



Features

- Selectable sensor Input (J, K & RTD)
- Control Action : PID Control / ON-OFF
- Input Signal Conditioning (Digital Filter & Offset)
- Selectable Control Output (Relay / SSR Drive)
- Overshoot Control Protection
- Program Lock function
- Time Delay for Compressor
- Universal supply voltage (90 ~ 270 VAC)





Technical Specifications

Display Specification

Digits	4 Digits Dual Row 7 Segment LED Display
LED Indication	1 - Control Output Status
Height	0.56" [PV (Red)]

Keys

4 Controlling keys for configuration and operation

SET  AT  UP  DOWN 

Auxiliary Supply Specification

Supply Voltage	90 - 270 VAC
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Input Specification

Sensor Input	Thermocouple - J, K RTD - Pt-100
Resolution	1°C
Accuracy	0.3% FSD
Temperature Unit	°C
Sampling Rate	250 m Sec
CJC Error	± 2°C
Sensor Open	All Input
Sensor Burnout Current	1.10uA
RTD Excitation Current	0.2mA
Input Impedance	>1M
Max Voltage	20 VDC



Make In India



Accurate



Reliable



Affordable



User Friendly

Output Specification

Control Output	Relay / SSR Drive (User Selectable)
Relay	5A @ 250 VAC / 30 VDC
SSR Drive	12 VDC @ 30mA

Environmental Specification

Temperature	Operating - 0 to 50°C
Storage	-20° to 75°C
Humidity	95% RH (Non-condensing)
Protection	IP 65 (Front Side)

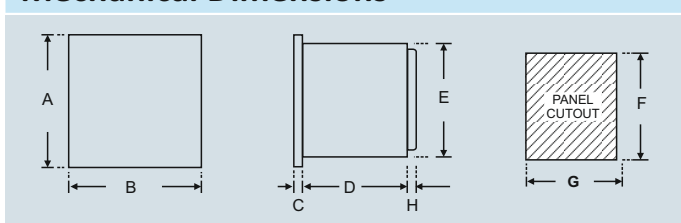
Certification

None

Mechanical Dimensions

Dim	A	B	C	D	E	F	G	H
Model								
AI-7941e	96	96	10	45	89	92	92	9

Mechanical Dimensions



Order Code : AI-7XXXe

Control Action	Size	No. Of Digits	No. of Output
7 (ON-OFF / TP)	9 (96X96X53)	4 Digits	One

Input Sensor Range

Sensor Input	Range	Resolution	Accuracy
Thermocouple (J) Type	0 ~ 760 °C	1 °C	± 1 °C
Thermocouple (K) Type	-99 ~ 1300 °C	1 °C	± 1 °C
Pt-100(RTD)	-100 ~ 450 °C	1 °C	± 1 °C

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
Overshoot Control Point	0 to 100%
Output Power Limit	0 to 100%
Hysteresis	J, K, RTD - 1 to 100°C
Delay	0 to 500 sec

Terminal Diagram

