

BIC Cooling Incubators

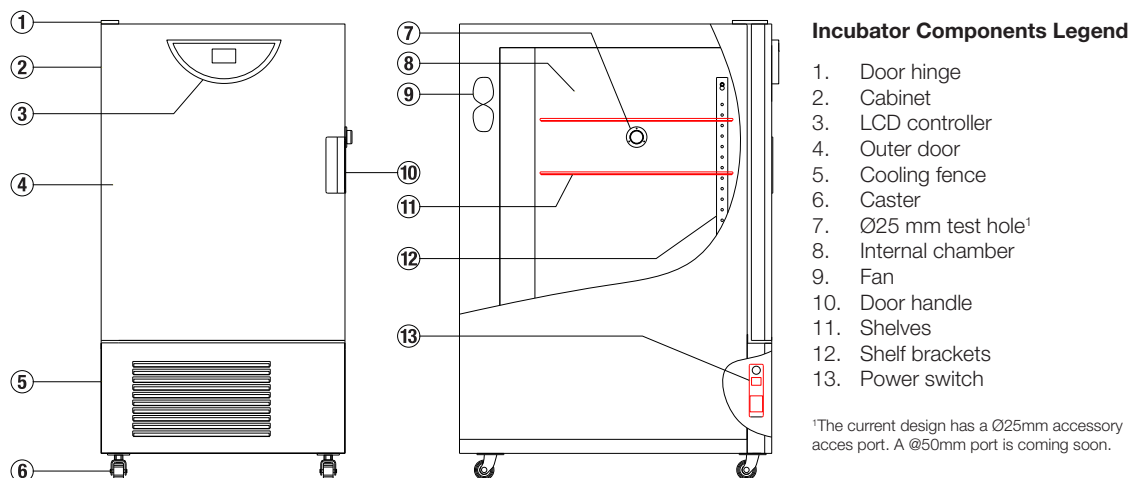


Our cooling incubators are the 'Smart Choice' for storage, studies, and testing.

BEING's BIC Series laboratory cooling (refrigerated) incubators offer one of the largest temperature ranges, -10°C to 80°C, on the market. They are ideal for applications such as culture, serum and medicine storage, plant and insect, fermentation and enzyme digestion studies, tissue culturing, histochemical procedures, dry and staining procedures, and shelf-life and water pollution testing. They are widely used in pharmaceutical, food, chemical, electronics, cosmetics, microbiology, and other industries.

All of our cooling incubators are energy efficient, have excellent temperature regulation capabilities, and come with a host of features that provide safe and easy operation — and are economically priced. They're all designed, manufactured, and tested to the DIN 12880-2007 standard, providing a long service life.

This combination of selection, specifications, features, quality, and value makes BEING cooling incubators the smart choice.



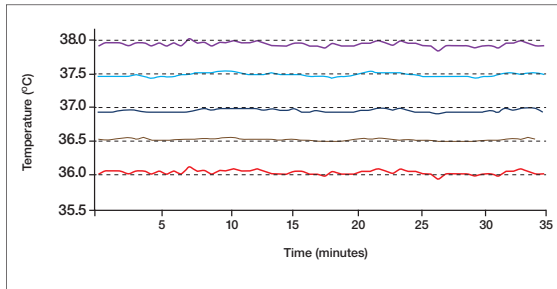
¹The current design has a Ø25mm accessory access port. A Ø50mm port is coming soon.



Precise temperature control

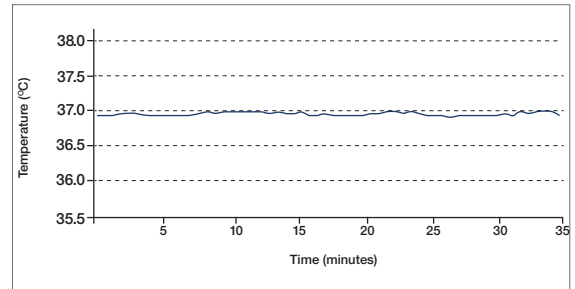
BEING BIC series incubators provide a precise and steady cooling or heating environment that ensures consistent product quality, lowers the chances for rework and helps achieve reliable production results while reducing your laboratory's energy costs by being energy efficient.

Temperature Uniformity



The incubation chamber's temperature uniformly cools or heats samples to within $\leq \pm 1.0^\circ\text{C}$.

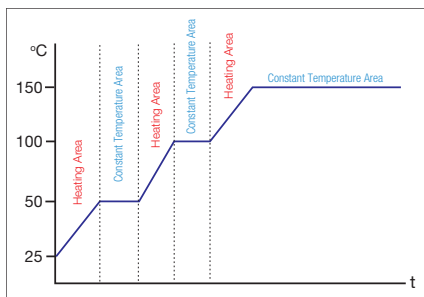
Temperature Stability



With a $< \pm 0.3^\circ\text{C}$ (high temp.) and $< \pm 0.5^\circ\text{C}$ (low temp.) temperature stability BEING ensures experiment stability.

Note: The stability and uniformity are measured at steady-state with an empty chamber according to DIN 12880.

Step Cooling/ Heating Control



In program control mode, the controller allows the operator to set up step cooling and heating control.

| Controller & Safety Feature | | Cooling Convection Incubators |
|-----------------------------|------------------------------|-------------------------------|
| Series | | BIC |
| Controller | Automatic over on/off | √ |
| | PID automatic control | √ |
| | Programmable functions | √ |
| | Fixed-value programs | √ |
| | Multi-step programs | √ |
| | Program cycling | √ |
| | Timed & Untimed | √ |
| | Fan speed - Adjustable | √ |
| | RUN delay | √ |
| Ports | Accessory Access | √ ¹ |
| Safety | Over-temperature protection | √ |
| | Temperature limit protection | √ |
| | Over-current protection | √ |
| | Power off memory | √ |
| | Anti-scalding protection | √ |
| | Audible & visual alarms | √ |

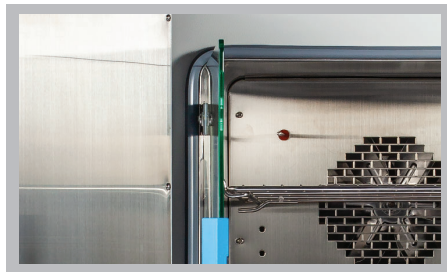
¹The current design has a $\varnothing 25\text{mm}$ accessory access port. A $\varnothing 50\text{mm}$ port is coming soon.

BIC Cooling Incubator Features



Professional LCD Controller

The intelligent controller has a bright, easy-to-understand LCD that shows the incubator's parameters on a single screen, and the pushbuttons allow quick temperature and time settings. It simplifies complicated testing procedures by creating up to 8 multistep programs with 8 steps each. Time can be programmed from 1 minute to 99 hours 59 minutes.



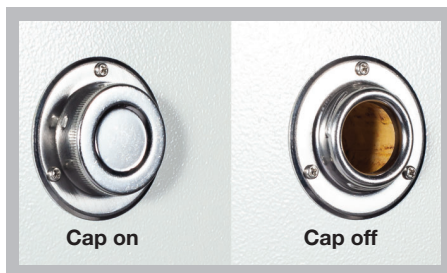
Glass observation door

You and your personnel can regularly monitor the specimens at a glance without impacting the incubating environment through the glass door made of high-strength tempered safety glass. The insulated outer door, in combination with the glass door, provides excellent heat retention.



Energy saving design

Comprehensive safety performance design to prevent high energy consumption. A new silicone door seal prevents heat loss and prolongs the heating elements' life. Compared with traditional equipment, BEING incubators are designed and engineered to **minimize heat loss by 20%, and thermal power is reduced by 25%**.



Accessory access port

Growing cultures and testing experiments often require additional instrumentation in the incubator's chamber. BEING includes a side-mounted, Ø25mm OD port to run your wires.

BIC Cooling Incubator Features



Stainless steel inner liner

Mirror-polished 304 stainless steel lines the BIC's chamber to provide excellent corrosion resistance. The large radius coved corners offer easy cleaning, sterilization, and maintenance while providing optimal air circulation.



Flexible, no tilt shelf design

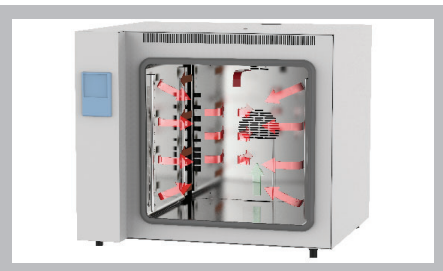
BEING's adjustable wire rack shelf design improves air circulation and maximizes chamber organizational versatility. As you pull out the chrome-plated, 304 stainless steel shelves, BEING's anti-inclination and shelf locking feature lock them in place when reaching halfway, eliminating any shelf tilting and experiment or sample loss, minimizing accidents, and protecting the operator.

Two or three shelves are supplied depending on the model; additional shelving is available if you need more storage.



Circulating fan

The forced-air convection fan has a large impeller with a unique duct design to provide good temperature uniformity by moving the air horizontally across the shelves and a fast recovery rate. The low noise emitting, 3-speed (high-100%, medium-75%, low-50%) fan is either controller adjusted based on temperature difference, or the user can select the appropriate speed for their application. The fan power adjustment saves energy, improves overall equipment efficiency (OEE), and **increases motor service life by up to 30%**.



Chamber air circulation

Ambient air is drawn in through the incubator's back. Pulled over the heating element and blown to the front of the chamber. Reflects off the door and expelled through the exhaust port.

BIC Cooling Incubator Features



Preventing damage from overheating

All incubators have dual overheating protection to prevent specimen and equipment damage. The controller's over-temperature protection is adjustable. It shuts down the heating element and fires an alarm until the temperature drops below the set point if the incubator exceeds the set temperature and the alarm setting. The independent overheating switch is adjustable.



Robust overcurrent and ground-fault protection

Laboratories need their electronic equipment to run precisely; otherwise, overheating can damage their experiments and equipment, shock the user, or cause a fire. All BEING BIC Series incubators are equipped with high-quality circuit breakers to protect against overcurrent, overloads, and short circuits while meeting international electrical standards.



Independent cooling and heating system

BEING cooling incubators are designed with independent cooling and heating systems managed by the controller to provide fast temperature stability and excellent accuracy. The cooling system utilizes a high-efficient refrigeration compressor which **shortens the cooling time by 40%** compared with traditional cryogenic equipment saving energy. It uses eco-friendly refrigerant and has a low noise emission. The heating system is identical to our BIF heating incubators.



Cooling Incubator

| Model | BIC-60 | BIC-120 | BIC-250 |
|--------------------------------------|---|--|---|
| Chamber Volume (ft ³ / L) | 2.4 / 68 | 4.2 / 120 | 8.7 / 247 |
| Temperature Range | 14°F - 176°F / -10°C - 80°C | | |
| Display Resolution | 0.1 | | |
| Temperature Uniformity | ±1.8°F (@77°F) / ±1.0°C (@25°C) | | |
| Temperature Stability | High: ±0.54°F / ±0.3°C Low: ±0.9°F / ±0.5°C | | |
| Shelves (Std. / Max.) | 2 / 10 | 3 / 14 | 3 / 16 |
| Shelves loading (lb / Kg) | 44.1 / 20 | | |
| Net Weight (lb / Kg) | 187.4 / 85 | 220.5 / 100 | 264.6 / 120 |
| Timer (hh:mm) | 00:01 – 99:59 | | |
| Accessory Access Port | Ø25mm ¹ | | |
| Internal Dimension (W×H×D) (in / mm) | 15.8 × 17.7 × 15.0 400 × 450 × 380 | 19.7 × 23.6 × 15.8 500 × 600 × 400 | 21.7 × 29.5 × 23.6 550 × 750 × 600 |
| External Dimension (W×H×D) (in / mm) | 21.5 × 39.4 × 27.2 545 × 1000 × 690 | 26.0 × 45.3 × 27.2 645 × 1150 × 690 | 27.4 × 51.2 × 35.17 695 × 1300 × 890 |
| Refrigerant | R134A | R404A | |
| Electrical Requirement | 120V/60Hz | | |
| Electrical Plug Type | NEMA 5-15 | | |
| Power Consumption | 1300W | 1500W | 1700W |
| Catalog Number | BLC15060U | BLC150120U | BLC150250U |
| Shelf Part Number | P19277 | P19278 | P19279 |

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BEING's portfolio of laboratory equipment includes.

Incubators

BIF Series - Mechanical Convection Incubator
BIT Series - Natural Convection Incubator
BIC Series - Cooling Incubator

Ovens

BOF Series - Forced-air Drying Oven
BON Series - Natural Convection Drying Oven
BOV Series - Vacuum Oven

Shakers

BS Series - Orbital Shaker
BIS Series - Incubated Shaker

Stirrers

BMS Series - Square Plate Heated Magnetic Stirrer

Water Bath

BWB Series - General Purpose Water Bath
BWB Series - Dual Chamber Water Bath
BWS Series - Shaking Water Bath
BPC Series - Heat/Cooling Circulating Bath
BRC Series - Recirculating Chiller

Pumps

V Series - Diaphragm Pumps

Learn more at www.beinglab-usa.com
The 'Smart Choice' for laboratory equipment.

Your local dealer is.

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