

**Stepset  
Heater Controller  
Profile-maker SSC series**



**Heat-tech**

## Stepset Controller Profile-maker SSC series



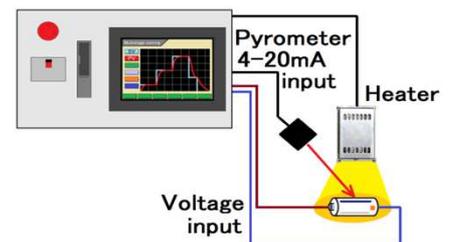
- ◆ Heating data can be taken out easily from a memory card slot in the panel surface.

- ◆ Memory card data folder function



- ◆ Multistep setting can be done easily by a touch panel display.

- ◆ Multistage setting function
- ◆ Gradient setting function
- ◆ Sine curve setting function

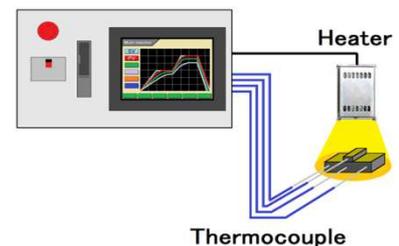


- ◆ By setting the heating temperature and time, this can precise heating test.

- ◆ One-Shot heating function
- ◆ Trigger Shift function (optional)

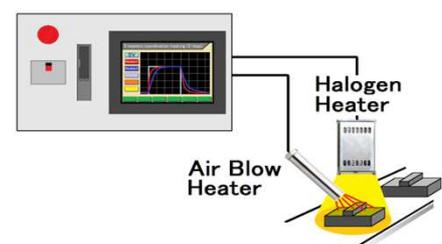
- ◆ From multiple sensors, can be heating test by setting any of the input to the reference temperature.

- ◆ Multi-monitor function
- ◆ Reference temperature input selection function
- ◆ Average value control function



- ◆ Multi-loop supervisor function built-in. That can cooperative control several heaters.

- ◆ 2 heater coordination heating function (2-loop)
- ◆ 2 heater independent heating function (2-loop)
- ◆ 3 heater coordination heating function (3-loop)
- ◆ 3 heater independent heating function (3-loop)
- ◆ 4 heater coordination heating function (4-loop)
- ◆ 4 heater independent heating function (4-loop)



Design Number	Input	Output	Power	Loop	Signal	Dimension
SSC-DC12V-300W-1L	AC85-264v	DC3-12v	300w	1Loop	Temp. input 4CH / Analog input 4CH	Standard
SSC-DC24V-300W-1L	AC85-264v	DC5-24v	300w	1Loop		Standard
SSC-DC24V-600W-2L	AC85-264v	DC5-24v	300w x2	2Loop		Standard
SSC-DC36V-600W-1L	AC85-264v	DC7-36v	600w	1Loop		Standard
SSC-DC36V-1200W-2L	AC85-264v	DC7-36v	600w x2	2Loop		Standard
SSC-AC15A-1L	AC100-110/200-220v		15A	1Loop		Standard
SSC-AC30A-1L	AC100-110/200-220v		30A	1Loop		Standard
SSC-AC30A-2L	AC100-110/200-220v		15Ax2	2Loop		Standard
SSC-AC45A-3L	AC100-110/200-220v		15Ax3	3Loop		Large
SSC-AC60A-1L	AC100-110/200-220v		60A	1Loop		Standard
SSC-AC60A-2L	AC100-110/200-220v		30Ax2	2Loop		Standard
SSC-AC60A-4L	AC100-110/200-220v		15Ax4	4Loop		Large
SSC-AC90A-3L	AC100-110/200-220v		30Ax3	3Loop		Large
SSC-AC120A-2L	AC100-110/200-220v		60Ax2	2Loop		Large
SSC-AC120A-4L	AC100-110/200-220v		30Ax4	4Loop		Large

\*1.Temperature input : J,T,E,R,B,N,S,w5Re,w26Re,JPt100,Pt100

\*2.Analog input : ±10V, ±5V, 0-10V, 0-5V, 1-5V, 0-20mA, 4-20mA

\*3.In order to use the water-cooled type halogen heater, water cooling system is required.

\*4.HLH of high output type requires a separate cooling air.

\*5.Nameplate will be created in designated language as much as possible.

## Standard Function

Memory card data folder	Read the heating data from the memory card, and can edit the tables and graphs in EXCEL.
Multi-monitor	Displays the total 8CH of temperature input 4CH and analog input 4CH the trend graph.
Multi-temperature	Multistage, Sign-curve and Gradient heating setting by a touch panel.
Supervisor	Multiple signal and several heaters coordination heating function.
One-shot heating	Heating time can be established by one shots from the preset temperature arrival value.
Temperature input 4CH	K,J,T,E,R,B,N,S,w5Re,w26Re,JPt100,Pt100 4CH
Analog input 4CH	±10V, ±5V, 0-10V, 0-5V, 1-5V, 0-20mA, 4-20mA 4CH

## Optional Function

TA4	Temperature and analog multiple input 4CH
HL	High-Low Control for rapid-heating or preheating
TR	When the trigger is input, and then shift move on to the next set temperature.
RC1	Heating start or stop in the signal from outside
RC2	Specified output voltage in 4-20mA from outside
RSP	Specified thermocontroller temp. in 4-20mA
PVMON	Monitor, Output 4-20mA signal the temperature of the heating object.
SVMON	Monitor, Output 4-20mA signal the temperature of the set volume.
RS485	RS-485 Communication
IOT	IOT function
ACOUT	Power supply for AC Air cooling fan.
DC24	DC24V power supply cooling fan
AirV	Air opening and closing valve
OFDT	Air closing valve, heating stop after the cooling timer 5 minutes
BO	With heater burnout detection and display. With current limiter.
OVH	Over-heat Alarm. (For ABH/DGH□v-□w/□□/+2S type)
WP	Cooling water pressure shortage alarm
AP	Air Blow Heater and terminal cooling air pressure shortage alarm
CFS	Cooling fan stop detection signal processing
FPR	Front Protection Rail
RPR	Rear Protection Rail
Power Cable	Manufacture the specification of the power cable.
+α	If user need a function other than the above, please contact us.

\*6.When the function is added, there is a possibility that change is external size.

## General specification

Power supply	AC100-240v
Internal current consumption	1.6A(except the heater output)
Ambient temperature	0~50°C (No freezing No condensation No dew)
Storage temperature	-10~+60°C (No freezing No condensation No dew)
Use and storage humidity	35~85%RH (No freezing No condensation No dew)
Withstand voltage	AC1500V 1minute Between power supply terminal and input and output terminals
Noise resistance	1500Vp-p Pulse width 1 μs,50ns IECstandard compliant 61000,4-2/3/4/6)
Insulation resistance	DC500MV- 5MΩ over (Between the power supply terminal and case)
Use atmosphere	No Dust, No terribly corrosive gas
Use altitude	2000m or less
External dimensions	Height 250mm width 400mm depth 270mm (Standard type)
Mass	About 5kg (Standard type)

## Touch panel specification

Display element	Ultra-high brightness TFT color LCD
Display dots Number	VGA 640x480
LCD life	About 5000 hours (Normal temp. and humidity)
Backlight life	About 5400 hours (Normal temp. and humidity, Cold-cathode tube can not replaced)
Touch switch life	1million times or more (touch switch actuating force 0.98NT below)

## Memory card specification

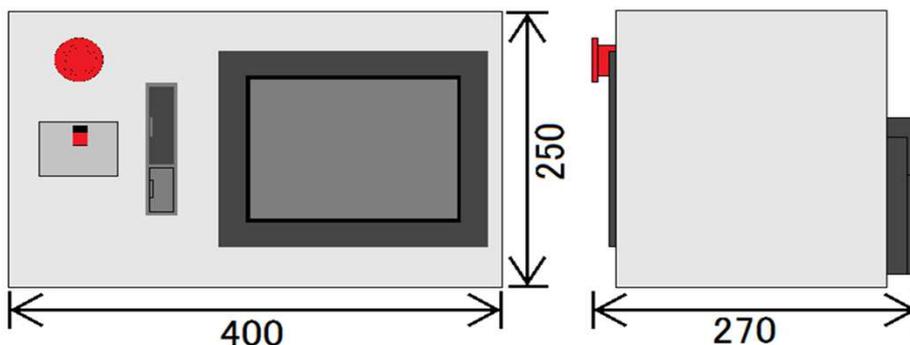
Storage element	CF compact flash card EEPROM
File type	CSV
Memory capacity	128MB
Number of rewrites	100,000 or more times
Storage capacity	Maximum 128MB, 262144 files



【 Options Front Protection Rail 】



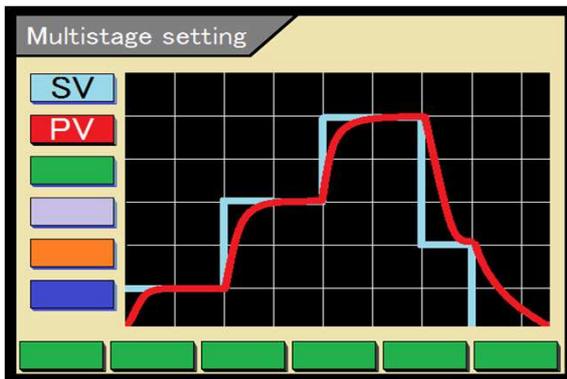
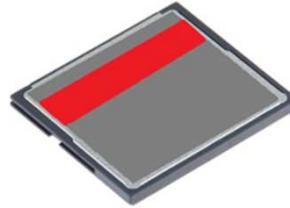
【 Options Rear Protection Rail 】



	A	B	C	D	E	F
1	10.00.00	25	26	25	24	
2	10.00.01	26	27	26	25	
3	10.00.02	27	28	27	26	
4	10.00.03	28	29	28	27	
5	10.00.04	29	30	29	28	
6	10.00.05	30	31	30	29	
7	10.00.06	31	32	31	30	
8	10.00.07	32	33	32	31	
9	10.00.08	33	34	33	32	
10	10.00.09	34	35	34	33	
11	10.00.10	35	36	35	34	
12	10.00.11	36	37	36	35	
13	10.00.12	37	38	37	36	
14	10.00.13	38	39	38	37	
15	10.00.14	39	40	39	38	
16	10.00.15	40	41	40	39	
17	10.00.16	41	42	41	40	
18	10.00.17	42	43	42	41	

### ◆ Memory card data folder function

Read the heating data from the memory card, and can edit the tables and graphs in EXCEL.



### ◆ Multistage setting function

A processing method such as a decline of the surface tension by the heating and extinction of the residual stress can be considered.

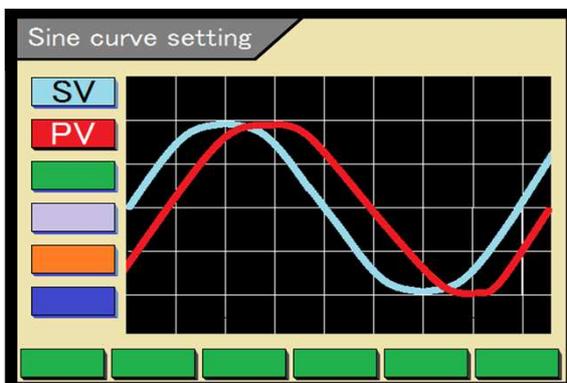
- Setting the reservoir of intermediate polymerization reaction
- Repeated heating and cooling method
- Maintenance of solution processing temperature
- Two-stage preheating quenching processing
- Gas nitriding processing
- Gas two-stage nitriding processing
- Salt bath soft nitriding processing
- Gas soft nitriding processing



### ◆ Gradient setting function

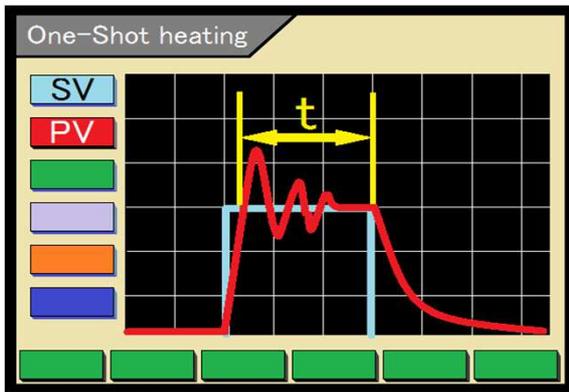
Important expansion and shrinkage rate, it is test for a precision material .

- Trapezoidal control
- Isothermal annealing
- Management of recrystallization temperature
- Slow heat → annealing → slow cooling process
- Two-stage annealing
- Age hardening treatment



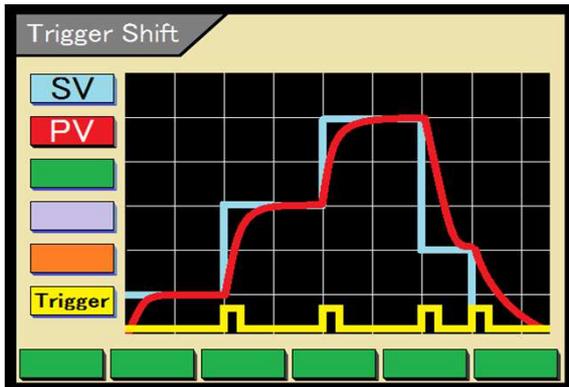
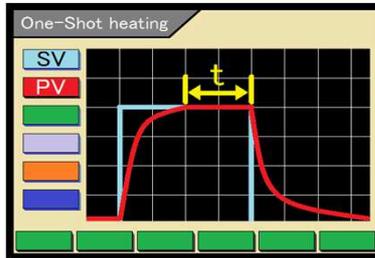
### ◆ Sine curve setting function

Heat cycle test of an electronic device.  
Aging accelerated test of an electronic device.



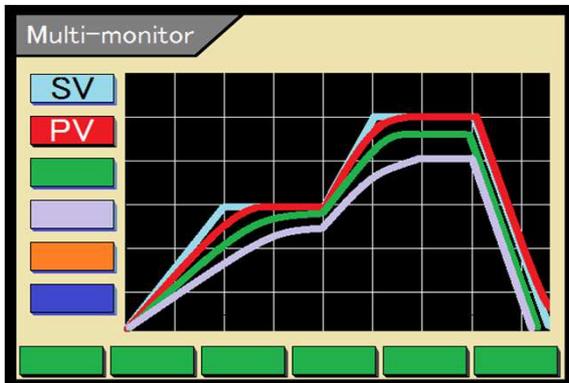
### ◆ One-Shot heating function

- The condition shortening of the tact time
- The tempering time management
- The normalizing time management



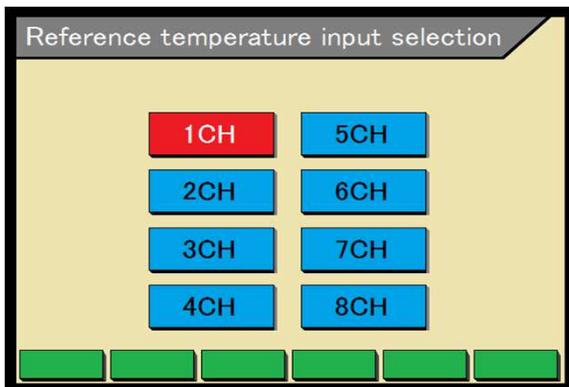
### ◆ Trigger Shift function (optional)

When the trigger is input, and then move on to the next set temperature.



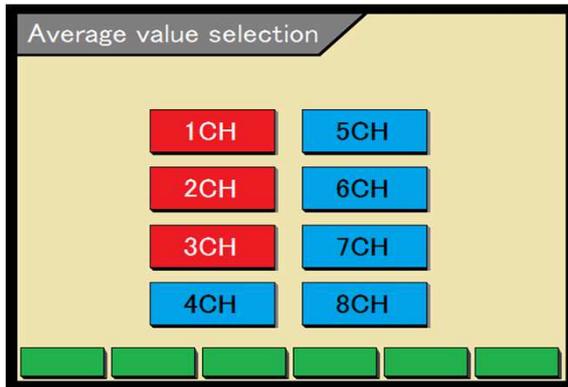
### ◆ Multi-monitor function

Temperature distribution can know in real time.



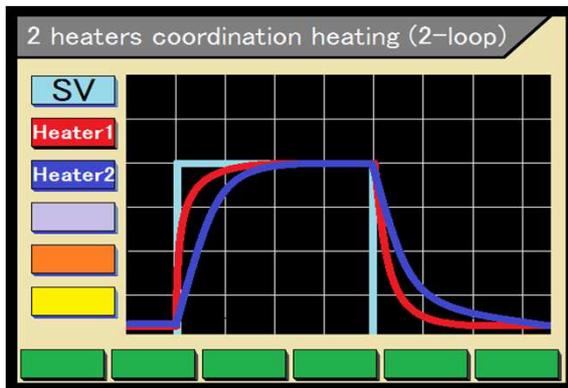
### ◆ Reference temperature input selection function

The sensors can be multiple mounting, heating the any position on the reference or the best, can evaluate the mounting position.



### ◆ Average value control function

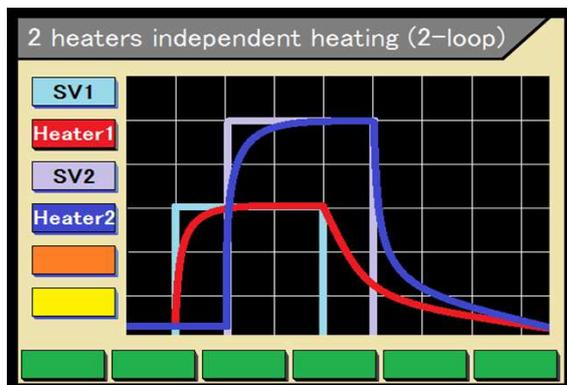
The sensor can be multiple mounting, the heating evaluate the position of the virtual to the reference.



### ◆ 2 heater coordination heating function (2-loop)

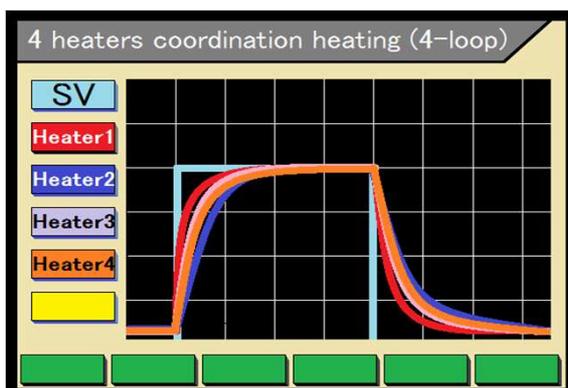
Heat the one object, use the air blow heater and halogen heater.

Heat the one object, use the two halogen heaters.



### ◆ 2 heater independent heating function (2-loop)

A certain areas is heated uniformly using several heaters.

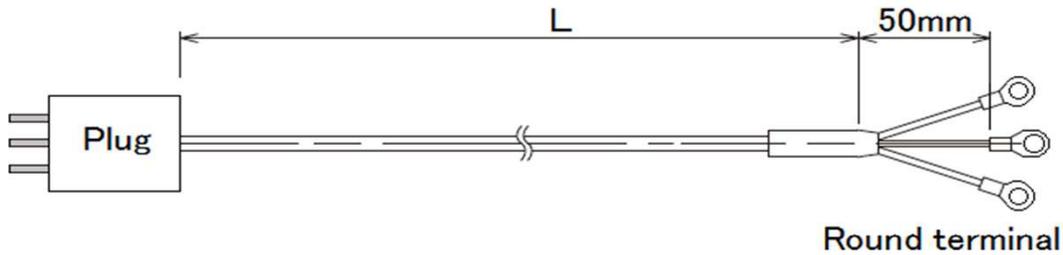


### ◆ 4 heater coordination heating function (4-loop)

A certain areas is heated uniformly using 1 heater.

# Power Cable for Heater Controller

Manufacture the specification of the power cable.



Type A	Type B	Type C	Type D	Type E	Type F
Type G	Type H	Type I	Type J	Type L	

VOLT	NEMA	15 AMPERE		20 AMPERE		30 AMPERE	
		Receptacle	Plug	Receptacle	Plug	Receptacle	Plug
125 V	L1						
		L1-15R	L1-15P				
250 V	L2						
				L2-20R	L2-20P		
125 V	L5						
		L5-15R	L5-15P	L5-20R	L5-20P	L5-30R	L5-30P
250 V	L6						
		L6-15R	L6-15P	L6-20R	L6-20P	L6-30R	L6-30P
277V, A.C.	L7						
		L7-15R	L7-15P	L7-20R	L7-20P	L7-30R	L7-30P
480 V	L8						
				L8-20R	L8-20P	L8-30R	L8-30P
600 V	L9						
				L9-20R	L9-20P	L9-30R	L9-30P

When the plug or the connector which the upper figure does not have are necessary, we will manufacture as much as possible.

<< Quotation model specification method >>

(Heater controller model) - (Plug shape) - (Cable length)

<< Quotation example >>

HCA-AC100/220V-15A-TypeA-5m

No-touch High Temperatures Hating

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