

*Simple*

*Efficient*

*Ecological*



**Temperature  
Project 4**



# *Super* PROJECT



# AVAILABLE FOR ALL OVENS AND INCUBATORS ARGOLAB\*

\*except TCN 30

**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**



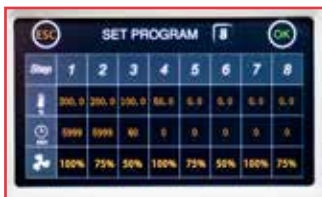
## All on board

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



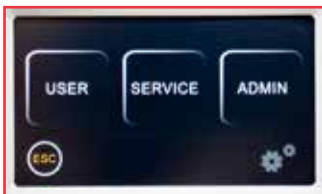
## Easy to use

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



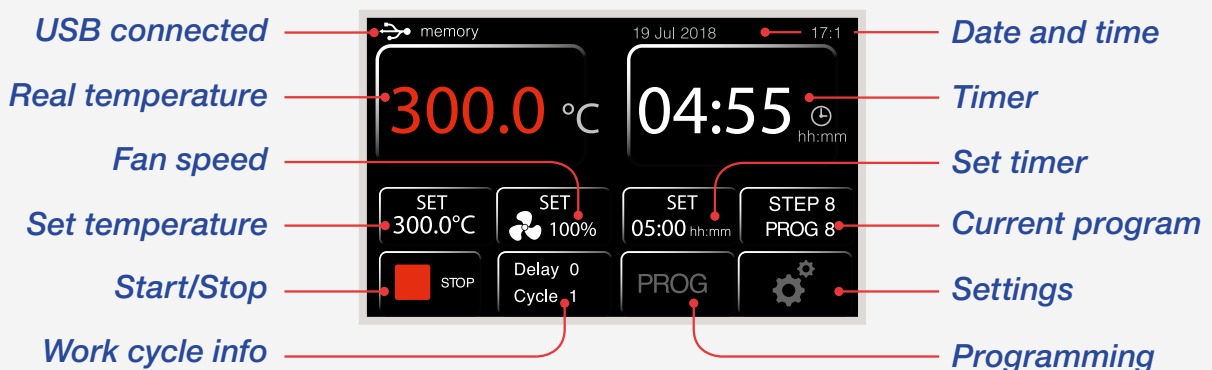
## Safety of use

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



# SERIES Plus

**AVAILABLE FOR ALL OVENS  
AND INCUBATORS ARGOLAB\***

\*except TCN 30

**New version of Professional controller Plus Series**  
**7 programs with 10 steps each one**  
**wide backlit LCD display**  
**easy setting of all operating parameters**

### All in one

Backlit LCD display with all parameters in a unique screen:  
 current temperature, set temperature, fan speed and running  
 program



### Intuitive reading

Easy reading of the most important parameters thanks to the  
 clear and logical distribution of numerical values, symbols and  
 user friendly icons



### Easy to use

The limited number of keys and of steps during setting  
 guarantee an extremely intuitive and quick operability





# STANDARD ADVANTAGES

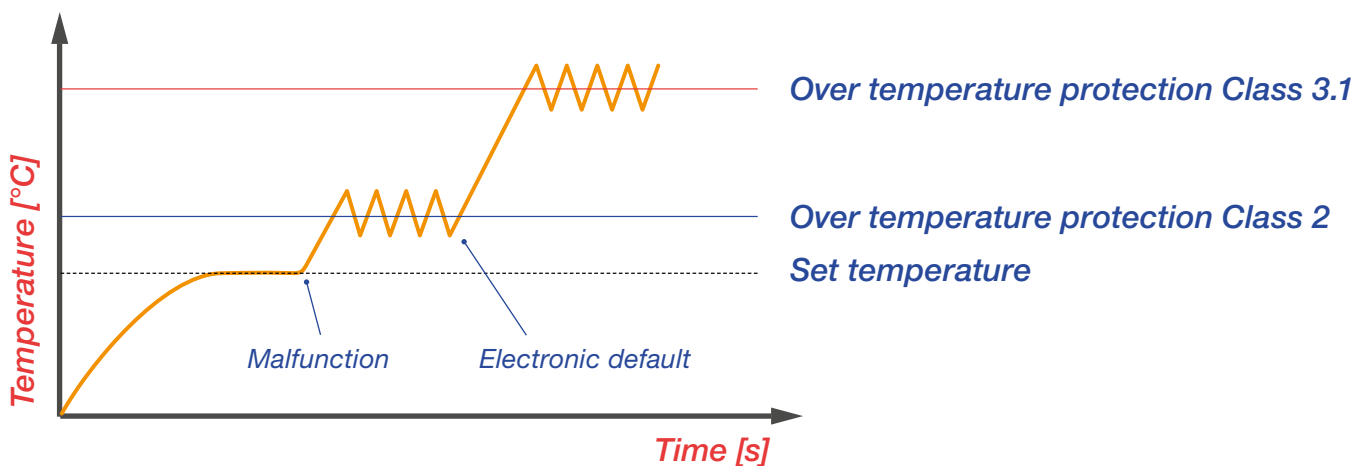
AVAILABLE FOR ALL OVENS AND INCUBATORS ARGOLAB

## Safety class 3.1 (standard DIN 12880)

Double over-temperature protection: if the set temperature is exceeded, an electronic control and an electromechanical one, both adjustable by the operator, intervene in succession.

Even in the event of an improbable total failure, the second protection is able to promptly interrupt the supply of the heating element because it is constituted of a fluid expansion switch and a temperature probe totally independent from the electronics.

All the instruments of the Argolab's line have a degree of protection at least Class 2. The ovens and other instruments with the most powerful heating elements are in Safety Class 3.1.



Through hole Ø 5 mm for inserting a temperature probe



Wire shelves with no overturning system to always operate safely



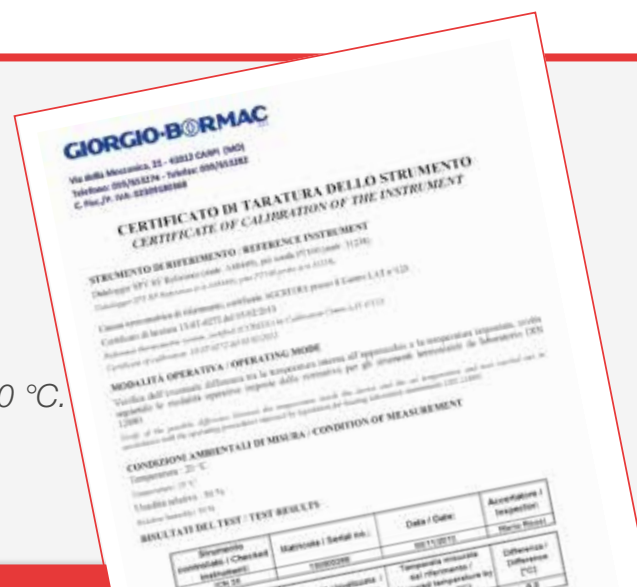
Rounded corners for easy cleaning of the internal walls



Silicone gasket for the optimal thermal insulation of the chamber

## Temperature test and certificate of calibration for each instrument

All the ovens and incubators Argolab are supplied with calibration report executed by instrument Accredia certified. The incubators are tested at 37 °C, the ovens at 150 °C.





**TCN 30**



**TCN 50 SUPER**



**TCN 115**



**TCN 200 SUPER**

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

The possibility to heat the samples up to 300 °C allows any type of process.

The minimum heating times, the heating power properly dimensioned and the perfect tightness of the gasket, ensure low energy consumptions in every application.



Steel wire shelf for TCN and TCF models



Holed platform applicable to wire shelf for TCN and TCF models

Part n.	Description
<b>41100142</b>	Steel wire shelf for TCN 30
<b>41100102</b>	Steel wire shelf for TCN 50 / TCF 50
<b>41100112</b>	Steel wire shelf for TCN 115 / TCF 120
<b>41100122</b>	Steel wire shelf for TCN 200 / TCF 200
<b>41100132</b>	Steel wire shelf for TCF 400

Part n.	Description
<b>41100192</b>	Holed platform for TCN 30
<b>41100152</b>	Holed platform for TCN 50 / TCF 50
<b>41100162</b>	Holed platform for TCN 115 / TCF 120
<b>41100172</b>	Holed platform for TCN 200 / TCF 200
<b>41100182</b>	Holed platform for TCF 400

Natural convection ovens	TCN 30	TCN 50	TCN 115	TCN 200
Usable volume	<b>30 liters</b>	<b>50 liters</b>	<b>115 liters</b>	<b>200 liters</b>
Max temperature / Resolution	+200 / 0,1 °C	+300 / 0,1 °C	+300 / 0,1 °C	+300 / 0,1 °C
Temperature homogeneity at 150 °C	± 3,5 °C	± 3,5 °C	± 3,5 °C	± 4,0 °C
Temperature variation at 150 °C	± 0,5 °C	± 0,5 °C	± 0,5 °C	± 0,7 °C
Heating up time at 150 °C	14 min.	16 min.	18 min.	20 min.
Timer	99:59 hh:min and ∞	99:59 hh:min and ∞	99:59 hh:min and ∞	99:59 hh:min and ∞
Safety class	3.1	3.1	3.1	3.1
Power supply / Nominal wattage	230 V / <b>700 W</b>	230 V / <b>1000 W</b>	230 V / <b>1900 W</b>	230 V / <b>2100 W</b>
Internal dimensions (W x H x D)	320 x 320 x 285 mm	400 x 420 x 330 mm	520 x 495 x 450 mm	650 x 640 x 495 mm
Number of shelves (standard/max)	2/3	2/5	3/6	3/9
Useful min. distance between shelves	50 mm	50 mm	50 mm	50 mm
Max load for shelf	10 kg	15 kg	20 kg	20 kg
External dimensions (W x H x D)	460 x 685 x 530 mm	690 x 635 x 470 mm	815 x 750 x 600 mm	940 x 905 x 660 mm
Weight	40 kg	53 kg	74 kg	103 kg
Part number - <b>PLUS</b> version	<b>41100062</b>	<b>41100002</b>	<b>41100012</b>	<b>41100022</b>
Part number - <b>SUPER</b> version	-	<b>41100502</b>	<b>41100512</b>	<b>41100522</b>

## Forced air ovens

from +10 °C over room temperature to +300 °C



TCF



The Argolab's forced air ovens control very efficiently the temperature up to 300 °C.

The PID controller, with wide backlit colour display, clearly shows in every moment the temperature set and that one inside as well as all the other parameters.

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



Wheels for TCN 200, TCF 200 and TCF 400



Through hole Ø 25 or Ø 50 mm for inserting of probes inside the chamber

Part n.	Description
<b>41110152</b>	Hole Ø 25 mm complete of closing caps for ovens TCN and TCF
<b>41100142</b>	Hole Ø 50 mm complete of closing caps for ovens TCN and TCF
<b>41101172</b>	Wheels for TCN 200 / TCF 200 / TCF 400. Set of 4 pieces
<b>41119002</b>	Paper manual IQ-OQ

Forced air ovens	TCF 50	TCF 120	TCF 200	TCF 400
Usable volume	<b>50 liters</b>	<b>120 liters</b>	<b>200 liters</b>	<b>400 liters</b>
Max temperature / Resolution	+300 / 0,1 °C	+300 / 0,1 °C	+300 / 0,1 °C	+300 / 0,1 °C
Temperature homogeneity at 150 °C	± 2 %	± 2 %	± 2 %	± 2 %
Temperature variation at 150 °C	± 0,3 °C	± 0,3 °C	± 0,4 °C	± 0,5 °C
Heating up time at 150 °C	20 min.	24 min.	30 min.	50 min.
Timer	99:59 hh:min and ∞	99:59 hh:min and ∞	99:59 hh:min and ∞	99:59 hh:min and ∞
Safety class	3.1	3.1	3.1	3.1
Power supply / Nominal wattage	230 V / <b>980 W</b>	230 V / <b>1900 W</b>	230 V / <b>2400 W</b>	230 V / <b>3200 W</b>
Internal dimensions (W x H x D)	400 x 415 x 310 mm	520 x 530 x 435 mm	645 x 650 x 495 mm	1000 x 800 x 500 mm
Number of shelves (standard/max)	2/5	3/7	3/9	3/10
Useful min. distance between shelves	50 mm	50 mm	50 mm	50 mm
Max load for shelf	15 kg	20 kg	20 kg	20 kg
External dimensions (W x H x D)	690 x 635 x 570 mm	810 x 750 x 690 mm	945 x 870 x 755 mm	1285 x 1060 x 750 mm
Weight	54 kg	74 kg	103 kg	160 kg
Part number - <b>PLUS</b> version	<b>41100202</b>	<b>41100212</b>	<b>41100222</b>	<b>41100232</b>
Part number - <b>SUPER</b> version	<b>41100602</b>	<b>41100612</b>	<b>41100622</b>	<b>41100632</b>



**ICN 16**



**ICN 35**



**ICN 55 SUPER**

The samples used in the typical laboratory applications require a constant and soft heating. The temperature distribution in the Argolab's incubators is obtained without forced air circulation but using only the natural convection, which does not stress the cultures and allows a uniform growth.

The large glass door in the smaller models and the internal one in the biggest ones, ensures perfect observation of the samples throughout the chamber, avoiding unnecessary heat dissipation and temperature changes.



High load capacity even in smaller models



Perfectly adaptable to your laboratory space



Natural convection incubators	ICN 16	ICN 35	ICN 55
Usable volume	<b>16 liters</b>	<b>35 liters</b>	<b>55 liters</b>
Max temperature / Resolution	+70 / 0,1 °C	+70 / 0,1 °C	+70 / 0,1 °C
Temperature 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 up time at 37 °C	18 min.	22 min.	25 min.
Timer	99:59 hh:min and ∞	99:59 hh:min and ∞	99:59 hh:min and ∞
Safety class	2	2	2
Power supply / Nominal wattage	230 V / <b>85 W</b>	230 V / <b>125 W</b>	230 V / <b>250 W</b>
Internal dimensions (W x H x D)	270x 230 x 255 mm	360 x 300 x 320 mm	400x 360 x 385 mm
Number of shelves (standard/max)	2/6	2/6	2/5
Useful min. distance between shelves	25 mm	30 mm	50 mm
Max load for shelf	5 kg	7,5 kg	10 kg
External dimensions (W x H x D)	530 x 370 x 400 mm	620 x 440 x 460 mm	660 x 500 x 545 mm
Weight	23 kg	33 kg	42 kg
Part number - PLUS version	<b>41101002</b>	<b>41101012</b>	<b>41101022</b>
Part number - SUPER version	<b>41101302</b>	<b>41101312</b>	<b>41101322</b>



# Natural convection incubators

from +10 °C over room temperature to +70 °C



ICN



ICN 120



ICN 200 SUPER

All Argolab's incubators, regardless of their volume, guarantee high levels of temperature homogeneity and stability, ensuring the correct incubation of samples, thanks to the wire heating elements positioned in optimal way over the entire surface of the chamber.



Internal glass door



Graphic of temperature stability and homogeneity, obtained with three PT 100 probes equidistant at the centre of the chamber

## Natural convection incubators

	ICN 120	ICN 200
Usable volume	<b>120 liters</b>	<b>200 liters</b>
Max temperature / Resolution	+70 / 0,1 °C	+70 / 0,1 °C
Temperature homogeneity at 37 °C	± 0,5 °C	± 0,5 °C
Temperature variation at 37 °C	± 0,3 °C	± 0,3 °C
Heating up time at 37 °C	30 min.	35 min.
Timer	99:59 hh:min and ∞	99:59 hh:min and ∞
Safety class	2	2
Power supply / Nominal wattage	230 V / <b>350 W</b>	230 V / <b>600 W</b>
Internal dimensions (W x H x D)	520 x 460 x 500 mm	610 x 600 x 575 mm
Number of shelves (standard/max)	3/7	3/9
Useful min. distance between shelves	50 mm	50 mm
Max load for shelf	10 kg	10 kg
External dimensions (W x H x D)	780 x 610 x 645 mm	875 x 755 x 710 mm
Weight	61 kg	77 kg
Part number - <b>PLUS</b> version	<b>41101032</b>	<b>41101042</b>
Part number - <b>SUPER</b> version	<b>41101332</b>	<b>41101342</b>



**ICF 120**



**ICF 200**



**ICF 400 SUPER**

Argolab's 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.



Steel wire shelf for ICF models



Holed platform applicable to wire shelf for ICF models



Through hole Ø 25 or Ø 50 mm for inserting of probes inside the chamber



Wheels for ICF 200 and ICF 400

Part n.	Description
<b>41100112</b>	Steel wire shelf for ICF 120
<b>41100122</b>	Steel wire shelf for ICF 200
<b>41100132</b>	Steel wire shelf for ICF 400
<b>41100162</b>	Holed platform for ICF 120
<b>41100172</b>	Holed platform for ICF 200
<b>41100182</b>	Holed platform for ICF 400

Part n.	Description
<b>41110152</b>	Hole Ø 25 mm complete of closing caps for incubators ICF
<b>41100142</b>	Hole Ø 50 mm complete of closing caps for incubators ICF
<b>41101172</b>	Wheels for ICF 200 / ICF 400. Set of 4 pieces
<b>41119002</b>	Paper manual IQ-OQ

Forced air incubators	ICF 120	ICF 200	ICF 400
Usable volume	<b>120 liters</b>	<b>200 liters</b>	<b>400 liters</b>
Max temperature / Resolution	+80 / 0,1 °C	+80 / 0,1 °C	+80 / 0,1 °C
Temperature 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 up time at 37 °C	40 min.	45 min.	55 min.
Timer	99:59 hh:min and ∞	99:59 hh:min and ∞	99:59 hh:min and ∞
Safety class	3.1	3.1	3.1
Power supply / Nominal wattage	230 V / <b>600 W</b>	230 V / <b>700 W</b>	230 V / <b>1500 W</b>
Internal dimensions (W x H x D)	520 x 530 x 435 mm	645 x 650 x 495 mm	1000 x 800 x 500 mm
Number of shelves (standard/max)	3/7	3/9	3/10
Useful min. distance between shelves	50 mm	50 mm	50 mm
Max load for shelf	20 kg	20 kg	20 kg
External dimensions (W x H x D)	810 x 750 x 690 mm	945 x 870 x 755 mm	1285 x 1060 x 750 mm
Weight	74 kg	103 kg	160 kg
Part number - PLUS version	<b>41100812</b>	<b>41100822</b>	<b>41100832</b>
Part number - SUPER version	<b>41100912</b>	<b>41100922</b>	<b>41100932</b>

# Cooled incubator

from 0 °C to +60 °C



IC-R



IC 150-R

The cooled incubator Argolab 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 sanitation 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.



Steel wire shelf



Through hole Ø 25 or Ø 50 mm for inserting of probes inside the chamber

Part n.	Description
41101562	Steel wire shelf for incubator IC 150-R
41110152	Hole Ø 25 mm complete of closing caps for incubator IC 150-R
41100142	Hole Ø 50 mm complete of closing caps for incubator IC 150-R
41119002	Paper manual IQ-OQ

Cooled incubator	IC 150-R
Usable volume	<b>150 liters</b>
Temperature range / Resolution	0 ~ +60 °C / 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 min.
Timer	99:59 hh:min and ∞
Safety class	3.1
Power supply / Nominal wattage	230 V / <b>700 W</b>
Internal dimensions (W x H x D)	500x 800 x 360 mm
Number of shelves (standard/max)	3/9
Useful min. distance between shelves	50 mm
Max load for shelf	10 kg
External dimensions (W x H x D)	650 x 1350 x 620 mm
Weight	100 kg
Part number - <b>PLUS</b> version	<b>41101512</b>
Part number - <b>SUPER</b> version	<b>41101532</b>



Inner lamp standard supplied



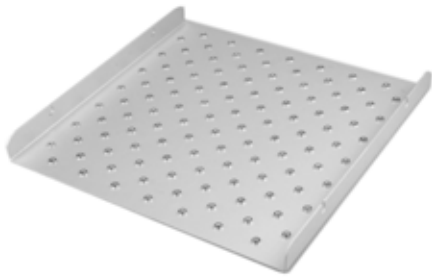
SKI 4



The SKI 4 Argolab combines in one instrument two typical laboratory operations: shaking and incubation of samples. Combining the convenience of a benchtop incubator and a shaker, it is ideal for cell culture, solubility studies, extraction procedures and many other laboratory applications.

The instrument is supplied with a standard platform equipped of flexible springs that can accommodate many type of flasks, beakers, tubes with different sizes.

Other platforms are also available: holed for clips, with no-slip film and universal with 4 bars.



Holed platform for clips



Platform with no-slip film



Universal platform with 4 adjustable bars

Shaking incubator	SKI 4
Max temperature / resolution	+60 / 0,1 °C
Temperature homogeneity at 37 °C	± 0,5 °C
Temperature variation at 37 °C	± 0,1 °C
Timer	99:59 hh:min and ∞
Air circulation	Forced
Shaking speed	40...300 rpm
Amplitude of movement of platform	20 mm
Capacity of standard platform	7 flasks of 500 ml / 4 flasks of 1000 ml
Usable size of standard platform	320 x 320 mm
Safety class	3.1
Power supply / Nominal wattage	<b>500 W</b>
External dimensions (W x H x D)	500 x 470 x 610 mm
Thickness of hood / material	8 mm / plexiglass
Weight	40 kg
Safety temperature control	yes
Safety control opening door	yes
Part number	<b>41102012</b>

Part n.	Description
<b>41102112</b>	Holed platform for clips fixing
<b>41102132</b>	Clips for flasks 100 ml (Max 16 clips)
<b>41102142</b>	Clips for flasks 200/250 ml (Max 9 clips)
<b>41102152</b>	Clips for flasks 500 ml (Max 9 clips)
<b>41102162</b>	Clips for flasks 1000 ml (Max 4 clips)
<b>41102172</b>	Clips for flasks 2000 ml (Max 4 clips)
<b>41102052</b>	Platform with no-slip film
<b>41102042</b>	Universal platform with 4 adjustable bars
<b>41102062</b>	Additional bar for universal platform





# Shaking bath

from +5 °C over room temperature to +100 °C



SB



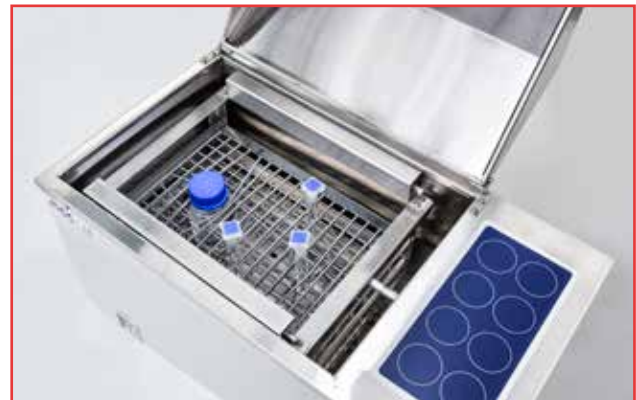
SB 35

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

Electronic regulator of the temperature with PID control and adjustment of the shaking speed by knob. The instrument is supplied as standard 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.



Tank emptying pipe and quick coupling valve



Tank, lid, basket and support surface for samples made entirely of stainless steel. The universal spring support permits the insertion of recipients with different capacities and shapes.

## Shaking bath

## SB 35

Tank volume	<b>35 liters</b>
Max temperature / resolution	+ 100 / 0,1 °C
Temperature homogeneity at 37 °C	± 1,0 °C
Temperature variation at 37 °C	± 0,5 °C
Recirculation pump	no
Timer	99:59 hh:min and ∞
Shaking speed	0...150 rpm
Amplitude of movement of platform	30 mm
Overheating protection	yes
Safety class	2
Spring basket dimensions (W x H x D)	320 x 115 x 200 mm
Minimum usable height with lid closed	150 mm
Power supply / Nominal wattage	230 V / <b>1250 W</b>
External dimensions (W x H x D)	645 x 350 x 355 mm
Weight	28 kg
Part number	<b>41101732</b>



Easy removable basket



from +5 °C over room temperature to +100 °C



WB 12



WB 22

The waterbaths are generally used in the laboratory to maintain the temperature of the samples constant. The Argolab's waterbaths WB series, thanks to the maximum operating temperature of 100°C, meet the different needs of operators and therefore allow them to be used in numerous applications.

**Rack 1**



Tubes Ø13mm  
one module

**Rack 2**



Tubes Ø18mm  
one module

**Rack 3**



Tubes Ø31mm  
one module

**Rack 4**



Tubes Ø56mm  
three modules

**Rack 5**



For blood bags  
three modules

Part n.	Description	Modules
41101802	Rack 1 for tubes Ø 13 mm / 20 positions	1
41101812	Rack 2 for tubes Ø 18 mm / 20 positions	1
41101822	Rack 3 for tubes Ø 31 mm / 5 positions	1
41101842	Rack 4 for tubes Ø 56 mm / 8 positions (biberon)	3
41101852	Rack 5 for blood bags / 5 positions	3



Bottom stainless steel holed platform and plastified stand

Waterbaths	WB12	WB22
Usable volume	<b>12 liters</b>	<b>22 liters</b>
Max temperature / Resolution	+ 100 / 0,1 °C	+ 100 / 0,1 °C
Temperature homogeneity at 37 °C	± 0,5 °C	± 0,5 °C
Temperature variation at 37 °C	± 0,1 °C	± 0,1 °C
Recirculation pump	no	no
Timer	99:59 hh:min and ∞	99:59 hh:min and ∞
Overheating protection	yes	yes
Safety class	2	2
Bottom plate dimensions (W x D)	250 x 205 mm	450 x 265 mm
Minimum usable height with lid closed	150 mm	150 mm
Power supply / Nominal wattage	230 V / <b>900 W</b>	230 V / <b>1100 W</b>
External dimensions (W x H x D)	480 x 380 x 310 mm	680 x 390 x 365 mm
Weight	12 kg	18 kg
Rack distribution		
Part number	<b>41101602</b>	<b>41101712</b>

# Waterbaths

from +5 °C over room temperature to +85 °C



**WB**

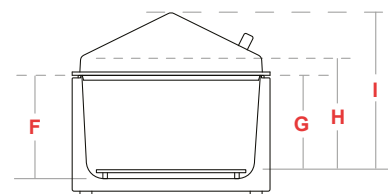
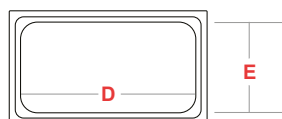
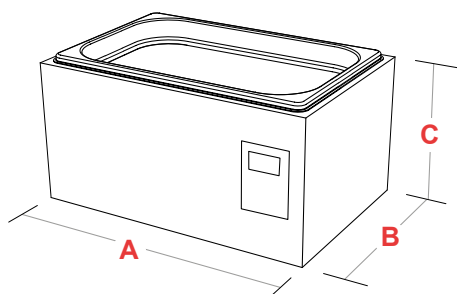


**WB 22 Pump**

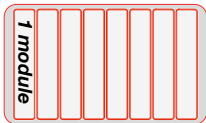
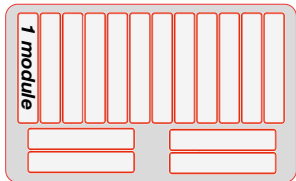


**WB 40 Pump**

The models WB 22 Pump and WB 40 Pump ensure a faster and more uniform temperature distribution thanks to the recirculation pump which are equipped.



Dimension	WB 12	WB 22	WB 22 Pump	WB 40 Pump
A (mm)	480	680	680	830
B (mm)	310	365	365	460
C (mm)	285	285	285	285
D (mm)	300	500	500	645
E (mm)	240	295	295	395
F (mm)	200	200	200	200
G (mm)	165	165	165	165
H (mm)	180	180	180	180
I (mm)	260	270	270	270

Waterbaths	WB 22 Pump	WB 40 Pump
Usable volume	<b>22 liters</b>	<b>40 liters</b>
Max temperature / Resolution	+ 85 / 0,1 °C	+ 85 / 0,1 °C
Temperature homogeneity at 37 °C	± 0,2 °C	± 0,5 °C
Temperature variation at 37 °C	± 0,1 °C	± 0,2 °C
Recirculation pump	yes	yes
Timer	99:59 hh:min and ∞	99:59 hh:min and ∞
Overheating protection	yes	yes
Safety class	2	2
Bottom plate dimensions (W x D)	450 x 265 mm	620 x 380 mm
Minimum usable height with lid closed	150 mm	150 mm
Power supply / Nominal wattage	230 V / <b>1100 W</b>	230 V / <b>2200 W</b>
External dimensions (W x H x D)	680 x 390 x 365 mm	830 x 390 x 460 mm
Weight	19 kg	28 kg
Rack distribution		
Part number	<b>41101612</b>	<b>41101622</b>



CB 5-10



CB 5-20



CB 5-30

The Argolab 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 test 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.

Refrigerated/Heating Circulating baths	CB 5-10	CB 5-20	CB 5-30
Working temperature range	-10 ÷ 100 °C	-20 ÷ 100 °C	-30 ÷ 100 °C
Setting / Display resolution	0,1 °C	0,1 °C	0,1 °C
Timer	99:59 hh:mm and ∞	99:59 hh:mm and ∞	99:59 hh:mm and ∞
Temperature stability at 20 °C	± 0,3 °C	± 0,2 °C	± 0,2 °C
Cooling capacity			
	(20°C)	0,37 kW	0,41 kW
	(10°C)	0,33 kW	0,37 kW
	(0°C)	0,30 kW	0,33 kW
	(-10°C)	0,22 kW	0,28 kW
	(-20°C)	-	0,16 kW
	(-30°C)	-	0,15 kW
Max pump pressure	0,35 bar	0,35 bar	0,35 bar
Max pump flow rate	3,2 l/min	6,5 l/min	6,5 l/min
Bath volume	5 liters	5 liters	5 liters
Bath opening/depth (W x D / H)	150 x 160 / 150 mm	150 x 160 / 150 mm	150 x 160 / 150 mm
External dimensions (W x D x H)	290 x 570 x 710 mm	380 x 670 x 840 mm	380 x 670 x 840 mm
Weight	34 kg	54 kg	54 kg
Power supply / Frequency	220 V / 50 Hz	220 V / 50 Hz	220 V / 50 Hz
Part number	41102202	41102212	41102222

Part n.	Description
41102202	Refrigerated/Heating Circulating bath CB 5-10 (working range -10÷100 °C) supplied as standard with PT100 probe, set of two pipes of 2 meter with insulation, metal clamps and pipe fittings
41102212	Refrigerated/Heating Circulating bath CB 5-20 (working range -20÷100 °C) supplied as standard with PT100 probe, set of two pipes of 2 meter with insulation, metal clamps and pipe fittings
41102222	Refrigerated/Heating Circulating bath CB 5-30 (working range -30÷100 °C) supplied as standard with PT100 probe, set of two pipes of 2 meter with insulation, metal clamps and pipe fittings

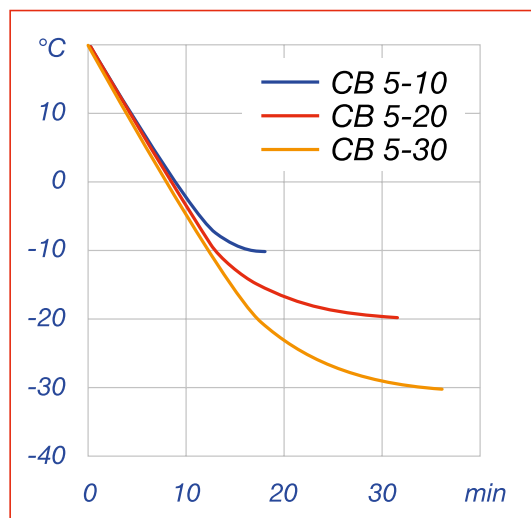


# Circulating baths

from -30 °C to +100 °C

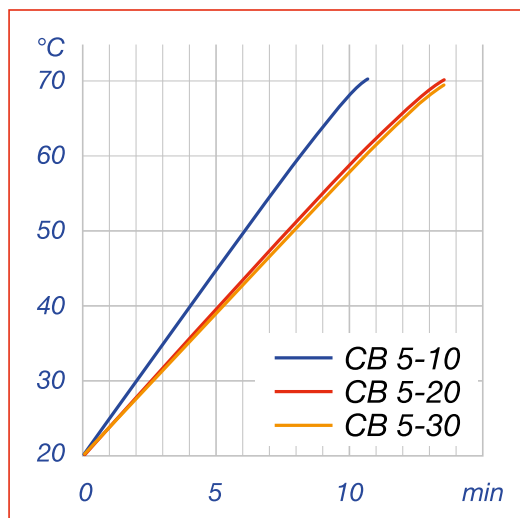


CB



### Cooling curve

Thermal fluid: ethanol (DIN 12876-2)



### Heating curve

Thermal fluid: water (DIN 12876-2)



### Everything on board

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



### 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.



Set of insulated pipes and clamps



Set of swivel wheels



Thermal fluid in 5 liters tank box



Spare probe PT56 TFE

Part n.	Description
41102302	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
41102312	Set of four swivel wheels, two of which can be braked
41102322	Premixed thermal fluid ready for use, working range -30 ÷ + 80 °C. Tank box 5 litres with plastic tap
51000252	Temperature sensor PT100 model PT56 TFE with 3m teflon cable. Working Range -100 ÷ + 300 °C (including cable)



CH 150



CH 250

The climatic chamber Argolab is 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

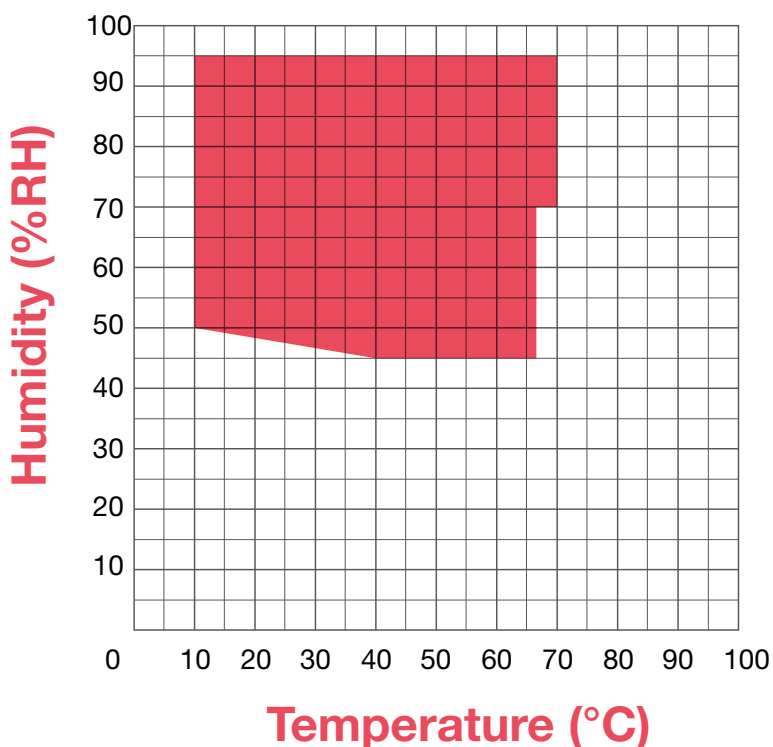
Climatic chambers	CH 150	CH 250
Usable volume	<b>150 liters</b>	<b>250 liters</b>
Temperature range	-10 ~ 85 °C (without humidity) +10 ~ 70 °C (with humidity)	-10 ~ 85 °C (without humidity) +10 ~ 70 °C (with humidity)
Resolution	0,1 °C	0,1 °C
Temperature homogeneity in the chamber	± 0,5 °C (without humidity) ± 1,5 °C (10 ÷ 70 °C / 45 ÷ 95% RH)	± 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)	± 0,2 °C (without humidity) ± 0,5 °C (10 ÷ 70 °C / 45 ÷ 95% RH)
Humidity range	45 % ~ 95 %	45 % ~ 95 %
Humidity variation on a point	≤ 2% RH (10 ÷ 70 °C / 45 ÷ 95% RH)	≤ 2% RH (10 ÷ 70 °C / 45 ÷ 95% RH)
Timer / Programs	Continuous mode Programs 1-100 step	Continuous mode Programs 1-100 step
Safety class	3.1	3.1
Power supply / Nominal wattage	230 V / 2200 W	230 V / 2200 W
Internal dimensions (W x H x D)	550x 670 x 405 mm	600 x 830 x 500 mm
Number of shelves (standard/max)	3/10	3/12
Useful min. distance between shelves	45 mm	45 mm
Max load for shelf	10 kg	10 kg
External dimensions (W x H x D)	690 x 1520 x 790 mm	740 x 1680 x 885 mm
External water tank dimensions (W x H x D)	370 x 340 x 560 mm	370 x 340 x 560 mm
Weight	145 kg	185 kg
Part number	<b>41101412</b>	<b>41101422</b>

# Climatic chambers

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



CH



Operating range temperature- humidity

Lighting of the internal chamber with LED strip standard supplied



Side command panel with visual-sound alarm and mini-printer incorporated



Through hole Ø 25 or Ø 50 mm for inserting of probes inside the chamber



Steel wire shelf for climatic chambers



External water tank for humidity generator, supplied as standard

Part n.	Description
41101462	Steel wire shelf for climatic chamber CH 150
41101472	Steel wire shelf for climatic chamber CH 250
41110152	Hole Ø 25 mm complete of closing caps for climatic chambers CH 150/CH 250
41100142	Hole Ø 50 mm complete of closing caps for climatic chambers CH 150/CH 250
41119002	Paper manual IQ-OQ



*Natural convection ovens*  
*Forced air ovens*  
*Natural convection incubators*  
*Forced air incubators*  
*Cooled incubator*  
*Shaking incubator*  
*Shaking bath*  
*Waterbaths*  
*Circulating baths*  
*Climatic chambers*



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