

Athena Hot Runner Controls

A technical problem...?

**2 YEAR
WARRANTY AS
STANDARD!**



Hot runner control systems

Athena has achieved its reputation as the leader in the field of "hot runner" temperature control through a series of firsts in the plastics industry:

Microprocessor-based self-tuning temperature controllers, from basic units to sophisticated modules featuring Modbus® communications and ZonePilot™ software for remote configuration via a Palm™ handheld device

1-, 2-, and 3-zone portable models and modular mainframe systems up to 48 zones

Wide range of cables, connectors, and accessories, including cables compatible with Incoe® and Fast Heat® hot runner systems

CompuStep® heater conditioning system

CompuCycle® power control system

Built-in diagnostics

SafeChange™ "hot swap" feature provides safe disconnect in case of inadvertent removal of module from energized mainframe

Automatic power hold if thermocouple breaks

Self-regulating manual power controllers

Mainframes field-convertible to global power supply voltages

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Athena Hot Runner Controllers are the 'Simple Solution to a Technical problem'. Used by thousands of moulders worldwide they are a very accurate modular system but can be set in seconds.

Available as a Single Zone controllers: IMP/P and RMC/P (Hot tip controller) or up to 12 zone modular builds per unit (up to 40 zones) using industry standard IMP and RMB modules - Now joining the range are the next generation controllers, the RMA and RMC.

Call 0845 838 1510 for more information

Your choice of control modules

With a choice of simple to use but feature packed Control Modules and Single Zone Controllers we are sure you will find a suitable solution for your application as used by 1000's of moulders world-wide.

The RMA Control Module

The Athena Series RMA is a microprocessor-based, single-zone temperature controller specifically designed for runnerless moulding applications.

It features an easy-to-use operator keypad, two LED displays, and discrete indicators for heat output, alarm, degree F/C indication, manual and closed loop mode.



NEW

**FROM LESS THAN
£140.00
PER MODULE**

Compatible with industry standard control modules and mainframes.

Accepts Type J thermocouple

Bumpless auto/manual transfer

CompuStep® bake out feature prevents moisture at startup

Open thermocouple break protection with jumper-selectable shutdown or average power output based on operation

Preset alarms at 30° F (17° C)

SafeChange™ "hot swap" feature allows safe removal and replacement of module

CE compliant

The IMP Control Module

SERIES IMP Athena's Series IMP Modules use microprocessor-based circuitry to perform all required control functions. Units have built-in diagnostics and are fully self-tuning—setpoint temperatures are maintained without the need to manually preset or adjust the control temperature.

Simultaneous digital setpoint and digital temperature indication

Available in 15-amp modules as well as single-zone 15- and 30-amp portable temperature controllers.

Athena's mainframes are compatible with all D-M-E Company's G SERIES and SMARTSERIES® ITC, MCS, YUDO® and INCO® brand mainframes.

CompuStep® feature removes moisture from the heater before full power is applied.

CompuCycle® feature improves response time, reduces thermal fatigue and prolongs heater life by applying AC power smoothly and continuously.

Manual control for non-thermocouple applications, provides standby or "weekend" heat or to manually control temperature if a thermocouple fails.

Diagnostic and protection features include power "on," power to load, manual made, and over/under temperature, plus indicators and system protection for reversed and open thermocouples.

SafeChange™ "hot swap" feature allows safe removal and replacement of module.

CE compliant.



THE IMP/P & RMC/P Single Zone Controllers

Ready to Go with all power and thermocouple leads – See the IMP/P & RMC/P model details to choose the specification you require.



...the simple solution.

The RMB Control Module

SERIES RMB The Athena Series RMB is a microprocessor-based, single-zone temperature controller specifically designed for runner less moulding applications.

It features an easy-to-use operator keypad, two LED displays, and three discrete indicators for heat-current, alarm and manual mode.

Athena's mainframes are compatible with all D-M-E Company's G SERIES and SMARTSERIES, ® ITC, MCS, YUDO® and INCO® brand mainframes.

Accepts Type J or Type K thermocouple input (jumper selectable).

Auto-tuning, with adjustable proportional band and rate

Bumpless auto/manual transfer

CompuStep® bake out feature prevents moisture at startup

Built-in loop break, short, open, and reverse thermocouple protection

Built-in triac safety protection

Ground-fault protection

Preset alarms at 30°F (17°C)

Jumper-selectable soft-start mode

Current monitor feature displays average current to load

SafeChange™ "hot swap" feature allows safe removal and replacement of module

CE compliant



The RMC Control Module



The most advanced controller to join the range is the RMC Series. The Athena Series RMC brings new and highly productive benefits to injection moulders looking for a modular hot runner controller that's flexible, easy to set up, and simple to operate.

Using the popular Modbus® communications protocol, the next-generation RMC gives users the ability to set or change all zones, either remotely from a desktop computer, from a Palm® handheld device, or (with the ALL command) from any other individual RMC module in the mainframe.

Choice of three default modes for open thermocouple condition

Built-in triac safety protection

Accepts J or K thermocouple input (jumper selectable)

SafeChange™ "hot swap" feature allows safe removal and replacement of module

CompuStep® bake out feature prevents moisture at startup

Built-in loop break, short, open, and reverse thermocouple protection

"Boost" mode for temporary % of power output increase

Ground-fault protection

Adjustable setpoint limits

Stores highest temperature detected

Current monitor feature displays average current to load

CE compliant



An Optional fully adjustable floor stand is also available for the majority of Athena Hot Runner Systems

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TECHNICAL SPECIFICATIONS

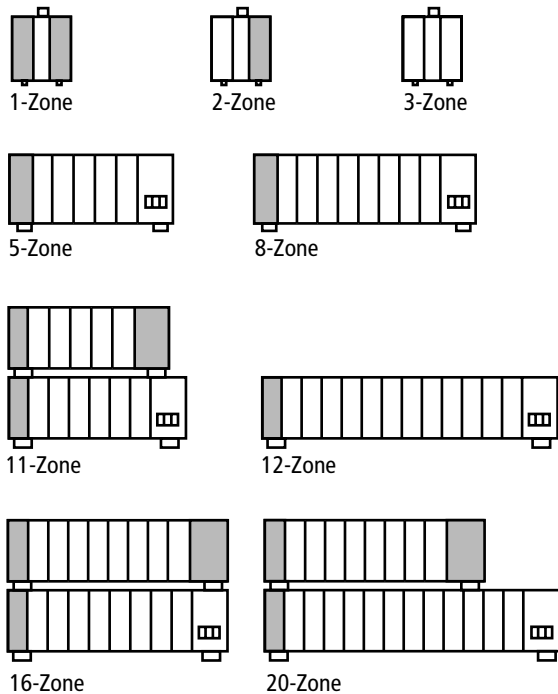
Single Zone Controllers

Order IMP/P (15A Single Zone Controller or RMC/P (15A Single Zone Controller) see IMP or RMC for full details. Each controller comes complete with combined power and thermocouple cables. 2 year Warranty as standard.

Modular Systems

The configurations illustrated below provide a wide selection of zone capacities to suit almost any control application. The 5, 8 and 12 zone frames use individual sections. The 16 thru 48 zone frames use 2, 3 or 4 frame sections rigidly fasted together into one pre-wired integral unit which requires only one main AC input connection. The Current/ Voltage Monitor option will be factory installed and must be ordered at same time as mainframe.

Examples of Configurations for 15A Modules

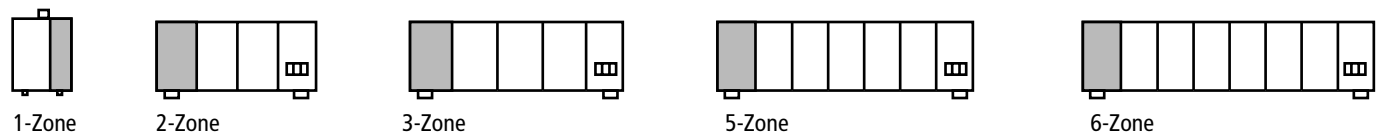


Notes for ordering

1. Choose your modules IMP – RMB – RMC (15A Standard or 30A special)**
2. Choose the number of zones you require. Please also note that where module bodies are supplied that have extra unused zone, blanking plates will be fitted as standard.
3. Choose your Power and Thermocouple cable length (10ft as standard or 20ft)
4. Add extras – Voltage/Current monitor – Floor Stand

Mainframes for 30-amp modules

The 5 configurations illustrated above provide 1, 2, 3, 5 or 6 zones of 30 amp control for higher wattage heater applications.



Extra Information

We also offer the Athena SY range which is our low voltage option (24Vac) modules can be supplied in RMB and RMC styles. It is necessary to use a special floor stand with step-down transformer. 240Vac and 24Vac units can be mixed in side the same cabinet. Existing users please note we supply a full repairing service for your existing units.

CONTROLLER SERIES				
Feature	IMP	RMA	RMB	RMC
CE-compliant				
UL/CSA/VDE-approved power switch				
Type J thermocouple				
Type K thermocouple				
Process display (LED)				
Fahrenheit/Celsius mode	Jumper	Jumper	Jumper	Jumper
Setpoint display	Thumbwheel	LED	LED	LED
Setpoint adjust	Thumbwheel	Pushbutton	Pushbutton	Pushbutton
Compustep® soft start				
Temperature alarms Fixed	Fixed	Fixed	Fixed	Adjustable
Reverse thermocouple alarm				
Open thermocouple alarm				
Shorted thermocouple alarm				
External alarm (add'l module req.)				
Auto/manual control				
Autotuning				
30 amp capability				
% output reading				
Horizontal single zone model	IMP/P	See RMC/P	See RMC/P	RMC/P
Idle setpoint/setback				
Safechange™ "hot-swap" feature				
Bumpless auto/manual transfer				
Front-panel lockout				
Switch to manual on open thermocouple				
Ground fault alarm				
Open heater alarm				
Loop break alarm				
Boost mode				
Current reading				
Adjustable control settings				
Shorted triac safety relay				
24 volt output (Series SY system)				
Thermocouple slaving				
Switch to manual % OFF, or last % of output on open thermocouple				
Setpoint limits				
ALL command				
Modbus® communications				
Years under warranty	2	2	2	2



