



# PRECISE TEMPERATURE CONTROL INTEGRATED INTO YOUR INJECTION MOLDING MACHINE

The powerful TempMaster M3 control platform can now be seamlessly integrated into any injection machine to eliminate the controller footprint. Featuring precise APS control technology and a wide range of advanced features, optimize the performance of any hot runner system. Unlock your operations full potential with TempMaster iM3.

# **KEY FEATURES**

## **SEAMLESS INTEGRATION**

- · 0EM appearance.
- Eliminates the excess footprint of separate control equipment.
- Utilizes the existing HMI of the injection machine.

#### **ADVANCED FEATURES**

- · Provides enhanced hot runner functionality.
- Significantly improve molding process control and performance.
- Incorporates a variety of safety and protection features such as plastic leakage detection to protect the tool.

### **EASILY MAINTAINED**

- · Control cards are readily accessible.
- Can be swapped out any time within seconds.

## **COMMUNICATION READY**

- Compatible with several industry standard protocols for superior flexibility and control.
- Built-in IO functions linked to machine interlocking.

## **Features**



TC-CONNECT Technology replaces conventional T/C mold cables with a single lightweight data cable. Eliminating conventional T/C cables, which make up 50% of all mold cables, saves cost, weight, and clutter from the molding cell.





PC UA

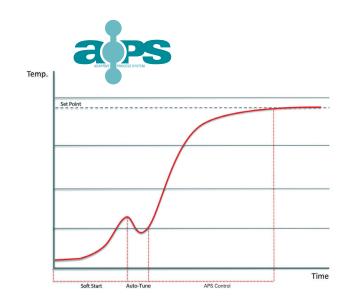




Control Card Formats	4-Zone (15A)		
Control Algorithm	APS (Adaptive Process System)		
Power Control	Phase Angle and Burst Firing Modes (Time Proportional, Zero-Crossing)		
Calibration Accuracy	0.1°C (0.2°F)		
Resolution	0.05°C (0.1°F)		
Power Response Time	8.3 ms at 60 Hz		
Temperature Scale	°C or °F (Software Selectable)		
Thermocouple	J or K-Type (Software Selectable)		
Operating Range	0 - 472°C (32 - 882°F)		
Output Voltage	240V @415V Supply and 230V @400V Supply		
Supply Voltage	200/240v 3P Delta or 380 to 415V 3P Star (other requires transformer)		
Frequency	50 - 60 Hz Automatic Switching		
Ambient Temperature Range	5 - 45°C (41 - 113°F)		
Humidity Range	Up to 95% non-condensing		
Ground Fault Detection	40mA per Zone		
Alarm Output	Closing Contact Relay 5A, 230V (Max)		
T/C Connector	Various options available		
Power Connector	Various options available		
Input Protection	63mA Nano Fuses on Both T/C Legs		
Overload Protection	Semi-conductor fuses on both heater legs		
Heater Fuses	15A @ 220V Fast Blow Type		
Control Modes	Closed Loop (Auto), Open Loop (Manual), Standby, Boost, Slave		
Ports	USB and Ethernet		
LED Indicators	Scan, Fuse, Thermocouple Failure, Ground Fault, Power %		
Communications	OPC-UA (Europmap82.2), VNC, SPI, Modbus		
Languages	English, French, German, Portuguese, Spanish, Polish, Russian, Chinese, Japanese, Czech, Italian, Turkish		

Frame Size	# of Cards (Max)	# of Zones	Dimensions** W x H x D mm (in.)
S	6	24	341x359x388 (14x14x15)
М	9	36	402x369x389 (16x15x15)
L	12	48	458x492x384 (18x19x15)

<sup>\*</sup>Based on 4z-15A cards.



<sup>\*\*</sup>Dimensions are a guideline only and may vary depending on integration requirements.