TEMPERATURE CONTROLS
BTC-9300, 2500

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

MORHEAT INC.
TOLL-FREE (800)817-3486
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MODEL CODE
BTC-2500
BTC-9300

SPECIFICATIONS - BTC2500, 9300

1. INPUT
Thermocouple
RTD
Linear Voltage (current)
Range
Accuracy
Cold Junction Comp
Input Impedance
Sample Rate

2. CONTROL
Proportional Band
Rest (Integral)
Rate (Derivative)
Ramp Rate
Dwell
On-Off
Cycle Time
Control Action

3. OUTPUT
Relay
Pulsed Voltage
Current
Linear Volts
Alarm

4. POWER
Rating

5. ENVIRONMENTAL
Operating Temp
Humidity
Insulation
Protect

6. PHYSICAL DIMENSIONS
BTC2500
BTC9300

DUAL OUTPUT
Rs485
COMMUNICATION
WATERPROOF
NEMA 4X
RAMP-to-SETPOINT

HEATER BREAK ALARM

2nd SETPOINT

Advanced Process Control
Heater Break Alarm
2nd Setpoint

Specifications - BTC2500, 9300

1. Input
Thermocouple
RTD
Linear Voltage (current)
Range
Accuracy
Cold Junction Comp
Input Impedance
Sample Rate

2. Control
Proportional Band
Rest (Integral)
Rate (Derivative)
Ramp Rate
Dwell
On-Off
Cycle Time
Control Action

3. Output
Relay
Pulsed Voltage
Current
Linear Volts
Alarm

4. Power
Rating

5. Environmental
Operating Temp
Humidity
Insulation
Protect

6. Physical Dimensions
BTC2500
BTC9300

Model Code
BTC-2500
BTC-9300
ADVANCED PROCESS CONTROL
HEATER BREAK ALARM
2nd SETPOINT

MODEL CODE
BTC-4300 -BTC-8300

SPECIFICATIONS - BTC4300, 8300

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

2. CONTROL
Proportional Band
0.0-500.0C (0.0-900.0F)
Reset (Integral)
0-3600 Sec.
Rate (Derivative)
0-900 Sec.
Ramp Rate
0.0-500.0C (0.0-900.0F)
Dwell
0-6550 minutes.
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
Isolated 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

STANDARD
FUZZY LOGIC with PID AUTOTUNE
RAMP-to-SETPOINT
SOAK TIMER
AUTO/MANUAL
SECURITY LOCKOUT-DIP SWITCH
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