



# Temperature Controller

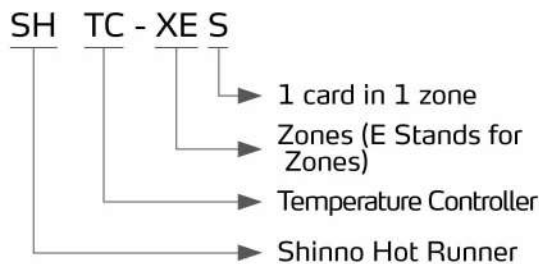
Simple Solution





# Temperature Controller (1 card in 1 zone)

## Coding Principles



## Specifications

Zones	Dim.	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

## Product Profile

- Adopt FUZZY PID 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.
- Software locking function.
- Power 380V input protector with alarm indicator.
- Full error code output

## Optional Functions

- Six kinds of alarm
- RS485 communication function: mode ASCII and RTU

## Working Principle

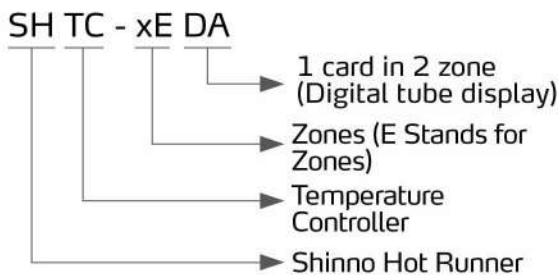
The temperature controller is a device that can constantly maintain set temperature according to the set value of customer, which mainly detects the temperature of heating elements through the product's internal microprocessor (MCU), and then controls the thyristor or solid-state relay after being processed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



SHTC - 12EDA

# Temperature Controller (1 card in 2 zone)

## Coding Principles



## Specification

- Power input voltage: AC185V-245V, 50/60HZ.
- Load: 16A, 600W per zone.
- Output type: PHA (Phase Shift Pulse Width Modulation), OCR(solid state).
- Thermocouple type: type J or K.
- Temperature control range:45-450°C.
- 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

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

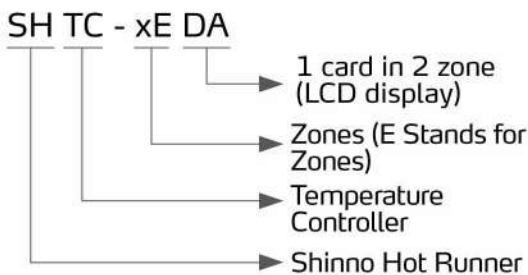




SHTC - 12ED

# Temperature Controller (1 card in 2 zone)

## Coding Principles



## Specification

- Power input voltage: AC185V-245V, 50/60HZ.
- Load: 16A, 600W per zone.
- Output type: PHA (Phase Shift Pulse Width Modulation), OCR(solid state).
- Thermocouple type: type J or K.
- Temperature control range:45-450°C.
- 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)

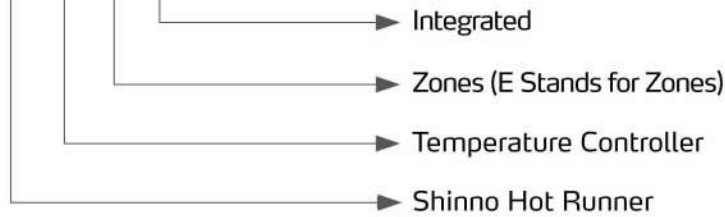
## Specifications

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



## 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

## Product Profile

- Adopt FUZZY PID 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



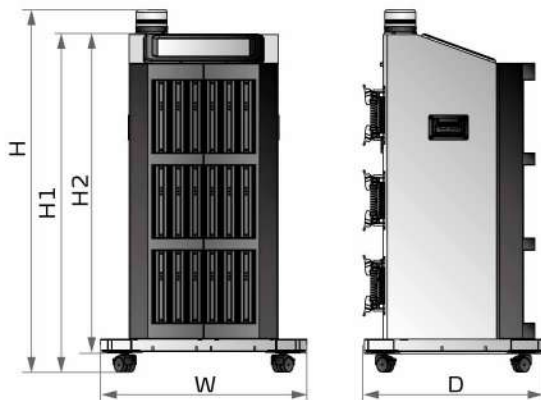
Alarm Interface

## ■ 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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