

Chapter 6 – Specifications

1016H Specifications

Temperature Range	–73°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, –40°C to +85°C)

Standard Humidity Range	10%RH to 95%RH, in the temperature range of +10°C to +85°C. Low humidity range limited by a 6°C dew point.
Control Tolerance	±3%RH (Short-term variations measured at the control sensor after stabilization)

Live Load Capacity @	+23°C	0°C	–40°C	–55°C	–65°C
	2,900 W	2,600 W	1,750 W	1,450 W	1,050 W

(Live load capacity is for non-humidity mode)

Cool Down Transition Time*				End Temp		
Start Temp to →	+23°C	0°C	–40°C	–55°C	–65°C	–73°C
+23°C	----	1 min	10 min	15 min	20 min	ultimate
+85°C	7 min	12 min	23 min	29 min	35 min	ultimate

Heat Up Transition Time	
–40°C to +85 °C	15 minutes (8.3°C/minute)

***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 end temperatures with an instantaneous step change in Set Point without a controlled ramp-rate. Does not include the effect of proportional band when approaching setpoint. Performance is reduced by 17% with 50Hz input power.

Input Power Requirements

230 V ±10%, 60 Hz, 3 PH	Max Current Draw 39 A; Recommended Service 50 A
208 V –5/+10%, 60 Hz, 3 PH	Max Current Draw 35 A; Recommended Service 45 A

Input may be configured for nominal 208 V or 230 V in the field by changing jumpers.
Call for other voltages or 50 Hz operation.

Workspace Dimensions	30" W x 30" H x 30" D (16 cubic feet)
Outside Dimensions	38" W x 78.5" H x 56" D (nominal) Door latch adds 3" to width on right side.
Min. Installed Clearance	12" from the left and right side, 24" from the rear
Access Ports	4" Port on left and right side (two total), Supplied with foam plugs
Sound Level	68 dBA in cooling mode (A-weighted, measured 36" from the front surface, 63" from the floor, in a free-standing environment)
Heat of Rejection	27,500 BTUH
Weight	1130 pounds

NOTE: Performance is typical and based on operation at 23°C (73°F) ambient and nominal input voltage. This product is 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.