



SPHERA GROUP

# LABORATORY CHEST DEEP FREEZER LCDF 320 xPRO



- **Structure** : completely in sheet steel white epoxy coated (rust-proof material) outside and embossed aluminium inside
- **Insulation** : high density (40 Kg/m<sup>3</sup>) foamed-in-place polyurethane, with a thickness of 100 mm. CFC-free
- **Feet** : Nr 4, fix (not adjustable), made in plastic material, granting the maximum stability
- **Lid** : Nr 1 hinged, fully insulated, realized in sheet steel white epoxy coated outside and atoxic plastic material inside. The lid is fitted up with counterbalanced hinges (to avoid unexpected lid closing), external robust, ergonomic handle, perimetric magnetic rubber gasket (granting a perfect seal) and security key locking
- **Control panel "xPRO"** : located in the right part of the structure (at the side of the lid), microprocessor operating, with capacitive touch-buttons and colour

display. The controller supervises all the appliance functions through the EEN (EVERmed Easy Navigation) interface, with icons and written messages, allowing a very intuitive interactivity between the appliance and the user, for an easy setting of all appliance functionalities according to needs and the control of the workings status. The control panel is battery operating in order to grant the functioning of the display and alarms even in case of power failure. The main functions panel are :

- High resolution 3,5" TFT colour display, LED backlit, showing the appliance working status (actual temperature, compressor functioning, defrosting, alarm running, etc.) and allowing the surfing through the various controller menu for setting and checking purposes
- Digital temperature displaying and adjusting with an accuracy of 0,1°C
- Keyboard touch-buttons with automatic block safety protection, to avoid tampering from unauthorized persons
- Dual-level safety access, with PIN code protections, on both ON/OFF switch and keyboard touch-buttons. Re-programmable PIN codes for increased security from access to the unauthorized personnel
- Back-up battery, with automatic recharging, granting till 48 hours autonomy for the control panel functioning in case of power failure. The charging status is continuously shown on the display for immediate checking
- Visual and acoustic alarm signalling (with automatic resetting) for:
  - high and low temperature, with limits programmable from the user through a dedicated menu
  - power failure
  - battery discharged
  - condenser dirty
  - anti-freezing evaporator
  - sensors failure
- Muting facilities for the acoustic alarms, with continuous warning indication on the display and automatic ring-back if the alarm situation persists. Programmable ring-back delay through a dedicated menu
- Test facilities for both control panel functioning, battery charging status and alarm limits
- Alarms log history for the latest 30 alarm conditions (not deletable), with the possibility of verify on the display, the alarm condition and all the related informations (starting time, ending time, highest/lowest peak of temperature reached where applicable)
- Defrosts history for the latest 30 days (not deletable), with the possibility of verify on the type of defrost, starting time and the duration
- Real-time temperature chart, with surfing possibilities of the previous 52 hours of operations and zooming facilities for a better control of a period of interest
- Written indications on the display selectable from 3 languages (Italian, English and French)



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- Pt1000 sensors for a better accuracy of the temperature control
- NO/NC contact to remote the alarm signals
- Software upgrading facilities
- **Cooling unit** : bottom mounted, with the condensing unit compounded by Nr 1 hermetic compressors and Nr 1 finned condenser, air cooled through a fan. Also, foamed into the insulation of all storage chamber walls, there are the evaporating pipes, in order to grant the maximum temperature stability and uniformity. All the used components are industrial grade granting the maximum reliability
- **Defrosting** : manual, with discharging hole for draining facilities for the derivate water
- **Refrigerant** : CFC- and HCFC-free
- **Refrigeration** : static, with evaporating pipes throughout all the chamber in order to grant maximum temperature stability and uniformity
- **Temperature range** : infinitely adjustable between -20°C and -45°C
- **Voltage (V/ph/Hz)** : 220-230/1/50
- **Plug** : Schuko type
- **Noise level (dB(A))** : ≤ 52
- **Gross capacity (litres)** : 340
- **Net capacity (litres)** : 320
- **Dimensions (W x D x H cm)** : 157 x 73 x 87
- **Net weight (Kg)** : 110
- **Packed dimensions (W x D x H cm)** : 169 x 85 x 112 (1,61 m³)
- **Gross weight (Kg)** : 130

# LABORATORY CHEST DEEP FREEZER LCDF 320 xPRO

## ACCESSORIES AVAILABLE



Wire basket



Kit of rollers



Temperature chart recorder



Electronic temperature printer



Data logger function with USB port



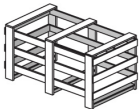
Ballasted sensor for simulation of product temperature alarm



GSM / GPRS telephone dialer



Different voltage



Wooden crate packing



\* The declared performances are referred at +35°C ambient temperature, relative humidity of 70% and without any internal thermal mass (empty cabinet).

\* Should it be necessary or useful without undermining any model essential features, technical and stylistic characteristics are subject to be changed without manufacturer's previous notice.

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Vers. March 14