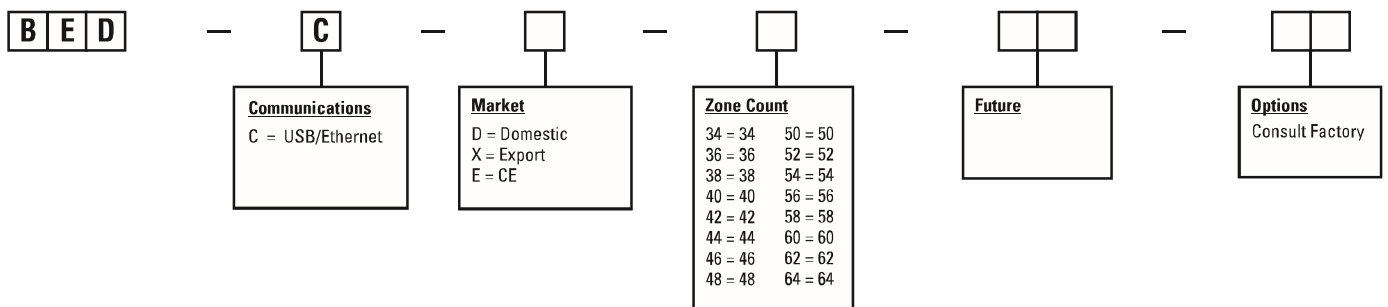# BEDROS™ XL Hot Runner Controller

For Medium-Sized Multizone Applications

Athena's new Bedros Hot Runner control system offers 34 to 64 zones of microprocessor-based control. The system delivers more functionality with a full featured easy-to-use touch screen that simplifies single and multizone system setup with mold storage recipe capabilities.

▲ Compact package design

▲ 34 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

▲ Build-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

▲ Remote alarm output contacts

▲ Mold storage recipe capabilities

▲ GFI protection

Ordering Information

| B | E | D | — | C | — | | — | | — | | — | |

Communications
C = USB/Ethernet

Market
D = Domestic
X = Export
E = CE

Zone Count
34 = 34	50 = 50
36 = 36	52 = 52
38 = 38	54 = 54
40 = 40	56 = 56
42 = 42	58 = 58
44 = 44	60 = 60
46 = 46	62 = 62
48 = 48	64 = 64

Future

Options
Consult Factory

Accessory
Floor Stand Included

ATHENA®

Technical Specifications

Operating Limits

Absolute Voltage Limits	85 to 265 Vac
Input Line Voltage	Nominal 100 to 240 Vac
Ambient Temperature	32 to 122°F (0 to 50°C)
Relative Humidity Tolerance	90%, non-condensing
Frequency	50-60 Hz

Performance

Auto Control Mode	CompuCycle® system (PWM, 200 msec)
Control Accuracy	± 0.1°F (± 0.1°C) dependent on the total thermal system
Temperature Stability	± 0.5% of full scale over the ambient range
Calibration Accuracy	Better than 0.2% of full scale
Power Response Time	Better than 400 ms
Process Sampling	100 ms
°F/°C	Field Configurable
CompuStep® System Control Mode	PWM
CompuStep® System Duration	Approximately 5 min.
CompuStep® System Output Voltage	PWM % with Zero Cross
CompuStep® System Override Temperature	200°F (93°C)
Operation Mode Priority	a: T/C open, T/C reverse, Shutdown and open heater override CompuStep® b: Manual mode overrides T/C open, T/C reverse

Dimensions

Height	52-1/2″ with floor stand
Width	16-1/2″
Depth	20″
Weight	130 lbs.

Inputs

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	Greater than 100dB
Power Supply Rejection Ratio	Greater than 70dB

Outputs

Voltages	240 Vac nominal, single phase 100 Vac available
Power Capability	15 amperes, 3600 watts @ 240 Vac per zone
Overload Protection	Type (ABC) Fuses
Power Line Isolation	Optically and transformer isolated from ac lines. Isolation voltage is greater than 2500 volts
Output Drive	Internal solid state triac

Human Interface (HMI)

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

Consult Athena for connector plate layouts, wiring, and TC & power cables