#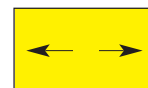 Precise reciprocal shaking baths controled by microprocessor "Unitronic Reciprocating Shaking Bath" and with refrigeration "Unitronic Reciprocating Shaking Bath C"

UNITRONIC RECIPROCATING SHAKING BATH LINEAR: TEMPERATURE RANGE FROM AMBIENT +5 °C TO 99.9 °C.
UNITRONIC RECIPROCATING SHAKING BATH C LINEAR: TEMPERATURE RANGE FROM 0 °C TO 99.9 °C.
STABILITY ±0.05 °C HOMOGENEITY ±0.1 °C, SET TEMP. ERROR ±1 °C, RESOLUTION 0.1 °C.

SAFETY:
DIN 12877 STANDARD. THE UNIT WILL CUT OUT IF THERE IS INSUFFICIENT LIQUID OR IF THE BATH TEMPERATURE EXCEEDS THE SET TEMPERATURE. A MANUAL RESET ADJUSTABLE TEMPERATURE SAFETY THERMOSTAT IS PLACED AT THE BACK OF THE UNIT.

Reciprocal linear agitation, controllable from 10 to 100 oscillations per minute

Controllable time from 1 minute to 99 hours 59 minutes

MICROPROCESSOR CONTROL WITH DIGITAL DISPLAY AND PUSH BUTTON TEMPERATURE, SPEED AND TIME SELECTION. RS-232 INTERFACE FOR PRINTER OR COMPUTER OUTPUT.

APPLICATIONS
Cell culture and biological samples, yeasts and general applications that require stable and reproducible temperatures.

COMMON FEATURES
Linear motion sliding tray from 10 to 100 oscillations per minute, with a variable stroke length of 32 or 46 mm.
Digital display and selection of temperature, oscillations and time.
Temperature sensor: thermo-resistant Pt100.
Rack frame support made of AISI 304 stainless steel incorporated in the tank that can accommodate a selection of flasks and racks.
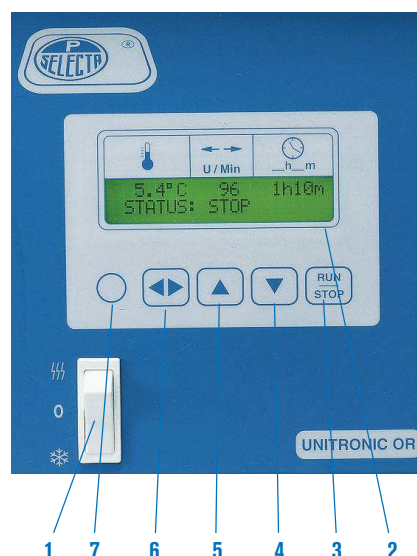Internal tank made of AISI 304 stainless steel with an external case of AISI 304 stainless steel.

Built in drain tap.
Ventilated hermetically sealed compressor for refrigeration in the "Unitronic - C".

CONTROL PANEL
1. Mains power switch.
2. LCD screen that shows:
   - Temperature, oscillations per minute and time.
   - Alarms: set temperature and probe failure.
   - Configuration: °C or °F, temperature calibration and set working temperature limits.
3. Push button Start/ Stop.
4. Push button to decrease value.
5. Push button to increase value.
6. Push button for parameter selection: temperature, strokes per min. and time.
7. Push button for configuration.

1   7   6   5   4   3   2

"Unitronic Reciprocating Shaking Bath"

"Unitronic Reciprocating Shaking Bath C"
Refrigerated Bath

MODELS	Part No.	Capacity litres	Height / Width /Depth (bath) cm			Height / Width /Depth (support carriage) cm			Height / Width /Depth (exterior) cm			Power W	Weight Kg
UNITRONIC RECIPROCATING	6032011	27	18	48	29	17	35	24	30	74	40.5	1500	25
UNITRONIC RECIPROCATING-C	6001173	27	18	48	29	17	35	24	30	74	63.5	1750	43

ACCESSORIES FOR UNITRONIC RECIPROCATING SERIES

Support Platform for Erlenmeyer flasks.
Made of AISI 304 stainless steel with location holes for various configurations of Erlenmeyer flask clip supports.
Sizes: 50, 100, 250, 500 and 1000 ml.

Part No.	Width /Depth (platform) cm		No. of flasks and capacity per platform					Weight Kg
			50 ml	100 ml	250 ml	500 ml	1000 ml	
3001004	23.5	34.5	20	12	6	6	3	1

Racks: made of AISI 304 stainless steel.
Capacity: 2 racks.

Part No.	Tube Ø mm	No tubes per rack	Height / Width /Depth (rack) cm		
1001233	13	70	8.5	11	34
1001234	16	48	8.5	11	34
1001235	20	48	8.5	11	34

Adapter clips for Erlenmeyer flasks.
Made of tempered stainless steel.
Part No.
1001003   Adapter for   50 ml.
1000978   Adapter for   100 ml
1000979   Adapter for   250 ml.
1000980   Adapter for   500 ml.
1000981   Adapter for 1000 ml.

Gable Lid: made of AISI 304 stainless steel.
Part No. **6000713**

Precision Viscometer Bath "VB-1423"

**DIGITAL TEMPERATURE CONTROL FROM AMBIENT +5 °C TO 100 °C.
STABILITY ±0.1 °C. HOMOGENEITY ±0.1 °C. RESOLUTION 0.1 °C.**

SAFETY:
SAFETY THERMOSTAT CONFORMS TO
THE DIN 12876. MANUAL RESET.

Precise constant temperature Kinematic Viscometer Bath

Manufactured for the calibration of viscometers, conforms to UNE 400313, ISO3105, ASTM 445 & 2515 specifications

FEATURES
Temperature sensor; Pt100 thermo-resistor, stainless steel AISI 304 lid with three viscometer locations ports, three independent lids and an additional location port for the control thermometer. The main body of the bath is made of a 20 litre borosilicate glass tank. A white plate is located at the back to help optimize and read the viscometers.

CONTROL PANEL
1. Main power switch with luminous ON.
2. Temperature regulator:
   3. Real time temperature display.
   4. Push button increase value.
   5. Push button decrease value.
   6. Push button configure operation.
7. Safety thermostat safety lamp.

MODEL

Part No.	Temperature control range °C	Capacity litres	Height / Ø (tank) cm		Height / Ø (total) cm		Power W	Weight Kg
3001423	amb.+5 up to 100	20	32	30	47	30	1000	8

ACCESSORIES

Universal viscometer support. made from PTFE with stainless steel AISI 304 support. Suitable for the following viscometers :

- Cannon-Fenske for transparent liquids.
- Cannon-Fenske for opaque liquids.
- Ubbelohde.
- Ostwald.
- BS U Tube.
- Cannon-Manning semi-micro.
- Ubbelohde type BS/IP/SL, BS/IP/SL(S) & type BS/IP/MSL.
- DIN Ubbelohde.
Part No. **1001453**

Calibration Chronometers (see page 295).

Thermometers for viscometer baths.
Part No.
1001454 Thermometer ASTM 120C at 38.6 to   41.4 °C divisions of 0.05 °C.
1001455 Thermometer ASTM 121C at 98.6 to 101.4 °C divisions of 0.05 °C.
1001456 Thermometer ASTM   91C at 20.0 to   50.0 °C divisions of 0.1 °C.
1001457 Thermometer ASTM   92C at 40.0 to   70.0 °C divisions of 0.1 °C.
1001458 Thermometer ASTM   93C at 60.0 to   90.0 °C divisions of 0.1 °C.
1001459 Thermometer ASTM   94C at 80.0 to 110.0 °C divisions of 0.1 °C.