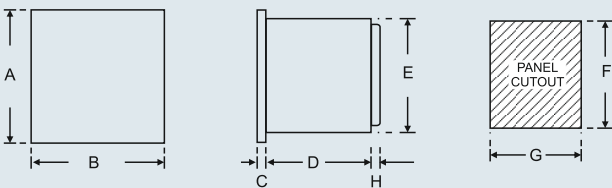
## General Description

Weight (Gms)	180
Enclosure	Molded ABS
Color	Black
Accessories	1 Pair of Mounting clamp
Terminal Cable Size	Barrier Type terminal cable Size ( 2.5 mm <sup>2</sup> )

## Terminal Diagram



## Mechanical Dimensions



## Mechanical Dimensions

Dim Model	A	B	C	D	E	F	G	H
ULT-99	96	96	10	65	89	92	92	9

## Order Code : ULT-99

Size	O/P1 - Cascade	O/P2 - Cabinet	O/P3 - Alarm	Communication	Supply
9 (96X96X65)	0 (None)	0 (None)	0 (None)	0 (None)	A (90 ~ 270 VAC)
	1 (Relay)	1 (Relay)	1 (Relay)	B (RS-485)	D (24 VDC)
	2 (SSR)	2 (SSR)	2 (SSR)		

## Example : ULT-99-111-BA

Size	O/P1 - Cascade	O/P2 - Cabinet	O/P3 - Alarm	Communication	Supply
9	1	1	1	B	A
4 (96X96X65)	1 (Relay)	1 (Relay)	1 (Relay)	B (RS-485)	A (90 ~ 270 VAC)

## Input sensor Range

Sensor Input	Range	Resolution	Accuracy
Pt-100 (RTD.1)	-99.9 ~ 450.0°C	0.1°C	±0.3°C