



## INFORMATION

This analog temperature controller is used for simple applications with on/off or P control, without deviation indication.

## FEATURES

- Built-in Laser Trim ASIC
- Easy to change range
- ON-OFF for time proportional selectable
- Compact, only 86mm in depth
- Wide selection of control output option
- Wide selection of ranges
- Sensor break protection
- Low Cost
- Safety : UL,cUL
- EMC, LVD : CE

## STANDARD SPECIFICATIONS

## INPUT

Thermocouple (T/C)	Type J, K
RTD	3-wires PT 100 ohms, DIN or JIS
Range	See ordering information
Accuracy	±2% of span (BTC-402, BTC-401), ±1% of span (BTC-404)
Cold Junction Compensation	±0.1°C / 1°C
Rejection of RTD Lead Resistance	( 0.1°C – 0.025% of PV reading) / ohm
Sensor Break Protection	Upscale
External Resistance	100 ohms max.
Normal Mode Rejection	60 dB
Common Mode Rejection	120 dB
Sample Rate	3 times / second

## CONTROL

Proportion Band	2.2% of span
ON-OFF Hysteresis	1 % of span
Cycle Time	20 seconds for relay output, 1 second for pulsed voltage output, 0.02 second for linear current or voltage output.
Control Action	Reverse action

## OUTPUT

Control	Relay 5A / 240V max. resistive load
Pulsed Voltage	20mA / 32VDC max.
Current	4-20mA, 0-20mA, max. load 500 ohms
Voltage	0- 10V, min. load 500k ohms
Alarm	Relay output, 2A / 240VAC max. resistive load

## ADJUSTMENT

Set point	Single turn wirewound potentiometer
Alarm	Deviation alarm, adjustable ±10% of span
Manuel Reset	Adjustable 2.6% of span (BTC-404, 402 only)
Resolution of set point	0.2% of span
Accuracy of set point	±2% of span
Repeatability of set point	±0.1 % of span

## INDICATION

Process Indicator	BTC-402 : Deviation meter BTC-404: 0.5" red 3-1/2 digit LED display
Status Indicator	ON red LED Lamp
Alarm Indicator	ON red LED Lamp

## POWER

Rating	BTC-402, BTC-401: 100-130VAC or 200-240VAC, 50 / 60Hz
Consumption	Less than 5VA

## CONTROL MODE

Operating Temperature	0-50°C
Humidity	0 to 90% RH (non-codensing)
Insulation	20M ohms min. (500VDC)
Breakdown	AC2000V, 50/60Hz, 1 minute
Vibraton	10-55Hz, amplitude 1mm
Shock	200 m/s <sup>2</sup> (20g)
Weight	BTC-404: 280 grams, BTC-402: 360 grams, BTC-401: 330 grams
Dimension	96(W)X96(H)X53mm (depth behind panel)
Panel cutout	92 X 92mm