ADVANCED PROCESS CONTROL

HEATER BREAK ALARM
2nd SETPOINT

STANDARD

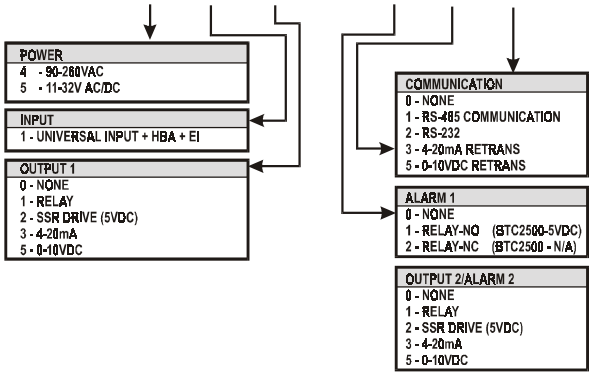
FUZZY LOGIC with PID AUTOTUNE
RAMP-to-SETPOINT
SOAK TIMER
AUTO/MANUAL
SECURITY LOCKOUT-DIP SWITCH
UNIVERSAL INPUT - T/C, RTD, mA, V
HEATER BREAK ALARM
EVENT INPUT - 2nd SETPOINT
NEMA 4X - WATERPROOF
POWER SUPPLY - 90-260VAC
UL, CSA, CE APPROVALS

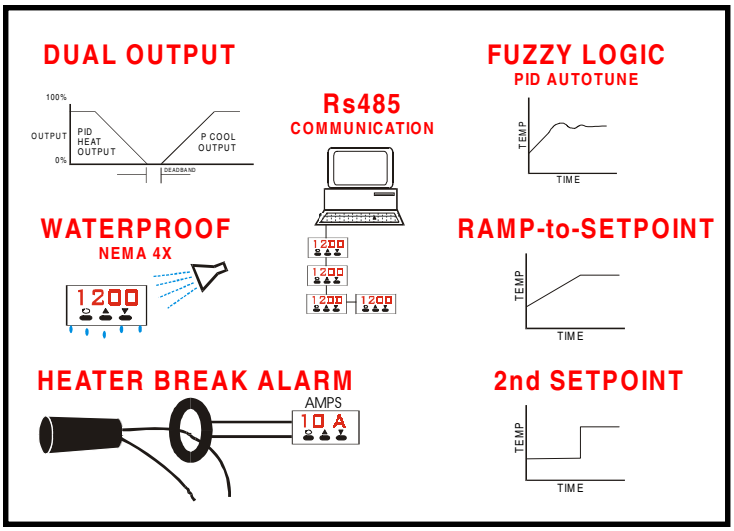
OPTIONS

ALARM 2
RS485 / RS232 COMMUNICATION
RETRANSMISSION - 4-20mA, 0-10VDC
POWER SUPPLY - 11-28VAC/DC

MODEL CODE

BTC-2500
-9300 □ □ □ □ □ □ □





SPECIFICATIONS - BTC2500, 9300

1. INPUT

Thermocouple	J, K, T, E, B, R, S, N (IPTS68/DIN 43710)
RTD	Pt100 ohms RTD (DIN 43760/BS 1904 or JIS)
Linear Voltage (current)	-10 to 60 mV confugurablewith input attenuation
Range	User configurable
Accuracy	+/-2C for T/C, _+0.2C for RTD, _+0.05% for Linear input.
Cold Junction Comp	0.1C/C ambient typical.
Input Impedance	10M ohms for T/C, 100K ohms for Linear Voltage, 2.7 Ohms for 0 (4)- 20 mA/
Sample Rate	100mS

2. CONTROL

Proportional Band	0.0-500.0C (0.0-900.0F)
Rest (Integral)	0-3600 Sec.
Rate (Derivative)	0-900 Sec.
Ramp Rate	0.0-500.0C (0.0-900.0F)
Dwell	0-6550minutes.
On-Off	With adjustable hysteresis
Cycle Time	0-100.0 seconds.
Control Action	Configurable for Direct (cooling) or Rev (Heating)

3. OUTPUT

Relay	5A/240VAC resistive.
Pulsed Voltage	Isloated 5 VDC 30mA Max.
Current	Isolated 0 (4) - 20 mA Max load 500 ohms.
Linear Volts	1~5, 0~5, 0~10VDC. MAX 100mA
Alarm	Relay output, (SPST) 2A/240VAC resistive.

4. POWER

Rating	85 - 265 VAC 50/60Hz 5VA max

5. ENVIRONMENTAL

Operating Temp	0 - 50C
Humidity	0- 90%
Insulation	20M ohms minimum @ 500VDC
Protect	Nema 4X

6. PHYSICAL DIMENSIONS

BTC2500	48mmW x 24mmH x 100mmD
BTC9300	48mmW x 48mmH x 80mmD

ADVANCED PROCESS CONTROL

HEATER BREAK ALARM
2nd SETPOINT

STANDARD

FUZZY LOGIC with PID AUTOTUNE
RAMP-to-SETPOINT
SOAK TIMER
AUTO/MANUAL
SECURITY LOCKOUT-DIP SWITCH
UNIVERSAL INPUT - T/C, RTD, mA, V
HEATER BREAK ALARM
EVENT INPUT - 2nd SETPOINT
NEMA 4X - WATERPROOF
POWER SUPPLY - 90-260VAC
UL, CSA, CE APPROVALS

OPTIONS

ALARM 2
RS485 / RS232 COMMUNICATION
RETRANSMISSION - 4-20mA, 0-10VDC
POWER SUPPLY - 11-28VAC/DC

MODEL CODE

BTC-4300
-8300 □ □ □ □ □ □ □

POWER
4 - 90-260VAC
5 - 11-32V AC/DC

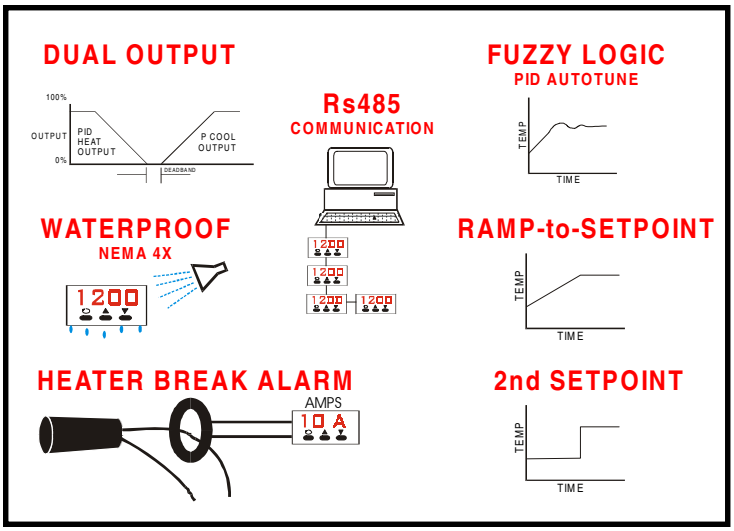
INPUT
1 - UNIVERSAL INPUT + HBA + EI

OUTPUT 1
0 - NONE
1 - RELAY
2 - SSR DRIVE (5VDC)
3 - 4-20mA
5 - 0-10VDC

COMMUNICATION
0 - NONE
1 - RS-485 COMMUNICATION
2 - RS-232
3 - 4-20mA RETRANS
5 - 0-10VDC RETRANS

ALARM 1
0 - NONE
1 - RELAY-NO (BTC2500-5VDC)
2 - RELAY-NC (BTC2500 - N/A)

OUTPUT 2/ALARM 2
0 - NONE
1 - RELAY
2 - SSR DRIVE (5VDC)
3 - 4-20mA
5 - 0-10VDC



SPECIFICATIONS - BTC4300, 8300

1. INPUT

Thermocouple	J, K, T, E, B, R, S, N (IPTS68/DIN 43710)
RTD	Pt100 ohms RTD (DIN 43760/BS 1904 or JIS)
Linear Voltage (current)	-10 to 60 mV confugurablewith input attenuation
Range	User configurable
Accuracy	+/-2C for T/C, _+0.2C for RTD, _+0.05% for Linear input.
Cold Junction Comp	0.1C/C ambient typical.
Input Impedance	10M ohms for T/C, 100K ohms for Linear Voltage, 2.7 Ohms for 0 (4)- 20 mA/
Sample Rate	100mS

2. CONTROL

Proportional Band	0.0-500.0C (0.0-900.0F)
Rest (Integral)	0-3600 Sec.
Rate (Derivative)	0-900 Sec.
Ramp Rate	0.0-500.0C (0.0-900.0F)
Dwell	0-6550minutes.
On-Off	With adjustable hysteresis
Cycle Time	0-100.0 seconds.
Control Action	Configurable for Direct (cooling) or Rev (Heating)

3. OUTPUT

Relay	5A/240VAC resistive.
Pulsed Voltage	Isloated 5 VDC 30mA Max.
Current	Isolated 0 (4) - 20 mA Max load 500 ohms.
Linear Volts	1~5, 0~5, 0~10VDC. MAX 100mA
Alarm	Relay output, (SPST) 2A/240VAC resistive.

4. POWER

Rating	85 - 265 VAC 50/60Hz 5VA max

5. ENVIRONMENTAL

Operating Temp	0 - 50C
Humidity	0- 90%
Insulation	20M ohms minimum @ 500VDC
Protect	Nema 4X

6. PHYSICAL DIMENSIONS

BTC8300	48mmW x 96mmH x 80mmD
BTC4300	96mmW x 96mmH x 65mmD