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Simple

Efficient

Ecological



Temperature
Project 4









### 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





#### 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

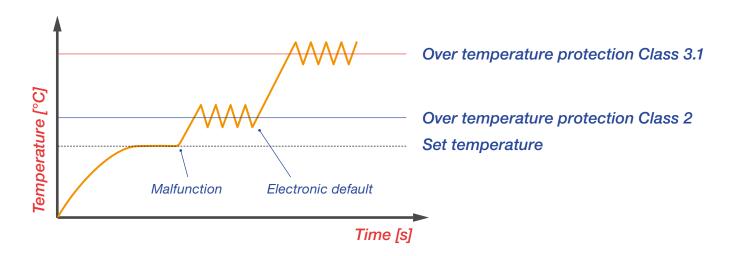
#### AVAILABLE FOR ALL OVENS AND INCUBATORS ARGOLAB

#### 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 certificated.

The incubators are tested at 37 °C, the ovens at 150 °C.



from +5 °C over room temperature to +300 °C





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
41100142	Steel wire shelf for TCN 30
41100102	Steel wire shelf for TCN 50 / TCF 50
41100112	Steel wire shelf for TCN 115 / TCF 120
41100122	Steel wire shelf for TCN 200 / TCF 200
41100132	Steel wire shelf for TCF 400

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

Natural convection ovens	TCN 30	TCN 50	TCN 115	TCN 200
Usable 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
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	2/6	2/9
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	41100062	41100002	41100012	41100022
Part number - <b>SUPER</b> version	-	41100502	41100512	41100522





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

Forced air ovens	TCF 50	TCF 120	TCF 200	TCF 400
Usable volume	50 liters	120 liters	200 liters	400 liters
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	2/7	2/9	2/10
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 - PLUS version	41100202	41100212	41100222	41100232
Part number - SUPER version	41100602	41100612	41100622	41100632



from +5 °C over room temperature to +70 °C







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.







Perfectly adaptable to your laboratory space

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Natural convection incubators	ICN 16	ICN 35	ICN 55
Usable volume	16 liters	35 liters	55 liters
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 - <b>PLUS</b> version	41101002	41101012	41101022
Part number - SUPER version	41101302	41101312	41101322



from +5 °C over room temperature to +70 °C







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.







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	120 liters	200 liters
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)	2/7	2/9
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 - PLUS version	41101032	41101042
Part number - SUPER version	41101332	41101342





#### from +5 °C over room temperature to +80 °C







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.







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
41100112	Steel wire shelf for ICF 120
41100122	Steel wire shelf for ICF 200
41100132	Steel wire shelf for ICF 400
41100162	Holed platform for ICF 120
41100172	Holed platform for ICF 200
41100182	Holed platform for ICF 400

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

Forced air incubators	ICF 120	ICF 200	ICF 400
Usable volume	120 liters	200 liters	400 liters
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)	2/7	2/9	2/10
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 - <b>PLUS</b> version	41100812	41100822	41100832
Part number - SUPER version	41100912	41100922	41100932











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 sanification 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	150 liters
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 - PLUS version	41101512
Part number - SUPER version	41101532



Inner lamp standard supplied



# Shaking incubator

from +5 °C over room temperature to +60 °C





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	40300 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	500 W
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	41102012

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









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	35 liters
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	0150 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	41101732



Easy removable basket









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	12 liters	22 liters
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	1 module	1 module
Part number	41101602	41101712







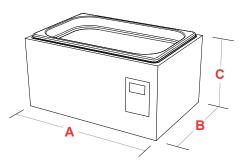


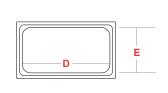


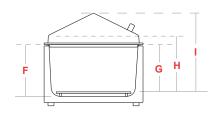
WB 22 Pump

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	<b>WB 22</b> Pump	WB 40 Pump
Usable volume	22 liters	40 liters
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	1 module	1 module
Part number	41101612	41101622



# Circulating baths

from -30 °C to +100 °C







**CB 5-10** 

**CB 5-20** 

**CB** 5-30

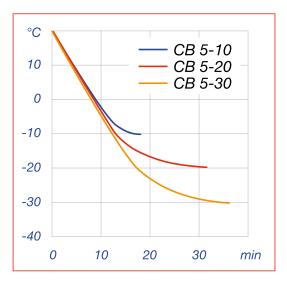
The Argolab refrigerated/heating circulating baths are suitable for temperature controlling of samples in a wide range of temperatures. All the models are designed for external and internal applications, usable for test in laboratories and industries. Each instrument is standard equipped with a PT100 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	0,44 kW
(10°C)	0,33 kW	0,37 kW	0,40 kW
(0°C)	0,30 kW	0,33 kW	0,37 kW
(-10°C)	0,22 kW	0,28 kW	0,32 kW
(-20°C)	-	0,16 kW	0,20 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

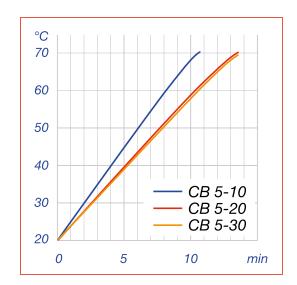






Cooling curve

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 $\div$ + 60 $^{\circ}$ 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)

















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.

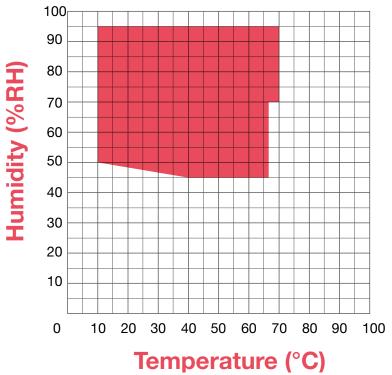
The standard supplied side through hole of 25 mm diameter allows to install probes inside the chamber.

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	150 liters	250 liters
Temperature range	$-10 \sim 85$ °C (without humidity) $+10 \sim 70$ °C (with humidity)	-10 $\sim$ 85 °C (without humidity) +10 $\sim$ 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)	$\pm$ 0,5 °C (without humidity) $\pm$ 1,5 °C (10 $\div$ 70 °C / 45 $\div$ 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	41101412	41101422









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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