"The entrepreneur always searches for change, responds to it, and exploits it as an opportunity."
Peter Drucker

BATHS; WATER AND OIL, SAND, AND ULTRASONIC
Summary table of the different models

QUICK OVERVIEW   RS232

BATHS WATER / OIL Range	Model	Control	Safety thermostat	CAPACITY / PART No.					Stability	RS-232
				1.5 litres						
+30 ... 110 °C	**Aquaterm**	**Thermostat**	**No**	**3000916**					**±2 °C**	**No**
				1 litre						
+30 ... 110 °C	**Baher**	**Thermostat**	**No**	**7000540**					**±3 °C**	**No**
				4 litres						
+40 ... 80 °C	**Termofin**	**Thermostat**	**No**	**3000459** (Paraffin)					**±1 °C**	**No**
				2.5 litres						
+5 ... 110 °C	**Univeba**	**Thermostat**	**Yes**	**3000400**					**±1 °C**	**No**
				2.5 litres						
+5 ... 200 °C	**Univeba**	**Thermostat**	**Yes**	**3000401**					**±2 °C**	**No**
				11 litres						
+5 ... 110 °C	**Termobat**	**Thermostat**	**Yes**	**3000587**					**±2 °C**	**No**
				11 litres						
+5 ... 200 °C	**Termobat**	**Thermostat**	**Yes**	**3000588**					**±3 °C**	**No**
				2 litres	**5 litres**	**12 litres**	**20 litres**	**45 litres**		
+5 ... 110 °C	**Precisterm**	**Thermostat**	**Yes**	**6000137**	**6000138**	**6000140**	**6000141**	**6000142**	**±1 °C**	**No**
+5 ... 200 °C	**Precisterm**	**Thermostat**	**Yes**	**6000385**	**6000386**	**6000387**	**6000388**	**6000389**	**±2 °C**	**No**
+5 ... 99.9 °C	**Precisdig**	**Digital µ**	**Yes**	-	**6001120**	**6001121**	**6001122**	**6001123**	**±0.1 °C**	**No**
+5 ... 200 °C	**Precisdig**	**Digital µ**	**Yes**	-	**6001220**	**6001221**	**6001222**	**6001223**	**±0.5 °C**	**No**
+5 ... 80 °C	**Agibat-20**	**Digital µ**	**Yes**	-	-	-	**6032015**	-	**±0.5 °C**	**No**
				160 litres	**220 litres**					
+5 ... 99.9 °C	**Precisbig**	**Digital µ**	**Yes**	**6001240**	**6001241**				**±2 °C**	**No**
				2x2 litres	**4x2 litres**	**6x2 litres**				
+5 ... 200 °C	**Precisbat**	**Thermostat**	**No**	**6001462**	**6001472**	**6001482**	-	-	**±2 °C**	**No**
Baths with stirring or shaking				**27 litres**						
+5 ... 99.9 °C	**Unitronic Reciprocating**	**Digital µ**	**Yes**	**6032011** (Shaker bath)	-	-	-		**±0.05 °C**	**Yes**
0 ... 99.9 °C	**Unitronic Reciprocating C**	**Digital µ**	**Yes**	**6001173** (Shaker bath)	-	-	-		**±0.05 °C**	**Yes**
Baths for viscometers										
+5 ... 100 °C	**VB-1423**	**Digital**	**Yes**	-	-	-	**3001423**	-	**±0.05 °C**	**No**

µ: with microprocessor.   +5 indicates ambient temperature +5 °c.

Sand baths

	Model	Control	Height / Widht / Depth (usable) cm			Height / Widht / Depth (usable) cm		
... +400 °C	**Combi-Sand**	**Electronic**	5	18	38	5	30	30
Part No.			**6000708**			**6000709**		

Ultrasonic cleaning baths with heating and with digital electronic regulation.

Part No.	Capacity litres	Height / Widht / Depth (usable) cm			Power heater W
3000865	5	15	24	14	75
3000866	6	15	30	15	75
3000867	10	15	30	24	225
3000868	22	15	50	30	375
3000864	30	20	50	30	900

Ultrasonic cleaning baths without heating

Part No.	Capacity litres	Height / Widht / Depth (usables) cm		
3000512	1	6	14	14
3000683	2,6	9	23	13
3001208	4	10	30	14
3000513	6	15	30	14
3000837	6,5	14	24	Ø
3000617	9	15	50	14
3000514	9	15	30	23
3000515	20	15	50	30

Water bath "Aquaterm"

ADJUSTABLE TEMPERATURE FROM 30 °C TO 110 °C. STABILITY ±2 °C.

Economic option

FEATURES
AISI 304 stainless steel tank with epoxy coated base.
Heater element embedded in high temperature, corrosive resistant INCOLOY.

CONTROL PANEL
Temperature regulator thermostat switch, synchronised with an indicator lamp.

MODEL

Part No.	Capacity litres	Ø (usable)	Height cm	Ø (exterior)	Height cm	Power W	Weight Kg
3000916	1.5	20	11.5	22	20.5	640	1.3

ACCESSORIES IN AISI 304. STAINLESS STEEL
Perforated shelf.
Part No. 6000998

Flat Lid with 5 concentric ring set.
Part No. 3000917

Boiling bath "Baher"

ADJUSTABLE TEMPERATURE FROM 30 °C TO 110 °C. STABILITY ±3 °C.

FEATURES
Rapid boiling (6-7 minutes).
AISI 304 stainless steel tank and epoxy coated base.
Heater element embedded in INCOLOY stainless steel.

CONTROL PANEL
Temperature regulator thermostat switch, synchronised with an indicator lamp.

MODEL

Part No.	Capacity litres	Ø (usable)	Height cm	Ø (exterior)	Height cm	Power W	Weight Kg
7000540	1	14	11	15	19	640	1

ACCESSORIES MADE OF STAINLESS STEEL
Lid with bakelite handle.
Part No. 7000572

Rack 24 haemolysis tubes up to 13 mm diameter.
Part No. 7004002

Rack for 24 tubes up to 18 mm diameter.
Part No. 7000541

Perforated shelf.
Part No. 6000033

Water and oil baths "Univeba"

WATER BATH: ADJUSTABLE TEMPERATURE FROM AMBIENT +5 °C TO 110 °C STABILITY ±2 °C.
OIL BATH: ADJUSTABLE TEMPERATURE FROM AMBIENT +5 °C TO 200 °C STABILITY ±3 °C.

SAFETY:
CONFORMS TO THE DIN STANDARD 12877 BY INCORPORATING A MANUALLY RESET OVER TEMPERATURE SAFETY CUT-OUT.

APPLICATIONS
To be used with a rotary evaporator or as a stand alone Bains Marie bath.

FEATURES
Tank interior and exterior case made of AISI 304 stainless steel. The heater element is embedded in a protective INCOLOY stainless steel shield.

CONTROL PANEL
Illuminated main power switch indicator lamp. Hydraulic temperature thermostat regulator synchronised with an indicator lamp. Safety thermostat cut out indicator lamp.

MODELS

Part No.	Maximum Temperature °C	Capacity litres	Ø (usable)	Height cm	Height / Widht / Depth (exterior) cm			Power W	Weight Kg
3000400	110	2.5	18	13	19	22	27	390	4
3000401	200	2.5	18	13	19	22	27	640	4

ACCESSORIES MADE OF STAINLESS STEEL
1- **Heating element cover shelf.**
Part No. 6000033

2- **Reduction ring** cover lid of 110, 80, 60 and 37 mm Ø. With a thermometer location hole in the lid. Part No. 7004001

3- **Tube rack** for 24 haemolysis tubes up to 13 mm Ø.
Part No. 7004002

4- **Tube support** rack for 24 tubes up to 18 mm Ø.
Part No. 7000541

5- **Thermometer.**
Part No.
1000100 up to 100 °C.
1095250 up to 250 °C.

Water and oil baths "Termobat"

ADJUSTABLE TEMPERATURE FROM AMBIENT+5 °C TO 110 °C. STABILITY ±2 °C TO 200 °C. STABILITY ±3 °C.

> **SAFETY:**
> **CONFORMS TO THE DIN STANDARD 12877 BY INCORPORATING A MANUALLY RESET OVER TEMPERATURE SAFETY CUT-OUT.**

APPLICATIONS
To be used with a rotary evaporator for flasks up to 10 litres or as a stand alone bains marie.

FEATURES
Tank interior made of AISI 304 stainless steel, with an epoxy coated base.
The heater element is embedded in a protective INCOLOY stainless steel shield.

CONTROL PANEL
Main power switch, with luminous indicator lamp.
A hydraulic temperature thermostat regulator is synchronised with an indicator lamp.

Large capacity

ACCESSORIES MADE OF AISI 304 STAINLESS STEEL
Reduction ring cover lid of 210, 180, 145, 115 and 80 mm Ø. With a location hole for a thermometer.
Part No. **7000589**

Heater element cover shelf.
Part No. **6000055**

Thermometer.
Part No.
1095100 up to 100 °C.
1095250 up to 250 °C.

MODELS

Part No.	Maximum Temperature °C	Capacity litres	Ø (usable)	Height cm	Ø (exterior)	Height cm	Power W	Weight Kg
3000587	110	11	29	17	29	25	2100	5.5
3000588	200	11	29	17	29	25	2100	5.5

Sand baths "Combiplac-Sand"

ADJUSTABLE PLATE TEMPERATURE UP TO 400 °C.

FEATURES
Electronic energy heater controller. The steel hotplate surface has an evenly distributed heater element providing homogeneous heat distribution.
The non warping AISI 304 stainless steel sand bath can be easily removed for cleaning.
The Hotplate can be used independently without the sand bath. The hotplate casing is made of AISI 304 stainless steel.

CONTROL PANEL
Mains power switch with luminous "On" indicator lamp.
Electronic heater power control between 0 to 100 %.
Heater operation indicator lamp.
The back of the unit is fitted for an electronic thermometer "Sensotherm" or digital electronic controller "Electemp-TFT" described under regulators and controllers (see page 293).

MODELS

Part No.	Height / Width / Depth (usable) cm			Height / Width / Depth (exterior) cm			Power W	Weight Kg
6000708	5	18	38	18	22	41	2300	13
6000709	5	30	30	21	32	35	2800	15

NEW DESIGN

Circulation pump "Ciragit"

FEATURES
The unit can be adjusted to fit most tanks or baths, can be submerged and held in position by an adjustable height support clamp.
Circulation pump allowing external circulation of liquids.
ON/ OFF illuminated power switch with light when on.

SPECIFICATIONS
OUTPUT water:
20 °C , 12 l/ min.- 150 mbar
OUTPUT silicon oil:
50 °C 4 l/min.- 130 mbar
Dimensions:
9.5 x 12.5 x 23 cm
Power: 30 W
Weight: 2.5 Kg.
Part No. **3000402**

Water and oil baths "Precisterm"

ADJUSTABLE TEMPERATURE RANGE FROM AMBIENT +5 °C UP TO 110 °C, STABILITY ±1 °C.
ADJUSTABLE TEMPERATURE RANGE FROM AMBIENT +5 °C UP TO 200 °C, STABILITY ±2 °C.

Extensive range of sizes and accessories

Stainless steel interior and external case

FEATURES

Capacity; from 2 litres up to 45 litres.
Double skinned tank of AISI 304 stainless steel with an exterior case of AISI 304 stainless steel.
Heating elements embedded in INCOLOY heat and corrosion resistant stainless steel.

CONTROL PANEL

Illuminated mains power switch.
Hydraulic thermostat temperature control, synchronised with the "ON" indicator lamp.
Safety thermostat cut out indicator lamp.

MODELS

Part No.	Maximum Temperature °C	Capacity litres	Height / Widht / Fondo (usable) cm			Height / Widht / Depth (exterior) cm			Power W	Weight Kg
6000137	110	2	15	15	13	20	20	27	390	3.5
6000385	200	2	15	15	13	20	20	27	640	3.5
6000138	110	5	15	30	14	20	37	27	600	6
6000386	200	5	15	30	14	20	37	27	1110	6
6000140	110	12	15	30	30	20	40	42	1100	8
6000387	200	12	15	30	30	20	40	42	1400	8
6000141	110	20	15	48	30	20	58	42	1500	10
6000388	200	20	15	48	30	20	58	42	2100	10
6000142*	110	45	15	62	50	22	69	62	2400	18
6000389*	200	45	15	62	50	22	69	62	3800	18

All water baths are supplied with heating elements protection shelf.
* With built in drain tap.

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.

Water and oil baths "Precisdig" with or without anti-evaporation folding lid

DIGITAL CONTROL AND DISPLAY OF TEMPERATURE AND TIME.
ADJUSTABLE TEMPERATURE RANGE FROM AMBIENT+5 °C TO 99.9 °C, STABILITY ±0.1 °C, HOMOGENEITY ±1 °C.
ADJUSTABLE TEMPERATURE RANGE FROM AMBIENT+5 °C TO 200 °C, STABILITY±0.5 °C, HOMOGENEITY ±2.5 °C.

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

Programmable temperature and time. Interior and exterior made from Stainless steel

45 l
20 l
5 l
12 l

NEW DESIGN

FEATURES

Double skinned tank of AISI 304 stainless steel with an external case of AISI 304 stainless steel.
Heating elements embedded in INCOLOY heat and corrosion resistant stainless steel.
Comes complete with drain tap.

20 l
45 l
12 l

37.0
29.7 °C

1 2 3
4 5 6 7

CONTROL PANEL

General switch with signal lamp.
1. Heating indicators; open thermostat; failure.
2. Reading display (temperature or time).
3. Setpoint value display (temperature or time).
4. Visualization mode change.
5. Increase value.
6. Decrease value.
7. Start / stop button.

MAKROLON® FOLDING LID PROPERTIES

Due to its transparency, you can visualize the bath's inside. It improves temperature stability, and restricts evaporation and pollution

MODELS

Part No.	Temperature maximum °C	Capacity litres	Height / Widht / Depth (usable) cm			Height / Widht / Depth (exterior) cm			Power W	Weight Kg
6001120	99,9	5	15	30	14	20	37	27	600	6
6001220	200	5	15	30	14	20	37	27	1100	6
6001121	99,9	12	15	30	30	20	40	42	1100	8
6001221	200	12	15	30	30	20	40	42	1400	8
6001122	99,9	20	15	48	30	20	58	42	1500	10
6001222	200	20	15	48	30	20	58	42	2100	10
6001123	99,9	45	15	62	50	20	69	62	2400	18
6001223	200	45	15	62	50	20	69	62	3800	18

All baths with heating shelf and drainage. Faucet included.

MODELS WITH MAKROLON® FOLDING LID

Part No.	Temperature maximum °C	Capacity litres	Height / Widht / Depth (usable) cm			Height / Widht / Depth (exterior+lid) cm			Power W	Weight Kg
6001131	99,9	12	15	30	30	40	40	42	1100	8
6001132	99,9	20	15	48	30	40	58	42	1500	10
6001133	99,9	45	15	62	50	40	69	62	2400	18

All baths with heating shelf and drainage. Faucet included.

Ge
1.
2.
3.
4.
5.
6.
7.

Water bath with inner stirring "Agibat-20"
with digital control and display of temperature and time

ADJUSTABLE TEMPERATURE RANGE FROM AMBIENT +5ºC UP TO 80ºC. STABILITY ±0.1ºC.
SET TEMPERATURE ACCURACY ±1 °C, WORKING TEMPERATURE PRECISION 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 TEMPE-
RATURE. A MANUAL RESET ADJUSTABLE TEMPERATURE SAFETY THERMOSTAT IS PLACED AT THE BACK OF THE UNIT.

J.P.Selecta original model. More space. More accuracy. Economical.

FEATURES

Double skinned tank, inner case made of AISI 304 stainless steel.
External case of AISI 304 steel.
Submerged heating elements in INCOLOY special alloy.
It comes complete with drain tap.

STIRRING SYSTEM

These baths have an aspiration and outflow internal circulation pump which allow a
constant flow stirring.
Flow: 8 litres per minute.

CONTROL PANEL

See page 87.
Three positions switch: only heater, heater + stirring and start/stop.

MODEL WITH MAKROLON® FOLDING LID

Due to its transparency, you can visualize the bath's inside.
It improves temperature stability, and restricts evaporation and pollution.

NEW DESIGN

Model with Makrolon® lid

Stirring detail by internal circulation pump.

MODELS

Part No.	Lid Makrolon®	Maximum Temp °C	Litres Capacity	Height/Width/Depth (usable) cm			Height/Width/Depth (exterior) cm			Power W	Weight Kg
6032015	Yes	80	20	15	48	30	40	58	42	2100	11
6032016	No	80	20	15	48	30	40	58	42	2100	12

ACCESSORIES.
See page 89.

All baths with heating shelf and drainage. Faucet included.

Big capacity water baths "Precisbig"

DIGITAL CONTROL AND DISPLAY OF TEMPERATURE AND TIME.
ADJUSTABLE TEMPERATURE RANGE FROM AMBIENT +5 °C TO 99,9 °C. STABILITY: ±0,2 °C. HOMOGENEITY ±2 °C.

NEW

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

Programmable temperature and time. Interior and exterior made from Stainless steel

FEATURES

Double skinned tank of AISI 304 stainless steel with an external case of AISI 304
stainless steel.
Heating elements embedded in INCOLOY heat and corrosion resistant stainless steel.

CONTROL PANEL

See page 89.

MODELS

Part No.	Temperature maximum °C	Capacity litres	Height / Widht / Depth (usable) cm			Height / Widht / Depth (exterior) cm			Power W	Weight Kg
6001240**	99,9	160	40	80	50	96	100	70	9000	130
6001241**	99,9	220	40	110	50	96	140	70	9000	160

All baths with heating shelf and drainage. Faucet included.
Due to their power consumption are manufactured for three phase 380 V. 4 wheels and gable lids included.

ACCESORIES
Gable lid for bath 6001240. Part No. **6000715**   **Gable lid** for bath 6001241. Part No. **6000716**
Silicone oil 4 liters. Temperature up to 300 °C. Viscosity 50 mm2/s at 25 ºC. Melting point 318 °C. Part No. **1000027**

ACCESSORIES FOR "PRECISTERM", "PRECIDSDIG" AND "AGIBAT-20"

Suitable for all "PRECISTERM", "PECISDIG" and "AGIBAT-20" models.

Only for baths model "PRECISTERM"

Removable constant liquid level.
Part No. 6001400
Note: Not compatible with gale and Makrolon® lid.

Fixed, constant liquid level.
Part No. 6000123

Thermometer support with locking screw (up to 40 mm).
Part No. 6000896

Thermometer.
Part No.
1000120 up to 100 °C.
1000872 up to 120 °C, extra long, suitable for Gable lid.
1095250 up to 200 °C, extra long, suitable for Gable lid.

1. **Gable lid** with thermometer location position hole.
2. **Flat lid with concentric reduction rings** of 105, 80, 60 and 37 mm Ø. With thermometer location position hole.
   Note: The perforated lid avoids the lock of the Makrolon® folding lid.
3. **Support frame** for tube racks.
4. **Tube Racks** various tube diameters available.

Capacity litres	Model code AGIBAT-20	Model code PRECISTERM	Model code PRECISDIG	1 Gable lid	2 Lid with concentric reduction rings	3 Support frame
2		6000137 - 6000385		–	6003231 1 place	–
5		6000138 - 6000386 - 6001120*- 6001220*		6000710	6003232 2 places	1001199
12		6000140 - 6000387 - 6001121*- 6001221*		6000711	6003234 4 places	1001200
20	6032012*6032013*	6000141 - 6000388 - 6001122*- 6001222*		6000712*	6003236 6 places	1001201
45		6000142*- 6000389*- 6001123*- 6001223*		6000714	6001603 12 places	1001205

* Comes complete with drain tap. ***** For all baths except those carrying Makrolon® lid.

Capacity litres	for PRECISDIG baths with Makrolon® lid	2 Lid with concentric reduction rings	3 Support frame
12	6001131	6003234 4 places	1001200
20	6001132	6003236 6 places	1001201
45	6001133	6001603 12 places	1001205

4 Tube racks (requires support frame)									
Part No.	Tube Ø mm	Number of tubes per rack	Rack Dimensions Height / Widht / Depth (usable) cm			Number of racks by bath capacity litres			
						5	12	20	45
1001202	13	36	8	8.2	23.6	1	3	5	10
1001203	16	24	8	8.2	23.6	1	3	5	10
1001204	20	24	8	8.2	23.6	1	3	5	10

Stabilising rings "circum" prevents flasks from floating when placed in a water bath. Suitable for all types of flasks,erlenmeyers, etc. See page. 176.

Silicone oil 4 liters. Temperature up to 300ºC. Viscosity 50 mm^2/s at 25 ºC. Melting point 318 ° C. Part No. 1000027

Histology paraffin section mounting bath "Termofin"

ADJUSTABLE TEMPERATURE FROM 40 °C TO 80 °C.
STABILITY ±1 °C.

P.T.F.E. coated

APPLICATIONS
Suitable for the fusion and preservation of paraffin wax in a liquid state that enables the user to see the floated sections.

FEATURES
Aluminium inner tank and lid with a P.T.F.E. matt black coating. Thermometer location hole in the lid to read temperature.

CONTROL PANEL
Mains power ON/OFF switch. Hydraulic temperature thermostat regulator synchronised with an indicator lamp.

MODEL

Part No.	Capacity litres	Ø (usable)	Height cm	Ø (exterior)	Height cm	Power W	Weight Kg
3000459	4	25	10	34	14	430	2.3

Comes complete with lid and thermometer.

ACCESSORY
Thermometer support (can only be used without the lid).
Part No. 6004591
NOTE: Wax dispenser (see page 217).

Bank of oil and water baths "Precisbat"

ADJUSTABLE TEMPERATURES FROM AMBIENT +5 °C UP TO 200 °C, STABILITY ± 2 °C.
INDEPENDENT TEMPERATURE CONTROL FOR EACH POSITION.

FEATURES
Inner vessel made of AISI 304 stainless steel with the external case made of AISI 304 stainless steel.
The heater element is embedded in stainless steel INCOLOY alloy, that is corrosion and heat resistant.
Each position has a lid with concentric reduction rings of; 105, 80, 60 and 40 mm in Ø.
An adjustable support frame is mounted at the back of the unit to facilitate the mounting and support of flasks, condensers and other apparatus, etc.
Capacity: 2 litres per position.

CONTROL PANEL
Independent control for each position.
Mains ON/OFF with luminous "ON" indicator lamp for each position.
Hydraulic thermostat temperature control synchronised with the "ON" indicator lamp.

MODELS

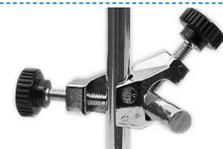| Part No.	Temperature maximum °C	Number of places	Height / Widht / Depth (usable each position) cm			Height / Widht / Depth (exterior) cm			Power W	Weight Kg
6001462	200	2	12	14	12	19	35	29	1300	5.5
6001472	200	4	12	14	12	19	67	29	2560	10
6001482	200	6	12	14	12	19	100	29	4200	15

ACCESSORIES

Perforated shelf (One per tank) made of AISI 304 stainless steel. Part No. 6000011

Clamp for supporting flasks and condensers. Part No. 7000403
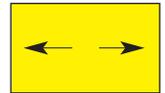
Thermometer up to 220 °C. Part No.1095250

Bosshead for supporting clamps. Part No. 1000069

Silicone oil 4 liters. Temperature up to 300ºC. Viscosity 50 mm^2/s at 25 °C. Melting point 318 ° C. Part No. 1000027

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.

RS232

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.
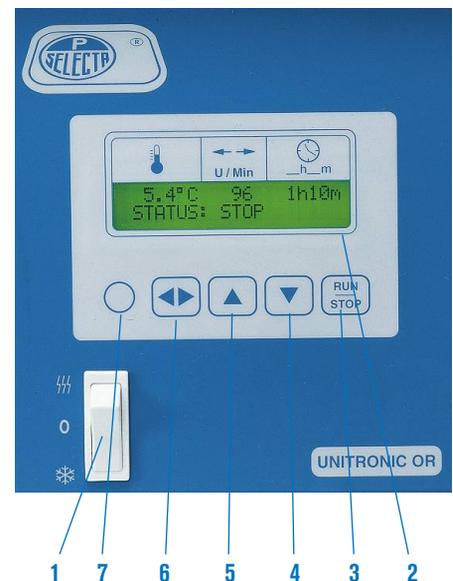Internal tank made of AISI 304 stainless steel with an external case of AISI 304 stainless steel.

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

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

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.

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

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.

Ultrasonic Cleaning Baths "Ultrasons", "Ultrasons UB-1488", "Ultrasons-H", "Ultrasons-HD" and "Ultrasons-P"

FUNDAMENTAL THEORY

The principal of ultrasonic cleaning consists of the use of high frequency sound waves (40 kHz), produced by a generator through a transducer, which propagates them mechanically inside the tank, this produces a cavitation effect which leads to the formation of millions of low pressure microscopical bubbles which carry out molecular cleaning, eliminating impurities, polluting agents and dirt from the parts or material which must be cleaned.

Complex parts can be cleaned without disassembly since the cavitation penetrates wherever the cleaning solution is in contact with the surface.

The generator of these baths is completely transistorised and incorporated, working through the "Sweeping frequency" system, which ensures uniform cavitation at all points of the resonance tank.

COMMON FEATURES

Double bodied tank, made entirely of stainless steel.
Emptying drain, anti-parasite filter, adjustable timer and heating, model dependent.

APPLICATIONS

Laboratories in general: acceleration of chemical reactions, degassing of liquids, cell disruption, cleaning of sieves, pipettes, micro-pipettes, cuvettes, trays, viscometers, decomposition of radioactive substances, etc.
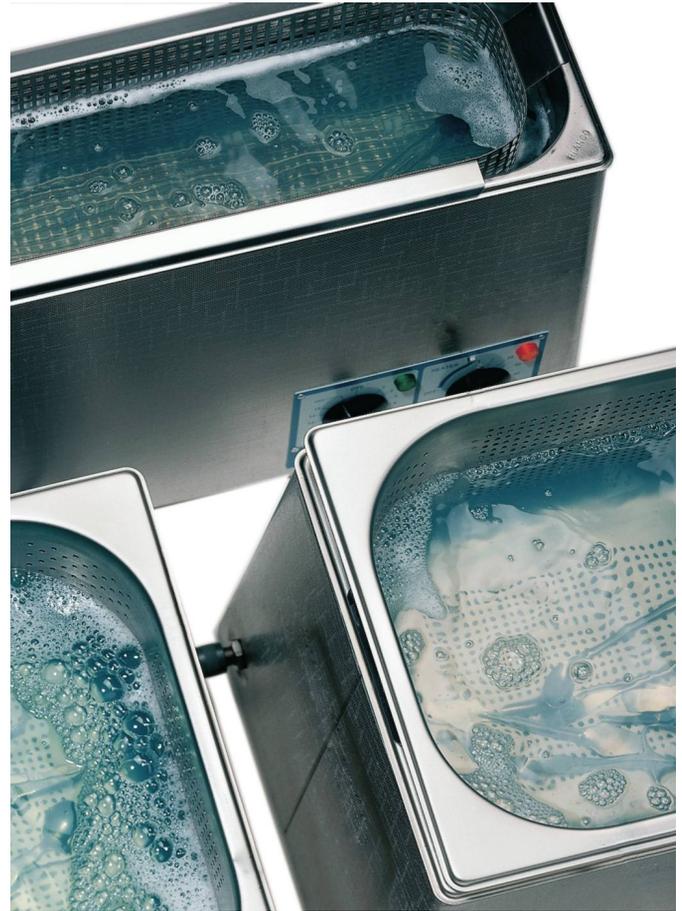**Dentistry:** Cleaning of prosthesis, instruments, etc.
Optics: Cleaning of frames, lenses, and contact lenses, etc.

SUMMARY TABLE

Medicine: Cleaning of instruments in general, forceps, probes, scalpels etc.
Jewellery and Watch making: Cleaning of all kind of watches and jewels.
Industry: Cleaning of all electronic components, printed circuit boards, semiconductors, petrol injector sieves and filters, etc.

Ultrasonic bath, Automatic Lift and Dry "Ultrasons-UB-1488"

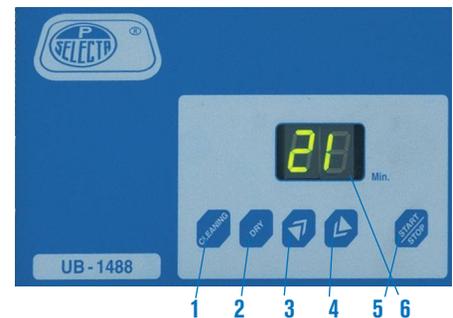*Selecta original model. Quick dry, without having to control the instrument*

FEATURES

Bath with automatic basket elevator that operates at the end of the time cleaning cycle.
Hot air drying by two-turbine air fans that switch on at the start of the elevation and finalise the complete operation. Waste drain at the front of the instrument. Removable support basket.

CONTROL PANEL

1. Cleaning time control: 0-15 minutes.
2. Push button drying time: 0-15 minutes.
3. Push button increase value.
4. Push button reduce value.
5. Push button stop / start.
6. Digital timer display.

MODEL

Part No.	Capacity litres	Height / Width /Depth (usable) cm			Height / Width /Depth (exterior) cm			Generator power W	Power total W	Weight Kg
3001488	6	15	30	14	30	40	34	150	2150	12

Comes complete with basket.

Ultrasonic cleaning baths "Ultrasons" without heating

3 Part No. 3000513 Cap. 6L

4 Part No. 3000617 Cap. 9L

8 Part No.3001208 Cap. 4L

7 Part No. 3000515 Cap. 20L

1 Part No. 3000512, Cap. 1L

2 Part No. 3000683 Cap. 2,6 L

5 Part No. 3000837 Cap. 6,5L
(suitable for sieves and filters etc.)

6 Part No. 3000514
Cap. 9L

CONTROL PANEL
Timer switch for 0 -15 minutes or continuous operation. Indicator lamp when the unit is in operation.

MODELS

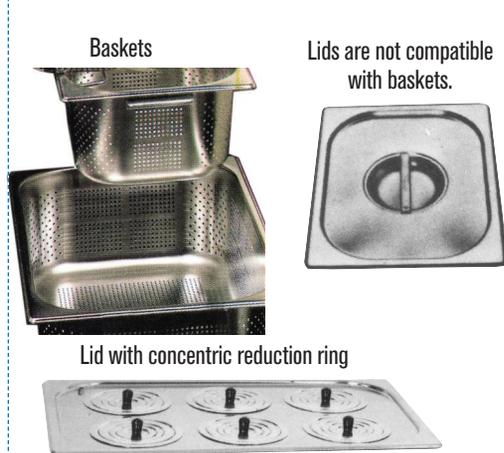| Part No.		Capacity litres	Height / Width /Depth (usable) cm			Height / Width /Depth (exterior) cm			Generator power W	Timer 0-15'	Waste drain	Weight Kg
3000512	1	1	6	14	14	20	20	18	50	Yes	No	2,5
3000683	2	2,6	9	23	13	22	29	19	100	Yes	No	4
3001208	8	4	10	30	14	24	33	18	100	Yes	Yes	7
3000513	3	6	15	30	14	30	36	20	150	Yes	Yes	9,5
3000837	5	6,5	14	24	Ø	30	27,5	Ø	150	Yes	No	8
3000617	4	9	15	50	14	30	56	20	200	Yes	Yes	10,7
3000514	6	9	15	30	23	30	36	30	200	Yes	Yes	13
3000515	7	20	15	50	30	30	56	36	400	Yes	Yes	22

COMPLEMENT

Detergent "BIO-SEL"
Bio-degradable, phosphate free. Excellent cleaning power just by mixing only 20ml per litre of water. BIO-SEL, in a 2% solution has a 9.7 pH level. Low toxicity. This detergent disperses, emulsifies, segregates, dissolves, suspends and breaks down dirtiness.

1000025 Capacity 1 litre.
1000026 Capacity 4 litres.
1000852 Box of 12 x 1 litre bottles.
1000853 Box of 4 x 4 litres bottles.

Baskets

Lids are not compatible with baskets.

Lid with concentric reduction ring

ACCESSORIES
Baskets and Lids.
Made of AISI 304 stainless steel.

Cleaner model Part No.	BASKET Part No.	BASKETS Height / Width /Depth (cm)			LID WITH CONCENTRIC REDUCTION RING Part No.	Number of positions	LID WITH HANDLE Part No.
3000512	6005123	5	11	11	6005122	1	6005121
3000683	6006833	7	20	12	6006832	1	6006831
3001208	6001209	7	26	13	–	–	6005131
3000513	6005133	12	26	13	6003232	2	6005131
3000837	6008373	13	23	Ø	–	-	6008371
3000617	6005144	12	46	12	6005134	3	6005124
3000514	6005143	13	29	23	6005142	2	6005141
3000515	6005153	13	49	29	6003236	6	6005151

Ultrasonic Bath "Ultrasons-Digit"
5 CYCLES ELECTRONIC DIGITAL TIME CONTROL
CAPACITY 1.4 LITRES

FEATURES
Internal tank made from stainless steel, with minimum and maximum level indicator.
External case, basket and lid made from PVC.
Maximum cleaning power , frequency 42 KHz

CONTROL PANEL
Pushbutton start/ stop
Timer 5 programs selection in seconds:
90" - 180" - 280'' - 380" and 480".
Wide application range from jewellery, watches, optical components. Dentistry and general laboratory use.

MODEL

Part No.	Capacity litres	Height / Width / Depth (usable) cm			Height / Width / Depth (exterior) cm			Power W	Weight Kg
5900650	1.4	6	13	16	15	17	22	70	1.75

Comes complete with basket and see through transparent PVC lid.

Model "Elegant".

Heating cleaning bath "Ultrasons-HD"

DIGITAL ELECTRONIC REGULATION OF TEMPERATURE AND TIME
FOR TEMPERATURES FROM AMBIENT +5ºC TILL 80ºC

Optimum cleaning efficiency

It comes complete with a universal basket, lid with handle and drain device.
Bath Part. No. 3000865 (5 Litres capacity) is also supplied with basket for small items.

FEATURES
Double body container, completely made of stainless steel and with waste drain device.

CONTROL PANEL
Illuminated main switch.
Start-stop push button.
Increase/decrease time push button in minutes (from 0' to 99').
Increase/decrease temperature push button in ºC.

MODEL

Part No.	Capacity litres	Height/Width/Depth (usable) cm			Height/Width/Depth (exterior) cm			Power Generator W	Power Heater W	Weight Kg
3000865	5	15	24	14	27	31	18	120	75	3,8
3000866	6	15	30	15	27	35	18	180	75	5,8
3000867	10	15	30	24	35	38	28	240	225	8,2
3000868	22	15	50	30	27	58	35	600	375	15
3000864	30	20	50	30	40	58	34	800	900	18

Heated Ultrasonic baths "Ultrasons-H"

AJUSTABLE TEMPERATURE FROM AMBIENT +5 °C HASTA 75 °C.

APPLICATIONS
For long pieces cleaning (especially for pipettes) .

Note: For cleaning long objects whose length may exceed that of the tank, such as tubes, pipettes, etc, it has been proved that they are submitted to the same cavitation effect by introducing them in a test tube filled with liquid and placed vertically in the cleaner.

FEATURES
Evenly distributed heating element, adhered to the tank for maximum heat transfer.

CONTROL PANEL
Adjustable thermostat heater.
Heater "on" indicator lamp.
Timer switch from 0-15 minutes or continuous operation.
In operation on indicator lamp.

MODEL

Part No.	Capacity litres	Height/Width/Depth (usable) cm			Height/Width/Depth (exterior) cm			Power Generator W	Power Heater W	Weight Kg
3000839	9	15	50	14	30	56	20	200	800	11

ACCESSORIES
Basket, Height 12/Width 46/Depth12 cm. Part No 6005144
3 Lid with concentric reduction ring. Part No 6005134
Lid with handle. Part No 6005124
See page: 92.

Ultrasonic pipette cleaner "Ultrasons-P"

FEATURES
Designed for automatically cleaning and rinsing pipettes, mounted inside a basket, pipettes are ultrasonically cleaned and rinsed.
Minimum rinsing time by using a water siphon action through the inside of the pipettes.
Metallic areas in contact with liquid are made of AISI 316 stainless steel.
The outer casing is made of AISI 304 stainless steel.
Cylindrical vessel in transparent acrylic, with lid to avoid splashing.
Connector(1") water inlet and siphon-drain tube.
Basket with handle in polypropylene for the easy handling and carrying of the pipettes.

CONTROL PANEL
Timer from 0-15 minutes or continuous operation.
Indicator lamp showing when the bath is in operation.

MODEL

Part No.	Capacity litres	Ø / Height (usable) cm		Height / Widht/ Depth (exterior) cm			Power W	Weight Kg
3000910	10	15	64	84	34	40	250	15

"It is characteristic of science that the full explanations are often seized in their essence by the percipient scientist long in advance of any possible proof."
John Desmond

THERMOSTAT BATHS AND IMMERSION THERMOSTATS
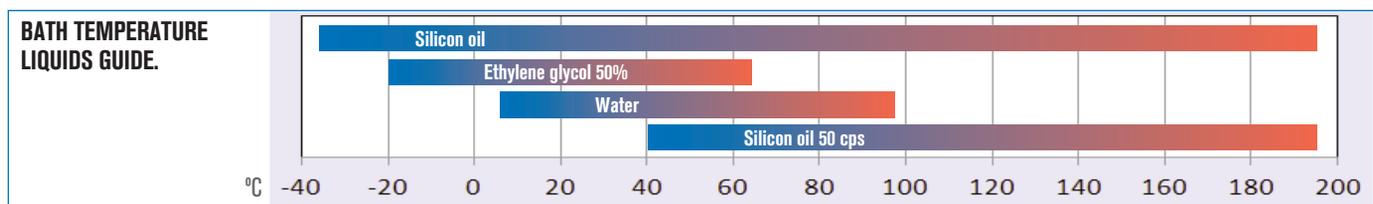## Summary table of the different models

EQUIPMENT FOR STABLE AND PRECISE TEMPERATURE CONTROL.

Range	Model	Part No.	Control	Volume máx. litres	Stability °C	Set error °C	RS-232/USB
+5 ... 100 °C	Termotronic 100	3000540	Digital µ	20	±0,2	-	No
+5 ... 150 °C	Digiterm-S-150	3000543	Digital µ	20	±0,1	±1	No
+5 ... 200 °C	Digiterm-TFT-200	3000544	TFT Touch screen µ	20	±0,1 / ±0,1	±2	Yes
0 ... 100 °C	Digit-Cool	3001373	Digital µ	20	±0,1 / ±0,1	±1	RS-232
+5 ... 150 °C	Digiterm-S-150-20	3000548	Digital µ	20	±0,1	-	No
+5 ... 150 °C	Digiterm-S-150-27	3000549	Digital µ	27	±0,1	-	No
+5 ... 200 °C	Digiterm-TFT-200 20	3000550	TFT Touch screen µ	20	±0,1	±2	Yes
+5 ... 200 °C	Digiterm-TFT-200 27	3000551	TFT Touch screen µ	27	±0,1	±2	Yes
+5 ... 200 °C	Ultraterm-TFT-200	3000545	TFT Touch screen µ	8	to 100 °C ±0,1 / to 200 °C ±0,1	±1 / ±2	Yes
–10 ... 100 °C	Frigiterm-TFT-10	3000546	TFT Touch screen µ	8	to 100 °C ±0,1 / to 0 °C ±0,1 / to -10 °C ±0,1	±1	Yes
–30 ... 100 °C	Frigiterm-TFT-30	3000547	TFT Touch screen µ	8	to 100 °C ±0,1 / to 0 °C ±0,1 / to -10 °C ±0,2	±1	Yes
+5 ... up to 90 °C	Interheater	6001491	Digital	20 l/min.	-	±1	No

Refrigerated coils

Range	Model	Part No.	Control	Volume máx. litres	Stability °C	Set error °C	RS-232/USB
–20 ... 20 °C	Frigedor	3000778	No controller	20	-	-	No
–20 ... 20 °C	Frigedor-Reg	3001214	Digital	20	±1,5	±1,5	No

THERMOSTATS DRY-BLOCKS

Range	Model	Control	Blocks-1	Blocks-3	Blocks-4	Stability	
30 ... 200 °C	Tembloc	Digital µ	7462200	-	-	±0,75 °C	With multiple adapters.
30 ... 200 °C	Multiplaces	Digital µ	-	7471200	-	±0,75 °C	With multiple adapters.
FIXED 37 °C	Clinic-bloc	-	7001569	-	-	±0,5 °C	Capacity 20 tubes of 75 x 13mm. VAC.
+5 ... 100 °C	Bio-bath 2	-	7001562	-	-	±0,5 °C	Capacity 15 cuvettes of 10 x 10mm.
+5 ... 60 °C	TRM-4	Digital µ	-	-	5109200	±0,5 °C	For 4 microtiter plates.
+5 ... 100 °C	TR100-6	Digital µ	5109100	-	-	±0,5 °C	WITH SHAKING. With multiple adapters.

µ: with microprocessor.
+5: ambient +5 °C.

BATH TEMPERATURE LIQUIDS GUIDE.

Silicon oil
Ethylene glycol 50%
Water
Silicon oil 50 cps

°C -40 -20 0 20 40 60 80 100 120 140 160 180 200

The most precise solution for maintaining constant liquid temperatures
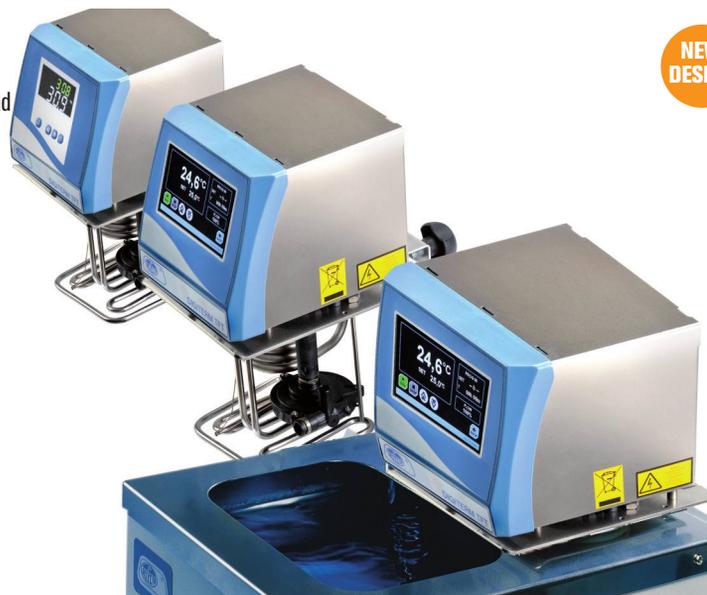
SAFETY:
STANDARD DIN 12876.
ADJUSTABLE OVER TEMPERATURE SAFETY THERMOSTAT WITH MANUAL RESET AND LOW LIQUID LEVEL FLOAT SENSOR. (EXCEPT TERMOTRONIC 100)

COMMON FEATURES

Temperature probe Pt 100.
Heating element made of stainless steel INCOLOY resistant to high temperatures and corrosive environments.
Circulation Pump for internal or external temperature control for:
 (Polarimeters, refractometers and viscometers, etc).
Cooling coil to maintain ambient temperatures using tap water.
External metal case in AISI 304 stainless steel.

NEW DESIGN

PARTS THAT ARE IN CONTACT WITH LIQUID

-Safety over temperature thermostat.
-Liquid level float.
-Cooling coil.
-Heating element made of stainless steel INCOLOY
that can withstand high temperatures and is corrosion
resistant.
-Circulation pump.
-Pump outlet for external circulation.
-Circulating pump outlet.

Outlet nut of the fluid flow fixed in A or B interchan-
geable:
A. Internal stirring within the tank.
B. External circulation.

H₂O FLOW OUTPUT

	Flow l/m
Cuvette inner circulation level	**Up to 7,05**
External circulation level raised to a meter.	**Up to 5,16**

Tests made with silicone tubes of 8 mm internal Ø.

TWO DIFERENT CONTROL SYSTEMS:

A Digital display and **B** TFT touch screen.

DIGITERM-S-150, TERMOTRONIC-100

Specific functions of models with digital screen:
- Real time temperature reading.
- Display resolution 0.1 °.
- Permanent view of set temperature.
- Timer from 1 min to 99 h 59 min. (only model DIGITERM S-150)
- Heating indicator.
- Monitoring temperature: high limit / low limit.
- Automatic calibration of a point.
- Connection for external probe PT-100 (only DIGITERM S-150 model)

DIGITERM TFT-200, ULTRATERM-TFT-200, FRIGITERM-TFT-10, FRIGITERM-TFT-30

Specific functions of models with touch screen:
- Acoustic and visual alarm.
- Clock and calendar.
- Single or cyclic On / Off programming.
- Up to 10 work programs.
- Up to 6 segments per program.
- Stability time in each segment (from 1 min to 99h).
- Alarms and events storage.
- Probe error detection.
- Self Diagnostics.
- Network failure detection and saving.
- Over temperature and low temperature alarms and me-
morization (date, start time, end time and temperature).
- Connection device for external temperature Pt100 pro-
be (see page 104).
- Safety thermostat (TS) by software.
- Mechanic safety thermostat (TS).
- USB and RS -232 output.
- Configurable parameters: Date / time, temperatu-
re correction , data collection interval, language
(English, Spanish and French) , °C / °F selection ,
over temperature and low temperature limit.
- Circulation pump speed control (between 0% and
100%).

High precision temperature control

SAFETY:
STANDARD DIN 12876. 1. SAFETY OVER TEMPERATURE THERMOSTAT WITH ADJUSTABLE MANUAL RESET

FEATURES

Maximum working volume to maintain maximum temperature: 20 litres.
A clamp and finger screw attach the unit to the tank, alternatively the extendible support bridge accessory can be used.
Minimum fixing depth to the tank: 14 cm.

CONTROL PANEL

1. Set temperature display indicator.
2. Bath temperature/time display indicator.
3. "SET" button.
4. Set value decrease/increase button.
5. Start/Stop button.

NEW
DESIGN

REGULATION
A
SYSTEM

TERMOTRONIC

MODELS	Part No.	Control range °C	Stability °C	Height / Width / Depth (exterior) cm			Pump Pressure / Flowrate H₂0	Power W	Weight Kg
TERMOTRONIC 100 3000540		**Amb +5 to 100**	**±0,1**	**28**	**18**	**19**	**150 mbar-12 l/min.**	**2000**	**3,9**

Accessories (See page. 104).

ACCESSORIES

Methacrylate tank "Clinic-Term"

Part No.	Capacity litres	Temp. max. °C	Height / Width / Depth (usable) cm			Capacity Rack	Weight Kg
1000544	8	60	14	16	39	4	2

Racks for the "Clinic-Term" made of AISI 304 stainless steel.
Racks for 50 micro-tubes of 11mm Ø. Part No. 1000546
Racks for 50 haemolysis tubes and coagulation tests with a diameter of 13 mm. Part No. 1000545
Racks for 14 tubes with a diameter of 18mm. Part No. 1000547
Racks for 8 cuvettes for spectrophotometers, 10 mm square, standard for monotest flask of different sizes. Part No. 1000548
Note: The methacrylate tank should not be used over 60 °C.

Metal baths. Manufactured with a double external AISI 304 stainless steel skin and an AISI 304 stainless steel pressed bath interior.

Part No.	Capacity litres	Height / Width / Depth (usable) cm			Height / Width / Depth (exterior) cm			Weight Kg
6000390	9	15	29	22	20	34	28	3.5
6000391	12	15	30	31	20	37	35	4.3
6000392*	20	15	48	30	20	55	35	6.6
6000393*	27	20	48	30	25	55	35	7.6
6001093*	45	15	62	50	23	70	56	11

* With drain tap and lifting handles.

Immersion thermostat with digital control "Digiterm S-150"

ADJUSTABLE TEMPERATURE FROM AMBIENT +5°C TO 150°C.

High precision temperature control

SAFETY:
STANDARD DIN 12876. 1. SAFETY OVER TEMPERATURE THERMOSTAT WITH ADJUSTABLE MANUAL RESET 2. LOW LIQUID LEVEL FLOAT

FEATURES
Maximum working volume to maintain maximum temperature: 20 litres.
A clamp and finger screw attach the unit to the tank, alternatively the extendible support bridge accessory can be used.
Minimum fixing depth to the tank: 14 cm.
Rear connection for additional OT100 probe. Automatic selection.
Cooling coil.

CONTROL PANEL
1. Set temperature display indicator.
2. Bath temperature/time display indicator.
3. "SET" button.
4. Set value decrease/increase button.
5. Start/Stop button.

NEW DESIGN

REGULATION SYSTEM **A**

MODELS	Part No.	Control range °C	Stability °C	Height / Width / Depth (exterior) cm			Pump Pressure / Flowrate H₂O	Power W	Weight Kg
DIGITERM S-150	**3000543**	**Amb +5 to 150**	**±0,1**	**28**	**18**	**19**	**150 mbar-12 l/min.**	**2000**	**3,9**

Accessories (See page. 104).

Immersion thermostat with TFT touch screen "Digiterm TFT-200"

ADJUSTABLE TEMPERATURE FROM AMBIENT +5°C TO 200°C.
With external refrigeration from -20 to 200.

High precision temperature control

SAFETY:
**STANDARD DIN 12876. 1. SAFETY OVER TEMPERATURE THERMOSTAT WITH ADJUSTABLE MANUAL RESET
2. OVER TEMPERATURE ALARM - 3. LOW LIQUID LEVEL FLOAT**

FEATURES
Maximum working volume to maintain maximum temperature: 20 litres.
A clamp and finger screw attach the unit to the tank, alternatively the extendible support bridge accessory can be used.
Minimum fixing depth to the tank: 14 cm.
RS-232, USB and Ethernet output.
Cooling coil.

CONTROL PANEL
1. Set/ current temperature indicator.
2. Pump flow indicator (%).
3. Stop button.
4. Start button.
5. Push up parameter.
6. Push down parameter.
7. Set / current time indicator in hours / minuts.
8. Return button.

NEW DESIGN

REGULATION SYSTEM **B**

RS232

MODELS	Part No.	Control range °C	Stability °C	Height / Width / Depth (exterior) cm			Pump Pressure / Flowrate H₂O	Power W	Weight Kg
DIGITERM TFT-200	**3000544**	**amb.+5 to 200**	**200 °C ±0,1**	**28**	**18**	**19**	**150 mbar-12 l/min.**	**2060**	**4,5**

Accessories (See page. 104).

Recirculation thermostat "Ultraterm-TFT-200"

**ADJUSTABLE TEMPERATURES
FROM AMBIENT+5 °C TO 200 °C.**

RS232

USB

> **SAFETY:**
> STANDARD DIN 12876. SAFETY OVER TEMPERATURE
> THERMOSTAT WITH ADJUSTABLE MANUAL RESET
> LOW LIQUID LEVEL SENSOR PROTECTION.

FEATURES

Maximum working volume to maintain maximum temperature: 8 litres.
AISI 304 stainless steel top and lid with an inner tank of AISI 304 stainless steel.
Complete with a pump for internal and external liquid circulation with inlet and outlet connectors. A cooling coil to maintain ambient temperatures using tap water is also provided.
A RS-232 interface for print out or computer control comes as standard.
A drain tap is also fitted.

MODEL

Part No.	Capacity litres	Control range °C	Stability °C	Height / Width / Depth (usable) cm			Height / Width / Depth (exterior) cm			Pump Pressure / Flowrate H$_2$0	Power W	Weight Kg
3000545	8	From amb. +5 to 200 °C With external refrigeration from -20 to 200	to 100 °C ±0.1 to 200 °C ±0.1	15	20	14	36	28	36	150 mbar-12 l/min	2060	9.5

Refrigerated recirculation baths "Frigiterm-TFT-10" and "Frigiterm-TFT-30"

**ADJUSTABLE TEMPERATURE FROM -10 °C TO 100 °C. STABILITY: 0 °C TO 100 °C, ±0.1 °C / -10 °C, ±0.1 °C.
ADJUSTABLE TEMPERATURE FROM -30 °C TO 100 °C. STABILITY: 0 °C TO 100 °C, ±0.1 °C / -30 °C, ±0.2 °C.
SET ERROR : ±1 °C. RESOLUTION: 0.1 °C.**

RS232

USB

> **SAFETY:**
> STANDARD DIN 12876. SAFETY OVER TEMPERATURE
> THERMOSTAT WITH ADJUSTABLE MANUAL RESET.
> LOW LIQUID LEVEL SENSOR PROTECTION.

FEATURES

Maximum working volume to maintain maximum temperature: 8 litres.
AISI 304 stainless steel top and lid with an inner tank of AISI 304 stainless steel.
Complete with a pump for internal and external liquid circulation with inlet and outlet connectors. A drain tap is placed at the side of the unit.
A hermetically sealed compressor is mounted on anti-vibration mounts.
A RS-232 interface for connection to a printer or computer.

MODELS

	Part No.	Capacity litres	Control range °C	Height / Width / Depth (usable) cm			Height / Width / Depth (exterior) cm			Pump Pressure / Flowrate H$_2$0	Power W	Compresser power H.P.	Weight Kg
FRIGITERM-10	3000546	8	-10 + 100	12	20	14	36	66	44	150 mbar-12 l/min	1150	1/8	28
FRIGITERM-30	3000547	8	-30 + 100	12	20	14	36	66	44	150 mbar-12 l/min	1460	3/8	30

PRECISE CIRCULATING BATHS
Choice of baths and immersion circulators
"Digiterm-S-150" and "Digiterm-TFT-200"

CONTROLLABLE TEMPERATURES FROM AMBIENT +5 °C TO 150 OR 200 °C.
CAPACITY FROM 20 TO 27 LITRES.
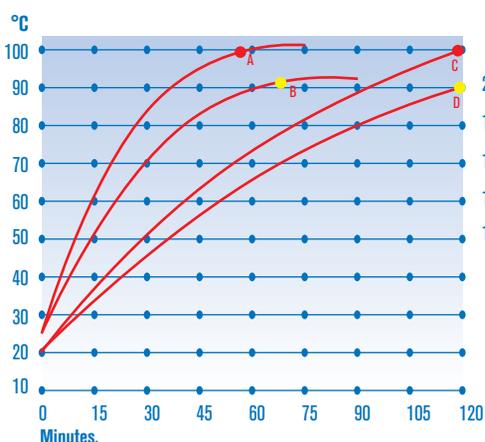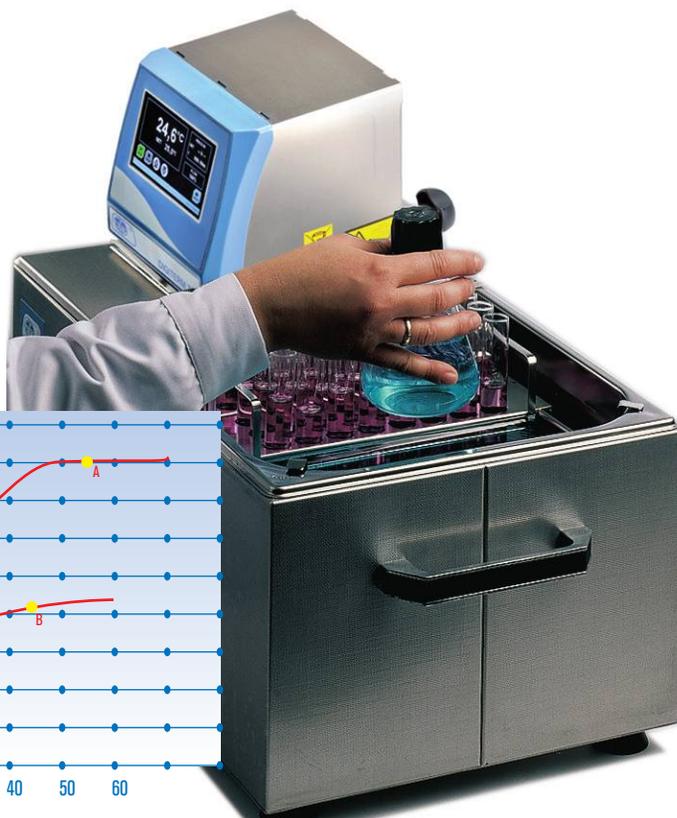
APPLICATIONS

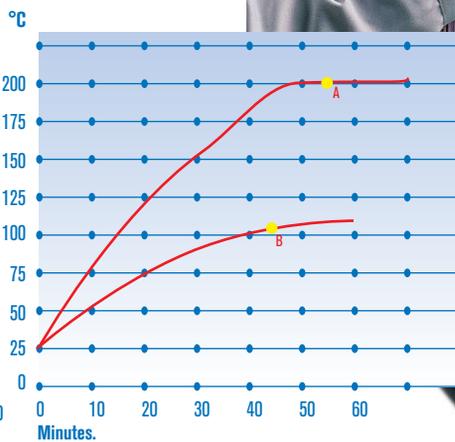Incubation processes, Enzymatic reactions, Fermentation, laboratory cultures in general.

COMMON FEATURES

Double skinned baths with an AISI 304 stainless steel internal tank with an AISI 304 stainless steel external, for convenience, handles at the side and drain tap are provided as standard. A detachable immersion thermostat for controlling stirring and temperature is fitted. A cooling coil with the use of tap water or cooled re-circulator can be used to maintain ambient temperatures. Internal or external circulation pump (Polarimeters, refractometers and viscometers, etc)

Graph of temperature and time for the Tectron Bio 100 and Digiterm-S-100 and Digiterm-TFT-200, units with capacity of 20 litres.
Tests completed with water up to 100°C:
A. Digiterm-TFT-200 with lid at 100 °C.
B. Digiterm-TFT-200 no lid at 90 °C.
C. Digiterm-S-100 with lid at 100 °C.
D. Digiterm-S-100 with no lid at 90 °C.

Graph of temperature and time for the Digiterm 100 and 200, units with capacity of 20 litres.
Tests completed with Silicon oil up to 200°C:
A. Digiterm-TFT-200 with lid at 200 °C.
B. Digiterm-TFT-200 with lid at 100 °C.
27 litres capacity baths take 20% more time to reach the same temperature.

Bath circulators "Digiterm-S-150"

CUVETTES SET OF 20 AND 27 L. CAPACITY, WITH THERMOSTATIC EQUIPMENT INCLUDED.
FORT TEMPERATURES FROM AMB+5 TO 150 °C.
STABILITY: ±0,1 °C. RESOLUTION: 0.1 °C.

SAFETY:
SAFETY STANDARD DIN 12876.
SAFETY ADJUSTABLE OVER TEMPERATURE CUT OFF WITH MANUAL RESET.
LOW LIQUID LEVEL CUT OFF.

CONTROL PANEL

Display temperature indicator of the bath.
Set temperature indicator display.
Heater function light indicator.
Start/Stop button.
"SET" button (temperature/time).

Push button to decrease set value.
Push button to increase set value.
PT 100 external probe connection.

MODELS	Part No.	Temperature Range °C	Cuvettes Capacity litres	Height / Width / Depth (interior) cm			Height / Width / Depth (exterior) cm			Pump Pressure mbar	Pump rate l/min	Power W	Weight Kg
DIGITERM-S-150-20	3000548	150	20	15	30	29	36	55	35	150	12	2000	9.2
DIGITERM-S-150-27	3000549	150	27	20	30	29	41	55	35	150	12	2000	10.8

Bath circulators "Digiterm-TFT-200"

WITH IMMERSION THERMOSTAT DIGITERM-TFT-200.
CUVETTES SET OF 20 AND 27 L.
FROM AMBIENT +5 °C TO 200 °C. STABILITY ±0.1 °C. SET ERROR ±2 °C. RESOLUTION 0.1 °C.

SAFETY: CONFORMS TO THE DIN 12876. STANDARD. ADJUSTABLE OVER TEMPERATURE SAFETY CUT OFF WITH ADJUSTABLE MANUAL RESET.
LOW LIQUID LEVEL CUT OFF. ELECTRICAL FAULT ALARM.

RS232

USB

FEATURES
Temperature sensor probe Pt 100.
Heating element made of stainless steel INCOLOY, resistant to high temperatures and corrosive environments.
Circulation pump with flow rate, suitable for external temperature control for: (Polarimeters, refractometers, viscometers, etc).
Cooling coil to maintain ambient temperatures, using tap water.
External temperature control connection using a Pt 100 probe (see page104).
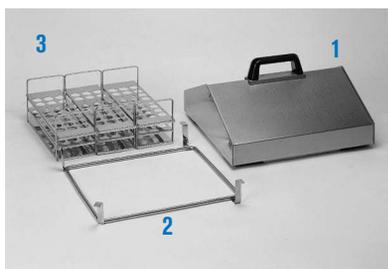External metal case made of AISI 304 stainless steel.
Handles at the side and drain tap.

MODELS	Part No.	Temperatura Range °C	Cuvettes Capacity litres	Height / Width / Depth (interior) cm			Height / Width / Depth (exterior) cm			Pump Pressure mbar	Pump Pump rate l/min	Power W	Weight Kg
TFT-200 20	3000550	200	20	15	30	29	36	55	35	150	12	2060	10
TFT-200 27	3000551	200	27	20	30	29	41	55	35	150	12	2060	12

ACCESSORIES see page 104.

ACCESSORIES for the DIGITERM-S-150 and DIGITERM-TFT-200. Made of AISI 304 stainless steel.

3
1
2

1. Gable lid. Part No. **3001295**
2. Lifting rack support. Capacity 3 tube racks. Part No. **1001296**
3. Tube racks for lifting rack support.

Part No.	For Ø tubes mm	Capacity Rack tubes	Height/Width/Depth (exterior) cm		
1001202	13	36	8	8.2	23.6
1001203	16	24	8	8.2	23.6
1001204	20	24	8	8.2	23.6

Immersion thermostat for baths "Digit-Cool"

DIGITAL SELECTOR AND TEMPERATURE CONTROL ADJUSTABLE FROM 0 °C TO 100 °C.
STABILITY: 100 °C ±0.1 °C, AND AT 0 °C ±0,1 °C. SET ERROR: ±0.1 °C. RESOLUTION: 0.1 °C.

RS232

SAFETY: STANDARD DIN 12876. SAFETY OVER TEMPERATURE THERMOSTAT WITH ADJUSTABLE MANUAL RESET.
LOW LIQUID LEVEL SENSOR PROTECTION.

FEATURES
Maximum volume to achieve the working temperature: 20 litres.
Minimum depth of the elements with contact with the liquid: 15 cm.
Hermetically sealed compressor.
RS-232 out put to a computer control or printer.
Portable control and stirring unit with lifting handle.

CONTROL PANEL
Main power switch.
LCD Display showing working parameters.
Push button configuration selector.
Push button parameter selection.
Push button increase/decrease set value.
Start / Stop, push button.

Autonomous unit with cooling system

Compressor unit built-in

Digitcool thermostat with bath and 4 place ring set lid.

MODEL

Part No.	Control Range °C	Height / Width / Depth (exterior) cm			Pump Pressure / Flow H$_2$0	Power W	Power H.P.	Weight Kg
3001373	0 +100	45	21	51	150 mbar / 12 l/min	1460	1 / 5	22

ACCESSORIES See page 104.

ACCESSORIES for thermostatic unit digit-cool.

Stainless steel baths.
Double skinned with an AISI 304 stainless steel exterior with a bath of AISI 304 stainless steel interior. Supplied with a drain tap and lifting handles.

1. Lifting rack support. .
Capacity 3 tube racks. Part No. **1001296**
2. Tube racks for lifting rack support.

Part No.	For Ø tubes mm	Capacity Rack tubes	Height / Width / Depth (exterior) cm		
1001202	13	36	8	8.2	23.6
1001203	16	24	8	8.2	23.6
1001204	20	24	8	8.2	23.6

MODELS

Part No.	Capacity litres	Height / Width / Depth (usable) cm			Height / Width / Depth (exterior) cm			Weight Kg
6000392	20	15	48	30	20	55	35	6.6
6000393	27	20	48	30	25	55	35	7.6

Ring set lid 105, 80, 60 and 37 mm Ø reduction rings and a check thermometer location hole in the lid.
Capacity 4 places.
Part No. **1001374**

Digitcool thermostat with bath and 4 place ring set lid.

ACCESSORIES FOR IMMERSION THERMOSTATS

Pt100 temperature sensor with handle
4 mm Ø x 135 mm long submersion.
Supplied with a 150cm cable and connector .
Part No. **1000893**

Silicone oil 4 liters. Temperature up to 300ºC. Viscosity 50 mm^2/s at 25 ºC. Melting point 318 ° C. Part No. **1000027**

Extension support bridge.
Made of AISI 304 stainless steel, adjustable, to fit the immersion thermostat models "Tectron and "Digiterm".
Support for apertures from 22 to 44 cm across.
Part No. **6001094**

Example showing the support bridge. Part No. 6001094.

Stainless steel baths.
Double skinned with an AISI 304 stainless steel exterior and internal bath of AISI 304 stainless steel.

MODELS

Part No.	Capacity litres	Height / Width / Depth (usable) cm			Height / Width / Depth (exterior) cm			Weight Kg
6000390	9	15	29	22	20	34	28	3.5
6000391	12	15	30	31	20	37	35	4.3
6000392*	20	15	48	30	20	55	35	6.6
6000393*	27	20	48	30	25	55	35	7.6
6001093*	45	15	62	50	23	70	56	11

* With drain tap and lifting handle.

Stainless steel baths, thermally insulated. Ideal for low temperatures. Suitable for J.P. Selecta refrigerated units. Similar to our other bath but with additional internal expanded foam insulation that prevents external condensation or heat loss, working temperature range from –40°C to +90°C.

MODELS

Part No.	Capacity litres	Height / Width / Depth (usable) cm			Height / Width / Depth (exterior) cm			Weight Kg
6003901	9	15	29	22	24	40	34	6
6003921*	20	15	48	30	24	61	41	9
6003931*	27	20	48	30	29	61	41	11

* With drain tap and lifting handles.

Removable constant liquid level. Suitable for any type of bath. Adjustable height to obtain the required liquid level.
Part No.
6001400 Bath depth up to 15 cm.
6001800 Bath depth up to 20 cm.

Methacrylate baths. Maximum temperature 60 °C.

MODELS

Part No.	Capacity litres	Height / Width / Depth (usable) cm			Thickness mm
1000394	8	15	18	31	6
1000544	9,5	14,5	16,5	39	6
1000395	13	15	23	40	8
1000396	30	20	30	50	8

Thermometer support. Stainless steel, suitable for thermometer. Fixation aperture up to 40 mm.
Part No. **6000896**

Thermometer.

Suitable for "Tectron-Bio" immersion thermostat. Scale -10 to 100 °C. See page 296
Part No. **1001257**

Refrigerated cooling coils for baths "Frigedor" and "Frigedor-Reg"

TEMPERATURES FROM -20 °C TO +20 °C.

APPLICATIONS
Designed for bath and tank applications that require below ambient temperatures.
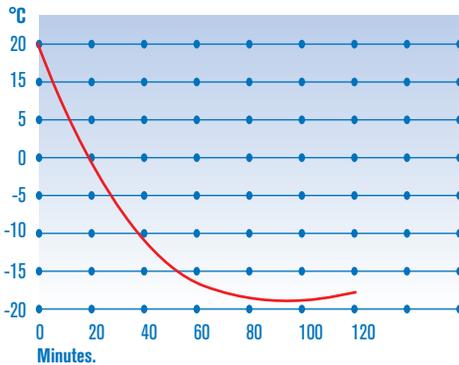
COMMON FEATURES
The unit is bench mountable and contains within the epoxy coated case a CFC free hermetically sealed compressor with condenser and evaporator, the cooling coil is made of AISI 304 stainless steel.

COIL DIMENSIONS
Refrigerated immersion length: 900 mm.
Cooling coil Ø: 45 mm.
Coil length: 150 mm.

MODEL FRIGEDOR 3000778
No temperature controller incorporated.
Continually operates the compressor.

CONTROL PANEL
Mains switch with "ON" indicator lamp.

MODEL FRIGEDOR REG 3001214
Equipped with a temperature controller with digital control and display. Includes a Pt 100 temperature probe. Resolution: 1 digit.

CONTROL PANEL
Mains switch with indicator "ON" lamp. Digital temperature controller with push buttons, connector for the Pt 100 temperature probe.

Graph showing the cooling performance of the 8 litre H_2O "Frigedor" With insulated stirring tank.

MODELS	Part No.	Temperature range °C	Stability °C	Height / Width / Depth (exterior) cm			Cooling potential	Power W	Weight Kg
FRIGEDOR	3000778	Fix -20	–	41	21	34	to -20 °C = 50 W	285	14
FRIGEDOR-REG	3001214	-20 to +20	±1.5	41	21	34	to -20 °C = 50 W	285	14

We recommend our thermally insulated baths (see page 104).

Water recirculators "Interheater"

FROM AMBIENT +5°C TO 90°C .

SAFETY: STANDARD DIN 12876. OVER TEMPERATURE SAFETY ADJUSTABLE THERMOSTAT WITH MANUAL RESET.

DESCRIPTION
Water circulation unit, designed to feed closed water loop circuits for condensers, distillation columns, reactor jackets, viscometers, electrophoresis baths etc. designed specifically for:
- Constant temperature.
- Constant pump rate of refrigerated fluid.
- Closed loop circuit, avoids the build up of scale in cooling coils, and cooling circuits.

FEATURES
Digital electronic temperature regulation.
Circulation flow: 20 L/min.
Case equipped with wheels.

Hose connectors Ø 12mm internal.
230V single phase.
INTERHERATER Heating power 2 or 4 KW control panel selectable.

CONTROL PANEL
Mains switch.
Digital temperature control.
Pressure gauge.
Water level in the reservoir.

MODEL

Part No.	Height / Width / Depth (exterior) cm			Regulation range °C	Power W	Weight Kg
6001491	70	43	56	Amb + 5 to 90	4100	22

ACCESSORY
Roll of 25 m of reinforced silicone hose.
Part number **1001540**

THERMOSTAT DRY-BLOCKS
WITH DIGITAL ELECTRONIC CONTROL OF TEMPERATURE AND TIME

SAFETY: CONFORMS TO EN 61010 DIRECTIVE, OVER TEMPERATURE CUT OUT SYSTEM.

High precision. Free from contamination.

APPLICATIONS

Clinical, biochemical and chemical laboratories. Incubation of DNA, enzyme assays, residual testing in dairy, incubation and fusion of AGAR, cell culture. Thermo control to dry, boiling, evaporation, concentration, hydrolysis, digestion etc.

COMMON FEATURES

Dry block systems have several advantages over wet contact methods such as: no risk of evaporation of heating liquid, higher working temperatures, better long term temperature stability and no sample cross contamination or germination of bacteria in the bath. Digital temperature calibration. Timer from 1 to 999 mi

nutes or continuous operation. Over temperature alarm. Heating elements are distributed evenly across the contact surface maintaining an even distribution of heat.
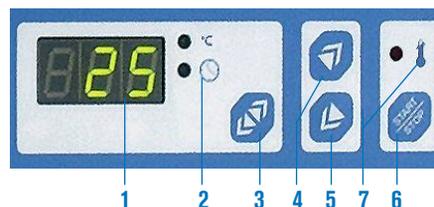
Easy to use digital temperature and time control with a digital display (3 Digits).
Built in temperature sensor Pt 100.
Interchangeable blocks made of anodised DURAL alloy to accommodate a variety of tube diameters. (Customer specific sizes also available.)
External case made of epoxy covered steel with an AISI 304 stainless steel top.

CONTROL PANEL
1. Digital display showing temperature and time in minutes.
2. Indicator show displayed parameter (Time or temperature.).
3. Push button selector to show time or temperature.
4. Push button increase displayed value.
5. Push button decrease displayed value.
6. Push button Start / Stop.
7. Over temperature alarm indicator.

Dry block heater for tubes "Tembloc"

ACCESSORIES

Metal blocks, size: 105 Ø x 55 mm high.
Part No.
7000346 for 34 x 6 mm Ø tubes
7000714 for 18 x 1.5 ml. Eppendorf tubes
7001224 for 24 x 12 mm Ø tubes.
7001618 for 18 x 16 mm Ø tubes.
7000208 for 8 x 20 mm Ø tubes.
7000256 for 6 x 25 mm Ø tubes.
7000715 Blank block with no holes for customized demand.
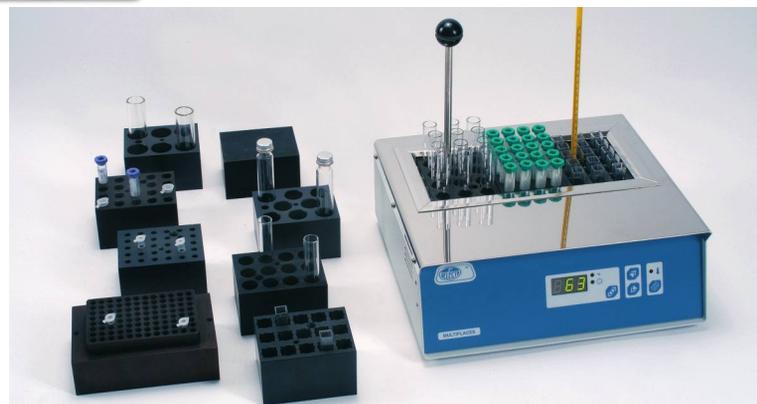
MODEL

Part No.	Temperature °C	Stability °C	Homogeneity %	Set error %	Resolution °C	Height / Width /Depth (exterior) cm			Power W	Weight Kg
7462200	30 - 200	±0.75	±1.5	±2	1	11	19	29	350	3.7

Supplied complete with thermometer 0-200 °C and extraction tool for blocks.

Dry Block heater for tubes "Multiplaces"
CAPACITY: THREE BLOCKS.

ACCESSORIES
Metal Blocks: 55 high x 95 wide x 75 mm deep.
Part No.
7000306 For 30 x 6 mm Ø tubes (total 3 blocks = 90 tubes).
7000716 For 20 x 1.5ml, Eppendorf tubes. (total 3 blocks = 60 tubes.)
7031220 For 20 x 12 mm Ø tubes (total 3 blocks = 60 tubes).
7031612 For 12 x 16 mm Ø tubes (total 3 blocks = 36 tubes).
7003208 For 8 x 20 mm Ø tubes (total 3 blocks = 24 tubes).
7001256 For 6 x 25 mm Ø tubes (total 3 blocks = 18 tubes).
7000717 Blank block without holes, can be customised to customer requirements.
7001474 Block for 15 cuvettes 10 x 10. Capacity: 3 blocks.
7001475 Block for 96 well microplates of 1.2 ml. Capacity: 1 block.

MODEL

Part No.	Temperature °C	Stability °C	Homogeneity %	Set error %	Resolution °C	Height / Width /Depth (exterior) cm			Power W	Weight Kg
7471200	30 - 200	±0.75	±1.5	±2	1	11	31	31	700	7.4

Supplied complete with thermometer 0-200 °C and extraction tool for blocks.

Metallic thermostat dry block "Clinic-Bloc" and "Bio-Bath 2"

CLINIC-BLOC: FIXED TEMPERATURE OF 37 °C WITH CHECK THERMOMETER.
BIO-BATH 2: TEMPERATURE RANGE: FROM AMBIENT +5 TO 100 ° C.

SAFETY: NORM EN 61010. OVER TEMPERTURE CUT-OUT FITTED.

"CLINIC-BLOC"
Capacity 20 tubes (5x4) of 75x13 mm. VAC. Part No.**7001569**

"CLINIC-BLOC" 1537
Capacity 15 cuvettes (5x3) of 10x10 mm. Part No. **7001570**

MODEL

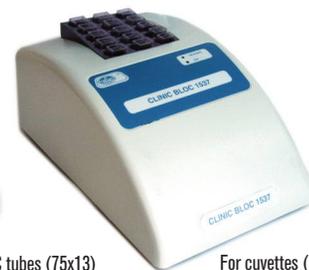| Part No.	Height / Width /Depth (exterior) cm	Stability °C	Power W	Weight Kg
7001569	11 18 28	±0.5	10	2.4
7001570	11 18 28	±0.5	10	2.4

"BIO-BATH 2"
Capacity 8 tubes (5x4) of 75x13 mm VAC.
Adjustable temperature and time.

MODEL

Part No.	Height / Width /Depth (exterior) cm	Stability °C	Power W	Weight Kg
7001562	11 11,3 14,5	±0,3	5	0,5

For VAC tubes (75x13)
Part No. 7001569

For cuvettes (10x10)
Part No. 7001570

NEW DESIGN

COMECTA Thermo shaker "TRM-4" for Microtiter plates

WITH ELECTRONIC CONTROL AND DIGITAL DISPLAY OF TEMPERATURE, SHAKING SPEED AND TIME.
FOR TEMPERATURES FROM AMBIENT +5 °C. TO 60 °C. STABILITY ± 0,5 °C.

APPLICATIONS
For clinical analysis, immunology and nutritious quality control use.

FEATURES
External ABS case with a platform for heating and shaking 2-4 96-well Microtiter plates.
Upper lid with aluminium plate coated inside, and simultaneous heating system to the main platform.
Digital display of current and set point temperature, time and shaking speed parameters.
Acoustic and luminous indications at the end of the cycle and due to malfunction in temperature or time programmed.
A built-in motor generates a uniform movement depending on the speed programmed, protected to over temperature with auto switch off and switch on activation.
Temperature calibration to meet the user's needs.
Protection device for over temperature that provides safety and reliability.

CONTROL PANEL
LCD display indicating temperature, speed in r.p.m. and time.
Push button SET to program temperature, speed in r.p.m. and time.
Push button ▼ increase value.
Push button   decrease value.
Push button START / STOP for starting and stopping the shaking system.
Push button OFF for any function.

SPECIFICATIONS
Temperature: Ambient +5ºC to 60ºC.
Heating time: ≤23 min (to 60ºC).
Shaking range: 100-1200rpm.
Orbital rotation: 2mm.
Timer: From 1 min. to 99h. 59 min.

Cover inner plate with heating system.

MODEL

Part No.	Temperature ºC	Stability ºC	Block homogeneity ºC	Height / Width (platform) cm	Height / Width / Depth (exterior) cm	Power W	Weight5 Kg
5109200 ambient +5 to 60		±0,5	±0,5	21,5 30	18 40 39	132	9.5

COMECTA Metallic dry block thermo shaker "TR100-G"

WITH ELECTRONIC CONTROL AND DIGITAL DISPLAY OF TEMPERATURE, SHAKING SPEED AND TIME. FOR ADJUSTABLE TEMPERATURE FROM AMBIENT +5 ºC. UP TO 100 ºC.

APPLICATIONS

Wide applications of TR100-G for DNA analysis, lipids and other cellular components extraction, DNA libraries creation, DNA amplification, electrophoresis pre-denaturalization, serum solidification, etc.

FEATURES

External ABS case with multiadapter device for different blocks depending on the analysis to be made.

Digital display of current and set point temperature, time and shaking speed parameters.

Acoustic and luminous notification at the end of the cycle and due to malfunction in temperature or time programmed.

A built-in motor generates a uniform movement depending on the speed programmed, protected to over temperature with auto switch off and switch on activation.

Temperature calibration to meet the user's needs.

The thermostat includes a heater platform to adapt multiple blocks, depending on the analysis to be made.

Protection device for over temperature that provides safety and reliability.

CONTROL PANEL

LCD display indicating temperature, speed in r.p.m. and time.

Push button SET to program temperature, speed in r.p.m. and time.

Push button ▲ increase value.

Push button ▼ decrease value.

Push button START / STOP for starting and stopping the shaking system.

Push button OFF for any function.

SPECIFICATIONS

Temperature: Ambient +5ºC to 100ºC.
Heating time: ≤23 min (to 100ºC).
Shaking range: 200-1500rpm.
Orbital rotation: 2mm.
Timer: From 1 min. to 99h. 59 min.

MODEL

Part No.	Temperature ºC	Stability ºC	Block homogeneity ºC	Height / Width / Depth (exterior) cm			Power W	Weight Kg
5109100	**ambient +5 to 100**	**±0,5**	**±0,5**	**18**	**21**	**30**	**88**	**9.5**

ACCESSORIES

ABS coated **metallic blocks** adapted to TR100-G thermostat by means of fixing screws to the block. Easy to clean and autoclavable.

For 24 tubes of Ø 11mm.
Depth: 30 mm.
Part No. **5109101**

For 12 tubes of 15 ml.
Ø Up to 15 mm.
Depth: 100 mm.
Part No. **5109102**

For 6 tube of 50 ml.
Ø Up to 28 mm.
Depth: 100 mm
Part No. **5109103**

For 96 microtubes of 0,2 ml.
with polypropylene lid.
Part No. **5109104**

For 54 microtubes of 0,2 ml.
with polypropylene lid.
Part No. **5109105**

For 15 microtubes of 0,5 ml.
and 20 microtubes of 1,5 ml.
with polypropylene lid.
Part No. **5109106**

For 35 microtubes of 1,5 ml.
with polypropylene lid.
Part No. **5109107**

For 35 microtubes of 2 ml.
with polypropylene lid.
Part No. **5109108**

Thermocycler for thermal cycles "B960" See page 238.