


PREPARED BY	1/30/03 RH	PANELIZED WALK-IN TEMPERATURE CHAMBER SPECIFICATIONS	Model	Drawing No.	Spc. No.	305536	1/3	
REVISION	A							
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| <p>1. Product Name</p> <p>2. Model</p> <p>3. Power</p> <p>4. Temperature Control System</p> <p>5. Ambient Temperature</p> <p>6. Water Temperature</p> <p>7. Performance</p> <p> 7.1. Loads</p> <p> 7.2. Temperature Range</p> <p> 7.3. Temperature Constancy</p> <p> 7.4. Temperature Uniformity (Gradient)</p> <p> 7.5. Temperature Performance</p> <p> 7.5.2. Transition Rate</p> <p> 7.5.2.1. Pull Down</p> <p> 7.5.2.2. Heat Up</p> <p> 7.6. Airflow</p> <p>8. Construction</p> <p> 8.1. General Material</p> <p> 8.1.1. Exterior</p> <p> 8.1.2. Color</p> <p> 8.1.3. Interior</p> <p> 8.1.4. Insulation</p> <p> 8.1.5. Floor</p> <p> 8.1.6. Chamber Lighting</p> <p> 8.2. Door</p> <p> 8.2.1. Size</p> <p> 8.2.2. Configuration</p> <p> 8.2.3. Viewing Window</p> <p> 8.2.4. Safety</p> <p> 8.2.5. Ramp</p> | <p>Panelized Walk-In Temperature Chamber.</p> <p>EWPT 3468 - CCW.</p> <p>460V 3PH 60Hz.</p> <p>Balanced Temperature Control System: BTC.</p> <p>Allowable Range of Operation: 5 to 35°C (41 to 95°F).</p> <p>Range of Assured Performance: 10 to 30°C (50 to 86°F).</p> <p>Allowable Range 5 to 30°C (41 to 85°F).</p> <p>10,000 Lb. (average sp. Ht = 0.31 BTU/#°F).</p> <p> (TV sets: 50% glass / 50% plastic typical)</p> <p>1,000 lb steel racks.</p> <p>14.5KW.</p> <p>-30°C to 85°C (-22°F to 185°F).</p> <p>±1°C (±1.8°F).</p> <p>±2°C (±3.6°F).</p> <p>Average change rate at Supply Air Thermocouple</p> <p>40°C to -20°C with-in 60 minutes (live load OFF).</p> <p>-20°C to 40°C with-in 60 minutes.</p> <p>Approximately 15,000 cfm.</p> <p>Steel Panels.</p> <p>ESPEC White.</p> <p>Stainless Steel (SS304).</p> <p>Urethane Foam (4 inches) in walls.</p> <p>16 Ga. Stainless Steel (SS304) over foam, 400 lbs per ft.sq.</p> <p>Floor Loading.</p> <p>Ten 100 Watt Lights</p> <p>72"W x 78"H.</p> <p>Bi-Part.</p> <p>14" x 24" heated view port in each door leaf.</p> <p>Inside Safety Release.</p> <p>72"W x 36"L external.</p> |
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- 8.3. Test Space Dry Bulb Detector, Ceiling Air Distribution Plenum.
- 8.4. Plenum Area Air Grille, Suction Grille, Heater, Cooler, Overheat Sensor, and Air Circulator.
- 8.5. Instrumentation Panel Temperature Controller, Chamber Lamp Switch, Running Time Meter, Overheat Adjustable Temperature Limit.
- 8.6. Machinery Compartment
 - 8.6.1. Top Water and Drain Connection Ports.
 - 8.6.2. Inside Refrigeration Unit, Auto-Regulating Water Control Valves, Refrigeration Gauges.

9. Heater

- 9.1. Dry Heater 90 KW Nichrome Wire Heater.

10. Cooler

Aluminum Fin Cooler.

11. Refrigeration System

Mechanical Refrigeration System.

- 11.1. Refrigeration Compressor 2 X 30 H.P. Semi-Hermetic Compressor.
1 X 15 H.P. Semi-Hermetic Compressor.
- 11.2. Condenser Water Cooled.
- 11.3. Expansion System Expansion Valve and Capillary Tube.
- 11.4. Refrigerants Refrigerant 404A.

- 12.1. Model Temperature Controller..... SCP-220.

13. Safety Devices

- 13.1. Electrical
 - Electrical Disconnect for Power.
 - Fuse for Compressors.
 - Fuse for Heaters.
 - Fuse for Control Circuit.
 - Overload Relay for Circulator Motor.
 - Specimen Power Supply Control..... for Product Interlock.
 - External Alarm Terminal for Equipment.
 - 13.2. Refrigeration High/Low Pressure Switch.....for Compressor.
 - Oil Pressure Switch for Compressor.
 - Relief Valve for Refrigeration Circuit.
 - 13.3. Chamber Thermal Fuse for Chamber.
 - Adjustable Overheat of Specimen and Chamber.

14. Dimensions

14.1. Exterior

Width	Depth	Height*
208 in. 5.28 M	465 in. 11.81 M	107.5 in. 2.73 M

*Height Includes Electrical Connection Boxes.

14.2. Interior

Width	Depth	Height	Volume
200 in. 5.08 M	384 in. 9.75 M	78 in. 1.98 M	3468 cu. ft. 98.20 cu. M

14.1. Console

Width	Depth	Height*
21 in. 0.53 M	24 in. 0.61 M	68.5 in. 1.74 M

15. Utilities

15.1. Power

460VAC / 3Ø / 60 Hz

15.1.1. Service

300 AMP

15.2. Condensate Drain

15.2.1. Connection Size

3/4" FPT Plenum and 4.1" PVC Socket..

15.3. Cooling Water

30 psig Differential Pressure Required.

15.3.1. Connection Size (30 hp x 2)

2" FPT x 2.

15.3.1.1. Water flow @ 75°F

75 GPM x 2.

15.3.1.2. Water flow @ 85°F

95 GPM x 2.

15.3.2. Connection Size (15 hp)

2" FPT.

15.3.2.1. Water flow @ 75°F

23 GPM.

15.3.2.2. Water flow @ 85°F

40 GPM.

16. Included Features

16.1. Recorder

DX106 Yokogawa Paperless Recorder with Disk Drive.

16.2. Computer Interface

RS232 with ERC-100S software for SCP-220.

16.3. Cooling Water Temperature and Pressure Display

Qty. 3.

16.4. Cooling Water Shutoff Valve and Strainer

Qty. 3.

16.5. Ramp

External Removable.

16.6. Ports

4-6" Ports with Plugs.

16.7. Calibration

Certificate of Calibration.