Temperature Controller

Simple Solution

SHINI

Temperature Controller (1 card in 1 zone)

Coding Principles

SH TC - XE S

- S: 1 card in 1 zone
- E: Zones (E Stands for Zones)
- TC: Temperature Controller
- SH: Shinno Hot Runner

Working Principle

The temperature controller is a device that can constantly maintain set temperature according to the set value of customer, which mainly detects the temperature of heating elements through the product's internal microprocessor (MCU), and then controls the thyristor or solid-state relay after being processed by the microprocessor's internal program to control the temperature.

Performance

- Power Input:AC110V-245V 50/60HZ
- Load: 16A, 3600W per zone
- Output type: PIDD (phase shift pulse width modulation) PID (solid-state)
- Thermocouple type: J or K type
- Temp. control range: 45C-450
- Temp. stability: ±0.5%
- Temp. control type: FUZZY+PIDD intelligence control
- Auto ambient temp. compensation of internal measurement loop
- Soft start to eliminate mould leakage due to moisture
- F1,F2:250-16A
- F3:250-1A

Features

Standard Function

- LED display, Chinese/English alarm code
- All series of products have passed the CE certification
- Output break detection, output short circuit protection
- Manual power output mode
- Thermocouple and power cable wiring protection
- and alarm prompt
- 380V power input protection

Optional Function

- Six optional alarm outputs
- RS485 comm. function: ASCII & RTU mode

Specifications

Dim. / Zones	W(mm)	D(mm)	H(mm)	Weight(kg)
1 Zone	115	245	230	5
2 Zone	262	322	235	9.5
3 Zone	262	322	235	11.5
4 Zone	262	322	235	12.3
6 Zone	364	322	235	17.5
8 Zone	465	322	235	23.2
10 Zone	566	322	235	26.5
12 Zone	364	322	435	30
16 Zone	465	322	435	39
20 Zone	566	322	435	47.3
24 Zone	465	322	635	55
30 Zone	566	322	635	67
32 Zone	465	322	835	79.9

SHTC - 12EDA

Temperature Controller (1 card in 2 zone)

Coding Principles

SH TC - xE DA

- 1 card in 2 zone (Digital tube display)
- Zones (E Stands for Zones)
- Temperature Controller
- Shinno Hot Runner

Performance

- Power input voltage: AC185V-245V, 50/60HZ.
- Load: 16A, 600W per zone.
- Output type: PHA (Phase Shift Pulse Width Modulation), OCR(solid sate).
- Thermocouple type: type J or K.
- Temperature control range:45-450℃.
- Temperature stability: +0.5%.
- Temperature control type: FUZZY+PIDD artificial intelligence AI+phase-shifting control.
- Auto ambient temperature compensation function of internal measurement loop.
- Soft start to eliminate mould leakage caused by moisture.
- F1:250-1A.
- F2:250V-16A

Features

Standard Functions

- SHTC-EDA has a small controller that is particularly suitable for production with limited space.
- LED display with Chinese/English alarm codes
- CE certification ready.
- Output break detection and short circuit protection
- Manual power output mode
- Thermocouple and power cable wiring protection with alarm
- 380V power input protection

Optional Functions

- The high-power module is capable of handling 7000-10000W of power each.
- Temperature controller cart (customizable)

Specifications

Dim. / Zones	W(mm)	D(mm)	H(mm)	Weight(kg)
2 Zone	130	310	190	9.2
4 Zone	180	310	190	11.7
6 Zone	230	310	190	14
8 Zone	280	310	190	18.8
10 Zone	375	310	190	22
12 Zone	425	310	190	26
16 Zone	325	310	355	35
20 Zone	375	310	355	40.25
24 Zone	425	310	420	45
32 Zone	425	345	585	93
48 Zone	425	345	750	109

SHTC - 12ED

Temperature Controller (1 card in 2 zone)

Coding Principles

SH TC - xE D

- 1 card in 2 zone (LCD display)
- Zones (E Stands for Zones)
- Temperature Controller
- Shinno Hot Runner

Performance

- Power input voltage: AC185V-245V, 50/60HZ.
- Load: 16A, 600W per zone.
- Output type: PHA (Phase Shift Pulse Width Modulation), OCR(solid sate).
- Thermocouple type: type J or K.
- Temperature control range:45-450℃.
- Temperature stability: +0.5%.
- Temperature control type: FUZZY+PIDD artificial intelligence AI+phase-shifting control.
- Auto ambient temperature compensation function of internal measurement loop.
- Soft start to eliminate mould leakage caused by moisture.
- F1:250-1A.
- F2:250V-16A

Features

Standard Functions

- SHTC-XED has a small controller that is particularly suitable for production with limited space
- Equipped with HARTING connector
- Chinese/English LCD display.
- CE certification ready.
- 380V power input protection
- Thermocouple and power cable wiring protection with alarm.
- All error codes are displayed in Chinese/English on the LCD display.
- Single-click to restore the factory default.

Optional Functions

- The single-click standby function can effectively prevent the plastics from carbonizing and yellowing
- The high-power module is capable of handling 7000-10000W of power each.
- Temperature controller cart (customizable)

Specifications

Zones \ Dim.	W(mm)	D(mm)	H(mm)	Weight(kg)
2 Zone	130	310	190	9.2
4 Zone	180	310	190	11.7
6 Zone	230	310	190	14
8 Zone	280	310	190	18.8
10 Zone	375	310	190	22
12 Zone	425	310	190	26
16 Zone	325	310	355	35
20 Zone	375	310	355	40.25
24 Zone	425	310	420	45
32 Zone	425	345	585	93
48 Zone	425	345	750	109

Integrated Temperature Controller

Coding Principle

SH TC-xE M

- M → Integrated
- E → Zones (E Stands for Zones)
- TC → Temperature Controller
- SH → Shinno Hot Runner

Features

- Adopt German PMA multi-loop temp. control system for accurate temp. control.
- 10.1'' color capacitive screen, featuring bright color and easy operation
- Multi-point touch control can zoom and display the temp. curve
- Current and output percentage display function
- Support history alarm display and record
- One button temp. setting function
- RS485 communication function

Operation Interface

Alarm Interface

Product Profile

- Adopt FUZZY PIDD technology
- Auto linear compensation function for ambient temperature
- Detection for thermocouple break
- Detection for measuring loop break inside the controller
- Heater current monitoring
- Output interruption detection, output short circuit protection
- Temperature deviation alarm
- Manual power output mode
- Power 380V input protector with alarm indicator
- Full error code output

Performance

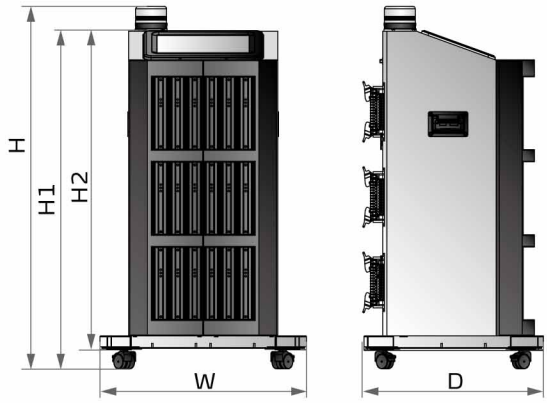
- Power Input:AC110V-245V 50/60HZ
- Load: 16A, 3600W per zone
- Output type: PIDD (phase shift pulse width modulation) PID (solid-state)
- Thermocouple type: J or K type
- Temp. control range: 45C-450
- Temp. stability: ±0.5%
- Temp. control type: FUZZY+PIDD intelligence control
- Auto ambient temp. compensation of internal measurement loop
- Soft start to eliminate mould leakage due to moisture
- F1,F2:250-16A
- F3:250-1A

Application

SHTC-EM series of touch-panel temperature controller can control the temp. of 12 to 126 zones, and several of the units can be connected through the RS485 or Ethernet interface to achieve centralized monitoring function. It supports the setting of multiple groups' control at one time that simplifies the operation processes.

Besides, with additional and practical current detecting functions, the unit is especially suitable for automobile industry, PET preform injection molding, medical consumables and other applications to realize one-stop control, and bring more benefits to this industry.

Outline Drawings



Specifications

Model SHTC-		12EM	24EM	36EM	48EM	60EM	72EM	90EM	108EM	126EM
Display Size (Inch)		10.1								
Dimension	H(mm)	465	660	855	1050	1245	1050	1245	1245	1050
	W(mm)	496	496	496	496	496	622	622	742	988
	D(mm)	431	431	431	431	431	431	460	460	460
	H1(mm)	413	608	803	998	1193	998	1193	1193	998
	H2(mm)	354	549	744	939	1134	939	1134	1134	939
Weight(kg)		29	47.5	66	84.5	103	123	145	165	190

We reserve the right to change specifications without prior notice.

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