



Half Cube Model 105 Temperature Chamber Specifications

Temperature Range

-40°C to +130°C

Control Tolerance

±0.5°C (±0.2°C Typical) (Measured at the control sensor after stabilization)

Uniformity

±1.0°C (Variations throughout the chamber after stabilization)

Cool Down Transition Time (empty)*

Start Temp		End Temp						
		+23°C	0°C	-10°C	-20°C	-30°C	-35°C	-40°C
+23°C	Standard	----	3 min	5 min	7 min	10 min	13 min	22 min
	50 Hz Export Version	----	3 min	5 min	7 min	11 min	15 min	24 min
+85°C	Standard	8 min	13 min	15 min	17 min	20 min	23 min	31 min
	50 Hz Export Version	9 min	14 min	16 min	18 min	21 min	27 min	41 min

Heat Up Transition Time (empty)*

Start Temp	End Temp		
	+23°C	+50°C	+85°C
+23°C	-----	1.5 min	6 min
0°C	2 min	4 min	7.5 min

-20°C	3 min	5 min	8 min
-40°C	4.5 min	7.5 min	11 min

Rate Of Change

To calculate rate of change for a particular condition, take the difference between the Start Temp and End Temp and divide by the Transition Time.

Cool Down Example (empty): From +85°C to -20°C = 105°C / 17 min = 6.18°C/min.

Heat Up Example: From -40°C to +85°C = 125°C / 11 min = 11.36°C/min.

***Note:** Transition times are measured after a 30 minute soak at the respective start temperature.

Live Load Capacity					
+23°C	0°C	-10°C	-20°C	-30°C	-40°C
200 Watts	175 Watts	165 Watts	145 Watts	90 Watts	10 Watts

Refrigeration and Heating System	
Compressor	1/3 HP Copeland hermetic
Condenser	Air Cooled
Heat of Rejection	3,000 BTUH (maximum rated chamber load at maximum cooling rate from high temperature soak)
Heater Power	500 Watts
Instrumentation	
Temperature Controller	16 steps, 2 profiles, ramp and soak programmable memory. RS-232C interface. Watlow Series 96.
Limit Controller	Independent of temperature controller. User adjustable high and low temperature limits. Shuts down the chamber if limits are exceeded. Watlow Series SD.

Power Requirements	
Input Voltage	Standard Model 105 120 V nominal (110 to 126 VAC), 60 Hz, 1 PH Max Current Draw 10 A, Recommended Minimum Service 15 A
	Export Model 105-EX 230 V nominal (209 to 253 VAC), 50 Hz, 1 PH Max Current Draw 5 A, Recommended Minimum Service 10 A

Physical Characteristics and Safety	
Inside Dimensions	12" W x 9" H x 8" D, 0.5 cubic feet (305 x 229 x 203 mm, 14 liters)
Outside Dimensions (nominal)	16.5" W x 26" H x 20" D (419 x 660 x 508 mm) Door latch adds 2" (51 mm) to width. Circulator motor housing adds 2" (51 mm) to depth in rear
Minimum Installed Clearance	12" (304 mm) from the rear
Access Ports	2" (51 mm) Port on left and right side (two total) Supplied with silicone foam plugs
Weight	Chamber Weight: 114 pounds (52 kg)

Shipping Weight: 140 pounds (64 kg)

NOTE: Performance is typical and based on operation at 23°C (73°F) ambient and nominal input voltage. Designed for use in a normal conditioned laboratory. Operation at higher ambient temperatures will result in decreased cooling performance. Low end limit derates to -38°C when operating above 27°C (80°F) ambient. Operation above 30°C (85°F) or below 16°C (60°F) ambient is not recommended.



Model 106 Specifications

Temperature Range	-42°C to +130°C
Control Tolerance	±0.5°C (±0.2°C Typical) (Short-term variations measured at the control sensor after stabilization)
Uniformity	±1.0°C (Variations throughout the chamber after stabilization)
Heat Up Transition Time (empty)	8.5°C/minute typical

Cool Down Transition Time (empty)*									
Start Temp		End Temp							
		+23°C	0°C	-10°C	-20°C	-30°C	-35°C	-40°C	
+23°C	Standard	----	7 min	11 min	15 min	19 min	23 min	30 min	Ultimate
	50 Hz Export Version	----	8 min	13 min	18 min	23 min	28 min	36 min	
+85°C	Standard	13 min	20 min	24 min	28 min	32 min	36 min	45 min	Ultimate
	50 Hz Export Version	16 min	24 min	29 min	33 min	38 min	43 min	54 min	

Rate Of Change

To calculate rate of change for a particular condition, take the difference between the Start Temp and End Temp and divide by the Transition Time.

Cool Down Example (empty): From +85°C to -20°C = 105°C / 28 min = 3.75°C/min.

***Note:** Transition times are measured after a 30 minute soak at the respective start temperature with an empty chamber, as indicated on the temperature controller, 23°C (73°F) ambient. Measured with setpoint beyond the start and end temperatures. Does not include the effect of proportional band when approaching setpoint.

Live Load Capacity			
+23°C	0°C	-30°C	-40°C
200 Watts	155 Watts	100 Watts	35 Watts

Refrigeration and Heating System	
Compressor	1/3 HP Copeland hermetic
Condenser	Air Cooled
Heat of Rejection	3,000 BTUH (maximum rated chamber load at maximum cooling rate from high temperature soak)
Heater Power	500 Watts
Instrumentation	
Temperature Controller	Watlow F4T Touch Screen Controller with RS-232, Ethernet interface, 4.3" color graphic touch screen. OR... Watlow F4 Controller with RS-232 interface, LED readout of temperature, LCD display of other parameters.
Limit Controller	Independent of temperature controller. User adjustable high and low temperature limits. Shuts down the chamber if limits are exceeded. Watlow EZ-Zone Series.

Power Requirements	
Input Voltage	Standard Model 106 120 V nominal (110 to 126 VAC), 60 Hz, 1 PH Max Current Draw 10 A, Recommended Minimum Service 15 A
	Export Model 106-EX 230 V nominal (209 to 253 VAC), 50 Hz, 1 PH Max Current Draw 5 A, Recommended Minimum Service 10 A
Physical Characteristics	
Inside Dimensions	9" W x 9" H x 13.25" D, 0.62 cubic feet (229 x 229 x 337 mm, 17 liters)
Outside Dimensions (nominal)	23" W x 26" H x 16" D (584 x 660 x 406 mm) Depth with door 16.2" (498 mm)
Minimum Installed Clearance	12" (304 mm) from the rear
Access Ports	4 " (3.83" inside diameter) Port on left side Supplied with silicone foam plug
Weight	Chamber Weight: 124 pounds (56 kg) Shipping Weight: 158 pounds (71 kg)

Sound Level	52 dBA in cooling mode (A-weighted, measured 36" from the front surface, 63" from the floor, in a free-standing environment)
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NOTE: Performance is typical and based on operation at 23°C (73°F) ambient and nominal input voltage. Designed for use in a normal conditioned laboratory. Operation at higher ambient temperatures will result in decreased cooling performance. Low end limit derates to -38°C when operating above 27°C (80°F) ambient. Operation above 30°C (85°F) or below 16°C (60°F) ambient is not recommended.

Due to continuous product improvement, specifications are subject to change without notice.



Model 115

Temperature Chamber



The new TestEquity Model 115 provides full-range temperature testing in a compact floor-standing or benchtop package. Its rugged design includes a variety of standard features, making it an exceptional value.

- ◆ 1.55 Cu Ft Workspace
- ◆ -73°C to +175°C Temperature Range
- ◆ Programmable Temperature Controller
- ◆ RS-232 Interface, Optional GPIB
- ◆ LabVIEW Drivers
- ◆ High/Low Limit Control & Alarm
- ◆ Access Ports on Left and Right Side
- ◆ Viewing Window & Interior Light
- ◆ Reversible Door
- ◆ Non-CFC Cascade Refrigeration
- ◆ Compact Floor-Standing & Benchtop Versions
- ◆ 120V Input
- ◆ Low Maintenance Design
- ◆ Fast Delivery from Stock

Programmable Temperature Controller

Easy to use microprocessor-based controller stores 256 steps in up to 40 profiles. Includes an RS-232C interface.

High/Low Temperature Limit Controller and Alarm

Provides user-adjustable independent protection against excess temperatures.

Viewing Window and Interior Light

Six-pane window minimizes thermal losses.

Shelf

A stainless steel wire shelf ensures proper airflow around your test sample for uniform temperature distribution.

Casters

The Model 115F floor-standing version includes casters to permit easy movement, making the chamber truly portable.

Two 2" Access Ports

Lets you attach wires and sensors to your test sample through both the left and right side of the chamber.

120 Volt Input

Plugs into a standard 120 Volt, 20 Amp outlet.

World's Best Chamber Warranty

Only TestEquity offers a 3-year warranty on parts and 1-year warranty on labor at your domestic site. Our nationwide service network is qualified to do the job right. And we always have replacement parts in stock for immediate shipment.

TESTEQUITY

Easy to Use Programmable Controller

Up to 256 steps can be programmed into as many as 40 nameable profiles. The context sensitive information key and guided steps make profile programming fast and easy. A four-line backlit LCD displays programming, setup, operating and help information. A large LED readout indicates the actual chamber temperature with 0.1° resolution. Internal logic provides refrigeration compressor control for responsive and reliable performance. Includes an RS-232 interface. Optional GPIB interface is available.

High/Low Limit Controller & Alarm

Provides independent protection against excess temperatures. Both high and low limits can be set. The limit controller will shut down the chamber and trigger the audible alarm in the event of an out of limit condition.

Reversible Chamber Door

The chamber door is reversible, allowing the door to open from the left or right side.

Reliability and Safety That's Designed In

Non-CFC refrigerants are used in a cascade (two compressors) configuration. Pressure controls keep the operating pressures within safe limits regardless of load conditions. Liquid injection ensures cool compressor operation during high-temperature cool down for long life. Sequential starting of each compressor reduces the current demand on start-up. Compressors are protected by high/low pressure switches. Care has been taken to use a minimum number of fittings, joints and welds to reduce the possibility of refrigerant leaks.

All electrical control components are UL approved. The nichrome air-heater has a low watt-density and even heat distribution for reliable performance and fast response. A fusible link provides fail-safe protection against thermal runaways, in addition to the microprocessor-based high/low limit controller.

We use a combination of structural foam and fiberglass blanket insulation for a higher combined R-factor than just fiberglass alone. The side and rear panels are removable to permit complete access to the refrigeration system for ease of service and preventive maintenance.

Temperature Range	-73°C to +175°C				
Control Tolerance	±0.2°C				
Uniformity	±0.5°C				
Cool Down Time (empty)					
		End Temp			
Start Temp	+23°C	0°C	-40°C	-55°C	-65°C
+23°C	-----	5 min	20 min	30 min	40 min
+85°C	16 min	25 min	45 min	57 min	69 min
Heat Up Time	5°C/minute typical (empty)				
Live Load Capacity	+23°C	0°C	-40°C	-55°C	-65°C
	300 W	255 W	160 W	110 W	80 W
Input Voltage	120 VAC nominal (110 to 126 VAC), 1 PH, 60 Hz				
Current Draw	Max Current Draw 15 A ; 20 A Service Required				
Line Cord	6' with NEMA 5-20P Plug				
Inside Dimensions	16" W x 12" H x 14" D (1.55 Cubic Feet)				
Outside Dimensions	115B Benchtop	24" W x 44" H x 26" D			
	115F Floor	24" W x 61" H x 26" D			
Installed Clearance	12" from the rear required for ventilation				
Access Ports	2" Port on left and right side (two total)				
Weight	115B Benchtop	Net: 275 lbs; Shipping: 320 lbs			
	115F Floor	Net: 300 lbs; Shipping: 345 lbs			
Sound Level	52 dBA in cooling mode				

NOTE: Performance is typical and based on operation at 23°C (73°F) ambient and nominal input voltage with an empty chamber. Designed for use in a normal conditioned laboratory. Operation at higher ambient temperatures will result in decreased cooling performance. Operation above 30°C (85°F) or below 16°C (60°F) ambient is not recommended.



Model 115B Benchtop Version

Available Options

- ◆ GPIB Interface
- ◆ Additional Shelves
- ◆ Additional Ports
- ◆ 50 Hz Export Version



Model 1007C Temperature Chamber Specifications

Temperature Range	-73°C to +175°C
Control Tolerance	±0.5°C (±0.2°C Typical) (Short-term variations measured at the control sensor after stabilization)
Uniformity	±1°C (Variations throughout the chamber after stabilization)

Cool Down Transition Time*						
Start Temp	End Temp					
	+23°C	0°C	-40°C	-55°C	-65°C	-73°C
+23°C	-----	4 min	18 min	25 min	33 min	Ultimate
+50°C	5 min	11 min	27 min	36 min	45 min	Ultimate
+85°C	13 min	20 min	37 min	47 min	55 min	Ultimate
+150°C	32 min	39 min	58 min	65 min	76 min	Ultimate
Heat Up Transition Time*						
Start Temp	End Temp					
	+23°C	+50°C	+85°C	+125°C	+150°C	+175°C
+23°C	-----	1.5 min	7 min	14 min	20 min	25 min
0°C	1.5 min	3.5 min	13 min	20 min	23 min	31 min
-40°C	6 min	11 min	17 min	24 min	30 min	35 min
-55°C	8 min	13 min	19 min	26 min	32 min	37 min
-65°C	10 min	14 min	21 min	28 min	34 min	39 min

Rate Of Change

To calculate rate of change for a particular condition, take the difference between the Start Temp and End Temp and divide by the Transition Time.

Cool Down Example: From +50°C to -40°C = 90°C / 27 min = 3.33°C/min.


Heat Up Example: From -40°C to +50°C = 90°C / 11 min = 8.18°C/min.

***Note:** Transition times are measured after a 2 hour soak at the respective start temperature with an empty chamber, as indicated on the temperature controller, 23°C ambient. Measured with setpoint beyond the start and end temperatures. Does not include the effect of proportional band when approaching setpoint. Performance is reduced by 17% with 50 Hz input power.

Live Load Capacity				
+23°C	0°C	-40°C	-55°C	-65°C
1,000 Watts	800 Watts	500 Watts	400 Watts	300 Watts

Refrigeration and Heating System	
High Stage Refrigerant	R-404A (Dupont HP-62)
Low Stage Refrigerant	R-508B (Dupont SUVA-95)
Compressors	1.5 HP x 1.5 HP Tecumseh hermetic compressors in a cascade configuration.
Condenser	Air Cooled
Heat of Rejection	14,800 BTUH (maximum rated chamber load at maximum cooling rate from high temperature soak)
Heater Power	2,000 Watts
Air Flow	450 cfm

Instrumentation	
Temperature Controller	<u>Watlow F4T Touch Screen Controller</u> with RS-232, Ethernet interface, 4.3" color graphic touch screen. OR... <u>Watlow F4 Controller</u> with RS-232 interface, LED readout of temperature, LCD display of other parameters.
Limit Controller	Independent high and low temperature limits. Triggers an audible alarm and shuts down the chamber. Relay contacts provide a safety power interlock for test sample.

Chart Recorder	(Optional) Honeywell DR4300 Series. One pen, 10" circular chart. Mounts in lower front door.	
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Input Power Requirements			
	Phase	Current Draw	Minimum Service
230 V ±10%, 60 Hz	1 PH	25 A	30 A
	3 PH	19 A	25 A
208 V -5/+10%, 60 Hz	1 PH	28 A	35 A
	3 PH	21 A	30 A

Input may be configured for single or three phase in the field by changing jumpers. Three phase load is semi-balanced. Call for 50 Hz operation. Performance is reduced by 17% with 50 Hz input power.

Customer power source must be hard-wired to the chamber by a qualified electrician. Power cord and plug is not included.

Physical Characteristics and Safety	
Inside Dimensions	24" W x 21" H x 24" D (7 cubic feet) 609 mm W x 533 mm H x 609 mm D (198 liters)
Outside Dimensions*	33" W x 67.75" H x 54.25" D (nominal) 838 mm W x 1721 mm H x 1378 mm D
* Door latch adds 3" to width on right side (may be removed to permit move-in through a 36" doorway). Circulator motor and housing adds 6" to height.	
Minimum Installed Clearance	18" from the left and right side 24" from the rear
Window Viewing Area	13.375" W x 9" H
Access Ports	4" Port on left and right side (two total) Supplied with foam plugs

Weight	Chamber Weight: 850 pounds Shipping Weight: 1,011 pounds
Sound Level	62 dBA in cooling mode (A-weighted, measured 36" from the front or side surface, 63" from the floor, in a free-standing environment)

NOTE: Performance is typical and based on operation at 23°C (73°F) ambient and nominal input voltage. Designed for use in a normal conditioned laboratory. Operation at higher ambient temperatures may result in decreased cooling performance. Additional ports and shelves will also affect performance. Operation above 30°C (85°F) or below 16°C (60°F) ambient is not recommended.



Model 1016C Temperature Chamber Specifications

Temperature Range

-73°C to +175°C

Control Tolerance

±0.5°C (±0.2°C Typical)(Short-term variations measured at the control sensor after stabilization)

Uniformity

±1.0°C (Variations throughout the chamber after stabilization, -40°C to +85°C)

Cool Down Transition Time (empty)*

	End Temperature					
	+23°C	0°C	-20°C	-40°C	-55°C	-65°C
Time from +23°C: °C/minute:	—	1 min 23°C/min	5 min 8.6°C/min	10 min 6.3°C/min	15 min 5.2°C/min	20 min 4.4°C/min
Time from +85°C: °C/minute:	7 min 8.9°C/min	12 min 7.1°C/min	17 min 6.2°C/min	23 min 5.4°C/min	29 min 4.8°C/min	35 min 4.3°C/min


Heat Up Transition Time (empty)*

-40°C to +85 °C	15 minutes (8.3°C/minute)
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*Note: Transition times are measured after a 2 hour soak at the respective start temperature with an empty chamber, as indicated on the temperature controller, 23°C ambient. Measured with setpoint beyond the start and end temperatures. Does not include the effect of proportional band when approaching setpoint. Performance is reduced by 17% with 50Hz input power.

Live Load Capacity					
+23°C	0°C	-20°C	-40°C	-55°C	-65°C
2,900 Watts	2,600 Watts	2,300 Watts	1,750 Watts	1,450 Watts	1,050 Watts

Refrigeration and Heating System	
High Stage Refrigerant	R-404A (Dupont HP-62)
Low Stage Refrigerant	R-508B (Dupont SUVA-95)
Compressors	3.5 HP x 3.5 HP Copeland scroll compressors in a cascade configuration More about Scroll Compressors >>
Condenser	Air Cooled
Heat of Rejection	27,500 BTUH (maximum rated chamber load at maximum cooling rate from high temperature soak)
Heater Power	4,200 Watts @ 208 V input
Air Flow	830 cfm

Instrumentation	
Temperature Controller	Watlow F4T Touch Screen Controller with RS-232, Ethernet interface, 4.3" color graphic touch screen. OR... Watlow F4 Controller with RS-232 interface, LED readout of temperature, LCD display of other parameters.
Limit Controller	Independent high and low temperature limits. Triggers an audible alarm and shuts down the chamber. Relay contacts provide a safety power interlock for test sample.
Chart Recorder	(Optional) Honeywell DR4300 Series. One pen, 10" circular chart. Mounts in lower front door. 

Input Power Requirements	
230 V ±10%, 60 Hz, 3 Phase	Max Current Draw 39 A; Recommended Service 50 A
208 V -5/+10%, 60 Hz, 3 Phase	Max Current Draw 35 A; Recommended Service 45 A
	Input may be configured for 230 V or 208 V in the field by changing jumpers. Three phase load is balanced. Call for other voltages or 50Hz operation. Performance is reduced by 17% with 50Hz input power. Customer power source must be hard-wired to the chamber by a qualified electrician. Power cord and plug is not included.

Physical Characteristics and Safety

Inside Dimensions	30" W x 30" H x 30" D (15.6 cubic feet) 762 mm W x 762 mm H x 762 mm D (442 liters)
Outside Dimensions	38" W x 78.5" H x 56" D (nominal) 914 mm W x 1994 mm H x 1422 mm D Door latch adds 3" to width on right side.
Minimum Installed Clearance	18" from the left and right side 24" from the rear
Window Viewing Area	18" W x 12" H
Access Ports	4" Port on left and right side (two total). Supplied with foam plugs.
Weight	Chamber Weight: 1,130 pounds Shipping Weight: 1,280 pounds
Sound Level	68 dBA in cooling mode (A-weighted, measured 36" from the front surface, 63" from the floor, in a free-standing environment)

NOTE: Performance is typical and based on operation at 23°C (73°F) ambient and nominal input voltage. Designed for use in a normal conditioned laboratory. Operation at higher ambient temperatures may result in decreased cooling performance. Additional ports and shelves will also affect performance. Operation above 30°C (85°F) or below 16°C (60°F) ambient is not recommended.

Due to continuous product improvements, specifications subject to change without notice.



Model 1027S Temperature Chamber Specifications

Temperature Range

-35°C to +175°C

Control Tolerance

±0.5°C (Short-term variations measured at the control sensor after stabilization)

Uniformity

±1.0°C (Variations throughout the chamber after stabilization)

Cool Down Transition Time (empty)*						
Start Temp	End Temp					
	+23°C	0°C	-10°C	-20°C	-30°C	-35°C
+150°C	9.0 min	14 min	17 min	20 min	26 min	Ultimate
+85°C	4.0 min	7.5 min	10 min	13 min	19 min	
+23°C	-----	1 min	2 min	4 min	9 min	

Cool Down Transition Time (with 80 lb. aluminum load)*						
Start Temp	End Temp					
	+23°C	0°C	-10°C	-20°C	-30°C	-35°C
+150°C	20.0 min	28 min	33 min	38 min	46 min	Ultimate
+85°C	8.0 min	16 min	20 min	25 min	33 min	

Heat Up Transition Time (empty)*						
	End Temp					

Start Temp	+23°C	+50°C	+85°C	+125°C	+150°C	+175°C
+23°C	-----	1.5 min	7 min	14 min	20 min	25 min
0°C	1.5 min	3.5 min	13 min	20 min	23 min	31 min
-10°C	2.2 min	4.2 min	14 min	22 min	25 min	33 min
-35°C	5.5 min	10 min	16 min	23 min	29 min	34 min

Heat Up Transition Time (with 80 lb. aluminum load)*						
Start Temp	End Temp					
	+23°C	+50°C	+85°C	+125°C	+150°C	+175°C
0°C	5 min	13 min	23 min	36 min	45 min	55 min
-35°C	11 min	19 min	29 min	42 min	51 min	61 min

Rate Of Change

To calculate rate of change for a particular condition, take the difference between the Start Temp and End Temp and divide by the Transition Time.

Cool Down Example (empty): From +85°C to 0°C = $85^{\circ}\text{C} / 7.5 \text{ min} = 11.3^{\circ}\text{C/min}$.

Cool Down Example (with 80 lb. load): From +85°C to 0°C = $85^{\circ}\text{C} / 16 \text{ min} = 5.3^{\circ}\text{C/min}$.

Heat Up Example (empty): From 0°C to +85°C = $85^{\circ}\text{C} / 13 \text{ min} = 6.5^{\circ}\text{C/min}$.

Heat Up Example (with 80 lb. load): From 0°C to +85°C = $85^{\circ}\text{C} / 23 \text{ min} = 3.7^{\circ}\text{C/min}$.

***Note:** Transition times are measured after a 2 hour soak at the respective start temperature with an empty chamber, as indicated on the temperature controller, 23°C ambient. Measured with setpoint beyond the start and end temperatures. Does not include the effect of proportional band when approaching setpoint. Performance is reduced by 17% with 50 Hz input power.


Live Load Capacity

+23°C	0°C	-10°C	-20°C	-30°C
4,000 Watts	2,800 Watts	2,300 Watts	1,800 Watts	1,250 Watts

Refrigeration and Heating System

Refrigerant	R-404A (Dupont HP-62)
Compressors	3.5 HP Copeland scroll compressor.
Condenser	Air Cooled
Heat of Rejection	30,200 BTUH (maximum rated chamber load at maximum cooling rate from high temperature soak)
Heater Power	4,000 Watts @ 208 V input
Air Flow	830 cfm

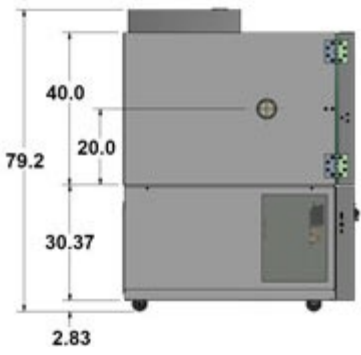
Instrumentation

Temperature Controller	<p>Watlow F4T Touch Screen Controller with RS-232, Ethernet interface, 4.3" color graphic touch screen. OR...</p> <p>Watlow F4 Controller with RS-232 interface, LED readout of temperature, LCD display of other parameters.</p>
Limit Controller	Independent high and low temperature limits. Triggers an audible alarm and shuts down the chamber. Relay contacts provide a safety power interlock for test sample.
Chart Recorder	<p>(Optional) Honeywell DR4300 Series. One pen, 10" circular chart. Mounts in lower front door.</p> 

Input Power Requirements

230 V ±10%, 60 Hz, 3 Phase	Max Current Draw 31 A; Recommended Service 40 A
208 V -5/+10%, 60 Hz, 3 Phase	Max Current Draw 26 A; Recommended Service 35 A
	<p>Input may be configured for 230 V or 208 V in the field by changing jumpers. Three phase load is balanced. Call for other voltages or 50 Hz operation.</p> <p>Customer power source must be hard-wired to the chamber by a qualified electrician. Power cord and plug is not included.</p>

Physical Characteristics and Safety

Inside Dimensions	<p>40" W x 32" H x 36.5" D (27 cubic feet) 1016 mm W x 812.8 mm H x 927 mm D (764 liters)</p>	
Outside Dimensions	<p>49" W x 73.25" H x 63" D (nominal) 1244 mm W x 1860 mm H x 1600 mm D Door latch adds 3" to width on right side. Circulator motor and housing adds 6" to height - may be removed for move-in.</p>	
Minimum Installed Clearance	<p>18" from the left and right side 24" from the rear</p>	
Window Viewing Area	16" W x 13" H	

Access Ports	4" Port on left and right side (two total) Supplied with foam plugs
Weight	Chamber Weight: 1,410 pounds Shipping Weight: 1,595 pounds

NOTE: Performance is typical and based on operation at 23°C (73°F) ambient and nominal input voltage. Designed for use in a normal conditioned laboratory. Operation at higher ambient temperatures may result in decreased cooling performance. Additional ports and shelves will also affect performance. Operation above 30°C (85°F) or below 16°C (60°F) ambient is not recommended. Performance is reduced by 17% with 50 Hz input power.

Due to continuous product improvements, specifications subject to change without notice.