Model JSMI-04C   125 L Four Chamber Incubator

JSMI-04C 125 Liter Four Chamber Incubator provides multiple chambers in a compact unit share less footprint. Temperature of each chamber can be controlled independently. Temperature range from +0 ^{o}C to +70 ^{o}C.

Suitable for incubation of microorganism needs temperature and light at the same time and various test for food and packaging test on QA / QC labs.

MAIN FEATURES

PERFORMANCE

-Control Temperature Range from +0 ^{o}C to +70 ^{o}C

-Forced air circulation for excellent thermal accuracy and uniformity

-Aero-dynamic chamber designed with circulation blower to achieve superior thermal uniformity

-Separate heating compartment located on back wall for contamination free and maintenance free

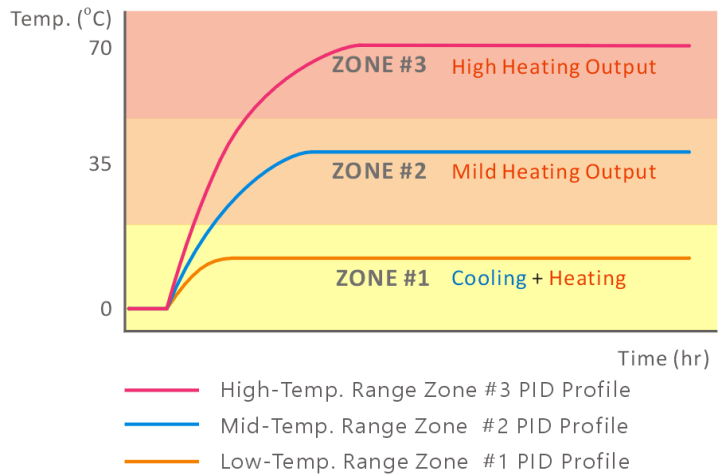-Air cooled refrigeration system with hermetically sealed compressor

CONSTRUCTION

-Durable epoxy powder coated metallic casing

-Corrosion resistant Stainless Steel 304 chamber with seamless round cornered edge allows easy cleaning and prevent leakage

-Tempered safety inner glass door for easy observation of samples
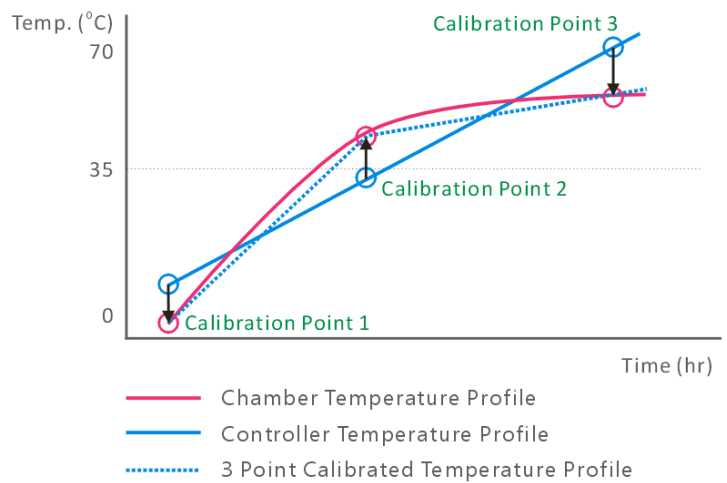
CONTROLLER

-3 ZONE PID ALGORITHM

Usable temperature range divided into three zones (LOW/MIDDLE/HIGH) and each ZONE has its individual PID parameters optimized to the range, and it provides precise and superior temperature control characteristic to whole temperature range.

Temp. (°C)

ZONE #3   High Heating Output

ZONE #2   Mild Heating Output

ZONE #1   Cooling + Heating

Time (hr)

—— High-Temp. Range Zone #3 PID Profile
—— Mid-Temp. Range Zone #2 PID Profile
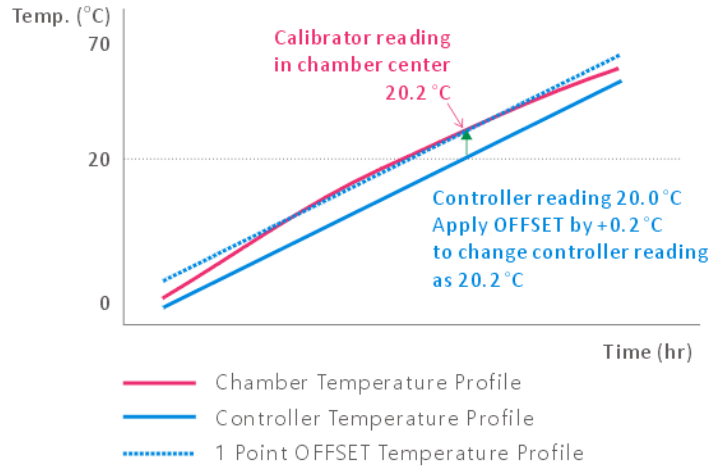—— Low-Temp. Range Zone #1 PID Profile

-3 POINT CALIBRATION FUNCTION

A perfect calibration tool to calibrate chamber at THREE DIFFERENT TEMPERATURE POINTS to adjust multiple temperature bias to increase the temperature accuracy of WHOLE TEMPERATURE RANGE.

Temp. (°C)

Calibration Point 3

Calibration Point 2

Calibration Point 1

Time (hr)

—— Chamber Temperature Profile
—— Controller Temperature Profile
······· 3 Point Calibrated Temperature Profile

- 1-POINT OFFSET FUNCTION

Provides simple and easy calibration tool to calibrate chamber at ONE SPECIFIC TEMPERATURE POINT in frequent use.

Temp. (°C)

Calibrator reading
in chamber center
20.2 °C

Controller reading 20.0 °C
Apply OFFSET by +0.2 °C
to change controller reading
as 20.2 °C

Time (hr)

━━━ Chamber Temperature Profile
━━━ Controller Temperature Profile
·········· 1 Point OFFSET Temperature Profile

CONTROLLER

-DIGITAL MICROPROCESSOR PID TEMPERATURE CONTROLLER

 Integrated Digital Microprocessor Control System

-GRAPHIC LCD DISPLAY

 Back Light Graphic LCD Display provides user-friendly operating information

-UV COATED POLYCARBONATE TOUCH PANEL

 Equipped with Capacitive LED Lighting Touch Button provides sensitive touching operation and durability

-ENCODER TYPE JOG DIAL

 Push to Start and Stop, Rotary turn to change values provides easy and simple user interface

-0.1 °C CONTROL RESOLUTION

-Auto-Stop Timer   1 min ~ 99 hour 59 min and alarm

-Auto-Start Timer   1 min ~ 99 hour 59 min and alarm

-Temperature and Timer Memory Function in frequent use

-3-ZONE PID ALGORITHM

-3-POINT CALIBRATION

-1-POINT OFFSET CALIBRATION

-POWER and TIMER RESTORE FUNCTION in case electric power outage

-CLASS A PT-100 Ω Sensor

-Delay starter to protect compressor.

-RS-232C PC COMMUNICATION INTERFACE [OPTION]

CONVENIENCE

  -Outer door with self-adhesive magnetic packing

  -Inner glass door with high density silicone gasket and air-tight door lock

  -Removable and height adjustable shelf by 25mm spacing

SAFETY

  -PT SENSOR SHORT OR DISCONNECTION AUDIO VISUAL ALARM

  -DUAL OVER TEMPERATURE CUT-OFF BY CONTROLLER AND INDEPENDENT THERMOSTAT

   Controller cut-off heater, compressor and AUDIO VISUAL ALARMS

     ALARM HIGH : +5 $^{\circ}$C above set temp.

     ALARM LOW : -5 $^{\circ}$C below set temp.

   Independent analog thermostat cut-off heater above set temperature

  -DOOR OPEN AUDIO VISUAL ALARM

  -OVER CURRENT CUT-OFF : Electric Circuit Breaker

SPECIFICATIONS

	JSMI-04C
Dimension Data	
Chamber Volume	4 chamber x 125 L
Inner Dims. (W x D x H mm)	500 x 500 x 500
Outer Dims. (W x D x H mm)	1365 x 830 x 1815
No. of Shelf Positions	16 ea
No. of Shelf included	8 ea
Performance Data	
Heating System	Forced Air Convection
Cooling System	Compressor
Temp. Range	+0 $^{\circ}$C ~ +70 $^{\circ}$C
Accuracy at +20.0 $^{\circ}$C	±0.2 $^{\circ}$C at +20.0 $^{\circ}$C
Uniformity at +20.0 $^{\circ}$C	±1.0 $^{\circ}$C at +20.0 $^{\circ}$C
Controller	
Processor	Digital Microprocessor PID Temperature Controller
Display	Back Light Graphic LCD Display
Panel	UV Coated Polycarbonate Solid Touch Panel
Button	Capacitive touch LED Lighting Touch Button
Interface	Push and Rotary encoder type Jog Dial
Control Logic	3 Zone PID Control

Calibration	1 Point Temperature OFFSET
	3 Point Temperature Calibration
Resolution	0.1 $^{\circ}$C
Auto-Stop Timer	1 min. ~ 99 hr 59 min
Auto-Start Time	1 min. ~ 99 hr 59 min
Sensor	CLASS A PT-100 Ω Sensor
Power Restoration	Power and Timer Restoration Function in case of power outage
PC Communication Interface	RS-232C PC COMMUNICATION INTERFACE [OPTION]

Safety Data

Safety Device	Sensor short or disconnection AUDIO VISUAL ALARM
	Controller cut-off heater, compressor and AUDIO VISUAL ALARM
	HI-ALARM : +5 $^{\circ}$C above set temp.
	LO-ALARM : -5 $^{\circ}$C below set temp.
	Independent analog thermostat cut-off heater above set temperature
	Door open AUDIO VISUAL ALARM

Material Data

Body	Epoxy Powder Coated Steel
Chamber	Stainless Steel 304 (AISI304)
Inner Glass Door	Tempered Safety Glass, 5 mm thick

Electrical Data

Rated voltage	220 ± 10% VAC
Power frequency	50 / 60Hz
Power Cord	Two for 4 chambers
Heater output	4 x 1.0 kW
Nominal power total	6.8 kW 30.8 amp
Nominal power per plug	3.4 kW 15.4 amp
Phase	1 Phase
Plug configuration	CEE 7/7 Schuko or BS 1363

Usable Condition

Temp. & Humidity	5°C - 40 $^{\circ}$C, < 80% RH

Technical specifications are subject to change without prior notice

Packaging Data

Type of packaging	Wooden Crating
Shipping Dims. (WxDxH mm)	1510 x 960 x 2000
Net Weight	220.0 kg
Shipping Weight	350.0 kg

ORDERING INFORMATION

Art. No.	Descriptions	Voltage
JSMI-04C	**125 L Four Chamber Refrigerated Incubator**	220 VAC 1~ ph 50/60Hz

OPTIONAL ACCESSORIES

Art. No.	Descriptions
PHS-A06	Perforated Shelf, Stainless Steel 304, W470 x D480 mm for JSMI-04
PHS-C05	PVC Coated Wire Shelf, W470 x D480 mm for JSMI-04
PHS-A99	Shelf Support, Set of 4 ea

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