

PRODUCT

Product range: Vertical freezers -86°C

Features: ---- Bio Memory 175 -86°C TOUCH -----

Vertical under - benches freezer (cabinet)

Internal capacity: 173.8 liters

Working temperature: adjustable from - 60°C to -86°C

Temperature homogeneity to -80°C: +/- 5°C

Maximum storage of 12000 cryotubes 2 ml



Construction: -----

Exterior body in electro-zinged steel with Epoxy paint

Inner stainless-steel tank, rounded corners. Easy cleaning

External dimensions: H 1330 mm, L 875 mm, D 712 mm

Internal dimensions: H 620 mm, L 630 mm, D 452 mm

Device mounted on 4 orientable wheels

2 adjustable upgrade jacks / 2 rear ends

6-sided vacuum panel insulation (VIP) and high-density polyurethane foam

80 mm insulation thickness (thermal conductivity - 0.005W/m/K)

Door with a key closure with progressive door closure

3 lip interchangeable silicone seal

Heated thermal bridge by hot gas return around door frame in order to minimize frost formation on the door seal

Heated pressure equalizer for instant door opening

Cooling machinery: -----

Cooling unit located in the lower part of the chassis with full access to the refrigeration compressor provided by two powerful airtight compressors (3/4 - 5/8 hp) cascade-ridden

Cold production by the 5 internal walls

HP security pressostat linked to audible alarm

Air ventilated condenser with washable filter (accessible in front)

Freezer without CFC, without HCFC, non-flammable (R 417a / R 508b)

Regulation: ----- Stability – 1°C -----

Electronic temperature regulator assisted by industrial automation,

1 Pt 100x3 silicone-sheathed temperature sensor (regulation - display)

Simultaneous digital display of internal temperature and temperature of record access to settings and regulatory settings protected by passcode

Large color touchscreen LCD on the door at eyes height: midnight blue background, white temperature record numbers on SD card / Display and recording alarms

Security: -----

BoSS system to keep compressors in permanent operation in case of problems on the electronic card

High sound and visual alarm and temperature at adjustable threshold (-10°C to -100°C)

Sound and visual alarm

Condenser blocked

Manual shutdown of the audible alarm / Voluntary acquittal of alarms

Exits for postponement of alarms (temperature / power sector) on dry contacts from 4th position (NO/NF)

Set regulation alarms powered and backed up on 24V battery and built-in chargers.

Indoor equipment (all stainless steel): -----

1 L x D x H 597 x 445 x 305 mm compartments (useful dim)

2 insulated inner doors with color markers

Equipped with a shelf (L x D 597 x 445 mm) in stainless steel adjustable to the full height (thread 25 mm)

Racks and removable shelves for complete cleaning of useful volume

PRODUCT

Product range: Freezers -86 degrees Celsius vertical

Other supplies included: -----

1 Washable condenser filter / 1 Power cable sector (L 2m)

Servitudes: -----

Power 230V / 50 Hz mono -T / 16 A /Differential Protection 30 mA curve C

Electric power 900 W

Electrical consumption 0.48 Kwh/h (internal temperature stabilized at -80°C / room ambient temperature : 23°C)

Optimal performance kept for an ambient temperature below 35 degrees Celsius

Climate Class N (up 16 degrees Celsius / 32 degrees Fahrenheit)

Inf. to 55 dB

Weight: 185 Kg

Doorway x h: 1.00 x 2.00 m

Optional equipment: ---- (possible adaptation later) -----

- Circular chart temperature recorder
- Memory temperature recorder
- Thermocouple or Pt 100 sensor with outputs
- Release mA/C (4/20 mA)
- Liquid CO₂ injection backup system supporting 150 bars (maximum pressure)
- Liquid nitrogen injection backup system (N₂ steam phase)
- Cryo-accumulators (additional battery life)
- Water condenser (cooled by city water or cooled water loop)
- Internal storage equipment (for cryotubes, bags, glitter, micro plates 96 wells)
- File IQ/OQ

Compliance: -----

Providing a technical instruction in English

1 Certificate of Compliance

Certificate of compliance with European technical guidelines

- gas appliances: 60/396/CEE
- electromagnetic compatibility: 89/336/CEE modified 92/31/EEC and 93/68/EEC
- low voltage: 73/23/CEE modified 93/68/CEE

Compliance with NF EN 61010-1 ISO 9001

Site Manufacturing

Device designed in France and manufactured in Europe

Set of equipment used from EU origin

SAV provided by FROILABO in and out of guarantee