



RMB01, RMB02 AND RMB03 SERIES OF NON MODULAR HOT RUNNER CONTROLLERS

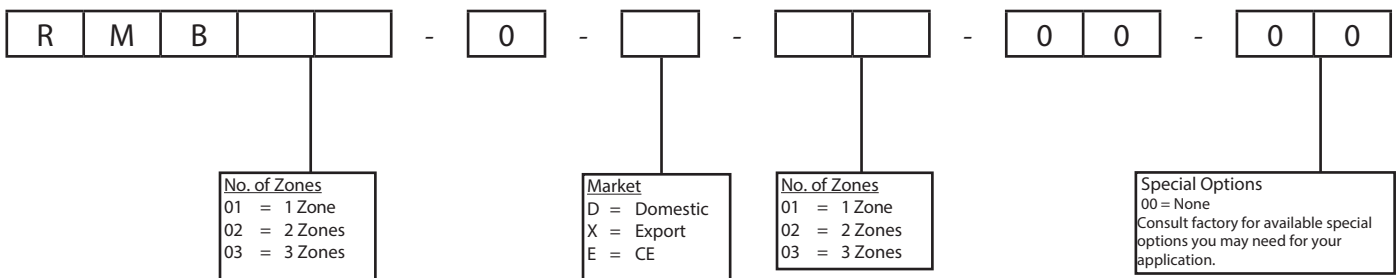
Athena's new RMB/ Series non-modular hot runner control systems offer 1, 2 or 3 zones of integrated control in a compact package design at an affordable price. The units are equipped with a full featured user-friendly operator keypad/LCD display and discrete indicators of heat, boost, closed loop, open loop, idle, and alarm for system status.

KEY FEATURES

- ▲ Compact package design
- ▲ Accepts "J" or "K" thermocouple input, grounded or ungrounded
- ▲ 1 (RMB01), 2 (RMB02) or 3 (RMB03) zones of control with a total of 15 amps per cabinet
- ▲ Built-in loop break, short, open, and reverse thermocouple
- ▲ CompuStep bake out feature prevents moisture at start up
- ▲ Adjustable set point limits
- ▲ "Boost" mode for temporary % of power output increase
- ▲ Remote input standby function
- ▲ Remote alarm output contacts
- ▲ Fan cooled
- ▲ Easily serviceable with optional spare parts
- ▲ Limited Two Year Warranty–Consult Factory



ORDERING INFORMATION



TECHNICAL SPECIFICATIONS

OPERATING LIMITS

Absolute Voltage Limits	240 Vac +10% -20%
Input Line Voltage	Nominal 240 Vac, 120 Vac optional
Ambient Temperature	32 to 122 °F (0 to 50 °C)
Relative Humidity	90% non-condensing
Frequency	50-60 Hz

PERFORMANCE

Auto Control Mode	CompuCycle system (PWM, 200 ms)
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	100ms
oF / oC	Field Configurable
CompuStep System	
Control Mode	PWM
Duration	Approx 5 min
Output Voltage	PWM % with zero cross
Override Temperature	200oF (93oC)
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.

INPUT SPECIFICATIONS

Thermocouple	Type J or K grounded or ungrounded
External T/C Resistance	Max 100 Ohms for rated accuracy
T/C Isolation	Channel to channel common mode voltage +/- 1.5 Vdc
Cold Junction Compensation	Automatic, better than 0.02 °F/°F (0.03 °C/°C)
Input Impedance	10 megaohms
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

OUTPUT SPECIFICATIONS

Voltages	240Vac nominal, single phase 120Vac available
Power Capability	15 Amps, 3600 W@ 240Vac <i>per cabinet</i>
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

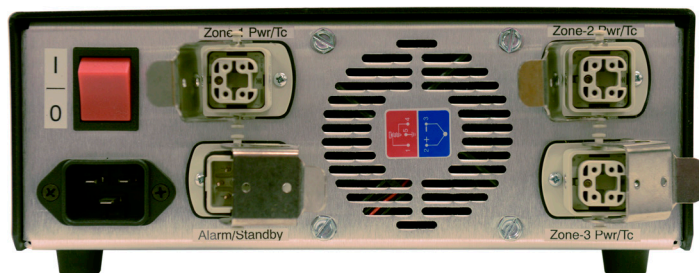
HUMAN INTERFACE

8 Control switches, 6 Status LED's per zone	
Degrees - °F and °C - status indicators	
LCD Display	2 line x16 characters

DIMENSIONS

Height	3.5 in (89mm)
Width	10.25 in (260mm)
Depth	7 in (178mm)
Weight	4.5 lb (2kg)

Specifications subject to change without notice.



View of back of RMB3 showing different connectors.