PHOENIX Instrument

Lab solutions

Drying

Incubators

Sterilization

Shaking Incubators

Convection Ovens

Water Baths

Circulation Bath

Incubators

Circulation Baths

Water Baths

Climatic Chambers

Temperature Instruments

PHOENIX Instrument

Lab solutions

Solutions for the Lab

The Idea …

PHOENIX Instrument started with a new concept to comply customer demands for high-quality but also well-priced laboratory instruments.

The Implementation …

Absolute customer orientation and satisfaction - is the focus of all activities of ***PHOENIX Instrument***.

Your Benefit …

As our customer you will take advantage of our long market experience, the attractive prices and the short delivery times. We guaranty comprehensive and competent consultations in all aspects and will always listen to your wishes, ideas and suggestions.
It goes without saying that ***PHOENIX Instrument*** offers a technical service, if required.

Temperature Instruments

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Lab solutions

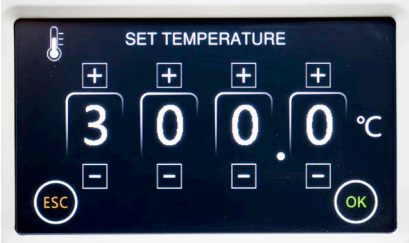
Super Series

New generation of colour touch screen display with user friendly screens and icons - 8 programs storable with 8 steps each one recordable data on USB support with flash drive supplied for all ovens and incubators except model TIN-TN30

All on board

Colour touch screen display for the selection of the various functions.

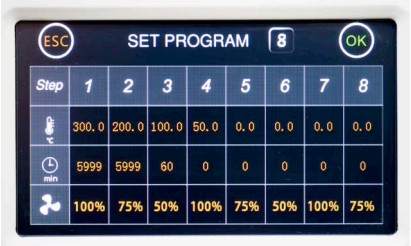
All parameters on a single screen: temperature, fan speed, time, program number and step, USB pendrive presence, date and time.



Easy to use

Simply and intuitive setting of all the operating parameters thanks to icons and symbols easy to understand.

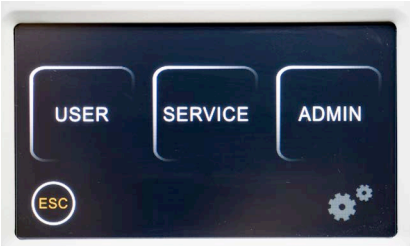
The capacitive display ensures touch sensitivity and precision even when wearing gloves.



Programs

Professional controller equipped with 8 storable programs with 8 steps each one and a further basic program (PROG 0) with a single step.

Simple programming of all work steps in a single screen.



Safety of us

Settings menu with 3 access levels:

1 free and 2 protected by password to avoid accidental changes to “sensitive” machine parameters.

Recording and downloading data

Work cycles are automatically stored inside the instrument, always available for download thanks to the USB port.

With an USB flash drive inserted, registration takes place without capacity limits.

Incubators and Ovens Basic Series

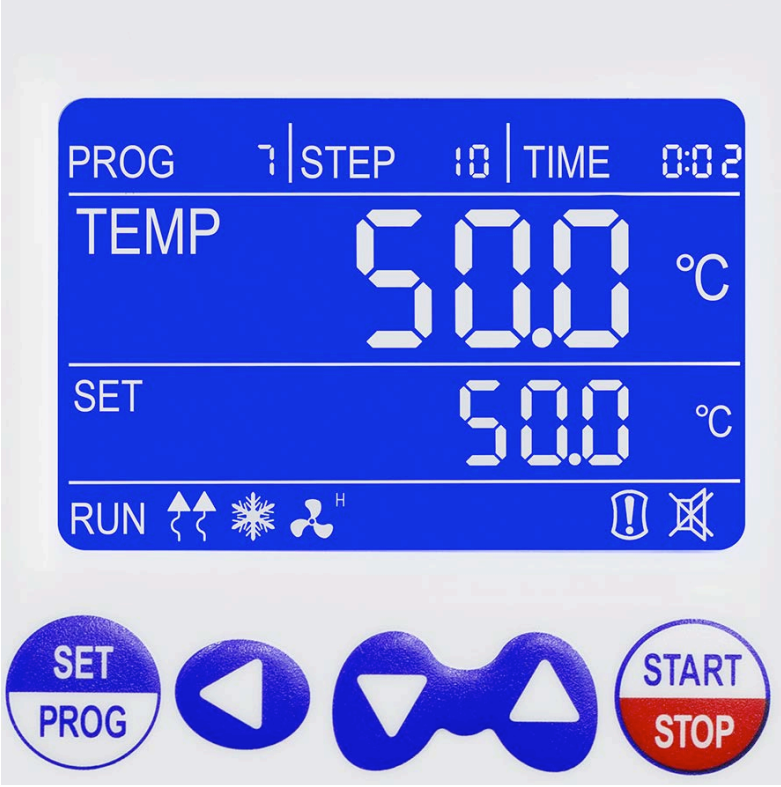
New version of Basic controller - 7 programs with 10 steps each one wide backlit LCD display easy setting of all operating parameter

The Incubator and ovens from Phoenix Instrument allow an easy setting of all operating parameters and optimal temperature control.

The large backlit display clearly shows in every moment the temperature set and that one inside as well as other parameters.

The introduction of user-friendly icons makes interpretation of the functions and commands extremely intuitive. Moreover, the limited number of adjustment keys ensures operability very simple and intuitive.

All our instruments are environmental-friendly with reduced power consumption and improved protection.
All instruments will be supplied with a calibration report.



Basic version

- 7 programs x 10 steps
- Repeatable working cycles
- Wide backlit LCD display
- Easy to read Icons
- Timer and continuous function
- Visual and sound alarm
- Fan speed control
- Program start delay
- Safety temperature for sample protection

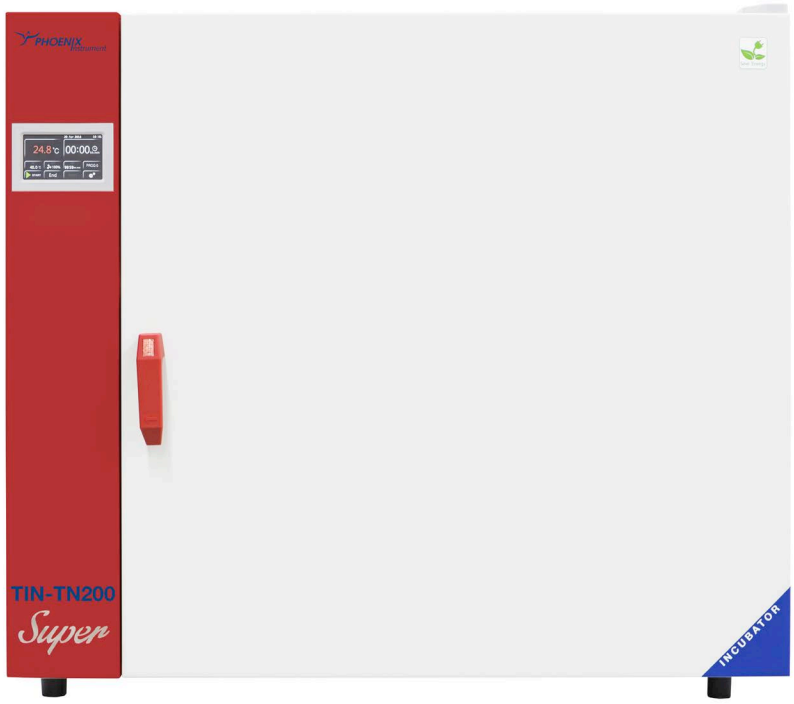
PHOENIX Instrument
Lab solutions

Natural convection oven

from +5 °C over RT up to +300 °C

Ideal for everyday use in the processes of drying and sterilization, the natural convection ovens are characterized by a high load capacity and by the accurate temperature control.

The possibility to heat the samples up to 300 °C allows any type of sterilization process. The minimum heating times, the heating power properly dimensioned and the perfect tightness of the seals, ensure low energy consumption in every application.



Technical Data	TIN-TN30	TIN-TN50	TIN-TN115	TIN-TN200
Volume	30 Liters	50 Liters	115 Liters	200 Liters
Max. Temperature/Resolution	+200/0,1°C	+300/0,1°C	+300/0,1°C	+300/0,1°C
Temp. homogeneity at 150°C	±3,5°C	±3,5°C	±3,5°C	±4°C
Temperature variation at 150°C	±0,5°C	±0,5°C	±0,5°C	±0,7°C
Heating time at 150°C (min)	14	16	18	20
Timer	99:59 / continuous operation			
Int. Dimension (WxHxD) in mm	320 x 320 x 285	400 x 420 x 330	520 x 495 x 450	650 x 640 x 495
No. of shelves (standard/max)	2/4	2/5	2/6	2/9
Min. distance between shelves	50 mm			
Max. load of shelves (kg)	10	15	20	20
Voltage / Power	230V / 700W	230V / 1000W	230V / 1900W	230V / 2100W
Ext. Dimension (WxHxD) in mm	460 x 685 x 530	690 x 635 x 470	815 x 750 x 600	940 x 905 x 660
Weight (kg)	40	53	74	103
Safety class	3.1			

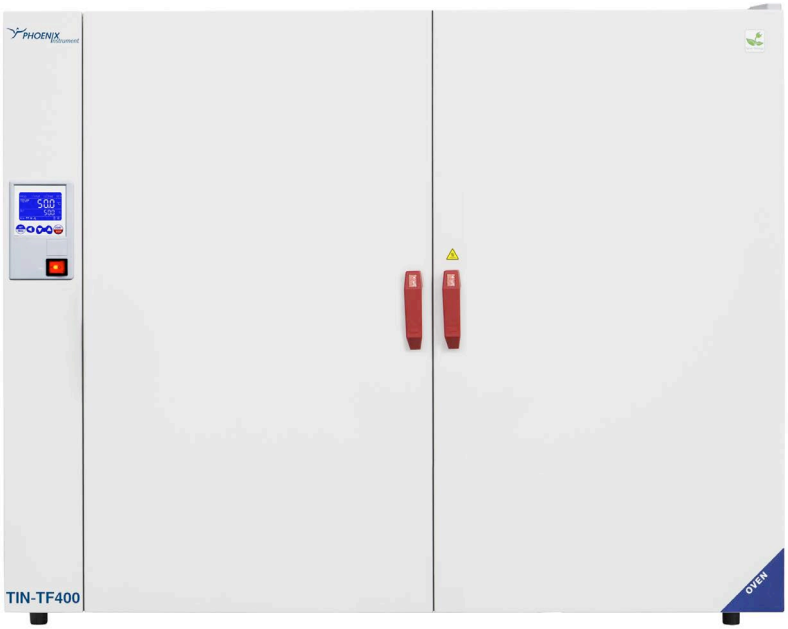
Forced air oven

from +10 °C over RT up to +300 °C

The forced air ovens TIN-TF 50, -TF 120,- TF 200 and -TF 400 control very efficiently the temperature starting from 10 °C above ambient temperature up to 300 °C.
The PID controller, with wide backlit color display, clearly shows in every moment the temperature set and that one inside as well as other parameters.

The forced air circulation, adjustable in three levels (High, Medium, Low), guarantees a perfect air replacement and homogeneity of temperature in every parts of the chamber.

A through hole of 5 mm diameter supplied as standard on the top side of the oven permits to introduce an external probe for the check or certification of the temperature.



Technical Data	TIN-TF50	TIN-TF120	TIN-TF200	TIN-TF400
Volume	50 Liters	120 Liters	200 Liters	400 Liters
Max. Temperature/Resolution	+300/0,1°C			
Temp. homogeneity at 150°C	±2%			
Temperature variation at 150°C	±0,3°C	±0,3°C	±0,4°C	±0,5°C
Heating time at 150°C (min)	20	24	30	50
Timer	99:59 / continuous operation			
Int. Dimension (WxHxD) in mm	400 x 415 x 310	520 x 530 x 435	645 x 650 x 495	1000 x 800 x 500
No. of shelves (standard/max)	2/5	2/7	2/9	2/10
Min. distance between shelves	50 mm			
Max. load of shelves (kg)	15	20	20	20
Voltage / Power	230V / 980W	230V / 1900W	230V / 2400W	230V / 3200W
Ext. Dimension (WxHxD) in mm	690 x 635 x 570	810 x 750 x 690	945 x 870 x 755	1285 x 1060 x 750
Weight (kg)	54	74	103	160
Safety class	3.1			

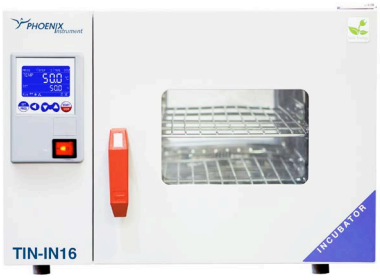
PHOENIX Instrument
Lab solutions

Natural convection incubators

from +5°c over RT up to 70°C

The organic materials used in the typical laboratory application require a constant and gentle heating. The temperature distribution in the incubators is obtained without forced air circulation but using only the natural convection, which does not stress the sample and allows its uniform growth.

The wide door glass window allows a constant check of the status of the samples inside the chamber without opening the door, thereby avoiding unnecessary heat loss and temperature changes.



Technical Data	TIN-IN16	TIN-IN35	TIN-IN55
Volume	16 Liters	35 Liters	55 Liters
Max. Temperature/Resolution		+70/0,1°C	
Temp. homogeneity at 37°C	±0,4°C	±0,4°C	±0,5°C
Temperature variation at 37°C	±0,3°C	±0,3°C	±0,3°C
Heating time at 37°C (min)	18	22	25
Timer		99:59 / continuous operation	
Int. Dimension (WxHxD) in mm	270 x 230 x 255	360 x 300 x 320	400 x 360 x 385
No. of shelves (standard/max)	2/6	2/6	2/5
Min. distance between shelves	25 mm	30 mm	50 mm
Max. load of shelves (kg)	5	7,5	10
Voltage / Power	230V / 85W	230V / 125W	230V / 250W
Ext. Dimension (WxHxD) in mm	530 x 370 x 400	620 x 440 x 460	660 x 500 x 545
Weight (kg)	23	33	42
Safety class		2	

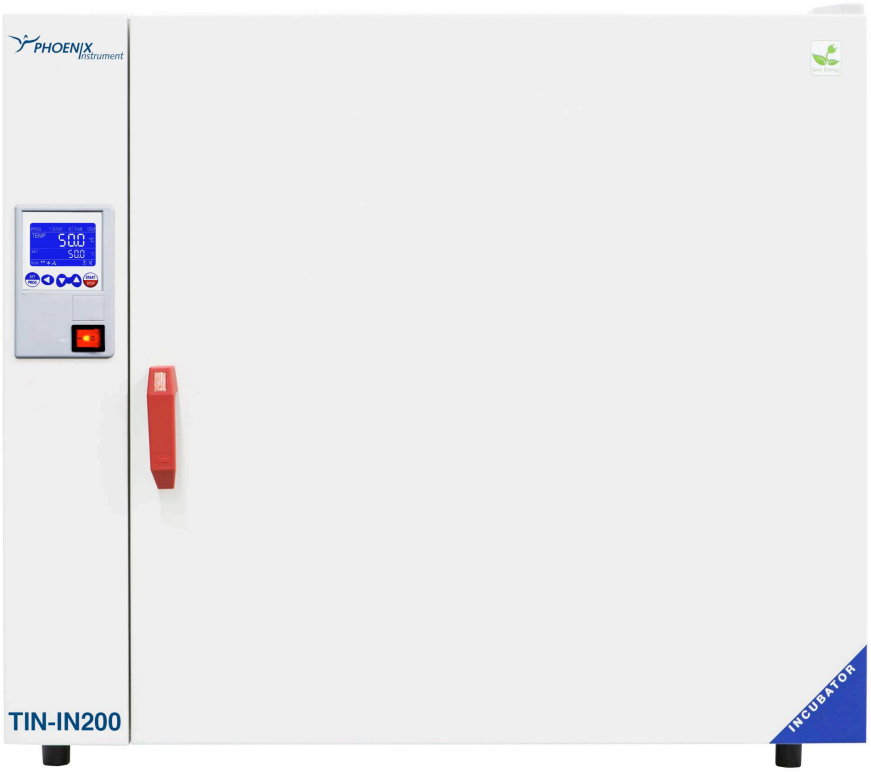
PHOENIX Instrument
Lab solutions

Natural convection incubators
with higher volumes

Incubators with higher volume, thanks to the optimal placing of the heating elements, ensure high performance in homogeneity and stability of temperature and the proper incubation of the samples.

The difference from the smaller models is the presence of the double door, with the inner glass full-width, which ensures a perfect observation of the samples in the chamber without unnecessary heat losses.

Double Door



Technical Data	TIN-IN120	TIN-IN200
Volume	120 Liters	200 Liters
Max. Temperature/Resolution	+70/0,1°C	
Temp. homogeneity at 37°C	±0,5°C	±0,5°C
Temperature variation at 37°C	±0,3°C	±0,3°C
Heating time at 37°C (min)	30	35
Timer	99:59 / continuous operation	
Int. Dimension (WxHxD) in mm	520 x 460 x 500	610 x 600 x 575
No. of shelves (standard/max)	2/7	2/9
Min. distance between shelves	50 mm	
Max. load of shelves (kg)	10	
Voltage / Power	230V / 350W	230V / 600W
Ext. Dimension (WxHxD) in mm	780 x 610 x 645	875 x 755 x 710
Weight (kg)	61	77
Safety class	2	

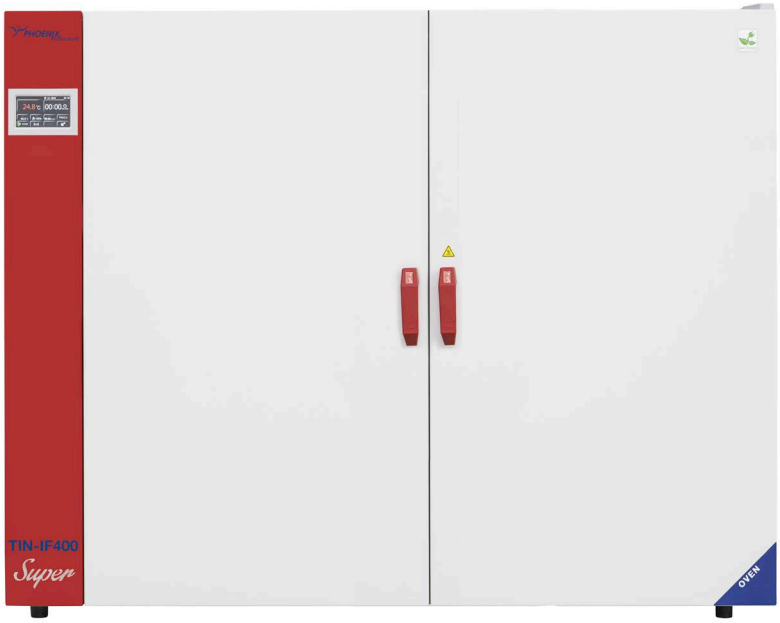
PHOENIX Instrument
Lab solutions

Forced air Incubators

from +5°c over RT up to 80°C

Our new forced air incubators control the temperature up to 80 °C very efficiently. It's possible in addition, set a program at 130 °C which allows the thermally sterilization of the chamber. The full wide internal glass door ensures perfect observation of samples without unnecessary and expensive heat losses.

The forced ventilation, adjustable on three levels (High, Medium, Low) guarantees a perfect air exchange and an excellent temperature homogeneity in all points of the chamber.



Technical Data	TIN-IF120	TIN-IF200	TIN-IF400
Volume	120 Liters	200 Liters	400 Liters
Max. Temperature/Resolution		+80/0,1°C	
Temp. homogeneity at 37°C	±0,4°C	±0,4°C	±0,5°C
Temperature variation at 37°C	±0,1°C	±0,2°C	±0,3°C
Heating time at 37°C (min)	40	45	55
Timer		99:59 / continuous operation	
Int. Dimension (WxHxD) in mm	520 x 530 x 435	645 x 650 x 495	1000 x 800 x 500
No. of shelves (standard/max)	2/7	2/9	2/10
Min. distance between shelves		50 mm	
Max. load of shelves (kg)		20	
Voltage / Power	230V / 600W	230V / 700W	230V / 1500W
Ext. Dimension (WxHxD) in mm	810 x 750 x 690	945 x 870 x 755	1285 x 1060 x 750
Weight (kg)	74	103	160
Safety class		2	

PHOENIX Instrument
Lab solutions

Water bath

from +5 °C over RT to +99 °C

The waterbaths are generally used in the laboratory to maintain the temperature of the samples constant. The waterbaths WB series, thanks to the maximum operating temperature of 99 °C, meet the different needs of operators and therefore allow them to be used in numerous applications.

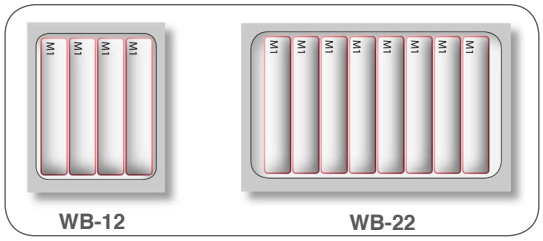
The model WB 22 pump ensures a faster and more uniform temperature distribution due to the recirculation pump which is equipped.

All water baths are equipped with a water drain.

WB-12 with rackTIN-1001822
(max. capacity 4 pcs.)

Technical Data	WB-12	WB-22
Volume	12 Liters	22 Liters
Max. Temperature/Resolution	+99/0,1°C	
Temp. homogeneity at 37°C	±0,5°C	
Temperature variation at 37°C	±0,1°C	
Overheating protection	yes	
Timer	99:59 / continuous operation	
Bottom plate Dimension (WxD)	290 x 230 mm	470 x 290 mm
Max. number of Modules	4	8
Min. height with closed lid	150mm	
Voltage / Power	230V / 900W	230V / 1100W
Ext. Dimension (WxHxD) in mm	480 x 380 x 310	680 x 390 x 365
Weight (kg)	12	18
Safety class	2	

Water drain



Maximum modules in place

PHOENIX Instrument
Lab solutions

Water bath with pump
from +5 °C over RT to +85 °C

The models WB 22 and WB-40 with pump ensures a faster and more uniform temperature distribution due to the recirculation pump which is equipped.

Technical Data	WB-22-pump	WB-40-pump
Volume	22 Liters	40 Liters
Max. Temperature/Resolution	+85/0,1°C	+85/0,1°C
Temp. homogeneity at 37°C	±0,2°C	±0,5°C
Temperature variation at 37°C	±0,1°C	±0,2°C
Overheating protection	yes	
Timer	99:59 / continuous operation	
Bottom plate Dimension (WxD)	470 x 290	620 x 380
Max. number of Modules	8	16
Min. height with closed lid	150mm	
Voltage / Power	230V / 1100W	230V / 2200W
Ext. Dimension (WxHxD) in mm	680 x 390 x 365	830 x 390 x 460
Weight (kg)	19	28
Safety class	2	

Inside chamber

Accessories

… for Ovens

TIN-1000142	Steel wire shelf for TN 30
TIN-1000192	Steel holed platform applicable to wire shelf for TN 30
TIN-1000102	Steel wire shelf for TN 50 / TF 50
TIN-1000152	Steel holed platform applicable to wire shelf for TN 50 / TF 50
TIN-1000112	Steel wire shelf for TN 115 / TF 120
TIN-1000162	Steel holed platform applicable to wire shelf for TN 115 / TF 120
TIN-1000122	Steel wire shelf for TN 200 / TF 200
TIN-1000172	Steel holed platform applicable to wire shelf for TN 200 / TF 200
TIN-1000132	Steel wire shelf for TF 400
TIN-1000182	Steel holed platform applicable to wire shelf for TF 400

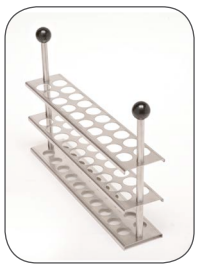
Steel wire shelf and holed platform

… for Incubators

TIN-1001112	Steel wire shelf for IN 16
TIN-1001122	Steel wire shelf for IN 35
TIN-1001132	Steel wire shelf for IN 55
TIN-1001142	Steel wire shelf for IN 120 / IF 120
TIN-1001152	Steel wire shelf for IN 200 / IF 200
TIN-1000132	Steel wire shelf for IF 400
TIN-1000182	Steel holed platform applicable to wire shelf for IF 400
TIN-1001172	Wheels for all Incubators and Ovens, Set of 4 pcs.

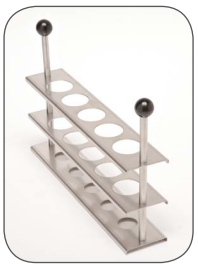
… for Water Baths

TIN-1001802	Rack 1 for tubes Ø13mm / 20 positions 1 Module
TIN-1001812	Rack 2 for tubes Ø18mm / 20 positions 1 Module
TIN-1001822	Rack 3 for tubes Ø31mm / 5 positions 1 Module
TIN-1001862	Rack 4 for tubes Ø56mm / 8 positions (biberon) 3 Modules
TIN-1001882	Rack 5 for blood bags / 5 positions 3 Modules



TIN-1001802

TIN-1001812



TIN-1001822

TIN-1001822

PHOENIX Instrument
Lab solutions

Shaking Water bath

from +5 °C over RT to +99 °C

The new Water bath SB35 with linear shaking function. Bath, lid, spring basket and support surface for samples are made entirely of stainless steel. Thanks to the flexibility of the universal spring support it is possible to insert different types of flasks, beakers, balloons or other recipients of different capacities and shapes.

Electronic regulation of the temperature with PID control and adjustment of the shaking speed by knob.

The instrument comes with a practical emptying tube and quick-fit valve for the periodic replacement of the liquid in the tank.

The practical basket fixing system allows easy cleaning and maintenance of the tub.

Water drain

Technical Data	WB-35
Tank Volume	35 Liters
Max. Temperature/Resolution	+99/0,1°C
Temp. homogeneity at 37°C	±1,0°C
Temperature variation at 37°C	±0,5°C
Overheating protection	yes
Timer	99:59 / continuous operation
Shaking Speed (rpm)	0 … 150
Amplitude of platform Movement	30 mm
Spring Basket Dimension (WxHxD)	320 x 115 x 200 mm
Min. height with closed lid	150mm
Voltage / Power	230V / 1250W
Ext. Dimension (WxHxD) in mm	645 x 350 x 355
Weight (kg)	28
Safety class	2

PHOENIX Instrument
Lab solutions

Shaking Incubator

The new shaking incubator IS-OS 20 combines two typical laboratory operations in one instrument: shaking and incubation of samples.

Ideal for cell culture, solubility studies, extraction procedures and many other laboratory applications.

The built-in fan guarantees a uniform distribution of the temperature.

IS-OS20 will be supplied with a standard platform equipped with flexible springs that can accommodate many types of flasks, beaker, tubes with different sizes.

Accessories

ISS-E 100 Baseplate to be used with fixing clips for Erlenmeyer-flasks

ISS-E 130 Fixing clip 100 ml for Erlenmeyer flasks (max. 16 pro ISS-E 100)

ISS-E 135 Fixing clip 200/250 ml for Erlenmeyer flasks (max. 9 pro ISS-E 100)

ISS-E 140 Fixing clip 500 ml for Erlenmeyer flasks (max. 9 pro ISS-E 100)

ISS-E 150 Fixing clip 1000 ml for Erlenmeyer flasks (max. 4 pro ISS-E 100)

Technical Data	IS-OS20
Temperature Range/Resolution	RT+5 -60/0,1°C
Temp. homogeneity at 37°C	±0,5°C
Temperature variation at 37°C	±0,1°C
Adjustable safety temparature protection	yes
Timer	99:59 / continuous operation
Shaking Speed (rpm)	40 … 300
Amplitude of platform Movement	20 mm
Capacity	7 x 500ml or 4 x 1000ml Erlenmeyer Flasks
Dimension Platform (WxD)	320 x 320 mm
Voltage / Power	230V / 500W
Ext. Dimension (WxHxD) in mm	500 x 470 x 610
Weight (kg)	40
Material of hood/sickness	Plexiglass/ 8 mm

PHOENIX Instrument

Lab solutions

Circulation bath

from -30 to +100 °C

The new refrigerated/heating circulating baths are suitable for temperature controlling of samples in a wide range of temperatures.

All the models are designed for external and internal applications, usable for tests in laboratories and industries.

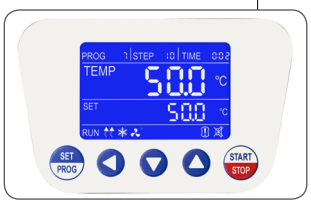
Each instrument is standard equipped with a PT100 probe for temperature control in an external circuit.

The controller automatically recognizes the presence of the probe and determines the type of work inside or outside the tank.

Technical Data	CB 5-10	CB 5-20	CB 5-30
Temperature Range	-10 – 100°C	-20 – 100°C	-30 – 100°C
Temperature Resolution/ Setting		0,1°C	
Temperature stability at 20°C	±0,3°C	±0,2°C	±0,2°C
Timer		99:59 / continuous operation	
Cooling Capacity			
(20°)	0,37KW	0,41KW	0,44KW
(10°)	0,33KW	0,37KW	0,40KW
(0°)	0,30KW	0,33KW	0,37KW
(-10°)	0,22KW	0,28KW	0,32KW
(-20°)		0,16KW	0,20KW
(-30°)			0,15KW
Max. pump pressure		0,35 bar	
Max. pump flow rate	3,2 l/min	6,5l/min	6,5 l/min
Bath volume		5 liter	
Bath opening depth		150 x 160 x 150mm	
External Dimension (WxHxD) in mm	290 x 570 x 710	380 x 670 x 840	380 x 670 x 840
Voltage/Power		230V/50Hz	
Weight (kg)	34	54	54

PHOENIX Instrument
Lab solutions

Circulation bath
from -30 to +100 °C



All on board

Backlit display for simultaneously displaying of the set temperature, and all other operating parameters.

Precision

Precision PT100 probe and its inlet are standard supplied for an optimal temperature control of the external circuit. The instrument automatically recognizes the presence of the external probe

Ready to use

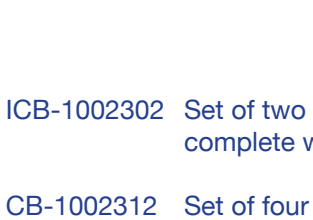
Pipe fittings, clamps and pipes with insulating material already supplied for an immediate use of the instrument.

External and internal

The instrument is equipped with an useful valve for selection of the external and internal circulation.

Easy maintenance

The frontal grill equipped by magnetic supports allows an easier cleaning and maintenance without the use of tools



Optimal space

The space inside the bath is fully usable thanks to optimal arrangement of the serpentine of cooling

Accessories

ICB-1002302	Set of two pipes of 2 meter with insulation (range of work -40 ÷ + 60 °C) complete with metal clamps for fastening to the pipe fittings.
CB-1002312	Set of four swivel wheels, two of which can be braked.
CB-1002322	Premixed thermal fluid ready for use, working range -30 ÷ + 80 °C Tank box 5 litres with plastic tap.
CB-1000252	Temperature sensor PT100 model PT56 TFE with 3m teflon cable. Working Range -100 ÷ + 300 °C (including cable).

PHOENIX Instrument
Lab solutions

Climatic chambers

Operation range: 10 °C ÷ 70 °C / 45 ÷ 95 % RH

The climatic chambers are the ideal instrument to do stability and aging test on materials, simulation of environmental conditions and stress test in several fields such as: industry, food, textile, packaging, rubber/plastics, etc.

Thanks to the digital control by PID regulator of the temperature and of the humidity percentage, it's possible simulate many environmental situations and use of materials, and moreover test the forced aging effects. The external steel door is equipped of a wide glass window that permits the observation of the materials during test.

The stainless steel chamber with rounded corners, the shelves and their fixing system completely removable, make the chamber perfectly cleanable. A LED inner lamp for observation of the samples is included.

The standard supplied side through hole of 25 mm diameter allows to install probes inside the chamber.
Digital backlit alphanumeric LCD screen. Digital timer, clock and date for GLP functions.

Standard supplied mini printer for operating and set parameters output. Safety class 3.1 with double digital limiter of temperature and additional fluid expansion limiter.

Technical Data	CH-150	CH-250
Useable Volume	150 Liters	250 Liters
Temperature Range	-10 - 85 °C (without humidity)	+10 - 70 °C (with humidity)
Temperature Resolution	0,1°C	
Temp. homogeneity in chamber	± 0,5 °C (without humidity)	± 1,5 °C (10 ÷ 70 °C / 45 ÷ 95% RH)
Temperature variation on a point	± 0,2 °C (without humidity)	± 0,5 °C (10 ÷ 70 °C / 45 ÷ 95% RH)
Humidity Range	45 % - 95 %	
Humidity variation on a point	≤ 2% RH (10 ÷ 70 °C / 45 ÷ 95% RH	
Timer / programs	continuous mode / Programs 1-100 step	
Safety class	3.1	
Voltage / Power	230V / 2200W	
Internal Dimension (WxHxD) in mm	550 x 670 x 405	600 x 830 x 500
Number of shelves (standard/max.)	3/10	3/12
Useful min. distance between shelves	45	
Max. load of shelf	10kg	
External Dimension (WxHxD) in mm	690 x 1520 x 790	740 x 1680 x 885
External water tank dimensions (WxHxD) in mm	370 x 340 x 560	
Weight (kg)	145	185

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Climatic chambers

Operation range: 10 °C ÷ 70 °C / 45 ÷ 95 % RH

Accessories

CH-1001462	Steel wire shelf for climatic chamber CH 150
CH-1001472	Steel wire shelf for climatic chamber CH 250
CH-1000152	Hole Ø 25 mm complete of closing caps for climatic chambers CH 150/CH 250
CH-1000142	Hole Ø 50 mm complete of closing caps for climatic chambers CH 150/CH 250
CH-1009002	Paper Manual IQ/OQ

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Cooled Incubator

Operation range: from 0 °C - 60 °C

The cooled incubator IC 150-R is ideal for every application in microbiological field. The wide range of temperature allows the growth of microorganisms in every environmental situation.

The removable shelves and rounded corners of the stainless-steel chamber, make the sonification processes easy.

The PID regulator guarantee an excellent control by microprocessor and the limited number of setting keys ensures an extremely simple and intuitive operability.

The instrument is standard equipped with a side through-hole diameter of 25 mm in order to install one or more temperature sensors inside the chamber.

The inner lamp for observation of the samples is standard supplied.

Technical Data	IC-150-R
Useable Volume	150 Liters
Temperature Range	10 – 60°C
Temperature Resolution	0,1°C
Temperature homogeneity at 25°C	± 0,5 °C
Temperature variation at 25°C	± 0,1 °C
Recovery time at 25°C	4 minutes
Timer	99:59 min and continuous mode
Safety class	3.1
Voltage / Power	230V / 700W
Internal Dimension (WxHxD) in mm	500 x 800 x 360
Number of shelves (standard/max.)	3/9
Useful min. distance between shelves	50 mm
Max. load of shelf	10kg
External Dimension (WxHxD) in mm	650 x 1350 x 620
Weight (kg)	100

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