



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

Display Specification

Digits : Dual 4 Digits
7 Segment LED Display

LED Indication : OUT1 - Cascade Output Status
OUT2 - Cabinet Output Status
ALM1 - Cascade Alarm Status
ALM2 - Cabinet Alarm Status

Height	Model	ULT-99
PV (White)		0.80"
SV (Green)		0.56"

Input Specification

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

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 @ 250VAC / 30VDC
SSR Drive : 12 VDC @ 30mA

Functional Specification

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

Auxiliary Supply Specification

Supply Voltage : 90 - 270 VAC
(24 VDC Available on Request)

Environmental Specification

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

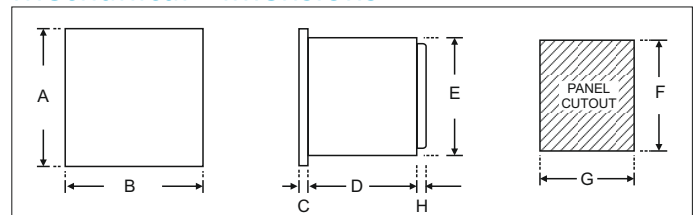
General Description

Model	ULT-99
Weight (Gms)	340

Certification

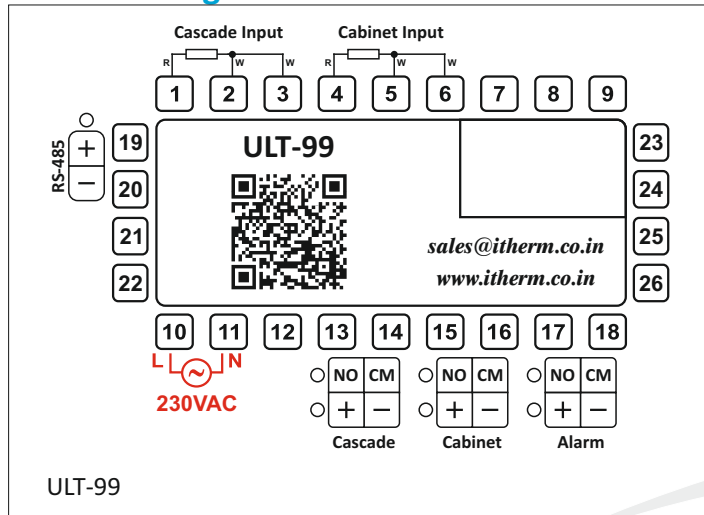
None

Mechanical Dimensions



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

Terminal Diagram



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
9 (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