ThermoStat Incubater

EGM-207

ExtraGene,Inc

I. Overview

1.1 Model and Name of Product

EGM-207 ThermoStat Incubater

1.2 Features of Product

a. Controlled with computer, displayed in LED with program storing function; and previously set parameters can automatically be restored after switching on the machine.

b. Precise temperature control and fast temperature rise (about 0.5 ℃/second)

c. Power Failure Resume Function enables automatic operation after power resumes.

d. The module is with plastic case to avoid

scald.

e. Replaceable modules allow easy disman tling. A user can easily replace, clean and sterilize modules.

II. Product Specification

Fast change of temperature, even temperature control, precise temperature, less than 180 seconds for temperature rising from 25℃ **to** 99℃

Average temperature rise rate: 1℃/5s

Temperature setting range: ： 1℃-99℃

Precision of temperature control: ±0.1℃

Temperature evenness: ±0.5℃

Display precision: 0.1℃

Time setting range: 1s-99h 59min, or continuous operation

Heating module sample capacity: 48X0.5ML, 38X1.5ML, 38X2ML, 96X0.2ML, 24X5ML, or other special module made as required by client

Overall dimension: 277×250×132(mm)

Weight: about 3.5Kg

III. Installation

Installation Procedure:

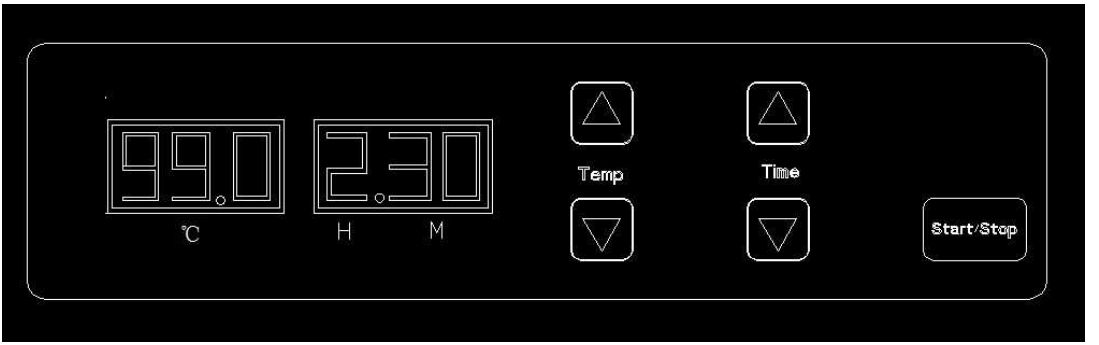
（1） Firm and smooth table should be prepared to avoid vibration or movement of the device during

work.

（2） Power source has separate earth line. Sharing zero line and earth line is prohibited to avoid injury caused by electric shock.

（3） There shall be no interference from corrosive gas and electromagnetic field around the device to avoid premature failure of its protective outer layer and interference to its electrical components.

（4） The device is placed levelly to ensure even loads of four rubber feet.



IV. Operational instruction

Display Window

99.0 is being shown in Temperature Display Window. The window will display set temperature in standby mode, and display actual temperature in operation with display precision of 0.1 and setting range of 1-99.

2.30 is being shown in Time Display Window, meaning operational time of two and a half hours. Hour is shown before decimal and Minute is shown behind decimal. It will constantly be on in standby mode, and its decimal will keep blinking during operation. Timing will start once the temperature reaches preset value. Countdown is shown in Time Display Window, and operation will automatically stop once time is out.

Key

TEMP

▲ —— Add set value of temperature;

▼ ——Drop set value of temperature

TIME

▲ —— Add set value of time

▼ —— Drop set value of time

START / STOP ——Start/ stop operation

V、 Installation and replacement of sample slot module

Sample slot module is assembled on temperature control module. Two locking screws on the modules are used to tighten it. When it is required to replace it with a sample slot module of another specification, a user shall unscrew these two locking screws counterclockwise and take down the module in use, and replace it with a new one by screwing locking screws clockwise. Except for 96×0.2ml module, the locking screws of other sample slot module may not fall off from module after tightening. Operation of the device is prohibited if no sample slot module is assembled.

Ⅵ、 Operational Method

1. Installation

1.1 The table on which the device is placed should be even and rigid. Four rubber feet of the device should fully contact table surface.

1.2 Large space surrounding the device should be kept to allow for air ventilation and direct sunshine should be avoided.

1.3 Power supply please properly use the voltage to meet local charge.

1.4 Check whether **5A** fuse tube is installed in the fuse tube box on the back of the device. New fuse tube of the same specification should be installed if the old one is broken.

Ⅶ Standard Ex-factory Configuration

Standard Ex-factory Configuration of the device: one main unit, one **48x0.5ml** sample slot module, one set of transparent sample

support. Sample slot module of other specification will only be available by separate ordering or replacement.

Ⅷ、 Precautions

1. The table on which the device is placed should be much rigid to avoid sympathetic vibration. Large space should be kept surrounding the device to allow for air ventilation and direct sunshine should be avoided. Four feet of the device should keep stable contact with table surface.
2. Power supply please properly use the voltage to meet local charge. It is strictly prohibited to wrongly use **AC 380V** power supply to avoid apparatus damage.
3. Please replace broken fuse tube with **5A** one.

4. When installing sample slot module, two mating faces should be clean and locking screws should be tightened. Operation of the device is prohibited if no sample slot module is assembled. Transparent sample support can be placed on machine in operation. As it is a design of fast movement and noise will appear when excess rotation speed is set, low rotation speed is preferred when using transparent sample support.
5. Check and make sure mating of the centrifugal tube in use with pipe hole of sample slot module is good; if not, replace it with a quality centrifugal tube meeting specification.
6. Sample slot module should be placed at a dry place with good ventilation. If in

use the pipe hole of module accidently contacts sample liquid, it should be rinsed with water and dried by airing to avoid corrosion of the module. Sample slot module should be cleaned and sterilized with neutral cleaner to avoid cross-infection.

7. The mixing frequency of sample slot module should not be higher than allowable maximum mixing frequency. In case of trace mixing, high frequency is not the sole determinant of perfect mixture.

8. Operational parameters should be set in standby mode. Program parameters should not be modified during operation. The countdown will start once preset temperature is reached.

9. Our company should be contacted for check or repair if there is any failure in control system.