MCE

MOLD CONTROL SYSTEMS, INC.

ADVANCED TEMPERATURE CONTROLS FOR THE PLASTICS INDUSTRY

INTELLIGENT SERIES™

QUALITY BY DESIGN

SITC-15

Mold Control Systems, Inc. provides exceptional quality and reliability with its *Advanced Intelligence Series™* line of hotrunner controller systems. With the SITC-15, we bring a feature rich temperature controller at low cost, with a simple intuitive design.

A simple yet informative front panel design:
- Process temperature and Set-point temperature digital LED displays
- Decimal Point status/indicator LEDs
- Control Mode Indicator LEDs
- Universal symbols
- Rugged user keypad
- Audible alarm for fault detection alert

Advanced diagnostics with real-time fault detections:
- High Temperature
- Low Temperature
- Open Thermocouple
- Pinched Thermocouple
- Reversed Thermocouple
- Shorted Heater/TRIAC
- Open Heater/TRIAC
- Over Current

Hardware Protection and Safety Features:
- Thermocouple Input High Voltage Fuse and Diode Protection
- Anti-Arc Protection
- Input Power Fuse Protection
- Integrated Safety Protection Features
    - Over Current
    - Shorted TRIAC/Heater
    - Open Heater/TRIAC

Advanced Precision Output Control Algorithm:
- Fuzzy Logic Phase and Burst Control
- Automatic Power Response to any heater of any size
- Automatic Bumpless Control for Thermocouple Break when at Set-point Temperature

Added features:
- Onboard Standby and Boost modes
- Amperage and Voltage measurement reading
- Type J and K thermocouple input
- Automatic Power On after outage (selectable)

Mold Control Systems, Inc. is a leader in innovative technologies. To prove that fact, the GITC-15 hotrunner temperature controller was designed. We have removed the idea that a computer is needed to get total control of a high capacity system, and combined it all into a fully *MODULAR* controller.

The GITC-15 contains all the features and specifications of the SITC-15.

Since there is no computer involved, there are no worries of long downtimes due to system failures, operating system errors, or mechanical drive failures. You can be assured of outstanding performance with no bottlenecking of information waiting for the computer to perform tasks.

The GITC-15 is still a modular unit, so it retains the feature of easy removal and replacement. Systems do not have to be shut down to replace a zone, saving both downtime and servicing costs.

Smart global communications between the controllers using the MFCP line of mainframes enable easier adjustment to parameters and basic settings. Using the global function, parameters can be sent to all controllers in a specified group so you don't have to adjust each individual controller.

Global Functions include:

- Global Set-point
- Global Parameters
- Global Power-on
- Global Start
- Global Halt

- Global Modes
  - Auto Soft-start
  - Manual (Open Loop)
  - Automatic (Closed Loop)
  - Auto/Manual Standby
  - Auto/Manual Boost

With the addition of the MFSB-1 System Communication Interface Module (does not use mainframe zone slot), a sophisticated range of features can be had with minimal cost.

Advanced Communication Features include:

- Even Rise
- Thermocouple Slaving
- External Alarm Output
- Remote Standby Input
- *Live-Swap™* Zone Retrievable Settings

Features:

	SITC-15	GITC-15
Fuzzy Logic Phase and Burst Control	●	●
Process Temperature and Set-point Displays	●	●
Amperage and Voltage Measurement Display	●	●
Mode Select:		
Auto Soft-Start	●	●
Manual (Open Loop)	●	●
Automatic (Closed Loop)	●	●
Auto/Manual Standby	●	●
Auto/Manual Boost	●	●
Real-Time Fault Detection:		
High Temperature	●	●
Low Temperature	●	●
Open Thermocouple	●	●
Pinched Thermocouple	●	●
Reverse Thermocouple	●	●
Shorted Heater/TRIAC	●	●
Open Heater/TRIAC	●	●
Over Current Protection	●	●
Audible Alarm	●	●
Type J and K Thermocouple	●	●
Grounded or Ungrounded Thermocouple	●	●
Automatic Bumpless Control for Thermocouple Break When at Set-Point Temperature	●	●
Thermocouple Input High Voltage Fuse Protection	●	●

	SITC-15	GITC-15
Selectable Degrees C or F	●	●
Anti-Arcing Protection	●	●
Auto Power On (Selectable)	●	●
15 Amp / 240 ± 5% VAC	●	●
Global Settings: *		
Global Set-point		●
Global Parameters		●
Global Power On		●
Global Start		●
Global Halt		●
Global Standby		●
Global Boost		●
Global Mode		●
Auto Soft-start		●
Manual (Open Loop)		●
Automatic (Closed Loop)		●
Auto/Manual Standby		●
Auto/Manual Boost		●
Start and Halt Keys		●
Even Temperature Rise (Even Rise) **		●
Thermocouple Slaving at Start Up**		●
External Alarm Output **		●
Remote Standby Input **		●
Live-swap™ Zone Retrievable Settings**		●

* Requires *MFCP-X-M* Communications Mainframe for operation (*X* = number of zones IE: 5, 8, or 12)

** Requires *MFSB-1* System Communications Interface Module in addition to MFCP Communications Mainframe

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