



# ***COLD CHAMBER WITH TEMPERATURE CONTROL***

## ***TE-4030/1***

Used to incubate vials for the determination of BOD (biological demand for oxygen) incubation of samples in general mainly storage of immunologicals (vaccines) as it is designed according to the regulations of the Ministry of Health.

## Technical Characteristics

### TE-4030/1

- Temperature Range: 0.5°C to 25.0°C;
- Control Accuracy:  $\pm 1.0^\circ\text{C}$ ;
- Uniformity:  $\pm 1.0^\circ\text{C}$ ;
- temperature sensor: PT100 3-wire;
- screen panel: 4.3" inch touch screen panel controller with PID control regime;
- Temperature set point memory: in case of power failure, the equipment returns with the last set point;
- data output: Point-to-point data output via USB B with dedicated software;
- Programmable alarm: Programmable high and low alarm regarding deviation relative to set point;
- indication: Open door indication on programming screen with active audible alarm after 5min;
- Thermal Insulation: Expanded Polyurethane;
- Refrigeration Compressor: Hermetic 1/2HP, with CFC-free 134-A gas;
- Heating resistance: Armored type with fins;
- Internal air circulation: through a micro fan with vertical flow;
- Security: Overheating thermostat above 30°C with audible alarm and automatic shutdown and programmable alarms for audible warning in case the variable deviates from the set point;
- lighting system: LED lighting system with manual ON/OFF control by the temperature display on the lower front;
- glass door: Anti-fog glass door;
- External and internal cabinet: In pre-painted steel with polyester painting;
- External dimensions: Width = 675 mm x Height = 1950 mm x Depth = 650 mm;
- Internal dimensions: Width = 550 mm x Height = 1200 mm x Depth = 500 mm;
- Volume: 406 liters;
- Weight: 105 kg;
- Power: 1600 W;
- Voltage: 220V/60Hz;
- Note: Equipment must be installed in a climate-controlled environment from 15°C to 24°C The minimum distance of the equipment from the wall and other equipment must be at least 350mm;
- Optional: RS 485 communication output;
- ACCOMPANIES: - 03 Shelves - Instruction Manual with Warranty Term - Power cable according to NBR 14136 with IEC standard tripolar adapter;

## Benefits and Advantages

- Microprocessed controller with PID control which provides more precise control with the final temperature being reached in a faster and more homogeneous way
- PT 100 sensor the most sensitive
- Touchscreen display for convenience
- It has thermoperiod: selection of a temperature during the day and a temperature during the night
- Glass door for internal viewing without the need to open keeping the internal temperature stable
- With gas thermal insulation preventing heat loss and condensation
- Permanent memory of the configuration state to restore the working state if there is a power failure in addition to recovering programmable and calibration parameters
- Overheating safety: thermostat for overheating above 30°C with audible alarm and resistance control turning off
- Temperature deviation alarm with sound activation via maximum and minimum limit programming around the set point
- Indication of open door on the panel on the operation screen: after 5 minutes of the door open the control system is disarmed turning the control into Standby-by for safety
- Communication with computer through USBB cable and ESBA (free software that monitors the Variable process control curve system)
- Rigid Quality Control in which checks and tests guarantee the perfect functioning of the equipment providing safety and client satisfaction
- Client service to answer questions and provide explanations about the equipment and methodologies.