Fiocchetti
THE COLD MANUFACTURER

Product technical data sheet

LABOR 1500 ECT-F TOUCH
Cod. LAB1502
Medical Device EMDN V0899

General features

Intended use	Refrigerator destined to store and preserve vaccines, pharmaceutical products, bacterial cultures, samples, analysis materials, chemical products, and other laboratory formulas, to support therapy and/or prevention in clinical centers, hospitals, pharmacies, and laboratories.
Temperature range	Adjustable +2°C / +15 °C
Factory setpoint | **Increment**	+5°C | 0.1°C
Ambient working class | **Climatic class**	From +16°C to +38°C | N-ST
Nominal capacity	1500 lt (52,97 cu ft)
Gross capacity | **Net capacity**	1355 lt (47,87 cu ft) | 1355 lt (47,87 cu ft)
External dimensions (WxDxH)	144x80,5x207 cm
Internal dimensions (WxDxH)	130x67x150 cm
Net weight without any internal fittings	203 kg
Package dimensions | **Weight**	Cardboard on pallet 148x86x214 cm | weight 228 kg
	Wooden crate on pallet 156x91x214 | weight 243 kg
Structure	Monocoque type body, made of plasticized, non-toxic white steel interior/exterior, coated with a special antibacterial-type film, or in inner 18/10 Aisi 304 stainless steel. Rounded corners and tray-type inner bottom.
Insulation type	High density (43 kg/m³) in-walls injected PUF, without any CFC, environmental-friendly, water-foam based.
Insulation thickness	70 mm
Feet	No.4 adjustable feet
Door	No.2 solid doors with ergonomic handle all door length, self-closing thanks to the spring hinge and 90°stop position.
Lightning	Full LED, all length of inner chamber, automatic switching on at door opening.
Energy saving functions	Night & Day function
Internal fittings	Customizable and height adjustable, it can mix independently: • wire shelves supported by adjustable clips (dim.cm 56x65) • fully extractible drawers made of aluminium, with dividers (WxDxH): cm 15x60x7,5 (nr 3 compartments) • fully extractible drawers made of aluminium, without dividers (WxDxH): cm 49x60x7,5 • st. steel wire basket on telescopic slides (WxDxH): cm 53,8x63x14,8 • st. steel wire drawers on telescopic slides (WxDxH): cm 53,8x60,5x6,2 • st. steel wire shelves supported by adjustable clips (dim.cm.56x66)
Suggested internal fittings	No. 6 wire shelves

Refrigeration system

Refrigeration	Professional, ventilated, forced, hermetic compressor type
Defrost	Automatic, adaptive, including condensate water vaporization
Refrigerant	Natural R290
GWP | **ODP**	3 | 0

Disclaimer:
Images are purely indicative. The features and the accessories of the products may differ according to model and application.

Electronic controller

Controller	TOUCH controller
Type of controller	Electronic controller, FULL TOUCH SCREEN 7" display, resolution 0,1°C, easily readable from the distance, with a real time temperature graph and all operational data always available on the homepage.
Power switch	Integrated in user's interface
Security features	Settable user password
Alarm system	Visual and acoustic for temperature alarms failures such as: • Open door • High temperature • Low temperature • Power failure, signaled when power is back. • Clogged condenser • Any functional failure/faulty parts
Data and event recording	Latest 32 events displayed, 10 years data recorded on SD card and 1 year on flash memory, downloadable from USB port
Settable temperature limits alarms	Yes
Control sensors	NTC type probes for controller board + PT100 for DMLP monitor board (optional)
Safety thermostat	Included, to prevent freezing and overheating
Connectivity for remote alarms transmission	Set-up on the electronic controller board, can be remoted on request. Modbus TCP/IP protocol available for data reading
Temperature recording	Full recording of temperatures and alarms data
Data export	USB, SD and RJ45.

Electrical and functional data

Standard power supply	230V / 1ph / 50Hz
Standard plug type	Schuko type "G"
Compressor protection	Overload Protector included
Power absorption/current	kW 0,4 (Amp 1,8)
Inrush current	Amp 6
Noise level	<55 dBA
Heat emission according to EN 12900	W 125
Hold over time at 20°C ambient	5 h (from +5C to +15°C)
Energy consumption at 20°C ambient	2,5 kWh/24h

Compliancy

Directives and regulations	The offered unit complies with Regulation (EU) 2017/745 and subsequent modifications and integrations, Risk Class I (All. VIII, Cap. III, Reg. 2). The equipment is also fully compliant with the specific requirements of the norms: Directive 2006/42/EC (Machines Directive), Directive 2014/30/EU (EMC), Directive 2014/35/EU (LVD), Regulation (EU) 2024/573 (F-gas), Directive 2012/19/EU (RAEE) Regulation (EC) n.1907/2006 (REACH) Directive 2011/65/UE (ROHS II) including subsequent modifications and integrations
Available certificate	CE
Application environment	Non-flammable, non-explosive, non-corrosive, with adequate air exchange

Visual and acoustic alarm for power failure	No.8 rechargeable batteries, AA, Ni-MH type, environmental friendly and easily replaceable, to feed power failure alarm
External contacts (Ethernet+ potential free) terminal board	
Electric-digital lock with password protection	Digital lock, the door is opened by touching an icon on the display. The function may be password protected. Mechanical release key supplied for emergency opening.
GSM module (including buffer batteries)	Plug-in module to notify on mobile phones, via sms, overall monitoring, alarms and failures of the refrigerator
Converter module type 4-20mA (including contacts terminal board)	External contacts included (this accessory excludes the installation of the GSM module)
Wi-Fi module	Plug-in module to connect to, monitor and manage the refrigerator wirelessly
Compliance kit to DIN 13277	Includes the electric digital lock, buffer batteries for power failure alarm signal and the external terminal board with potential free contact
DMLP TOUCH Digital Monitor	Visual, acoustic alarm and fully independent recording system, with accuracy 0,1 °C thanks to the PT100 probes used for temperature detection. DMLP will take over alarming function when installed as integrated module on the Ect-f Touch controller board. The module is fed by standard rechargeable batteries (power failure alarm batteries included) to register temperatures and events even in case of power outage. Data download and their management are made possible by CAPTURE software, supplied on board on the SD card, through which tables and graphs are created
PT100 product temperature simulation probe	
FIOCCHETTI COLD EYES cloud monitoring	Annual monitoring service, Cloud based, featuring the notification of alarms and failures from pc thanks to a dedicated app, including SMS messages and emails, also allowing the full download of recorded data.
FIOCCHETTI LAN SUPERVISOR	Monitoring system allowing the supervision of one or several refrigerators thanks to the access to historical data and to present equipment status. It allows the creation and export of temperature graphs of selected periods or of specific hours. A single license enables the connection of up to 100 refrigerators installed in the same building and connected to the same net.
Additional wire shelf kit	
Extractible drawer on telescopic slides	
Extractible drawer without inner dividers on telescopic slides	
St. steel wire shelf kit	
St. steel wire drawer on telescopic slides	
St. steel wire basket on telescopic slides	
Perforated stainless steel shelf	
Lockable drawer for narcotics H mm 100	
Rack 140x500x150H mm (max 3 per each shelf)	
Plexiglas front panel for extractible drawer	
Castors kit with brakes	
Internal Socket (no.1)	
35 mm access port with stopper	
Port hole mm 15	
Humidity sensor	
PT100 sensor with free contacts	
Mains voltage stabilizer	
Power 220V/60Hz	
Power 115V/60Hz	
Wooden crate package	