

VirTis Freezemobile 35L

Research Freeze Dryer



(Freezemobile 25L shown with manifold)

Electrical Requirements

Item	EL
Voltage (VAC)	208 / 240
Hertz	50, 60
Phase	1
Breaker Amperage	30
NEMA Receptacle	L6-30R*

Key Features

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

Performance Specifications

	EL
Lowest Condenser Temperature (50 Hz / 60 Hz, °C)	-82 / -85
Lowest Freezing Temperature with Optional Shell Bath (50 Hz / 60 Hz, °C)	-67 / -70
Maximum Condenser Capacity (L)	35
Condenser Surface Area (in ² / cm ²)	750 / 4838
Maximum Ice Condensing Capacity in 24 hours (L) [†]	20
Maximum Deposition Rate (L/hour) [†]	0.83
Condenser Pull-Down from 20 °C to -45 °C (minutes)	≤ 25
Number of Compressors	2
Compressor Horsepower	1.5, 1.0
Vacuum Time to 100 Millitorr (minutes)	≤ 20
Lowest System Vacuum (mT)	≤ 15
Average Defrost Time (minutes)	≤ 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).

Utility Requirements

	EL
Approx. Peak Heat Generated (BTU/h)	9,800

Freezemobile 35 EL Refrigerant Information			
Gas #	F gas	Charge (kg)	GWP
Gas #1	R407C	0.906	1774
Gas #2	R508B	0.287	13396
Gas #3	N/A	N/A	N/A
			C02e
			5.451

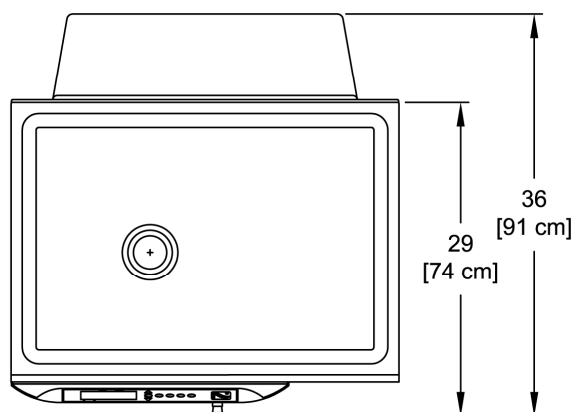
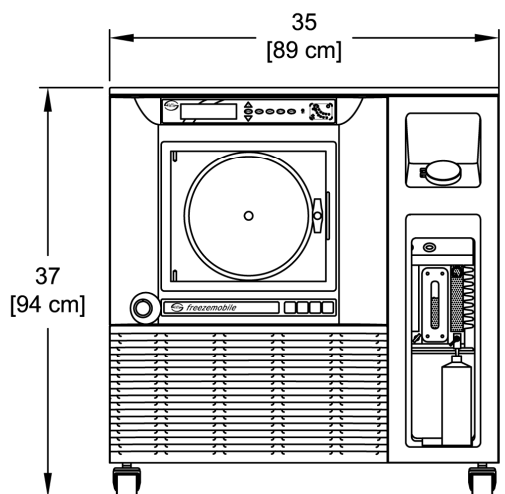
The refrigerants and insulating foam contain fluorinated greenhouse gases

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Label: P/N 100011729 Rev 001

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Dimensional Data

Width	35 in (89 cm)
Depth	36 in (91 cm)
Height	37 in (94 cm)
Approximate Weight Range	450-500 lb (205-225 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



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.