



# RMB15 & RMB30 Hot Runner Controls

## INTELLIGENT SERIES • LOW COST • MORE FEATURES

- Compatible with "G" sized mainframes. Including Athena "G+" and DME "G" & "Smart" Series.
- Accepts Type J or Type K thermo-couple input (Type K requires special mainframe & cables).
- Auto-tuning, with adjustable proportional band and rate.
- Bumpless auto/manual transfer.
- CompuStep® bakeout feature prevents moisture at startup.
- Current monitor feature displays average current to load.
- Built-in loop break, short, open, and reverse thermocouple protection.
- Ground-fault protection (U.S. model).
- Preset Alarms at 30°F (17°C).
- Jumper-selectable self-start mode.
- SafeChange™ "hot swap" feature allows safe removal and replacement of module.
- CE-compliant.

### With SafeChange™ Hot Swap Feature!



PPE's RMB Series module is a microprocessor-based, single zone temperature controller specifically designed for runnerless molding applications. It features an easy-to-use operator keypad, two LED displays, and three discrete indicators for heater-current, alarm, and manual mode. Units have built-in diagnostics and are fully self-tuning. RMB modules are available in 15 and 30 amp versions and are compatible with all previous "G" series mainframes.

RMB modules provide fully self-tuning, line voltage compensating, automatic closed-loop temperature control over a wide range of operating conditions. A single chip microprocessor performs all the proportional, integral and derivative (PID) control functions required to maintain setpoint temperature, through an advanced auto-tune process. No operator calculations or presetting of values is needed.

For information on the CompuStep®, CompuCycle®, Manual Control and Safety & Diagnostics see IMP Controller.

#### PERFORMANCE SPECIFICATIONS

<b>Auto Control Mode</b>	CompuCycle® system
<b>Control Accuracy</b>	±0.1°F (±0.1°C) dependent on the total thermal system
<b>Temperature Range</b>	32°F to 999°F, (0°C to 537°C)
<b>Temperature Stability</b>	±0.5% of full scale over the ambient range of 32 to 131°F (0 to 55°C)
<b>Calibration Accuracy</b>	Better than 0.2% of full scale
<b>Power Response Time</b>	Better than 0.3 seconds
<b>°F/°C</b>	Jumper-selectable
<b>CompuStep® System Control Mode</b>	Variable stepping voltage, phase fired
<b>CompuStep® System Duration</b>	Approximately 5 minutes
<b>CompuStep® System Output Voltage</b>	Steps approximately from 25 V RMS with 240 VAC line output, phase fired
<b>CompuStep® System Override Temperature</b>	200°F (93°C)
<b>Operational Mode Priority</b>	a) TC open, TC reverse, Shut-down and Open heater override CompuStep® System b) Manual mode overrides TC open, TC reverse

#### OUTPUT SPECIFICATIONS

<b>Voltages</b>	240 VAC nominal, single phase, 120 VAC available
<b>Power Capability</b>	15 Amps, 3600 watts @ 240 VAC, 30 Amps, 7200 watts @ 240 VAC
<b>Overload Protection</b>	Triac and load use high speed fuses. Both sides are fused (GDB).
<b>Power Line Isolation</b>	Optically and transformer isolated from AC lines. Isolation voltage is greater than 2500 volts.
<b>Output Drive</b>	Internal solid state triac, triggered by ac zero crossing pulses.

#### INPUT SPECIFICATIONS

<b>Thermocouple (TC) Sensor</b>	Type "J" or type "K", grounded or ungrounded (jumper-selectable)
<b>External (TC) Resistance</b>	Maximum 100 ohms for rated accuracy
<b>TC Isolation</b>	Isolated from ground and supply voltages
<b>Cold Junction Compensation</b>	Automatic, better than 0.02°F/°F (0.01°C/°C)
<b>Input Impedance</b>	10 Megohms
<b>Input Protection</b>	Diode clamp, RC filter
<b>Input Amplifier Stability</b>	Better than 0.05°F/°F (0.03°C/°C)
<b>Power Supply Rejection Ratio</b>	Greater than 70 dB

#### CONTROLS AND INDICATORS

<b>Setpoint Control</b>	Two buttons up or down. Resolution: 1°F (1°C)
<b>% Power Control</b>	Two buttons up or down.
<b>Mode Control</b>	Push button switch with LED indicator for manual mode
<b>Display</b>	Top: 3-digit filtered LED Bottom: 4-digit filtered LED
<b>Status Indicators</b>	Heat-current output Alarm °F/°C % output CompuStep® Normal, Manual, Standby
<b>Power ON/OFF</b>	Rocker switch, UL, CSA, VDE approved

#### ELECTRICAL POWER SPECIFICATION

<b>Input Voltage</b>	240/120 VAC, ±10% - 20%
<b>Frequency</b>	50 Hz ±3 Hz, 60 Hz ±3 Hz
<b>DC Power Supplies</b>	Internal generated, regulated and temperature compensated
<b>Module Power Usage</b>	Less than 3 watts, excluding load

**MODEL RMB15**  
15 AMP 1-11.....\$165.00  
12+ .....\$160.00

**MODEL RMB30**  
30AMP ..... \$525.00



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