The Armfield Freeze Dryer is a compact unit with an insulated working chamber 300mm in diameter and 370mm deep. It incorporates a built-in refrigeration system and temperature-controlled heating system. With the working chamber and condenser chamber constructed from stainless steel, it offers excellent corrosion resistance and can be easily sterilised.

- The unit is operated via a colour touchscreen with a graphing facility to show temperatures and vacuum level in real-time
- The products can be frozen in the chamber before drying
- The unit is designed for freeze drying biologically heat-sensitive materials contained in beakers or other vessels
- It can be considered to be a small-scale replica of commercial-scale pharmaceutical and food production machines

- A vacuum freeze dryer with a top-loading working chamber 300mm in diameter and 370mm deep with refrigeration and heating, 210mm-diameter refrigerated condenser chamber
- The chambers have clear acrylic lids for process observation. The refrigerant is R507 (non CFC) and the condenser chamber no load temperature is -55°C
- The working chamber has four mobile temperature probes
- A membrane panel with touch-sensitive switching and liquid crystal display controls refrigeration, vacuum pump, heating and defrost
- A vacuum pump with a capacity of 150 l/min is provided
DESCRIPTION

The FT33MkII Freeze Dryer comprises a cylindrical working chamber 300mm in diameter and 370mm deep mounted adjacent to a 210mm-diameter condenser chamber in a painted stainless steel cabinet. Both chambers incorporate a clear acrylic lid on an ‘O’ ring seal. Products to be freeze dried may be frozen in the working chamber prior to drying. Drying rate may be controlled by the application of heat to the working chamber via a heating element with temperature controller. The unit is controlled via a touchscreen display, with real-time plotting of temperatures and vacuum level.

Ice build-up in the condenser chamber can be observed through the acrylic lid. The chamber is defrosted by an electrical heater and the ice plug may be removed whole via the lid or allowed to melt totally and drained through the drain plug.

A vacuum pump of 150 l/min capacity is supplied and stands beside the freeze dryer. An oil mist filter is fitted as standard.

The refrigeration system will give a no load condenser chamber temperature of -55°C. A thermostatic expansion valve automatically adjusts the extraction rate to handle large quantities of vapour. The unit is provided with magnetic shut-off valves, electrical overload and overheat protection devices. A membrane panel with touch-sensitive switching and LCD controls refrigeration, vacuum pump, heating and defrost.

TECHNICAL DETAILS

Condenser chamber:
Ice capacity: 3kg
No load temp: -55°C

Working chamber:
Heater rating: 300W
Refrigerant: R507 (non CFC)

REQUIREMENTS

Electrical supply:
FT33MkII-A: 220-240V / 1ph / 50Hz
FT33MkII-B: 120V / 1ph / 60Hz

OVERALL DIMENSIONS

Height: 0.570m
Width: 0.915m
Depth: 0.512m
(excluding vacuum pump)

SHIPPING SPECIFICATION

Volume: 0.8m³
Gross weight: 170kg

ORDERING CODES

FT33MkII-A: 220-240V / 1ph / 50Hz
FT33MkII-B: 120V / 1ph / 60Hz