



## Features

- Selectable sensor Input (J, K & Pt.100)
- Control Action : T.P Control / ON-OFF
- Input Signal Conditioning (Filter & Offset)
- Selectable Control Output (Relay / SSR Drive)
- Time Delay for Compressor
- Universal supply voltage (90 ~ 270 VAC)
- Programmable Setpoint Limits
- Program Lock function

## Technical Specifications

### Display Specification

Digits	4 Digits Single Row 7 Segment LED Display (Red)
LED Indication	OP1 - Control Output Status
Height	0.56"

### Keys

3 Controlling keys for configuration and operation

SET

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	T/C - 1°C Pt-100 - 1°C
Accuracy	0.3% FSD
Temperature Unit	°C
Sampling Rate	250 m Sec
C/JC 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 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)

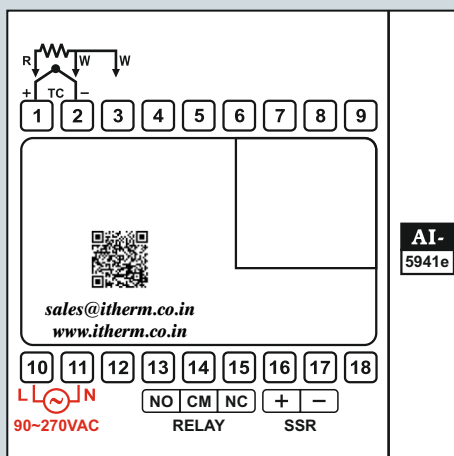
### General Description

Model	AI-5941e
Weight (Gms)	230
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> )

### Certification

None

### Terminal Diagram

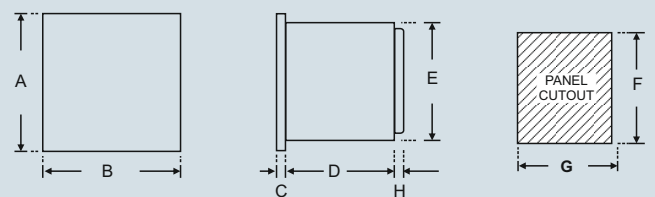


AI-5941e

### Functional Specification

Control Action	T.P. Control / ON-OFF
Control Logic	Heat / Cool
Proportional Band	0.5 to 99.9°C
Cycle Time	1.0 to 100.0 sec
Hysteresis	1 to 25°C
Delay	0 to 500 sec

### Mechanical Dimensions



### Mechanical Dimensions

Dim	A	B	C	D	E	F	G	H
Model								
AI-5941e	96	96	10	45	89	92	92	9

### 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