KLAB R700V HTS
Laboratory /Pharmacy Refrigerator +5°C

Technical Features

Nominal / Net Storage Volume	700 lt (24,72 cu ft) / 600 lt (21,2 cu ft)
Temperature Range	0°C/+15°C
Factory Set Point	+5°C
Temperature Uniformity	± 3°C
Temperature Stability	± 1°C
Ambient Operating Temperature	+10°C/+38°C, 50% RH (N-ST Climate Class)
Noise Level	< 42 dBA
Power Supply	230V ±10% / 50Hz
Standard Electrical Plug	Schuko
Power Absorption	2,5A
Daily Energy Consumption	2 kWh/24h (with +20°C ambient temperature)
External Dimensions	W 750 x D 840 x H 2050 mm | W 29,52 x D 33,08 x H 80,70 inch.
Internal Dimensions	W 590 x D 670 x H 1510 mm | W 23,22 x D 26,38 x H 59,45 inch.
Weight	155 kg
Packing Dimensions	Carton Box + Pallet: W 850 x D 900 x H 2200 mm, 160 kg
	Wooden Cage: W 1000 x D 1000 x H 2400 mm, 230 kg
External Surface	Anti-corrosion hot-dip galvanized steel sheet, covered with PVC film
Internal Surface	AISI 304 18/10 stainless steel
External/Internal Edges	Rounded to facilitate easy cleaning
Insulation Type	High-density CFC-free PUR foam
Insulation Thickness	80 mm on sides / 80 mm rear
Door Type	Double-layer glass, with self-closing system (with opening angle ≤90°), ergonomic handle, key-lock
Door Sealing	Magnetic silicone gasket placed all over the door's frame
Lighting	LED light, with automatic activation when the door is opened
Standard Configuration	n°3 wire shelves made in PVC-coated steel, adjustable in height (Dimensions W 530 x D 650 mm) with max load 35 kg each
	n°4 swivel castors (front castors equipped with brakes)
	Porthole (Ø 25 mm) for introducing in the chamber independent probes connected to external monitoring system/BMS
	7,2A backup battery with self-charging circuit (48 hours autonomy in case of power failure)
	Volt-free contact for connection to an external alarm monitoring system
	RFI filter
Max Shelves / Drawers	7 / 7 (or a mix of them)

Cooling System

Cooling	Forced-air cooling, with automatic shut-off of the evaporator fan during door opening
Compressor	Fully sealed hermetic compressor (1/4 HP) with thermal protector
Refrigerant (CFC/HCFC free)	R455a (gr. 340)
Defrost System	Fully automatic with evaporation of condensation water

HTS Control System

Controller	Microprocessor Controller
Display	5" TFT LCD touch screen display with 0.1°C resolution
Temperature Probes	n°2 NTC probes (for evaporator / control) + n°1 Pt100 Class A (for monitoring)
Available Languages	Italian / English / German / French / Spanish / Danish / Croatian / Polish / Turkish / Dutch
Access Control	3-levels password security system (User/Service/Admin)
Data Export	USB, SD card
Features	The main screen displays the temperature set point, high/low T limits, battey level, date/time, LED light ON/OFF switch
	Possibility to view the real-time temperature graph on the display
	Data logger function with automatic recording of temperature data (at 30-seconds intervals) and events
	Internal memory (built-in 4GB SD card) capable of recording data for a minimum period of 10 years
	Data history menu for consultation and selection of temperature data records, events and alarms of the device
	Possibility to display the temperature in °C (standard) or °F
	Safety thermostat with anti-freezing (factory pre-set limit at +2°C) and anti-heating (factory pre-set limit at +8°C)
	In-built power stabilizer with linear voltage regulation (±20 Volts)
Main Alarms List (Audio/visual notification)	- Power failure
	- Door open (the alarm interval can be freely set by the user)
	- High/Low temperature (alarm limits can be set freely by the user)
	- Temperature probes failure
	- Back-up battery failure / low charge

External surface made in AISI 304 stainless steel with satin finish (Code: KLAB R700VX HTS)

Additional adjustable wire shelf in PVC-coated steel

Perforated drawer (sliding on telescopic guides) in AISI 304 18/10 stainless steel with plexiglass front panel (dimension W 535 x D 635 x H 130 mm)

Pt100 temperature probe enclosed in vial filled with glycol solution (for product simulation)

Weekly cycle chart disk recorder (including n°52 spare paper disks + n°1 pen)

Mains voltage stabilizer

RS485 bridge module with serial port for PC/BMS connectivity

RJ45 port (ModBus TCP protocol) for LAN connection to PC/BMS

RJ45 port for connection to the free KW Cloud platform for monitoring, data download and setting alarm notifications in real time (via email)

Wi-Fi connection module to the free KW Cloud platform for monitoring, data download and setting alarm notifications in real time (via email)

Electric lock for door opening with PASSWORD

Electric lock for door opening with BADGE/RFID

Electrical outlet different from standard Shucko

Packing in wooden cage