# Options

- Window and interior light. Window size is 6" x 8" clear viewing area.
- Access Ports. Sizes are 2", 3", 4" and 6." One 3" access port in the left wall is provided with each chamber.
- Casters, four swivel type are standard.
- Shelf pilasters and wire-type stainless steel shelves.
- LN2 boost cooling with vent for extra cooling is standard.
- GN2 gas purge with pressure regulator, gauge, flow measuring and regulating valved rotameter, and vent.
- Desiccant drier purge with dual tower 10 cfm desiccant drier, pressure regulator, gauge, flow measuring and regulating valved rotameter and vent.
- Four refrigeration gauges (two per compressor) mounted in the refrigeration package available with or without isolation valves.



The FB1.5V-UHC Series with optional window and door open. LN, Boost system is on the side with drip pan.

### Instrumentation

Controls are mounted on a recessed aluminum panel to prevent dripping from damaging the instruments. Available instrument accessories:

- Microprocessor-based, FM Approved high over-temperature safety control.
- Set of two, one high and one low microprocessor-based, FM Approved temperature safety controls.
- Remote control over an Ethernet Link.
- 12 inch, two pen, chart printing, circular recorder.
- Strip chart recorder.





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### **Description:**

Heat and cool in a single compartment at amazing rates with a Bemco FB1.5V-UHC Ultra Shock Temperature Chamber.

Easily maneuverable, this chamber provides an industry leading 2712 cubic inches of workspace.

A long list of available options allows you to modify the chamber for almost any use.

Why settle for the appearance of testing when you can have a system that actually works?

Choose Bemco, the chamber that others only copy.

Contact Us For a Free Quotation or Additional Information

# Environmental Test and Space Simulation Systems

### -73 C to +177 C -100 F to +350 F

# FB1.5V UHC

Compact Ultra Shock Temperature Chamber





# **FB1.5V-UHC Temperature Chamber**



Bemco FB1.5V-UHC control panel with optional high temperature safety control and audible and visual alarm.

The FB1.5-UHC cools and heats at a rate in excess of 75 C per minute. It is capable of heating from -55 C to + 155 C in less than 5 minutes and cooling from +155 C to -55 C in less than 5 minutes, both with the chamber empty.

+ or - 1 C (+ or - 1.8 F) guaranteed control, + or - 0.15 C (+ or - 0.25 F) typical.

Power requirement is 230/115 VAC - 1 Phase - 60 Hertz, 33 FLA. Refrigeration is air cooled. 50 Hertz is available as an option.

All electrical wiring meets the United States National Electric Code. U.L. and CSA approved components are used where possible.

### Conditioning

Chamber air is recirculated by a high volume, nonsparking aluminum axial fan discharging through a removable rear mounted guard and diffuser baffle to create a uniform environment around your test objects.

The fan is driven by a close coupled externally mounted motor with dual ball bearing races, connected by a stainless steel shaft.

4,000 watts of fast-response open type heaters behind a radiation baffle raise chamber temperature as required.

### Cooling

A proportionally controlled cascade, two compressor refrigeration system utilizing modern environmentally friendly refrigerants cools the workspace. The system includes automatic hot gas bypass and suction cooling unloading as well as Bemco's exclusive, high performance coaxial cascade heat exchanger.

All systems have thermal and current sensors on each compressor as well as numerous safety and reliability protection systems for dependable operation. A proportionally controlled liquid nitrogen system boosts the cooling rate as required.

# Construction

FB1.5V-UHC Series chambers include a 304 Series stainless steel welded inner liner with high temperature fiberglass insulation.

No asbestos is used in chamber construction. Outer cases are fabricated from cold rolled steel finished in Bemco Blue.

Chamber doors feature dual gaskets to greatly reduce thermal losses near the door face. An overcenter, black anodized aluminum cam-type latch seals the door.

## Controls

The Bemco FB1.5V-UHC chamber is furnished with a microprocessor based programmable, 1/4-DIN, solid state 256-step ramping controller which includes a 4-line LCD interface display and a large red LED display.

Temperature inside the chamber is sensed by a precision thermocouple. An RS232 and RS485 interface are standard. Heaters are interlocked with a separate heavy duty power contactor and a factory preset high temperature safety control.

Model	Interior	Interior	Interior	Exterior	Exterior	Exterior	Weight
Number	Height	Width	Depth	Height	Width	Depth	Pounds
FB1.5V-UHC	15.5″	14″	12.5″	55.5″	21.5″	29″	285
Air cooled condensing and casters are standard.							

Excellence

Request a Free Quotation or Analysis of your Testing needs. Our experienced engineers are ready to help you.

### **We Deliver**

Bemco chambers really simulate the environments expected. We take your specifications and requirements literally. Our equipment does what we promise and you specify. We are truly focused on Excellence.

### **Combined Environments**

Temperature, Humidity, Altitude, Vibration, Vacuum, Rain, Sunshine, Salt Spray, Sand and Dust, and Gasses. Space Simulation Systems, Walk-in Chambers, Drive-in Rooms, PAO Fluid Chillers, and Air Servos.