

Features

- Jumper-less Selectable J/K Thermocouples & RTD Pt100 Inputs
- Programmable Input Signal Conditioning (Digital Filter & Zero Offset)
- Self Tune PID or On-Off Control
- Heat (Reverse) or Cool (Direct) Control Mode
- Both Output-1 & Output-2 are User Configurable as Relay or SSR
- In-built Programmable Timer
- Auxiliary Control (Output-2) : Blower / Alarm / Compressor with Time Delay
- Dimensions

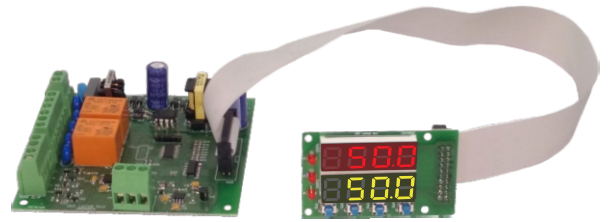
Control Board : 95 X 95, mm

Display Board : **Large** 84.5(H) X 89.5(W), mm

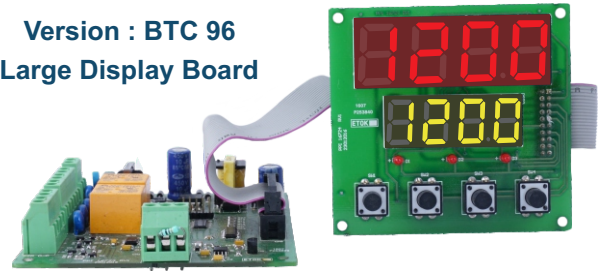
Small 40(H) X 66(W), mm



**Version : BTC 48
Small Display Board**



**Version : BTC 96
Large Display Board**



Specifications

Display	
Digital Readout	<p>Large Display Version Upper Readout : 4 digits, 0.80" Bright Red LED, 7 Segment Lower Readout : 4 digits, 0.56" Bright Green LED, 7 Segment</p> <p>Small Display Version Upper Readout : 4 digits, 0.39" Bright Red LED, 7 Segment Lower Readout : 4 digits, 0.39" Bright Green LED, 7 Segment</p>
Status Indicator	3 Red LED (3mm Round)
Keys	
Type	4 Tactile Switches
Functions	PAGE, DOWN, UP, ENTER
Sensor Input	
Type (User Programmable)	Thermocouple : J, K RTD : Pt100 (3-Wire)
Corrections	<ul style="list-style-type: none"> • In-built Cold-Junction Compensation for Thermocouples • In-built Lead Resistance Compensation for RTD (Up to 22Ω in each lead)
Accuracy	± 0.25% of reading ± 1°C
Range & Resolution	<p>J Type TC Range : 0 to +960°C Resolution : 1°C Fixed</p> <p>K Type TC Range : -200 to +1376°C Resolution : 1°C Fixed</p> <p>RTD Pt100 Range : -199 to +600°C Resolution : 0.1/1°C Selectable</p>
ADC	16 Bit (±32,768 Counts), Sigma-Delta (ΣΔ)
Sampling Time	200mS (5 Samples per Second)

Input Resistance	> 1 MOhm
CMR	> 100dB at 50/60 Hz
Signal Conditioning	R-C Analog Filter with Programmable Digital Low-Pass Filter
Zero Offset	User Adjustable over Full Range
Alarms	
Numbers	1
Programmable Parameters	Type : Process Low, Process High, Deviation, Window, End-of-Soak Logic : Normal, Reverse Hysteresis : 1 to 999 Unit Counts Inhibit : No, Yes
Output	Output-2 (OP-2) Relay Change-over Contacts or SSR Drive can be Configured as Alarm Output
Auxiliary Control	
Control Type	Second Setpoint or Blower / Compressor Setpoint
Control Parameters	Second Setpoint : Hysteresis, Control Logic Blower / Compressor : Hysteresis, Time Delay
Output	Output-2 (OP-2) Relay Change-over Contacts or SSR Drive can be Configured as Auxiliary Control Output
Main Control	
Type	ON-OFF or Self Tune PID
Mode	Heat only, Cool only
Control Parameters	• ON-OFF : Hysteresis • Self Tune PID : Proportional Band, Integral Time, Derivative Time, Cycle Time, Power Low, Power High, Overshoot Inhibit
Output	Output-1 (OP-1) Relay Change-over Contacts or SSR Drive
Programmable Timer	
Operation Mode	Free Running or Soak at Setpoint with Hold Band
Range	5 Seconds to 999 Hours
Power-fail Recovery	Resume, Reset, Abort
Output	Output-2 (OP-2) Relay Change-over Contacts or SSR Drive can be Configured as End-of-Soak Alarm Output
Outputs	
Relay	Contact Type : Potential-free Change-over Contacts Contact Rating : 7A Resistive @ 120/250 VAC Contact Life : > 5,00,000 Operations at Rated Voltage / Current
SSR Drive	≅ 12 VDC @ 40 mA
Power Supply	
Type	Switch Mode (SMPS)
Line Voltage	85~264 VAC/VDC, 50/60Hz
Consumption	5VA Max

Physical	
Mounting	Board Type Mounting
Overall Dimensions	<ul style="list-style-type: none"> Control Board : 95 X 95, mm Display Board : Large 84.5(H) X 89.5(W), mm Small 40(H) X 66(W), mm
Terminals	Screw Type
Weight	400gm, Max.
Environmental	
Operating Ambient	0~55°C & 5~90%RH Non-condensing
EMC Standards	EN50081-2 & EN 50082-2 Generic Stds for Industrial Environment
Atmospheres	Not Suitable for use in Corrosive or Explosive Atmospheres. The Panel in which the Instrument is Mounted must be free of Electrically Conductive Pollution.

Electrical Connections

