

# DB030 INCUBATOR

## DB Series Overview

The DB series chambers are used for a variety of research applications. The DB series laboratory incubators include heating and cooling. These units have lower temperature capabilities than our thermoelectrically cooled units, have associated greater heat removal capabilities, and are ideal for locations where the ambient conditions cannot be controlled very well.

### DB09

The DB09 is a bench top incubator designed to fit on 24" benchtops or stacked with optional racking.

### DB030

The DB030 is a single-door incubator.

### DB034

The DB034 is a single-door incubator designed for maximum capacity while still allowing passage through most commercial doorways.

### DB055

The DB055 is a 2-door incubator.

### DB084

The DB084 is a 3-door incubator.



Featured photo is the DB030 single-door incubator, open door view to show adjustable internal racks and optional chart recorder.



The DB030 single-door incubator, closed door view.



## DB SERIES: INCUBATOR

The DB series incubators include heating capabilities and cooling capabilities. These units excel as general all-round incubators. They have lower temperature capabilities than our thermoelectrically cooled units and have associated greater heat removal capabilities. These units are ideal for locations where the ambient conditions cannot be controlled very well or there is a live heat load - such as for HPLCs, shakers, or other laboratory equipment. These units will also outperform our thermoelectric units where specifications call for fast "open door" recovery times.

Typical optional accessories are Watlow controllers, Honeywell or Partlow chart recorders, 485 communications for PC control, temperature and humidity data logging monitors, full glass doors, windows, blow out panels, full stainless steel interior and exterior, and more shelves.

As always, if you have different dimensions, specifications, probes, microprocessors etc., we can accommodate your needs.

### Performance

Darwin Chambers DB030 model comes standard with a temperature range of 2° C to 60° C with a temperature control of  $\pm 0.2^\circ$  C and temperature uniformity of  $\pm 0.7^\circ$  C.

### Control System

All DB series models comes standard with a Fuji PXG4 (PID - Fuzzy Logic) controller providing a readout of actual and set-point values. This chamber comes with audible and visual alarms, remote monitoring and a numeric password protection. Plenty of alternative customized options are available.

### Construction

Darwin Chambers DB030 model comes standard with a stainless steel front door, and brushed aluminum sides on exterior. Interior is coated aluminum side walls, back, floor, ceiling, and door liner. Full stainless steel construction option available. 3 gray PVC coated shelves are included. All chambers come with a 2" access port. See chart on next page for exact dimensions.

### Options

All DB series offer endless customized options. Common upgrades include stainless steel shelving, interior/exterior, various lighting options including LED, fluorescent, dimming options and microprocessor control of lights, upgraded controllers (West EC-44, Future Design Touchpad, Watlow, Allen Bradley, etc.), and more.

### Services and Warranties

Darwin Chambers Company offers 24 hour technical support throughout the lifetime of your chamber. In addition to standard warranties, we also offer extended warranties for cooling components, parts and labor. We also provide qualifications, validations and preventive maintenance services at an additional cost. Please ask for a quote.

## DB030 Incubator Specifications (ambient 21° C)

Performance	Standard	Customized Option
Temperature Range	2° C to 60° C	Extended Range, Defrost
Ambient Temperature	21° C ± 3° C	
Temperature Control	± 0.2° C	Available
Temperature Uniformity	± 0.7° C	Available
Control Resolution	0.1° C	Available
Temperature Sensor	NIST Traceable Platinum RTD	Available

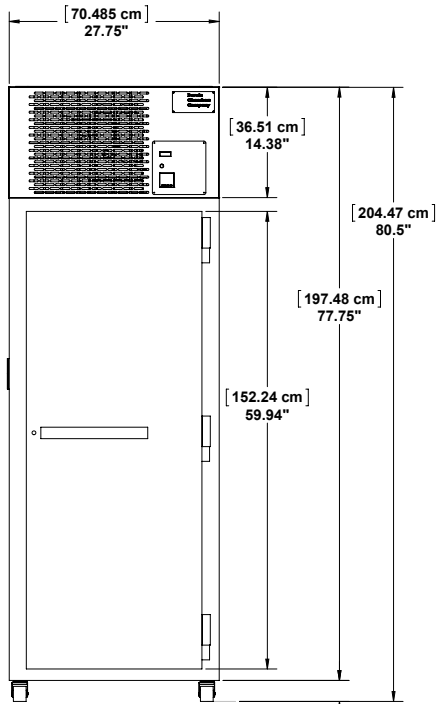
Control System	Standard	Customized Option
Controller	Fuji PXG4 (PID - Fuzzy Logic)	West EC-44, Future Design Touchpad, Watlow, Allen Bradley
Control Readout	Actual and Set-Point Values	Trending, Duty Cycle
Calibration Correction Capability	Standard 0.1 Resolution	Available
Uniformity Off Set	Standard 0.1 Resolution	Available
Alarm	Audible and Visual	Text, Email, Web Server, Remote Access
Alarm Type	Deviation in 0.1° C or 0.1% RH with Delay	Absolute 0.1 Resolution with Delay
Remote Monitoring	Dry Alarm Contact, RS 485 & Analog Output	Ethernet
Password Protection	Numeric	Numeric, Alpha Numeric
Audit Trail	N/A	Available
Uninterrupted Power Supply (Monitoring)	N/A	Available

Construction	Standard	Customized Option
Exterior	Stainless Steel 300 series on front, door and Brushed Aluminum finish sides	Complete Stainless Steel 300 Series, front, door, and sides
Interior	Coated Aluminum side walls, back, door liner, and Stainless Steel floor and ceiling	Stainless Steel 300 Series, side walls, back, floor, ceiling, and door liner
Shelving	2 Stainless Steel Shelves, Supports Up to 150 lbs of Evenly Distributed Weight	Stainless Steel. Chrome Plate
Casters	2.75". Total Weight Capacity is 300 lbs per caster (not including the weight of the chamber)	Available

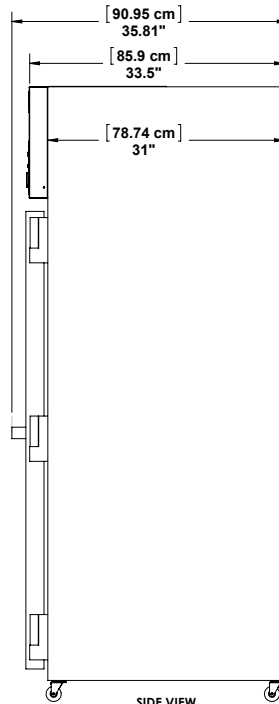
Capacity & Dimensions	US Standard	Metric
Interior Capacity	24 ft <sup>3</sup>	633 liters
External Dimensions	27.75" W x 35.81" D x 80.5" H	70.48 cm W x 90.95 cm D x 204.47 cm H
Internal Dimensions	58.5" H x 22.5" W x 29" D	148.59 cm W x 73.66 cm D x 73.66 cm H
Shelf Dimensions	26.75"W x 22.875"D	54.61 cm W x 66.68 cm D
Crated Weight	605 lbs	275 kg

Electrical	US Standard	International
Voltage	115 / 60 / 1	230 / 50 / 1
RLA	7	3.5 With Step Down Transformer
Cord Length	9 ft	9 ft

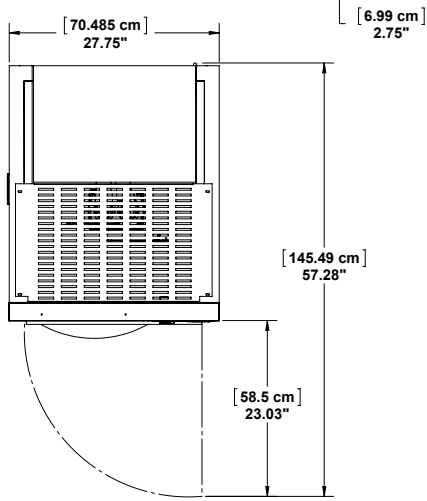
## DB030 Incubator Technical Drawings



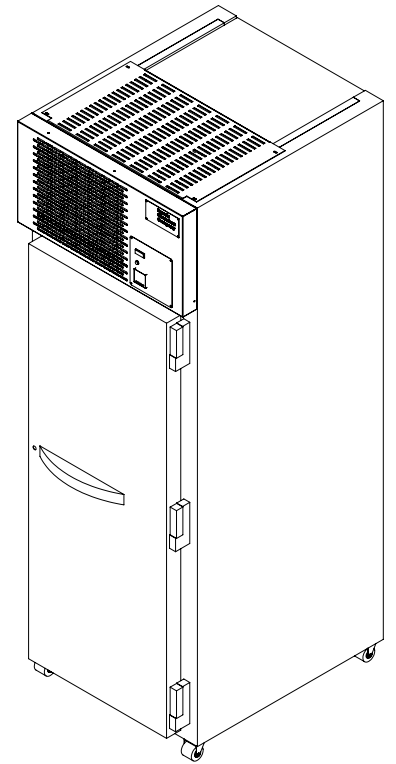
FRONT VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW