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Safety Notes

Basic Operating Precautions

These operating instructions describe Heratherm incubators.

Heratherm incubators have been manufactured to the latest state of the art and have been tested thoroughly for flawless functioning prior to shipping. However, the incubator may present potential hazards, particularly if it is operated by inadequately trained personnel or if it is not used in accordance with the intended purpose. Therefore, the following must be observed for the sake of accident prevention:

- Heratherm incubators must be operated by adequately trained and authorized professional personnel.
- Heratherm incubators must not be operated unless these operating instructions have been fully read and understood.
- The present operating instructions, applicable safety data sheets, plant hygiene guidelines and the corresponding technical rules issued by the operator shall be used to create written procedures targeted at personnel working with the subject matter device, detailing:
 - the decontamination measures to be employed for the incubator and the accessories used with it,
 - the safety precautions to be taken when processing specific agents,
 - the measures to be taken in case of accidents.
- Repair work on the incubator must be carried out only by trained and authorized expert personnel.

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Thermo Scientific Heratherm 1-1

Explanation of Safety Information and Symbols

Thermo Scientific Heratherm 1-3

Safety Notes Intended Purpose of the Incubator

Thermo Scientific 2-1



Installation

Ambient Conditions

Location Requirements

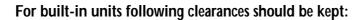
Built-in units of incubators can, heating and dryin

Thermo Scientific Heratherm 3-1

- · Avoid direct exposure to sunlight.
- Devices that produce excessive amounts of heat must not be placed near the incubator.
- The table-top incubator should not be operated directly on the floor of the lab, but must be placed on a substructure (optional: must be ordered separately). This prevents the penetration of dust or dirt into the device.

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Space Requirements



A, B, C and D see Operating Instructions of the unit.

Installation Built-in Units

When installing the incubator, make sure that the i

Thermo Scientific Heratherm 3-3

Table-top units

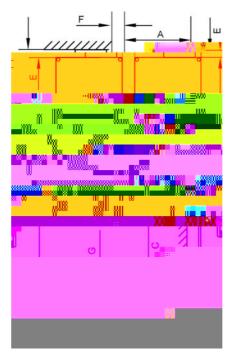


Figure 3-1 Table-top Incubators, dimensions and required clearances

Table 3-1 Incubator Dimensions

Model	A (mm/inch [*])	B (mm/inch)	C (mm/inch)	D (mm/inch)
IGS 0	0/20.1	/22.2	20/2 .	0/21.
IGS 100	0/2 .2	/22.2	20/ 2.	0/2 .
IGS 1 0	0/2 .2	/2 .1	20/ .2	0/2 .

^{*}Dimensions in inches are rounded equivalents specified for information only. Depth of handle /display (66 mm/2.6 in) not included in overall depth specified; height of adjustable feet (36 mm/1.4 in) not included in overall height specified.

Table 3-2 Required Clearances

E (mm/inch)	F (mm/inch)	G (mm/inch)	H (mm/inch)	
0/ .1	0/2.0	200/ .	00/11.	

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Installation Space Requirements

750 liter units

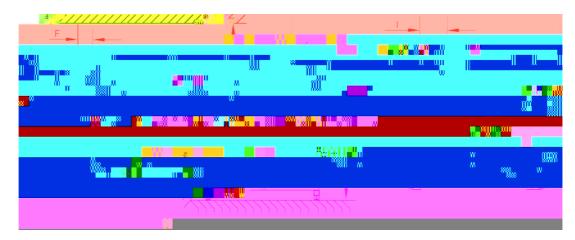


Figure 3-3 Floor Stand Incubators, dimensions and required clearances

Table 3-5 Incubator Dimensions

Modè	A ne-	B ne-	C ne-	D ne-
IGS 0	121 / .	0 / 0.	1 / .2	0/2.

^{*} Depth of handle /display (66 mm/2.6 in) not included in overall depth specified. Width of hinge (23 mm) not included in overall width.

Table 3-6 Required Clearances

E			
120/ .	0 / 2.0	200 / .	0/1.

3-6 Heratherm Thermo Scientific

Transport

Table-top units

For transport, do not lift the incubator using the doors or components attached to the incubator as lift points.

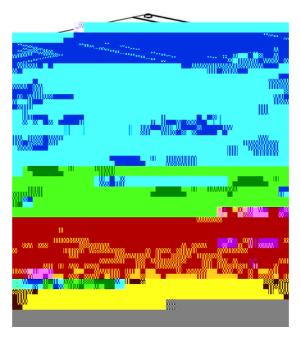


Figure 3-4 Lift Points



Heavy loads! Lift with care!

To avoid injury through physical strain, such as strain traumata and slipped discs, do not attempt to lift the incubator alone! To avoid injury through dropped loads, be sure to wear Personal Protection Equipment, such as safety shoes, when lifting the incubator.

To avoid crushing your fingers or hands (particularly in a closing door) or damaging the incubator, do not use any other lift points than those indicated in the illustration above.

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Floor Stand Units

The floor stand units come equipped with four (4) casters. The lever for releasing the caster is located above the locking lever. After positioning the unit in its installation location ensure that the locking levers are pressed down on the casters.

To ensure the degree of stability specified by safety requirements the front casters must be turned so that they are facing forward after the unit has been positioned in its installation location and the locking levers pressed down on these casters.

Danger of tipping when moving!

Before moving the unit, ensure that it has been unplugged.

Move the Heratherm floor stand units with caution.

Quick starts and stops can result in tipping!

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Stacking kit

The stacking adapter is available only for table-top units.

Scope of delivery.

- 1 Stacking adapter
- 1 Anti-tilt anchor
- 1 Plastic bag with 2 stacking feet and 2 M4x16 Torx screws.

Required Tools

Slotted screwdriver 5,5x100 or Torx screwdriver 20x100.

Installing the Stacking Feet

Remove the left and right blank plugs at the topi 5CCzMM ktin

athe Itacking feet 5ig

Thermo Scientific Heratherm 3-9

Take the anti-tilt anchor, bend the fixing brackets one side down in and the other side up in an angle of approx. 90°.

- 1. Do not use position at hinge side
- 2. Preferred position.
- 3. Alternative position at handle side

Remove the bracket screws. Use preferred position, if possible.

Fix the anti-tilt anchor with the bracket side down to the unit.

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Risk of overheating with stacked devices

To avoid the risk of electrical components and the outer enclosure overheating or temperature control failing due to insufficient ventilation, do not exceed the specified stacking height!



Risk of tipping and dropping of stacked devices

You should be aware at all times that stacked devices do not form a stable unit, even when the stacking pads and frames are correctly used. The top device may tip over and drop down when being transported in a stack. To avoid injury to persons and damage to equipment, do not attempt to move stacked devices as a unit! Separate and move each device one by one, then restack them.

Floor Stand Units



Heratherm floor stand units must always be attached to the wall using two (2) retaining brackets on the outer left and right side on the back of the unit.



Remove the screws.

Attach the end of the retaining bracket that is facing downward to the unit.

Align the device at roughly 90°, +/-20° to the retaining bracket.

Affix the retaining bracket to the wall.

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Installation

Product Description

This section describes IGS Series Heratherm general protocol microbiological incubators for standard laboratory applications.

Heratherm IGS Series Incubator Overview

IGS Series general protocol microbiological natural convection incubators come equipped with the following features:

- high-precision work space temperature control, adjustable in steps of one-tenth of a degree up to 75 °C (167 °F)
- · two perforated shelves.
- access port for table top units
- · inlet and exhaust air tube for floor stand units

The individual features of IGS Series incubators are shown in the figures below.

Thermo Scientific Heratherm 4-1

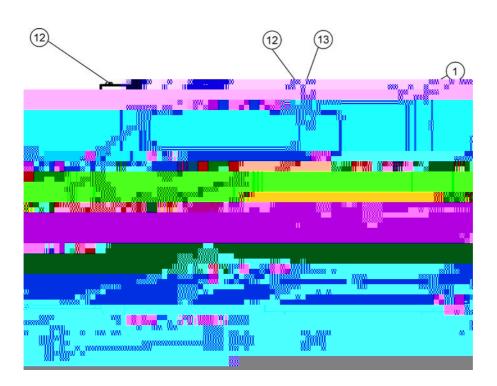


Figure 4-1 Heratherm IGS 60/IGS 100/IGS 180 Front View

- [1] Outer door
- [2] Door latch cutout
- [3] Door latch and handle
- [4] Door hinge, lower
- [5] Levelling foot
- [6] Nameplate
- [7] Perforated shelf
- [8] Support rail for perforated shelf
- [9] Shelf support
- [10] Door hook catch
- [11] Door seal
- [12] Stacking pad
- [13] Glass door
- [14] Temperature sensor

4-2 Heratherm Thermo Scientific

Figure 4-2 Heratherm IGS 60/IGS 100/IGS 180 Rear View

Thermo Scientific Heratherm 4-3

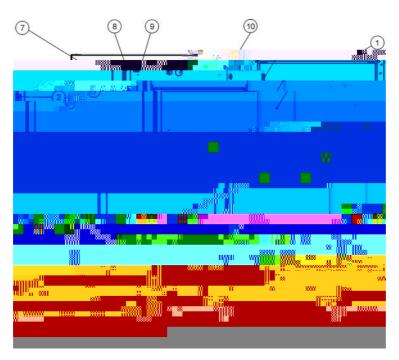


Figure 4-3 Heratherm IGS 400 Front View

- Outer door [1]
- [2] [3] Door latch
- Unit caster
- Air baffle
- Perforated shelf
- Door hook catch
- Glass door latch
- [7] Glass door [8] Temperatui [9] Exhaust air [10] Glass door Temperature sensor
- Exhaust air tube

4-4 Heratherm **Thermo Scientific**

Product Description
Heratherm IGS Series Incubator Overview

4-6 Heratherm Thermo Scientific

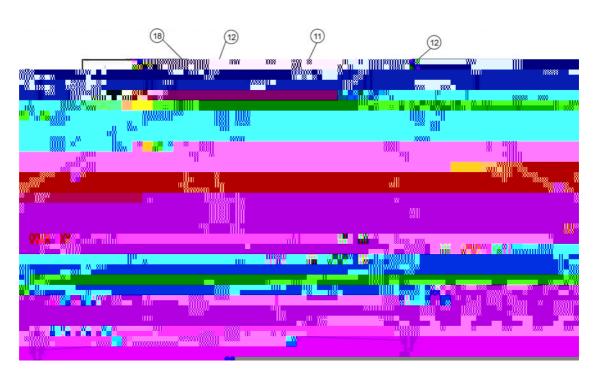


Figure 4-6 Heratherm IGS 750 Rear View

- Outer door [1]
- [2] [3] [4] [5] [6] Unit caster

- [8]
- [9] [10]
- Exhaust air tube
- [12] Anti-tilt anchor
- Electronic compartment [13]

- [15] Hinge, right [16] Door handle
- Display
 Nameplate on sidewall
 Hinge, left [18]
- [19] Hinge, left [20] Inlet air tube

Thermo Scientific Heratherm 4-7

Safety Devices

The incubators are equipped with the following safety features:

- a sample protection feature that safeguards the samples against destruction through overheating in case of contoller failure;
- · dual fuses rated at 16 amperes.

Work Space Atmosphere

To ensure undisturbed operation, the ambient temperature in the operating room must be at lea5:MU4z:xaBW5zU:CCxtB5zzEE:x B:8ttC=xl4C58M:MjxlBU5j4j8(MjxlBjCBWEC8x1B3E58C44)

4-8 Heratherm Thermo Scientific

The unit features a thermal protection function that is factory-preprogrammed and not

Thermo Scientific Heratherm 4-9

AC Power Socket

The incubator is connected to the AC supply mains via the socket (item 4 in figure 4-9), which accepts a power cord with an IEC standard plug.

Fuses

Two 16 A slow-blow fuses mounted on the incubator's

4-10 Heratherm Thermo Scientific

Shelf System

The incubator is supplied with two perforated shelves. The shelf support rails [1] have an alternating pattern of oblong and round perforation

Thermo Scientific Heratherm 4-11

Tube Access Ports

Heratherm incubators may be equipped with additional tube access ports in the side and top panels.

Available tube access port options are listed in Table 4-1 below.

The tube access ports are mounted in fixed locations in the side and top panels (see figure 4-11).

Figure 4-11 Tube Access Ports

- [1] Top panel mounted tube access port
- [2] Side panel mounted tube access port
- [3] Sealing cap for side panel mounted tube access port

Once the cables, tubes or other conduits have been inserted, the tube access ports must be padded with the heat-resistant fiber pads shipped with the device and the cap must be

4-12 Heratherm Thermo Scientific

5-1

Start-up

Installing the Shelf System for Table-top Units

The installation of the shelf system does not require any tools. The support rails are secured in place by spring action. Once the shelf support have been inserted into the rails, the perforated shelves can be simply pushed onto their support hooks to complete the installation.



Initial Installation

- 1. Peel off the protective foil from the support rails.
- 2. Push the retaining spring [1] into the guide on the support rail [2], making sure that the locking nub [3] on the retaining spring safely engages with the matching hole in the support rail.

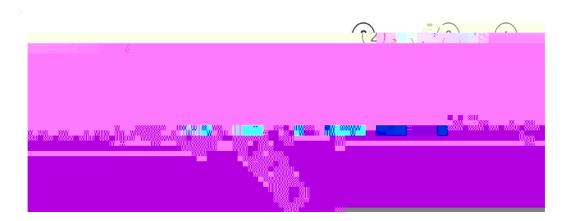


Figure 5-1 Sliding the Retaining Spring into the Support Rail

Thermo Scientific Heratherm

Start-up Installing the Perforated Shelves

5-2 Heratherm Thermo Scientnn

Thermo Scientific Heratherm 5-3

Installing/Removing air baffles

The section below describes how to install/remove the bottom plate.

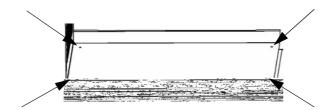


Figure 5-6 Removing the bottom plate

1. Loosen and remove the four (4) screws in the bottom plate and then remove the bottom plate completely.

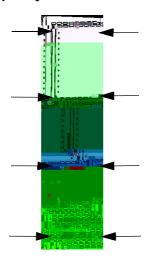
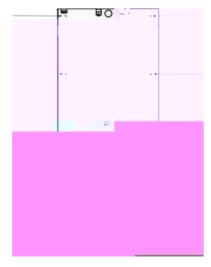


Figure 5-7 Removing the left and right support profiles

Loosen and remove the eight (8) screws for the left and right support profiles and then take out the lateral air baffles.



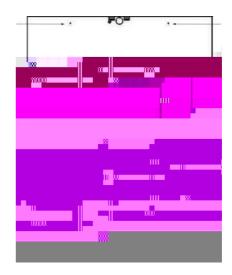


Figure 5-8 Removing the rear air baffle IGS 400 / 750

On the IGS 400 model loosen and remove the six (6) screws for the rear air baffle and for model IGS 750 loosen and remove the six (6) screws for the top and bottom air baffles and then remove the air baffle(s).

Thermo Scientific Heratherm 5-5

Levelling the Table-top Incubator Unit

- 1. Position a bubble level onto the center shelf.
- 2. Manually adjust the levelling feet until the shelf is horizontally aligned in all directions. Perform the adjustment of the levelling feet from left to right and from rear to front.

Connecting Power

The incubator has a class I, protection-earthed enclosure. To minimize the risk of electrical shock, use the AC power cord supplied to connect the incubator to a correctly installed and protection-earthed power supply source, with the following features in place for each incubator:

- T 16 A slow-blow fusing
- B 16 circuit breaker

Connecting to the Power Supply Source

1. Before connecting the incubator to the power source, check to see if the power supply voltage corresponds with the specifications on the nameplate on the front of the incubator.

5-6 Heratherm Thermo Scientific

Keep the power outlet accessible! To allow a rapid disconnection of power in case of an emergency, make sure that power outlets remain freely accessible at all times!

Figure 5-9 AC Power Supply Socket

Note The alarm contact is not functional with IGS Series incubators. If you have a need for alarming, please contact Thermo Scientific Customer Support for advice.

Condensation
When taking the incubator into operation for the first time allow some time before switching on for stabilization to avoid condensation forming on live parts.

Connecting the RS-232 Interface

The RS-232 data communication interface supports the querying of status information and temperature data from the incubator by entering basic commands in a standard terminal window provided by your computer's operating system. The interconnection requires a standard RS-232 cable with 9-pin connectors and a straight "1:1" pinout without any crossed wires, which is not supplied with the incubator.

Users may employ the RS-232 command inventory listed in table 5-1 below for automating process data logging - for example, by embedding these commands in scripts that run on a remote computer.

Thermo Scientific Heratherm 5-7

Interconnecting the Incubator with a Computer

- 1. Turn the computer off.
- Route the serial interface cable along a path that does not cross hot exhaust air piping, tables, aisles or passageways.With stacked devices, keep the serial interface cable away from hot spots on the other incubator in the stack.
- 3. Connect one connector of the serial interface cable (cable length, 5 to max. 10 m, not supplied as a standard item) to the socket labeled 3 in the computer and alarm interface section at the rear of the incubator (see "Signal Interfaces and Power Socket" on page 4-9).
- 4. Connect the second connector to an unused COM 1 /COM 2 or other serial port on the computer.
- 5. Boot the computer.
- 6. Launch your standard terminal program and set up

5-8 Heratherm Thermo Scientific

You will receive a response of the following general format:

!aaaa bb XXXXX cc CR , where:

- —! identifies the line as a response to a query;
- aaaa is the parameter address entered with the query;
- bb. is the number of payload bytes in hexadecimal code for example, 1F for the decimal value 1;s
- XXXXXX is the significant status information queried;
- cc. is a check sum (technically an inverted XOR of all bytes returned, excluding the check sum bytes and the <CR> character);
- CR is for carriage return.

Table 5-1 Terminal Commands for Querying Data

Thermo Scientific Heratherm 5-9

Start-up Connecting the RS-232 Interface

5-10 Heratherm Thermo Scientific

Operation

Preparing the Incubator

The incubator must not be released for operation before all major start-up activities have been completed (see chapter 5, "Start-up.").

Device Check

Prior to starting operation, the following incubator components must be checked for their correct function:

- The door seal in the front frame must not be damaged.
- The glass door must not be damaged.

Thermo Scientific Heratherm 6-1

Hot surfaces

The screen of the glass door, the interior panel of the outer door as well as the surfaces of the shelving and the work space become hot while the incubator is running through its heating cycles and need some time to cool down.

When removing samples from a running or recently completed heating cycle, always wear safety gloves and other appropriate personal protectiiriiria t cyrallnd br wei

6-2 Heratherm Thermo Scientific

Table 7-3 Menu Bar Icons

lcon	Function
	Settings Invokes a submenu with the following functions - Read access to error log - Calibrating the incubator - Toggling the temperature display unit between \$\mathbb{C}\$ and \$\mathbb{F}\$ - Entering a configuration control code (Instructions: "Settings on page -11)
	Readiness Indicator Illuminated when the incubator has been switched off using the On/Off button (item K in figure -1). Unlike other menu items, this icon cannot be selected. (Instructions "Switching the Incubator Off / Powering Down* on page -)

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Powering Up

1. Plug the power plug of the incubator into a suitable protection-earthed AC power outlet.

In the display window on the front panel the readiness indicator icon (rightmost icon in the menu bar at D2 in figure 7-1 on page 7-1) is illuminated.

2. Keep the On/Off button depressed for two seconds.

An initialization routine will be run after the incubator has been powered up. On completion of the initialization, the display will light up and the current work space temperature will appear in the temperature display field (item D1 in figure 7-1 on page 7-1). The incubator is ready for use now.

Switching the Incubator Off / Powering Down

1. Keep the On/Off button depressed for two seconds.

The display window goes out, except for the readiness indicator icon (rightmost icon in the menu bar at D2 in figure 7-1 on page 7-1) and a residual heat temperature rea

Thermo Scientific Heratherm 7-5

Table 7-6 Setting a Countdown-type On Timer

Press to activate the menu bar, then use to select the Timer icon and press to confirm.
Press to select the on timer option On , then to confirm.
The words turn and On are flashing alternatingly in the multifunctional display pane.
Press to select the on timer option and confirm the
selection with .
Set the hours and minutes until the incubator is supposed to
turn on by pressing or , then press to confirm.
The incubator switches off. The display goes out, the Timer icon is illuminated in the menu bar with a rotating hand on its face. Additionally, the readiness indicator icon is illuminated.

Stopping a Timer

7-8 Heratherm Thermo Scientific

Handling and Control Timer

Thermo Scientific Heratherm 7-9

Power Outlet

This menu item (IMH Series only) toggles the built-

7-10 Heratherm Thermo Scientific

Settings

The Settings menu item opens a submenu populated with various commands for viewing general status information on the Heratherm unit and setting for the operation of the incubator or its display window:

- Read access to error log
- Calibrating the incubator
- · Toggling the temperature display unit between °C and °F
- Entering a configuration control code

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Handling and Control

Press to switch to the CAL(ibration) menu item.

Press to confirm the selection.

The option USEr now appears in the display.

Press to confirm the selection.

In the settings dialog that appears, set the temperature

Temperature Display Unit

The Settings - C / F menu item allows for toggling the incubator used for displaying temperatures between degrees Centigrade and Fahrenheit.

Note This setting does not have any impact on data logging via the RS-232 interface. Any temperature data that is logged to a computer for operational parameter documentation purposes is handed over in °C.

Thermo Scientific Heratherm 7-13

Handling and Control Settings

7-14 Heratherm Thermo Scientific

Shut-down Shutting the Incubator Down

8-2 Heratherm Thermo Scientific

Cleaning and Disinfection

Cleaning

Cleaning Exterior Surfaces

Remove dirt residues and depositions thoroughly using a solution of lukewarm water and commercial detergent.

Wipe the surfaces clean using a clean cloth and clear water.

Then, wipe the surfaces dry using a clean cloth.

Wipe / Spray Disinfection

Thermo Scientific Heratherm 9-1

Cleaning and Disinfection Predisinfection

Recommendations for decontamination

9-4 Heratherm Thermo Scientific

Maintenance

Maintenance and inspection at regular intervals of the features and components listed below are mission-critical to maintain the product in a fully operative and safe condition and avoid malfunctions due to ageing and wear. Failure to perform maintenance on a regular basis may result in:

• deviations in heating performance

Thermo Scientific Heratherm 10-1

To minimize temperature variations during the measurement, put the measuring sensor in an isothermal container (such as a bowl filled with glycerol) before placing it in the work space. Use the center of the work space as the reference location for the comparison measurement.

Comparison Measurement Procedure

- 1. Turn the incubator on using the power switch.
- 2. Set the temperature set value and allow the incubator to stabilize. This may take several hours.
- 3. Place the measuring device in the center area of the work space. Alternatively, a

Thermo Scientific Heratherm 10-3

Replacing the Door Seal

The door seal of the outer door is located in the retaining slot.

The door seal should be inspected for any signs of embrittlement at half-yearly intervals.

No tools are required to replace the seal.

Figure 10-1 Door Seal Replacement

- 1. Pull the seal out of the guide slot.
- 2. Starting on the hinge side of the door, position the end of the new seal at the location indicated by the arrow in figure 10-1 above.
- 3. Gently press the seal into the slot, working around the circumference of the door. In corner areas in particular ensure that the seal lip is installed without any wrinkles and that

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Returns for Repair

Prior to returning any materials, please contact our Customer Service Department for a "Return Materials Authorization" number (RMA).

Material returned without an RMA number will be refused.

Contamination hazard

The incubator may have been used for treating and processing infectious substances, which may have caused contamination of the incubator and its components.

Prior to return shipment, it is therefore mandatory that all incubator components be properly decontaminated..

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Maintenance Returns for Repair

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Disposal





Contamination hazard

The incubator may have been used for treating and processing infectious substances, which may have caused contamination of the incubator and its components.

Prior to disposal, it is therefore mandatory that all incubator components be properly decontaminated.

Clean the incubator components thoroughly, then disinfect or decontaminate them (depending on application).

Attach a declaration of decontamination with details on decontamination activities performed to the items that are to be disposed of.

Overview of Materials Used

Component	Material		
Thermal insulation components	Glass wool		
Printed circuit boards	Coated electrical components contain various plastics materials. Components mounted on circuit boards containing epoxy resin bonder.		
Plastic components, general	see material labelling		
Exterior housing	Galvanized steel sheet, painted		
Device rear panel	Galvanized steel sheet		
Outer door	Galvanized steel sheet, painted, + stain- less steel (optional)		
Door inner panel	Stainless steel		
Control panel and display window protective foil	Polyethylene		
Heater	Silicone-sheathed resistance heater wires		

Thermo Scientific Heratherm 11-1

Interior containers, installed compo-

nents and shelves

Silicone

Door frame seal

Glass screen

Sodium silicate glass

Stainless steel 1. 01 + 1. 01

11-2 Heratherm Thermo Scientific

Error Codes

The table 12-1 below lists the error messages that may appear in the control panel display window (see "Error Log" on page 7-11) and provides instructions for clearing such alarms.

Table 12-1 Heratherm Incubator Error Codes

Error Message & Code	Root Cause	Alarm Response	Alarm Clearing Instructions*
Display Error (E002)	Display communication error. The built-in controller was unable to restore communication with the control panel.	Audible alarm activated, message shown on display. Reset after 0 s.	

Thermo Scientific Heratherm 12-1

Incorrect voltage (E01)	The applied voltage is too high or too low.	Audible alarm activated, error message shown on display.	Apply the correct voltage as indicated on the name- plate and acknowledge the error.
Sensor Error (E100)	The actual measured value is out of range.	Audible alarm activated, message shown on display. Control transferred to reference sensor. If both sensors are defective, disable all control circuits.	Call service.
Temperature Too High (E101)	Actual measured value exceeds permissible range. The Triac is defective.	Process protection activated, control continues on set value. Audible alarm activated, E101 message shown on display.	If the error occurs repeatedly, call service.
Temperature Not Plausible (E10)	The difference between the control and reference sensors exceeds the maximum permissible deviation, rendering the measurement implausible.	Device uses the sensor that indicates the higher	

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Heating Triac Error (E110)

The voltage measurement has indicated a defect in

the triac

Audible alarm activated, message shown on display. Overheat protection activated to prevent destruction of the samples. Audible alarm returns upon acknowledgement.

Call service and switch the device off.

Temperature Too High (E111)

The actual measured value exceeds the upper limit of the permissible error range.

Audible alarm activated, message shown on display. Heater turned off until

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Error Codes

12-4 Heratherm Thermo Scientific

Technical Data

The technical data are valid only for an empty device equipped with three shelves, a spray-painted outer enclosure and a power line voltage 120 V/60 Hz. Options may have an impact on the specified performance.

Table 13-1 Technical Data - IGS Series - Table-top Units

Parameter	Unit	IGS 60	IGS 100	IGS 180
Process				
Work space atmosphere Min.	6 C/ 6 F	Ambient temperature plus SC/ 18F	Ambient temperature plus SC/ 18F	Ambient temperature plus SC/ 1SF
Max.	S C/ S F	6 C/1 6 F	S C/1 S F	9 C/1 9 F
Temperature deviation from set value at SC				

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Technical Data

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Heat-up time (work space unoccupied, from min 65 25 °C (77 °F) to 98% of set temperature of 37 °C/99 °F)

Recovery time (work space unoccupied, H

Thermo Scientific Heratherm 13-3

Table 13-2 Technical Data - IGS Series - Floor Stand Units

Parameter	Unit	IGS 400	IGS 750			
Noise level	dB(A)	no inherent noise				
Degree of pollution as per IEC EN 1010-1		2				
Site conditions						
Maximum altitude above sea level	m/y ASL	200	0/21			
Minimum side clearance	mm/in	0/2				
Minimum front clearance	mm/in	10 / 1. 0 / 2 .2				
Minimum back wall clearance	mm/in	120/ .				
Minimum top clearance	mm/in	200/ .				

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Spare Parts and Accessories

M ⊠er \ No	De cr pMon
50126665	Stacking adapter Heratherm 60L
50126666	Stacking adapter Heratherm 100L
50126667	Stacking adapter Heratherm 180L
50127146	Fresh air filter IMH / IMH-S

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50127450	Upper door hinge for Heratherm incubators and heating & drying ovens
50127451	Lower door hinge for Heratherm incubators and heating & drying ovens
50127455	Outer door for Heratherm IGS 100, IMH 100, IMH 100-S, OMS 100, OMH 100, OMH 100-S, OGS 100, OGH 100 and OGH 100-S with a door stop on the right side
50127456	Outer door for Heratherm IGS 180, IMH 180, IMH 180-S, OMS 180, OMH 180, OMH 180-S, OGS 180, OGH 180 and OGH 180-S with a door stop on the right side
50127457	Kit operating panel Heratherm General Protocol incubators and heating & drying ovens
50127458	Kit operating panel Heratherm Advanced Protocol and Advanced Protocol Security incubators and heating & drying ovens
50127461	Kit electronic insert Heratherm General Protocol incubators and heating & drying ovens
50127462	Kit electronic insert Heratherm Advanced Protocol and Advanced Protocol Security incubators and heating & drying ovens without main board fan.
50127463	Mainboard cable for Heratherm incubators and heating & drying ovens
50127468	Glass door hinges for Heratherm incubators
50127469	Door switch for the right side of Heratherm incubators and heating & drying ovens
50127470	Door switch for the left side of Heratherm incubators and heating & drying oven

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50127511	Kit fan system Heratherm IMH 60 IMH 60-S, OMH 60 and OMH 60-S, IMH 100, IMH 100-S, IMH 180 and OMH 180-S, 120 V.
50127515	Kit Heating coils IMH 230 V
50127531	Circulation fan IMH / IMH-S D = 160 mm (6.3 inch), H = 28 mm (1.1 inch)
50127555	Kit fan system Heratherm IMH 60 IMH 60-S, OMH 60 and OMH 60-S, IMH 100, IMH 100-S, IMH 180 and OMH 180-S, 230 V
50127567	Fresh air filter for IMH, IMH-S
50127741	Support stand with castors for Heratherm 60L
50127742	Support stand with castors for Heratherm 100L
50127743	Support stand with castors for Heratherm 180L
50127764	Wire mesh shelf IGS 60/100/180, IMH 60/100/180, IMH 60/100/180-S, including 2 shelf supports
50127768	Sample sensor for IMH 60-S / IMH 100-S / IMH 180-S
50127770	Stainless steel perforated shelf IGS 60, including 2 shelf supports
50127771	Stainless steel perforated shelf IGS 100, including 2 shelf supports
50127772	Stainless steel perforated shelf IGS 180, including 2 shelf supports
50127773	Stainless steel perforated shelf IMH 60 / IMH 60-S / OMH 60 / OMH 60-S/OMS 60/100/180, including 2 shelf supports
50127774	Stainless steel perforated shelf IMH 100 / IMH 100-S / OMH 100 / OMH 100-S/OMS 60/100/180, including 2 shelf supports
50127777	Stainless steel perforated shelf IMH 180 / IMH 180-S / OMH 180 / OMH 180-S/OMS 60/100/180, including 2 shelf supports
50127861	Retaining springs for Heratherm incubators and heating & drying ovens
50127862	Support rail for Heratherm IGS 60, IMH 60, IMH 60-S, OMS 60, OMH 60, OMH 60-S
50127863	Support rail for Heratherm IGS 100, IMH 100, IMH 100-S, OMS 100, OMH 100, OMH 100-S
50127864	Support rail for Heratherm IGS 180, IMH 180, IMH 180-S, OMS 180, OMH 180, OMH 180-S
50128179	Kit Fuses T2A Incubators 120 V
50128184	Sample sensor connection for Heratherm incubators and heating & drying ovens
50128197	Power socket for Heratherm IMH
50128203	Kit Fuses T2A Incubators 230 V
50128212	Fuse holder for Heratherm IMH
50128237	Kit Key for door handle with lock Heratherm
50128265	Lowenstein holder IGS 100 / IMH 10 / IMH 100-S / IGS 180 / IMH 180 / IMH 180-S
50128683	Drip tray IGS / IMH / IMH-S 60L

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50128704	Kit Anti-tilt anchor			
50128791	Drip tray IGS / IMH / IMH-S 100L			
50128792	Drip tray IGS / IMH / IMH-S 180L			
50128793	Petri dish holder 50 mm (2 inch) IGS 60 / IMH 60 / IMH 60-S			
50128794	Petri dish holder 50 mm (2 inch) IGS 100 / IMH 100 / IMH 100-S			
50128815	Petri dish holder 50 mm (2 inch) IGS 180 / IMH 180 / IMH 180-S			
50128816	Petri dish holder 90 mm (3.54 inch) IGS 60 / IMH 60 / IMH 60-S			
50128818	Petri dish holder 90 mm (3.54 inch) IGS 100 / IMH 100 / IMH 100-S			
50128819	Petri dish holder 90 mm (3.54 inch) IGS 180 / IMH 180 / IMH 180-S			
50128960	Kit Shelving system with glass door lock IGS 60, IMH 60, IMH 60-S			
50128961	Kit Shelving system with glass door lock IGS 100, IMH 100, IMH 100-S			
50128962	Kit Shelving system with glass door lock IGS 180, IMH 180, IMH 180-S			
50130657	Kit Viton door seal 60 L Heratherm			
50130658	Kit Viton door seal 100 L Heratherm			
50130659	Kit Viton door seal 180 L Heratherm			
50134116	Kit Heating coil IGS 400, 750 120 V, centre			
50134117	Kit Heating coil IGS 400, 750 230 V, centre			
50134120	Kit Heating coil IGS 750 120 V, outside			
50134121	Kit Heating coil IGS 750 230 V, outside			
50134122	Kit Heating coil IMH 750 120 V, ring heater			
50134123	Kit heating coil IMH 750 230 V, ring heater			
50134315	Kit DS bus cable cpl 400 / 750			
50134322	Kit glass door cpl 400 HTM			
50134323	Kit glass door ri / le cpl 750 HTM			
50134326	Door gasket 400 L HTM			
50134327	Door gasket 750 L HTM			
50134328	Kit profile gasket 750 L HTM			
50134329	Kit door conn. clips 400 / 750 HTM			
50134333	Kit castors 400 / 750 HTM			
50134334	Kit shelf rac5:EID0000 ch) t shshHTM			
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50135056	Kit glass door hinges cpl 400/750 L HTM
50135058	Kit door lock 750 left cpl HTM
50135059	Kit door lock 750 right cpl HTM
50135060	Door outer casing left HTM 400
50135061	Door outer casing right HTM 400
50135062	Door outer casing left HTM 750
50135063	Door outer casing right HTM 750
50135150	Kit temp sensor cpl HTM incubator floor
50135153	Kit door lock 400 right cpl HTM
50135154	Kit door lock 400 left cpl HTM

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Spare Parts and Accessories

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Device Log

Incubator type:		Part number:		
Serial number:		Service number:		
Location		Operator's note:		
Work carried out	Notes	1	Date	Signature

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Thermo Electron LED GmbH
Robert-Bosch-Straße 1
D - 63505 Langenselbold
P- one
١e
                   Toll free 0800 1 536 376
                   or +49 6184 90 6940
                   Toll free 0800 1 112110
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or +49 6184 90 6940

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