PLASMA-LABOR 2T 280 TOUCH
Cod. DML0282
Medical Device EMDN Z121702

General features

Intended use	Refrigerator intended to store blood, fluids or body tissues for transfusion, administration or introduction into the body.
Temperature range	Chamber A adjustable between +2°C / +6°C
	Chamber B adjustable between -10°C / -20°C
Factory setpoint | Increment	+4°C | 0.1°C chamber A
	-20°C | 0.1°C chamber B
Ambient working class| Climatic class	From +16°C to +32°C | N-ST

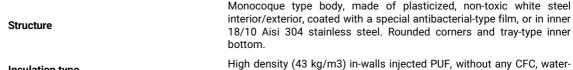|	
Nominal capacity	140 + 140 lt (4,94 + 4,94 cu ft)
Gross capacity | Net capacity	153 + 153 lt (5,40 + 5,40 cu ft) | 128 + 128 lt (4,52 + 4,52 cu ft)
External dimensions (W x D x H)	52 x 66,5 x 177,5 cm
Internal dimensions (W x D x H)	44 x 51,6 x 56 cm (x 2)
Net weight without any internal fittings	103 kg

Package dimensions | Weight	Cardboard on pallet 55 x 69 x 190 cm | weight 120,7 kg
	Wooden crate on pallet 60 x 77 x 193 cm | weight 132,7 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, water-foam based.
Insulation thickness	40 mm
Feet	No. 4 unidirectional rollers + No. 2 stabilizing feet
Door	No.2 solid doors with ergonomic handles, self-closing thanks to the spring hinge and 90°stop position.
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.
Lightning	Full LED, all length of inner chamber, automatic switching on at door opening or from the display when the door is closed.
Energy saving functions	Night & Day function

Provided shelves:	No.04 (02+02) wire shelves supported by adjustable clips (dim.cm.40x49)

Refrigeration system

Refrigeration	Professional, ventilated, forced, hermetic compressor type.
	No. 2 separate and independent cooling systems, one for each compartment.
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 • Clogged condenser • Any functional failure/faulty parts
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.
Temperature, data and event recording	Full recording of 10 years data (temperature and alarms), even in case of power failure, on SD card and 1 year on flash memory, with download from USB port. Latest 32 events displayed on the screen.
Settable temperature limits alarms	Yes
Control sensors	NTC type probes for controller board + PT100 for DMLP monitor board PT100 product temperature simulation probe
Safety thermostat	Included, to prevent freezing and overheating
Connectivity for remote alarms transmission	External contacts (Ethernet+ potential free) terminal board Modbus TCP/IP protocol available for data reading
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 0,14 + 0,5 (Amp 0,9 + 2,3)
Inrush current	Amp 2,5 + 6
Noise level	<45 dBA
Heat emission according to EN 12900	W 191
Hold over time at 20°C ambient (air)	3,1 h chamber A (from +5°C to +15°C) 1,7 h chamber B (from -20°C to 0°C)
Energy consumption at 20°C ambient	4,6 kWh/24h

Compliancy

Directives and regulations	Directive 93/42/EEC and following and subsequent modifications and integrations, Class II annex IX, with conformity to the transitional provisions to Regulation (EU) (EU) 2017/745 and (EU) 2023/607 DIN 13277 Conformity (only for refrigerator compt.) Directive 2011/65/EC (ROHS II) Directive 2015/863/ EC (ROHS III) Directive 2012/19/EC (RAEE) Regulation (EU) 517-2014 (F-gas) Regulation (EU) 1907-2006_REACH
Available certificate	MDD CE
Application environment	Non-flammable, non-explosive, non-corrosive, with adequate air exchange

Accessories available on request

GSM module	Plug-in module to notify on mobile phones, via sms, overall monitoring, alarms and failures of the refrigerator
Converter module type 4-20mA	(this accessory excludes the installation of the GSM module)
Wi-Fi module	Plug-in module to connect to, monitor and manage the refrigerator wirelessly
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 (e.g., a hospital).
Additional wire shelf kit	
Extractible drawer on telescopic slides	
Extractible drawer without inner dividers on telescopic slides	
Plexiglas front panel for extractible drawer	
Glass door for chiller compartment	
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	
Non-standard plug and cable	
Power 220V/60Hz	
Power 115V/60Hz	
Wooden crate package	