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 or back-up cooling.
- 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 FB1.5VN Series with optional window and door partially open.

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.

Bemco Inc.
Focused on Excellence

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805-583-4970
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http://www.bemcoinc.com

Description:

Reduce the floor space needed for reliable temperature testing with a Bemco FB1.5V high and low 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.

Environmental Test and Space Simulation Systems

Contact Us For a Free Quotation or Additional Information

-29 C to +177 C
-20 F to +350 F

FB1.5VN

Compact Narrow Range Mechanically Refrigerated Temperature Chamber

Bemco Inc.
Focused on Excellence

FB1.5VN Temperature Chamber

Bemco FB1.5VN-20/177C with door open

Cooling rate from 23 C (+73 F) to -29 C (-20 F) is approximately 35 minutes and heating rate from 23 C (+73 F) to +177 C (350 F) is approximately 35 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 115 VAC - 1 Phase - 60 Hertz, 20 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, non-sparking 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. Fast-response open type heaters behind a radiation baffle raise chamber temperature as required.

Cooling

A proportionally controlled single stage, one compressor refrigeration system utilizing a modern environmentally friendly refrigerant cools the workspace. The system includes automatic hot gas bypass and suction cooling unloading.

The refrigeration system includes a thermal and current sensor on the compressor as well as numerous safety and reliability protection systems for dependable operation.

Construction

FB1.5V 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 over-center, black anodized aluminum cam-type latch seals the door which closes flush on the front face of the chamber for a smooth appearance.

Controls

Each Bemco FB1.5V chamber is furnished with a microprocessor based programmable 1/4-DIN, solid state, 10 step ramping controller that utilizes an adaptive control algorithm to precisely control chamber temperature. The control features dual 4 digit displays. An advanced control algorithm improves sensor accuracy by more than 50%. Temperature inside the FB1.5V chamber is sensed by a precision thermocouple. An EIA-485 Modbus interface is standard.

Model Number	Interior Height	Interior Width	Interior Depth	Exterior Height	Exterior Width	Exterior Depth	Weight Pounds
FB1.5VN	15.5″	14″	12.5″	55.5″	21.5″	29″	255
Air cooled condensing and casters are standard.							

Environmental & Space Simulation Systems

Excellence

Bemco Inc.

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.