



Standard Vacuum Freeze Dryer

SVFQ SERIES

www.laboquest.com

info@laboquest.com

Standard Vacuum Freeze Dryer SVFQ 3210

Standard Vacuum Freeze Dryer SVFQ 3210 is an electrical heating vacuum unit with a freeze drying area of $0.18\,\mathrm{m^2}$ and condensing temperature of $-50\,\mathrm{^oC}$. Equipped with electrical heating shelf and sensor calibration function for rapid and accurate drying process. LCD operational panel makes monitoring of parameters easy. Transparent drying chamber helps in visualization of drying process.

Features

- **X** LCD touch screen for parameter manipulation and observation
- PLC controller with multiple built-in programs (36 segments each)
- * Transparent acrylic drying chamber for easy process observation
- High speed vacuum pump
- Optimum ice capture condenser function
- Large capacity ice condenser trap with external coiling tubes
- Checking, storage and modification of historical curves and records in real time
- Login facility with multi-level password protection for sample security
- * Alarm system (elevated temperature, error diagnosis, equipment maintenance)
- 🗱 Adjustable Pa or mbar vacuum degree display
- Over-heating safety control system
- USB interface to export data

Standard Vacuum Freeze Dryer SVFQ 3211

Standard Vacuum Freeze Dryer SVFQ 3211 is an electrical heating vacuum unit with a freeze drying area of $0.18~\text{m}^2$ and condensing temperature of -80~°C. Equipped with electrical heating shelf and sensor calibration function for rapid and accurate drying process. LCD operational panel makes monitoring of parameters easy. Transparent drying chamber helps in visualization of drying process.

Features

- **X** LCD touch screen for parameter manipulation and observation
- PLC controller with multiple built-in programs (36 segments each)
- * Transparent acrylic drying chamber for easy process observation
- # High speed vacuum pump
- Optimum ice capture condenser function
- Large capacity ice condenser trap with external coiling tubes
- * Checking, storage and modification of historical curves and records in real time
- Login facility with multi-level password protection for sample security
- * Alarm system (elevated temperature, error diagnosis, equipment maintenance)
- * Adjustable Pa or mbar vacuum degree display
- Over-heating safety control system
- USB interface to export data

Applications

Used in medicine, pharmacy, biology, pharmaceutical and food industry, research institutes, archaeological conservators, food and beverage industries for long term preservation of sample

Specifications

Model No	SVFQ 3210	SVFQ 3211
Freeze drying area	0.18 m ²	0.18 m ²
Product dimensions	630 x 580 x (970 + 480) mm	810 x 580 x (950 + 480) mm
Condenser capacity	6 kg / 24 h	6 kg / 24 h
Condenser temperature	- 50 °C	- 80 °C
Trays	4 layers	4 layers
Shelf temperature	RT to 80 °C	RT to 80 °C
Vacuum degree	< 10 Pa	< 10 Pa
Defrosting mode	Off cycle defrosting	Off cycle defrosting
Cooling mode	Air cooling	Air cooling
Refrigerant	CFC free refrigerant	CFC free refrigerant
Bulk loading capacity (10 mm thickness)	1.8 L	1.8 L
Vacuum pump flow rate	4 L / S (14.4 m³ / h)	4 L / S (14.4 m³ / h)
Vial capacity (Φ 22 mm)	348	348
Vial capacity (Φ 16 mm)	680	680
Vial capacity (Φ 12 mm)	1220	1220
Power consumption	1.8 kW	2.1 kW
Power supply	220 V / 50 Hz, 110 V / 60 Hz, 120 V / 60 Hz	220 V / 50 Hz, 110 V / 60 Hz, 120 V / 60 Hz
Product material	SUS304 stainless steel	SUS304 stainless steel
Condenser size (DxH)	Ф 270 x 400 mm	Ф 270 x 400 mm
Drying chamber size	Ф 300 x 480 mm	Ф 300 x 480 mm
Tray size	Ф 240 mm	Ф 240 mm
Tray spacing	70 mm	70 mm
Weight	160 kgs	190 kgs

Standard Vacuum Freeze Dryer SVFQ 4510

Standard Vacuum Freeze Dryer SVFQ 4510 is an electrical heating vacuum unit with a freeze drying area of 0.27 m² and condensing temperature of -50 °C. Equipped with electrical heating shelf and sensor calibration function for rapid and accurate drying process. LCD operational panel makes monitoring of parameters easy. Transparent drying chamber helps in visualization of drying process.

Features

- **X** LCD touch screen for parameter manipulation and observation
- PLC controller with multiple built-in programs (36 segments each)
- * Transparent acrylic drying chamber for easy process observation
- 🗱 High speed vacuum pump
- Optimum ice capture condenser function
- * Large capacity ice condenser trap with external coiling tubes
- Checking, storage and modification of historical curves and records in real time
- Login facility with multi-level password protection for sample security
- * Alarm system (elevated temperature, error diagnosis, equipment maintenance)
- X Adjustable Pa or mbar vacuum degree display
- Over-heating safety control system
- USB interface to export data

Standard Vacuum Freeze Dryer SVFQ 4511

Standard Vacuum Freeze Dryer SVFQ 4511 is an electrical heating vacuum unit with a freeze drying area of $0.27~\text{m}^2$ and condensing temperature of -80~°C. Equipped with electrical heating shelf and sensor calibration function for rapid and accurate drying process. LCD operational panel makes monitoring of parameters easy. Transparent drying chamber helps in visualization of drying process.

Features

- * LCD touch screen for parameter manipulation and observation
- PLC controller with multiple built-in programs (36 segments each)
- * Transparent acrylic drying chamber for easy process observation
- High speed vacuum pump
- Optimum ice capture condenser function
- * Large capacity ice condenser trap with external coiling tubes
- Checking, storage and modification of historical curves and records in real time
- Login facility with multi-level password protection for sample security
- * Alarm system (elevated temperature, error diagnosis, equipment maintenance)
- X Adjustable Pa or mbar vacuum degree display
- X Over-heating safety control system
- USB interface to export data

Applications

Used in medicine, pharmacy, biology, pharmaceutical and food industry, research institutes, archaeological conservators, food and beverage industries for long term preservation of sample

Specifications

Model No	SVFQ 4510	SVFQ 4511
Freeze drying area	0.27 m ²	0.27 m ²
Product dimensions	630 x 580 x (970 + 480) mm	810 x 580 x (950 + 480) mm
Condenser capacity	6 kg / 24 h	6 kg / 24 h
Condenser temperature	- 50 °C	- 80 °C
Trays	6 layers	6 layers
Shelf temperature	RT to 80 °C	RT to 80 °C
Vacuum degree	< 10 Pa	< 10 Pa
Defrosting mode	Off cycle defrosting	Off cycle defrosting
Cooling mode	Air cooling	Air cooling
Refrigerant	CFC free refrigerant	CFC free refrigerant
Bulk loading capacity (10 mm thickness)	2.7 L	2.7 L
Vacuum pump flow rate	4 L / S (14.4 m³ / h)	4 L / S (14.4 m³ / h)
Power consumption	1.8 kW	2.1 kW
Power supply	220 V / 50 Hz, 110 V / 60 Hz, 120 V / 60 Hz	220 V / 50 Hz, 110 V / 60 Hz, 120 V / 60 Hz
Product material	SUS304 stainless steel	SUS304 stainless steel
Condenser size (DxH)	Ф 270 x 400 mm	Ф 270 x 400 mm
Drying chamber size	Ф 300 x 480 mm	Ф 300 x 480 mm
Tray size	Ф 240 mm	Ф 240 mm
Tray spacing	50 mm	50 mm
Weight	160 kgs	190 kgs

Standard Vacuum Freeze Dryer SVFQ 5310

Standard Vacuum Freeze Dryer SVFQ 5310 is an electrical heating vacuum unit with a freeze drying area of $0.36 \, \text{m}^2$ and condensing temperature of $-50 \, ^{\circ}\text{C}$. Equipped with electrical heating shelf and sensor calibration function for rapid and accurate drying process. LCD operational panel makes monitoring of parameters easy. Transparent drying chamber helps in visualization of drying process.

Features

- **X** LCD touch screen for parameter manipulation and observation
- PLC controller with multiple built-in programs (36 segments each)
- * Transparent acrylic drying chamber for easy process observation
- High speed vacuum pump
- Optimum ice capture condenser function
- Large capacity ice condenser trap with external coiling tubes
- Checking, storage and modification of historical curves and records in real time
- Login facility with multi-level password protection for sample security
- * Alarm system (elevated temperature, error diagnosis, equipment maintenance)
- 🗱 Adjustable Pa or mbar vacuum degree display
- Over-heating safety control system
- USB interface to export data

Standard Vacuum Freeze Dryer SVFQ 5311

Standard Vacuum Freeze Dryer SVFQ 5311 is an electrical heating vacuum unit with a freeze drying area of $0.36~\text{m}^2$ and condensing temperature of -80~°C. Equipped with electrical heating shelf and sensor calibration function for rapid and accurate drying process. LCD operational panel makes monitoring of parameters easy. Transparent drying chamber helps in visualization of drying process.

Features

- **X** LCD touch screen for parameter manipulation and observation
- PLC controller with multiple built-in programs (36 segments each)
- Transparent acrylic drying chamber for easy process observation
- # High speed vacuum pump
- Optimum ice capture condenser function
- Large capacity ice condenser trap with external coiling tubes
- * Checking, storage and modification of historical curves and records in real time
- Login facility with multi-level password protection for sample security
- * Alarm system (elevated temperature, error diagnosis, equipment maintenance)
- X Adjustable Pa or mbar vacuum degree display
- Over-heating safety control system
- USB interface to export data

Applications

Used in medicine, pharmacy, biology, pharmaceutical and food industry, research institutes, archaeological conservators, food and beverage industries for long term preservation of sample

Specifications

Model No	SVFQ 5310	SVFQ 5311
Freeze drying area	0.36 m ²	0.36 m ²
Product dimensions	630 x 580 x (970 + 480) mm	810 x 580 x (950 + 480) mm
Condenser capacity	6 kg / 24 h	6 kg / 24 h
Condenser temperature	- 50 °C	- 80 °C
Trays	8 layers	8 layers
Shelf temperature	RT to 80 °C	RT to 80 °C
Vacuum degree	< 10 Pa	< 10 Pa
Defrosting mode	Off cycle defrosting	Off cycle defrosting
Cooling mode	Air cooling	Air cooling
Refrigerant	CFC free refrigerant	CFC free refrigerant
Bulk loading capacity (10 mm thickness)	3.6 L	3.6 L
Vacuum pump flow rate	4 L / S (14.4 m³ / h)	4 L / S (14.4 m³ / h)
Power consumption	1.8 kW	2.1 kW
Power supply	220 V / 50 Hz, 110 V / 60 Hz, 120 V / 60 Hz	220 V / 50 Hz, 110 V / 60 Hz, 120 V / 60 Hz
Product material	SUS304 stainless steel	SUS304 stainless steel
Condenser size (DxH)	Ф 270 x 400 mm	Ф 270 x 400 mm
Drying chamber size	Ф 300 x 480 mm	Ф 300 x 480 mm
Tray size	Ф 240 mm	Ф 240 mm
Tray spacing	35 mm	35 mm
Weight	160 kgs	190 kgs

Optional Accessories

Accessory No	Accessory	
1	Vacuum control valve	
2	Intake backfilling filter	
3	Air inlet pump filter	
4	Nitrogen inflation valve	
5	Eutectic point tester	
6	Electrical heating-defrosting mode	
7	Exhaust filter / oil mist pump filter	
8	Automated backfilling / drainage system	
9	Cascade refrigeration	
10	Stainless steel organic solvent sample chamber	
11	RS232 software	