

LABORATORY REFRIGERATOR

412-TD



Product description

- Great capacity vs footprint
- Precise temperature control
- Exterior: corrosion resistant treatment and epoxy powder coated
- Inside: stainless steel
- High durability and easy-to-clean.

Technical Characteristics

- Ecological refrigeration system, no CFC
- Thermal isolation with low temperature dissipation, magnetic sealed door
- Temperature control and reading through sensor PT100 with 0,1°C resolution
- Size flexibility from 86 to 600liters (check technical specification chart)
- Smart defrost system for better performance and thermal balance, no need for a stop to maintenance.

Technical Specifications

Temperature range	0°C to 20°C
Temperature control	PID
Temperature control resolution	± 0,1°C
Display Resolution	Colored 4 digit TouchScreen
Temperature sensor	PT 100
Retransmission output	4 to 20mA
Inner capacity	86 to 600
Temperature uniformity at a 5°C	± 3,0°C
Temperature uniformity at a 15°C	± 3,0°C
Defrost system	Smart electric
Refrigeration system	Hermetic compressor
Refrigeration gas	R134a
Heating system	Stainless steel tubular resistance
Protection grade	IP 20
Electrical specs	110V or 220V 50Hz/60Hz

OPTIONAL



- Qualification protocols IQ, OQ and PQ
- Software for RDC 17 and GAMP5 requirements

ethik EXCLUSIVE SOFTWARE



Better user interaction software , for easy and clear operation.



Easy and simple control programming of temperature on a colorful and graphic interface on a 3" screen.



Saves up to 10 different programs for ramp/soak (60 segments each) with the possibility of naming each program.



Exclusive security system which allows access control (LOGIN) for every user.



Programmable software for visual alarm activation in case of higher or lower temperature than set point, and temperature differential.

INCLUDED ACCESSORIES AND COMPONENTS



- Wired tray
- Side door for calibration, 37mm diameter
- Operational manual
- RBC Calibration Certificate, for temperature controller
- Connection for Data Logger (4 to 20mA)
- Audio and visual open door, exceeded temperature rate and defrost alarm
- Shutting down circulation device when door opens

Laboratory Refrigeration 412-TD information

SIZE	INTERIOR				EXTERIOR			
	WIDTH mm	DEPTH mm	HEIGHT mm	INTERN VOLUME L	WIDTH mm	DEPTH mm	HEIGHT mm	EXTERN VOLUME L
86	450	350	550	87	580	680	1170	461
155	550	350	870	167	680	680	1490	689
255	550	400	1160	255	680	730	1780	884
335	550	510	1200	337	680	840	1820	1040
600	670	680	1320	601	800	1010	1940	1568

SIZE	WEIGHT Kg	ELETICALSPECS W	TRAY AMOUNT SUPPORT	TRAYS	MAXIMUM WEIGHT PER TRAY Kg	DOORS
86	51	600	4	1	20	1
155	76	800	4	3	20	1
255	97	800	6	4	20	1
335	114	1000	6	4	30	1
600	172	1500	6	4	30	1