



## MC5 Series

HEATS MOLDS  
FASTER FOR  
QUICKER STARTUPS.

EASIER TO MAINTAIN.

IT'S THE NEXT  
GENERATION IN  
MOLD TEMPERATURE  
CONTROLLERS.

NEXT GENERATION MOLD TEMPERATURE CONTROL. **ONLY FROM MATSUI.**



# The next generation in mold temperature controllers.

Easy-to-use touchpad allows you to preset operations, monitor settings, view progress and make changes effortlessly.

## ALL-NEW CONTROL PANEL

The new MC5 comes in three sizes with both standard (G1) and advanced (G3) designs for use with low temperature (up to 203°) or high temperature (up to 248°) water. G3 units offer even more programming features as standard.

### More intuitive and operator-friendly

The MC5's control panel features a large LCD character display that's visible even in bright lighting conditions. More functional and versatile than ever before, it allows you to store up to 64 different temperature settings, detect heating and cooling errors, improve maintenance and more. Its easy-to-use touchpad simplifies programming, enabling you to preset operations, monitor settings, view progress and make changes effortlessly. The new, easy-to-program control panel. G1 panel is standard. G3 panel with more functions is an optional upgrade.



New design allows easy access to components behind the control panel.

## TWELVE MODELS TO CHOOSE FROM



26.5 IN. HIGH



22.2 IN. HIGH



20.6 IN. HIGH

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### Energy-saving construction

Heater pump sizes on the new MC5 are optimized for performance, minimizing energy consumption. The unit's precision control software and technologically advanced circuitry reduce heater "on" time up to 8%, increasing your energy savings.

### Ready to integrate into production

Standard (G1) units of the new MC5 are in stock and ready to ship. They come with everything needed for installation, including 2-way or 4-way manifolds and ball valves. There's also an adjustable pressure bypass valve allowing you to tailor and optimize performance for different jobs.

# MC5 Series

It heats faster so you can start to mold sooner.

New solenoid valve is now located outside the cabinet so it is easier to maintain.

## IT'S SMALLER FOOTPRINT SLIPS IN AND OUT OF THE TIGHTEST SPACES

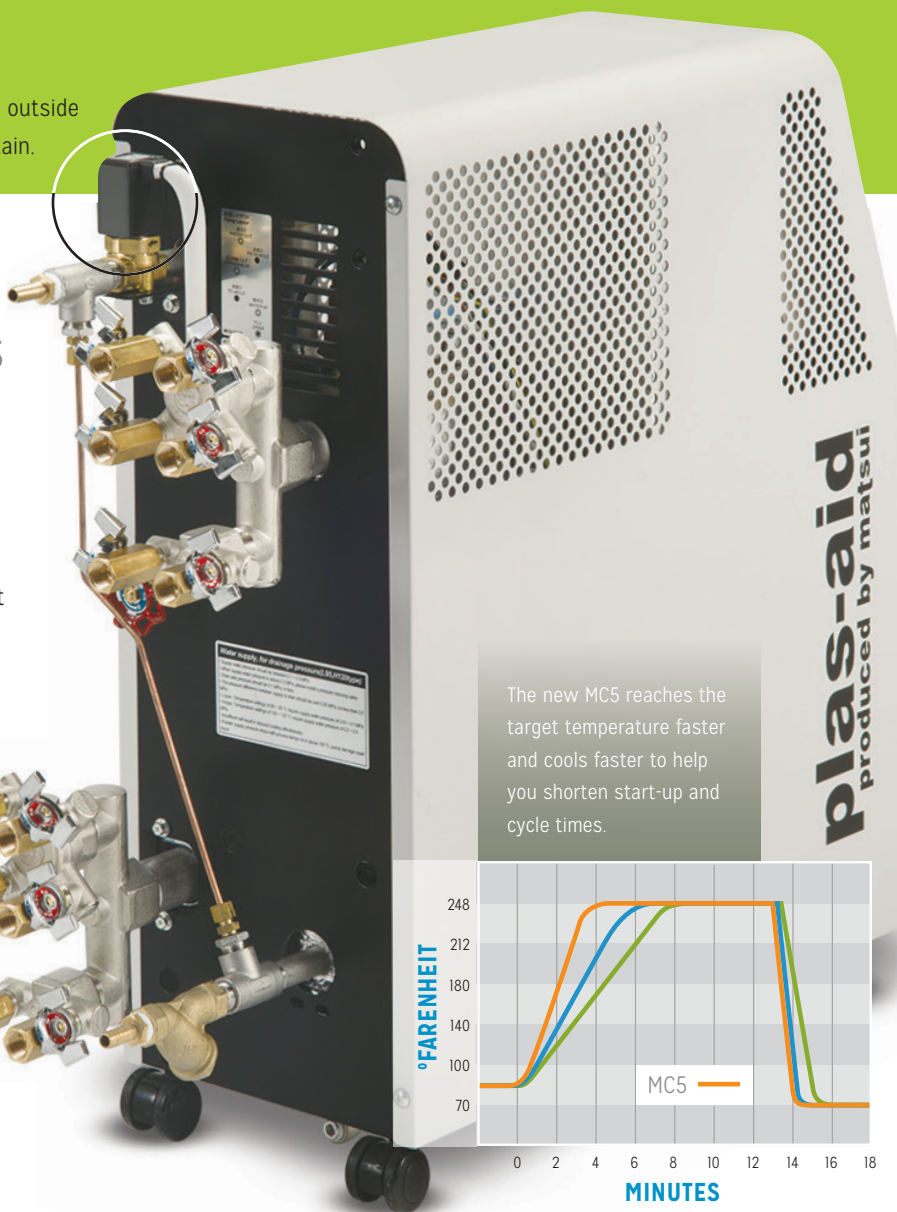
Introducing the new MC5, the next generation in mold temperature controllers. It reaches temperature settings faster, so as it moves from machine to machine you are ready to mold sooner. And it has a bigger, feature-packed, user-friendly control panel. The MC5 is equipped with more features as standard than other units. And even the simplest design change, putting valves outside the cabinet, makes it even easier to maintain.

### With the new MC5, you get:

**More power** – Built with the largest heater in its class, a more powerful pump and a more responsive thermocouple sensor, the new MC5 works faster than previous designs. It quickly and accurately reaches target temperatures within 1° of set point, shortening startup times. By taking samples four times every second, the unit maintains optimum temperatures throughout production. As a result, you can mold more parts in less time with fewer rejects, boosting your productivity as well as your bottom line.

**Smaller Package** – Compared to previous designs, the all-new MC5 is 27% lighter. Its footprint is 23% smaller. With casters built into the base, the unit is easy to move from one machine to the next, even into the tightest of spaces on the production floor.

**Cyclonic filtering** – Combining centrifugal force with gravity, the system's cyclonic filter pushes resin powder into a dust box at the system's base. Just lift out the box to empty any residue.



**Easier maintenance** – Your maintenance team will appreciate the new solenoid valve on the MC5. It's located on the outside – not the inside – of the unit, making it easier to reach and keep clean. With solid state relays in the heater control and all critical internal components constructed from stainless steel, the entire unit is virtually maintenance-free. If you need to service the inside, simply remove four screws and lift off the base plate. No need to worry about accidental start-ups; a safety disconnect switch is now standard on all MC5 models.

NEXT GENERATION MOLD TEMPERATURE CONTROL. ONLY FROM MATSUI.

# GET THE PERFORMANCE YOU NEED FROM THE MOST ADVANCED, MOST INNOVATIVE MOLD TEMPERATURE CONTROLLER ON THE MARKET. **ONLY FROM MATSUI.**

## New standard features of the new MC5:

- Stores up to 64 temperature settings
- Timed switching (10 sets of 10 temperature values)
- Temperature control programming
- Displays estimated setup temperature waiting time
- Heating and cooling error detection
- Programmable slow cooling
- Variable temperature control programming
- Programming to stop unit automatically at a preset temperature

## G3 units also have:

- Set value switching
- Programmable weekly operation

## Other standard features:

- Digital temperature display
- Reverse-phase detection
- Operation monitoring
- Alarm indication of pump overload, abnormal sensor, low level, low/high temperature, machine maintenance
- Automatic pressure relief
- Heat-resistant water level detection switch
- Pressure gauge
- One-touch display of set values on control panel
- Remote operation of start/stop
- Automatic air venting at start-up

## Standard features of MC5 Control Panel:

- Intuitive, user-friendly operation
- Easy to read LCD display visible even in bright lighting
- Displays PV, set values, alarm status, operation status, overloads/errors, estimated setup temperature waiting time
- Option to display error history
- Function for programming temperature control
- Can display flow rate and pressure (requires sensor)

## G3 units also have:

- Calendar function
- SPI or MODBUS communications board

## MC5 SERIES SPECIFICATIONS

Chart refers to both G1 and G3 Models

MC MODEL	MC5-25L / MC-25H		MC5-55L / MC5-55H		MC5-88L / MC5-88H	
POWER SUPPLY VOLTAGE	230V OR 460V, 3PH 50/60 HZ					
POWER USAGE (KVA)	5.5		8.0		11.8	
BREAKER CAPACITY	20		30		40	
MEDIA*	FRESH WATER (SOFT WATER)					
MAXIMUM WATER TEMPERATURE	203°F	248°F	203°F	248°F	203°F	248°F
COOLING CAPACITY (kW)/PRESSURE (Mpa)	50°F	2.4 / 3.3	2.9 / 4.1		3.6 / 4.9	
	86°F	7.2 / 9.8	8.6 / 12.4		10.7 / 14.7	
	140°F	14.5 / 19.6	17.2 / 24.7		21.4 / 29.5	
HEATER CAPACITY	4kW		6kW		9kW	
PUMP FLOW RATE (GAL/MIN)	50HZ	7.9	12.5		20.4	
	60HZ	10.2	14.8		22.7	
PUMP OUTPUT (KW)	0.3		0.6		1.0	
PUMP PERFORMANCE	REFER TO PUMP PERFORMANCE CHART (PAGE 2)					
WATER LEVEL DETECTION	ELECTRODE SENSOR OR FLOAT SWITCH					
TEMPERATURE CONTROLLER INPUT	K-TYPE THERMOCOUPLE					
WATER SUPPLY PORT	Ø 10.5 HOSE NIPPLE & STRAINER					
WATER DRAIN PORT	Ø 10.5 HOSE NIPPLE					
MEDIUM FEED & RETURN PORT	3/8" X 2 BALL VALVES		3/8" X 4 BALL VALVES		3/8" X 6 BALL VALVES	
DRAIN PORT	1/4B PURGE					
APPROX. DIMENSIONS W/L/H (INCHES**)	9.1 X 17.7 X 20.6		9.1 X 19.6 X 22.2		9.1 X 22 X 26.5	

\*\*Outer dimensions do not include piping.

When this product is used at a medium temperature of 185 to 203, drain pressure requires 0.03 to 0.1 Mpa.

Pump Flow Rate is a head with a height of 10 m.

**Options:** Leakage breaker, external start/stop, general alarm output, alarm buzzer, revolving lamp, stacked lamp (red+green), optional signal, water supply pressure abnormality, flow rate monitor, medium return sensor, mold sensor, water supply filter, multi-direction manifold, air purge (manual)



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