

VirTis Freezemobile 25L

Research Freeze Dryer



(Freezemobile 35L shown)

Key Features

- Compact, freestanding, mobile design.
- Includes microprocessor-based Sentry 2.0 controller.
- Choice of refrigeration system to meet a variety of process requirements.
- Wide variety of optional manifolds, shelves and accessories available.
- Optional filter traps available to protect the vacuum pump from corrosive solvents.

Electrical Requirements

| | XL | EL |
|------------------|-----------|-----------|
| Voltage (VAC) | 208 / 240 | 208 / 240 |
| Hertz | 50, 60 | 50, 60 |
| Phase | 1 | 1 |
| Breaker Amperage | 15 | 20 |
| NEMA Receptacle | 6-15R* | 6-20R* |

Utility Requirements

| Item | XL | EL |
|-------------------------------------|-------|-------|
| Approx. Peak Heat Generated (BTU/h) | 6,000 | 8,500 |

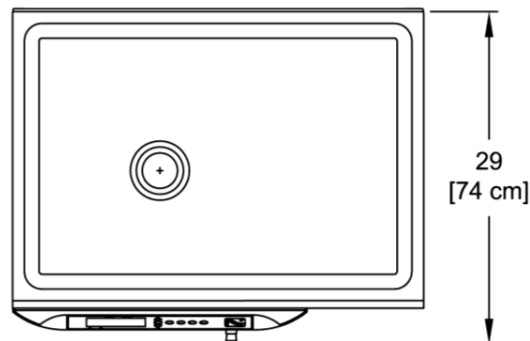
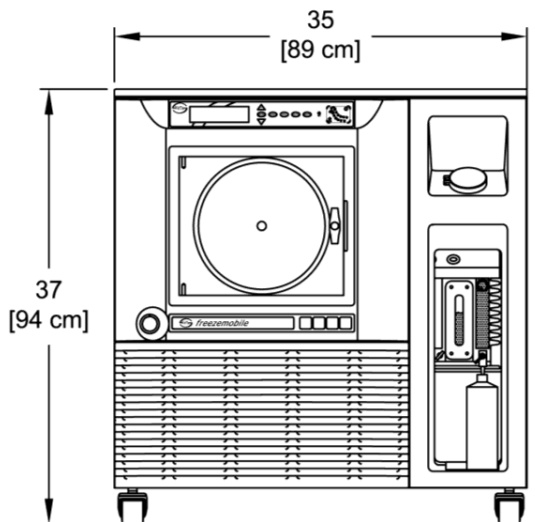
Performance Specifications

| | XL | EL |
|--|----------------|--------------|
| Lowest Condenser Temperature (50 Hz / 60 Hz, °C) | -67 / -70 | -82 / -85 |
| Lowest Freezing Temperature with Optional Shell Bath (50 Hz / 60 Hz, °C) | -52 / -55 | -67 / -70 |
| Maximum Condenser Capacity (L) | 25 | 25 |
| Condenser Surface Area (in ² / cm ²) | 506 / 3264 | 506 / 3264 |
| Maximum Ice Condensing Capacity in 24 hours (L) [†] | 12 | 12 |
| Maximum Deposition Rate (L/hour) [†] | 0.5 | 0.5 |
| Condenser Pull-Down from 20 °C to -45 °C (minutes) | ≤ 25 | ≤ 25 |
| Number of Compressors | 1 | 2 |
| Compressor Horsepower | 1.0 | 1.0, 1.0 |
| System Refrigerant | R245fa / R508B | R508B, R407C |
| Vacuum Time to 100 Millitorr (minutes) | ≤ 20 | ≤ 20 |
| Lowest System Vacuum (mT) | ≤ 15 | ≤ 15 |
| Average Defrost Time (minutes) | ≤ 60 | ≤ 60 |

Note: Performance specifications are based on SP Scientific test data from units operating at an ambient room temperature of approximately 20 °C. SP Industries recommends an operating range of 15-25 °C (59-77 °F).

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Dimensional Data

| | |
|--------------------------|-------------------------|
| Width | 35 in (89 cm) |
| Depth | 29 in (74 cm) |
| Height | 37 in (94 cm) |
| Approximate Weight Range | 280-495 lb (127-225 kg) |

Additional Information

| | |
|--------------------------------------|--|
| Construction | 316L Stainless Steel Condenser Chamber |
| Vacuum Pump (required, not included) | Two-Stage Rotary Vane |
| Defrost Type | Hot Gas |
| Refrigerant | CFC-Free |

Optional Components



Acrylic Drum Manifold

12 Port Acrylic Drum Manifold; 12 Inch Outside Diameter (OD)



Stainless Steel Drum Manifold

12 or 18 Port Stainless Steel Drum Manifold



Bulk Shelf Rack

3, 4 or 5 Shelves; Heated or Unheated



Stoppering Assembly

1, 2 or 3 Shelves; Heated or Unheated



Vertical Manifold Assembly

4, 8, 12, 24 or 48 Port Stainless Steel Vertical Manifold



Horizontal "T" Manifold

1, 2 or 3 Tier Stainless Steel Horizontal "T" Manifold

Note: Additional standard and custom accessories are available, along with flask adapters, glassware and other components. Contact SP Scientific for more information.

* Receptacle configuration for 50 Hz units varies by country.

† The specified Maximum Ice Condensing Capacity in 24 Hours and Maximum Deposition Rate are based on the process of freeze-drying water as aggressively as possible. The freeze dryer's ability to collect ice at an hourly rate or over a specified period will always be application dependent.