Digital bacteriological incubators “Incudigit”

Natural Convection.
Digital control and display of temperature and time.
Adjustable temperature from ambient +5 °C up to 80 °C.
Stability: ±0.1 °C, up to 37 °C.
Homogeneity: ±0.5 °C, up to 37 °C.
Set error: ±2% of the working temperature, resolution 0.1 °C.
Internal tempered glass door.

Features, Control Panel, Standard and Accessories (see pages 134 and 135).

Safety:
Over temperature cut out incorporated according to the EN.61010 standard.
Adjustable safety thermostat DIN 12880.3.1 fitted.

RS-232 Interface output for a computer, printer or USB adapter.

Standard Equipment
2 shelves and 4 shelf guides.

Models

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Capacity litres</th>
<th>Height / Width / Depth (interior) cm</th>
<th>Height / Width / Depth (exterior) cm</th>
<th>Shelves positions</th>
<th>Power W</th>
<th>Weight Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001246</td>
<td>19</td>
<td>30 25 25</td>
<td>50 60 44</td>
<td>5</td>
<td>150</td>
<td>26</td>
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<tr>
<td>2001247</td>
<td>36</td>
<td>40 30 30</td>
<td>60 65 49</td>
<td>7</td>
<td>225</td>
<td>36</td>
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<tr>
<td>2001616</td>
<td>52</td>
<td>33 47 33</td>
<td>53 82 52</td>
<td>5</td>
<td>250</td>
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<tr>
<td>2001248</td>
<td>80</td>
<td>50 40 40</td>
<td>70 74 59</td>
<td>8</td>
<td>300</td>
<td>54</td>
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<tr>
<td>2001249</td>
<td>150</td>
<td>50 60 50</td>
<td>70 95 68</td>
<td>8</td>
<td>525</td>
<td>75</td>
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</tbody>
</table>

Spares

Shelves and guides.

<table>
<thead>
<tr>
<th>Oven Part No.</th>
<th>2001246</th>
<th>2001247</th>
<th>2001616</th>
<th>2001248</th>
<th>2001249</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guides (2) Set</td>
<td>2000011</td>
<td>2000012</td>
<td>2000012</td>
<td>2000013</td>
<td>2000015</td>
</tr>
<tr>
<td>Shelves</td>
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<td>2000022</td>
<td>2000024</td>
<td>2000023</td>
<td>2000025</td>
</tr>
</tbody>
</table>

Each self requires two guides i.e. one set.

Performance graph of temperature and time.
A. Set at 80 °C: 1 h 12'.
B. Set at 56 °C: 54'.
C. Set at 37 °C: 48'.

Accessories

4120131 USB adapter model.
Pen-Drive included (Memory board) for data storage.

Accessories must be factory installed.

2000016 Digital printer for time and temperature with numerical printout on continuous paper roll, with print intervals from 1 minute to 99 hours.

Ovens, Incubators and Furnaces
OVENS AND INCUBATORS SERIES 2000
MODELS:
- NATURAL AIR CONVECTION, DRYING AND STERILIZATION.
- FAN ASSISTED CIRCULATION, UNIVERSAL APPLICATIONS.
- NATURAL AIR CONVECTION, BACTERIOLOGY AND INCUBATION.
CONTROL: ANALOGUE OR DIGITAL MICROPROCESSOR CONTROL OF TEMPERATURE AND TIME, MODEL DEPENDENT.
COMPLIES WITH THE STANDARDS: DIN 50011 - DIN 58945. REQUIRED FOR HEATING, STABILITY AND HOMOGENEITY.

SAFETY:
STANDARD EN61010. INCORPORATED FIXED OVER TEMPERATURE DEVICE.
STANDARD DIN 12880.2. (CLASS 2 AND 3.1) SAFETY THERMOSTAT CONTROLLER FITTED.

Leading edge technology

COMMON FEATURES
Construction.
1. External case treated with a corrosive resistant epoxy coating.
2. Internal part: Easy to clean AISI 304 stainless steel double chamber, self adjusting door seal and adjustable shelves and guides.
3. Control panel: independent insulated control panel to facilitate all types of instruments, controls and regulators.
4. Adjustable air inlet.
5. Flexible floating door seal, self adjusting that maintains the best possible seal.

Technical Properties.
6. Excellent thermal qualities of the insulation has the optimum performance according to heater capacity and power consumption, with minimal external temperature loss.
7. Independent heating chamber for the heating elements to obtain an even heat distribution and rapid temperature equilibrium and stabilization.

Fan assisted convection models have a turbo fan.
All incubators for bacteriology and cell culture have a second inner door of tempered glass.

Technology from J. P. Selecta:
8. Locking device in analogue temperature controls.
10. Double seal around the chamber to provide a gentle but effective seal.
11. Floating spring door that adjusts the pressure and absorbs the thermal expansion.
12. Adjustable door pressure system closure.

NOTE:
For all models, the values for stability and homogeneity shown are based on temperature conditions with the ventilation closed. The optimum homogenization of temperature within the chamber is based on a reasonable load that does not surpass more than 70 % of the volume of the chamber. The graphic results shown for temperature for each model are based on the above criteria.

Detailed longitudinal cross section.

Original Selecta
Locking device on analogue temperature controls and security.
CONTROL PANELS

Models with Analogue control.
1. Mains switch.
3. Temperature control thermostat.
4. Heating “ON” indicator lamp.
5. Analogue thermometer temperature indicator.
6. Vacant positions for additional accessories.
7. Controllable safety thermostat that disconnects power to the heater in case of a fault in the main thermostat, manual reset (Directive DIN12880.2 class 2 and 3.1) and function signal lamp.

Models with microprocessor control and digital display.
1. Mains switch with “ON” indicator.
2. Temperature mode indicator.
3. Time mode indicator.
4. Display for temperature and time.
5. Operating, “RUN” mode.
6. Delay time state indicator.
7. Push button temperature selector.
8. Push button time selector.
9. Push button “increase” value or parameter.
10. Push button “decrease” value or parameter.
11. Push button Start / Stop.
12. Set temperature.
13. Set run time: time period from 1 minute to 9 hours 59 minutes, or up to 99.9 hours, once the set temperature value has been reached.
14. Set wait time before starting the run, time period from: 1 to 24 hours.
15. RS-232 Interface output for a computer, printer or USB adapter.
16. Controllable safety thermostat (that disconnects power to the heater in case of a fault in microprocessor), manual reset and function signal lamp.

MODEL SUMMARY TABLE

<table>
<thead>
<tr>
<th>Models</th>
<th>CONTERM</th>
<th>DIGITHEAT</th>
<th>DIGITRONIC</th>
<th>INCUBAT</th>
<th>INCUDIGIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE</td>
<td>Drying Oven</td>
<td>Drying Oven</td>
<td>Universal</td>
<td>Bacteriological Incubator</td>
<td>Bacteriological Incubator</td>
</tr>
<tr>
<td>CONTROL</td>
<td>Temperature</td>
<td>Temperature + time</td>
<td>Temperature + time</td>
<td>Temperature</td>
<td>Temperature + time</td>
</tr>
<tr>
<td>DISPLAY</td>
<td>Analogue</td>
<td>Digital</td>
<td>Digital</td>
<td>Analogue</td>
<td>Digital</td>
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<tr>
<td>AIR</td>
<td>Convection natural</td>
<td>Convection natural</td>
<td>Fan assisted</td>
<td>Convection natural</td>
<td>Convection natural</td>
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<tr>
<td>CIRCULATION</td>
<td>natural</td>
<td>natural</td>
<td>natural</td>
<td>natural</td>
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</tr>
</tbody>
</table>

ACCESSORIES

Part No. 2000007 Digital programmable microprocessor. Capacity: 10 programs of 100 segments. Programmable timer: up to 99 hours 59’ 59”. Program repetition: up to 99 times. Programs can also be linked for up to 4 stages. RS-232 interface for data down load to a printer or computer. Suitable for DIGITRONIC.

Part No. 2000010 Digital printer for time and temperature with numerical printout on continuous paper roll, with print intervals from 1 minute to 99 hours. Suitable for DIGITHEAT, DIGITRONIC and INCUDIGIT.

Part No. 2000002 Timer switch 0-120 minutes. Suitable for CONTERM.

Part No. 2000003 Timer switch 0-12 hours. Suitable for CONTERM and INCUBAT.

Part No. 2000009 24 hour programmer with continuous on/off cycling up to every 15 minutes. Suitable for CONTERM and INCUBAT.

4120131 USB adapter model. Pen-Drive included (Memory board) for data storage. Only for RS-232 outlet ovens.