

BEDROS AND BEDROS XL NON MODULAR HOT RUNNER CONTROLLERS

Athena's Bedros and Bedros XL offer from 8 to 64 zones of control for a variety of applications. Used in injection molding, thermoforming, extrusion and even heat trace operations, Bedros delivers more functionality in a compact, easy to use design. Featuring a touch screen and joy stick interface, any user can quickly set up their process, store the recipe, and set up communications with an external network.

KEY FEATURES

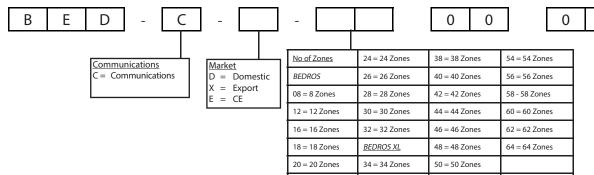
Compact package design

△ 8 to 64 zones of control with 15 amps per zone

A user-friendly color touch screen with intuitive HMI and built-in buttons for joy stick operation

- △ Accepts "J" or "K" thermocouple input
- CompuStep® bake out feature prevents moisture at start-up.
- A Built-in loop break, short, open, and reverse thermocouple
- Slaving feature
- Adjustable set-point limits
- △ "Boost" mode for temporary % of power output increase
- USB or Ethernet communications
- △ Remote input standby function
- A Remote alarm output contacts
- △ Mold storage recipe capabilities
- GFI protection

ORDERING INFORMATION



22 = 22 Zones

36 = 36 Zones

52 = 52 Zones





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TECHNICAL SPECIFICATIONS

OPERATING LIMITS

Absolute Voltage Limits Input Line Voltage Ambient Temperature Relative Humidity Tolerance 85 to 265 Vac Nominal 100 to 240 Vac 32 to 122°F (0 to 50°C)

90%, non-condensing

50-60 Hz

PERFORMANCE

Frequency

Auto Control Mode CompuCycle $^{\circ}$ system (PWM, 200 msec) Control Accuracy $\pm 0.1 ^{\circ}$ F ($\pm 0.1 ^{\circ}$ C) dependent on the total

thermal system

Temperature Stability \pm 0.5% of full scale over the ambient range Calibration Accuracy Better than 0.2% of full scale

PWM

Power Response Time Better than 400 ms

Process Sampling 100 ms

°F/°C Field Configurable

CompuStep® System Control Mode

CompuStep® System

Duration

CompuStep® System
Output Voltage
CompuStep® System

CompuStep® System Override Temperature Operation Mode Priority Approximately 5 min.

PWM % with Zero Cross

200°F (93°C)

a: T/C open, T/C reverse,

Shutdown and open heater override

CompuStep[®]

b: Manual mode overrides T/C open,

T/C reverse

INPUT SPECIFICATIONS

Thermocouple (T/C Sensor)

Type "J" or "K" grounded or ungrounded

External T/C Resistance

Max. 100 ohms for related accuracy

T/C Isolation

Isolated from ground and supply voltages

Cold Junction

Compensation Automatic, better than 0.02°F/°F (0.03°C/°C)

Input Impedance 10 megohms
Input Protection Diode clamp, RC filter
Input Dynamic Range Greater than 999°F (537°C)

Common Mode Rejection Ratio

ejection Ratio Greater than 100dB

Power Supply

Rejection Ratio Greater than 70dB

OUTPUT SPECIFICATIONS

Voltages 240 Vac nominal, single phase 100 Vac

available

Power Capability 15 amperes, 3600 watts @ 240 Vac per zone

Type (ABC) Fuses

Power Line Isolation Optically and transformer isolated from ac

lines. Isolation voltage greater than 2500

volts

Output Drive Internal solid state triac

HUMAN INTERFACE

Color Touch/screen (6" x 4")

Summary of all zones including process values and set points

Configure single or multiple zones

Zone Group Naming Mold Storage Capabilities Network Communications Built-in Buttons for joy stick

DIMENSIONS

Height BEDROS 24-1/4" (615.95mm)
BEDROS XL 52 1/2" (1333.5mm)

Width 16-1/2 " (419mm)

 Depth
 20" (510mm) with connectors

 Weight
 BEDROS
 62 lb (28.12 kg)

 BEDROS XL
 130 lb (58.97kg).

Specifications subject to change without notice.









Overload Protection

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