

RAYPA

Leading
Lab Technologies

 Sterilization

VERTICAL AUTOCLAVES WITH PREVACUUMS AND DRYING

AE-B SERIES **CLASSIC LINE**

EXCELLENT PERFORMANCE,
ADVANCED FEATURES AND
ALL-AROUND VERSATILITY FOR
SEVERAL APPLICATIONS



Vertical autoclaves with prevacuums and drying

The **AE-B** Series vertical floor-standing autoclaves with top-loading access cover all laboratory sterilization needs in many industries and research facilities with the aim of increasing the productivity of the laboratory. A great chamber capacity, the independent integrated steam generator, the touchscreen display, the independent clean water tank, the initial prevacuum pulses, the final vacuum drying and the direct water discharge results in an excellent autoclave to perform from the most simple to the most demanding applications.

INTENDED USE

+ **STERILIZATION OF ITEMS OF COMPLEX GEOMETRIES, POROUS OR HOLLOW OBJECTS, FABRIC LOADS, LABORATORY WASTE BAGS, PLASTICS, GLASSWARE, CULTURE MEDIA AND LIQUIDS**



MAIN FEATURES

EXCELLENT PERFORMANCE

AE-B Series autoclaves are autoclaves with excellent performance for several sterilization procedures. They are equipped with an independent integrated steam generator, a vacuum pump and a heating jacket to guarantee proper steam penetration on all types of loads and completely dry solid loads.

MULTIPLE TYPES OF STERILIZATION CYCLES

Several options available to perform sterilization of solids or liquids. Programmable auto-preheating, auto-start, initial prevacuum pulses, duration of the final vacuum drying and optional heart temperature probe for load sensed sterilization of liquids.

GREAT EASE OF USE

AE-B Series autoclaves are equipped with a 5" color touchscreen, they include an independent clean water tank that automatically feeds the independent steam generator with water, with an optional upgrade to fully automatic water feed directly from water network. Discharge is always directly sent to the drain.

SAFETY FIRST

AE-B Series autoclaves are equipped with several features to ensure the safety of the operators. These include overpressure safety valve, overtemperature safety thermostats, water level detectors, an open door detection system and an independent safety pneumatic system that locks the main door while positive pressure exists inside the sterilization chamber.



ADVANTAGES



Heating by an independent integrated powerful steam generator.



Adjustable number of initial prevacuum pulses to guarantee proper steam penetration on items of complex geometries and large loads.



Final vacuum drying feature by a heating jacket and a vacuum pump to completely dry solid loads.



Sterilization chamber and door made of high quality stainless steel grade AISI-316L extremely resistant to corrosion.



Equipment built following all applicable European Union quality, regulatory and safety standards.



Control by a PID microprocessor and a 5" touchscreen, with 50 available programs, adjustable by time, temperature, number of prevacuum pulses, drying time and type of sterilization cycle (solids or liquids, with optional heart probe control).



Surpasses Vacuum Leak and Bowie Dick test cycles.



Suitable to sterilize all types of loads, including wrapped goods, fabric loads, porous and hollow objects and items of complex geometries with cavities thanks to the standard initial prevacuum phase.



Automatic clean water feed to the integrated steam generator from the independent water tank, with water level sensors included in both locations. Optional upgrade to fully automatic water feed directly from water network.



The discharge of each cycle is always directly sent to the drain to minimize long term sterilization chamber and water tank corrosion and calcification processes.



Programmable auto-preheating and auto-start.



Optional software for sterilization data management.



Optional integrated printer.



User management with administrator hierarchy.



STERILIZATION APPLICATIONS

AE-B Series autoclaves are intended for the sterilization of a wide range of liquids and solids such as wrapped and unwrapped loads, items of complex geometries, fabric loads, culture media, glassware, plastics, metal utensils, laboratory waste bags and other laboratory items.



Vertical autoclaves with prevacuums and drying

WORKING PRINCIPLE

AE-B Series autoclaves provide a solution for the multiple sterilization needs of all laboratories, including wrapped and unwrapped solids, fabric loads, porous and hollow objects, plastics, metal utensils, laboratory waste bags, liquids, culture media, glassware and other laboratory items.

The load has to be placed into the vessel's baskets and, after manually filling the independent clean water tank with purified water, the equipment starts to create the initial prevacuum, automatically feeds water to the independent integrated steam generator, generating saturated steam that is directly injected into the sterilization chamber until the set combination of sterilization time and sterilization temperature is reached.

STANDARD AE-B SERIES STERILIZATION CYCLE

PREHEATING PHASE

- In this initial step, the user has the option to set up a preheating temperature up to 70°C to speed up the duration of the sterilization cycle.

PREVACUUM PHASE

- In this phase the equipment's vacuum pump mechanically removes air from the chamber and load through a single or multiple vacuum pulses of -0,75 Bargs. This allows the steam to penetrate load objects of difficult geometries that couldn't otherwise be reached with simple gravity displacement.

HEATING PHASE

- After completing the prevacuum phase the powerful independent integrated steam generator heats up dramatically and injects saturated steam throughout the chamber.

STERILIZATION PHASE

- Upon reaching the set sterilization temperature inside the chamber the sterilization phase begins, accurately sustaining the temperature throughout the duration of this phase.
- This crucial step is controlled by a PT-100 Class A temperature probe located within the chamber. As an option for liquids sterilization processes, this phase can be regulated by a flexible PT-100 Class A temperature probe located inside a sample.

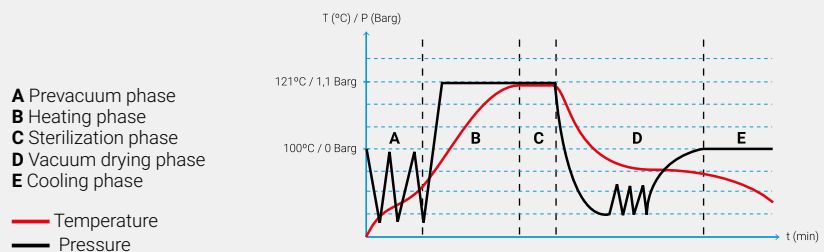
VACUUM DRYING PHASE

- After sterilization phase finishes, only for solid programs, vacuum drying starts, where multiple vacuum pulses occur while the heating jacket is turned on, completely drying the load.

COOLING PHASE

- After the vacuum drying step is completed natural cooling begins and an acoustic beep will sound when a safety temperature is reached and the door can be opened.

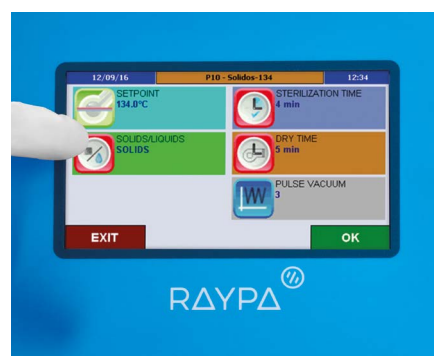
Sterilization cycle graph for a solid load



DIGITAL MICROPROCESSOR WITH TOUCHSCREEN



Digital microprocessor with a 5" TFT touchscreen for an easy programming and parameters selection.



Several process parameters are shown on the screen such as current temperature, current pressure, both in numbers and in graphs, including water status or heating status.

AE-B Series autoclaves have 50 programs and the first 14 are predefined and protected. The rest of the programs are editable with the following parameters settings:

- Sterilization temperature.
- Sterilization time.
- Prevacuum pulses number.
- Final drying time.
- Sterilization mode (Solids or Liquids).
- Sterilization controlled by main chamber temperature probe or both main chamber temperature probe plus heart temperature probe.



AE-B SERIES PROGRAMS

AE-B Series autoclaves have 50 programs, from P1 to P50, and the first fourteen are predefined and protected.

PREDEFINED PROGRAMS

Program N°	Program name	Prevacuum pulses	Sterilization temperature °C	Sterilization time min	Drying time min	Program mode Solids or Liquids	Heart probe regulation
P1	BD	3	134	4'	4'	Solids	-
P2	Vacuum	1	-	-	-	Solids	-
P3	Porous-134	3	134	4'	15'	Solids	-
P4	Prion-134	3	134	18'	20'	Solids	-
P5	Porous-121	3	121	20'	15'	Solids	-
P6	Hollow-134	3	134	4'	10'	Solids	-
P7	Hollow-121	3	121	20'	10'	Solids	-
P8	Wrapped-134	1	134	7'	20'	Solids	-
P9	Wrapped-121	1	121	20'	20'	Solids	-
P10	Solids-134	1	134	4'	10'	Solids	-
P11	Solids-121	1	121	20'	10'	Solids	-
P12	Flash-134	1	134	3'	1'	Solids	-
P13	Liquid	1	121	30'	-	Liquids	-
P14	Liquid probe	1	121	15'	-	Liquids	Heart probe

The rest of the programs are editable with the following parameters settings:

- Prevacuum pulses number.
- Sterilization temperature.
- Sterilization time.
- Final drying time.
- Sterilization mode (Solids or Liquids).
- Sterilization controlled by main chamber temperature probe or both main chamber temperature probe plus heart temperature probe.



Vertical autoclaves with prevacuums and drying

LOADING CAPACITIES



ERLENMEYER FLASKS

Autoclave model	AE-50-B	AE-75-B	AE-110-B	AE-150-B
Usable chamber dimensions Ø x H mm	300 x 710	400 x 600	400 x 850	500 x 780
Usable capacity L	55/50	79/75	115/110	175/153
250 ml (Ø 85 x 143 mm)	Total baskets	3	3	4
	Total units per basket	7	12	12
	Total units	21	36	48
500 ml (Ø 105 x 183 mm)	Total baskets	3	2	3
	Total units per basket	4	8	8
	Total units	12	16	24
1000 ml (Ø 131 x 230 mm)	Total baskets	1	2	3
	Total units per basket	1	4	4
	Total units	1	8	12
2000 ml (Ø 166 x 280 mm)	Total baskets	1	1	1
	Total units per basket	1	3	3
	Total units	1	3	3



BOTTLES

Autoclave model	AE-50-B	AE-75-B	AE-110-B	AE-150-B
Usable chamber dimensions Ø x H mm	300 x 710	400 x 600	400 x 850	500 x 780
Usable capacity L	55/50	79/75	115/110	175/153
250 ml (Ø 70 x 143 mm)	Total baskets	3	3	4
	Total units per basket	10	19	19
	Total units	30	57	76
500 ml (Ø 86 x 182 mm)	Total baskets	3	2	3
	Total units per basket	7	12	12
	Total units	24	24	36
1000 ml (Ø 101 x 203 mm)	Total baskets	1	2	3
	Total units per basket	2	8	8
	Total units	2	16	24
2000 ml (Ø 136 x 260 mm)	Total baskets	1	1	1
	Total units per basket	1	4	4
	Total units	1	4	4

*All data on loading capacities of these tables are non-binding guidance to help you choose your autoclave model. The total units per basket and per model have been calculated using standard baskets, for special loads that require custom baskets please contact us.



Accessories



INTEGRATED BASKETS CRANE

Reference	ELEV-CLAV
Dimensions L x D x H mm	800 x 300 x 2100
Power W	480
Weight Kg	40
For autoclaves with the following chamber volumes L	79, 115 and 175
Max. load Kg	30
Voltage V	230
Frequency Hz	50/60

*Must be installed in our facilities.

Intended use

- Powerful lift system with adjustable arm to assist the movement of heavy loads into the autoclave.

Features

- Ease of use.
- Compatible with 79L, 115L and 175L vertical autoclaves. Contact us for other models.
- Up to 200 degrees of rotation.

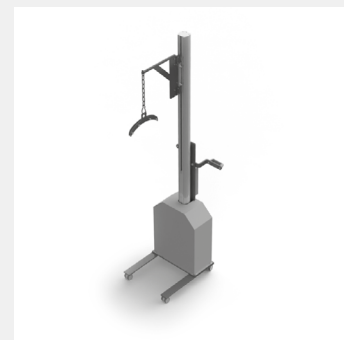
Safety

- Emergency stop button.
- Motor with auto braking system.

MOBILE BASKETS CRANE

- Electrically operated crane made of stainless steel to assist the loading and unloading of heavy loads up to 50 Kg.
- Push-button operation control for ease of use.
- With swiveling casters for more maneuverability.

Reference: **MOB-LIFT**



Vertical autoclaves with prevacuums and drying

Accessories

STAINLESS STEEL WIRE BASKETS

Reference		CV-28	CV-75S	CV-75	CV-150S	CV-150M
Dimensions	Exterior Ø x H mm	270 x 185	370 x 180	370 x 265	470 x 190	470 x 235
	Interior Ø x H mm	260 x 180	360 x 175	360 x 260	460 x 185	460 x 230
For autoclaves with the following chamber volumes	33 L	2	-	-	-	-
	55 L	3	-	-	-	-
	79 L	-	3	2	-	-
	115 L	-	4	3	-	-
	175 L	-	-	-	4	3



STAINLESS STEEL LIQUIDS COLLECTOR TRAY FOR WIRE BASKETS

Reference		TR-270	TR-370	TR-470
Dimensions	Exterior Ø x H mm	240 x 50	320 x 50	420 x 50
	Interior Ø x H mm	238 x 48	318 x 48	418 x 48
For the following wire baskets models	CV-28	✓	-	-
	CV-75S & CV-75	-	✓	-
	CV-150S & CV-150M	-	-	✓



UNPERFORATED STAINLESS STEEL BASKETS FOR LABORATORY WASTE STERILIZATION

Reference		CCI-28	CCI-75S	CCI-75	CCI-150S	CCI-150M
Dimensions	Exterior Ø x H mm	270 x 185	370 x 180	370 x 265	470 x 190	470 x 235
	Interior Ø x H mm	260 x 180	360 x 175	360 x 260	460 x 185	460 x 230
For autoclaves with the following chamber volumes	33 L	2	-	-	-	-
	55 L	3	-	-	-	-
	79 L	-	3	2	-	-
	115 L	-	4	3	-	-
	175 L	-	-	-	4	3



STAINLESS STEEL "SCHIMMELBUSCH" DRUM FOR MEDICAL INSTRUMENTS STERILIZATION

Reference		TBE-24x16	TBE-34x24	TBE-48x24
Dimensions	Exterior Ø x H mm	240 x 165	340 x 240	480 x 240
	Interior Ø x H mm	230 x 155	330 x 230	470 x 230
For autoclaves with the following chamber volumes	33 L	2	-	-
	55 L	4	-	-
	79 L	-	2	-
	115 L	-	3	-
	175 L	-	-	3





Accessories

STAINLESS STEEL CYLINDERS FOR PETRI DISHES STERILIZATION

Reference		CEP-1027	CEP-1041	CEP-1427	CEP-1441	
Dimensions	Exterior Ø x H mm	100 x 270	100 x 410	140 x 270	140 x 410	
	Maximum number dishes / cylinder	10	18	10	18	
Petri dishes	Diameter Ø mm	80	80	120	120	
	For autoclaves with the following chamber volumes	33 L	4	4	2	2
		55 L	8	4	4	2
		79 L	16	8	10	5
		115 L	24	16	15	10
		175 L	28	14	16	8



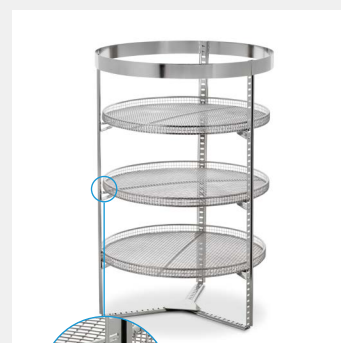
STAINLESS STEEL CYLINDERS FOR PIPETTE STERILIZATION

Reference		CEPP-726	CEPP-740	CEPP-1025	CEPP-1435	
Dimensions	Exterior Ø x H mm	70 x 260	70 x 400	100 x 250	140 x 350	
	Interior Ø x H mm	60 x 250	60 x 390	90 x 240	130 x 340	
For autoclaves with the following chamber volumes		33 L	11	11	6	6
		55 L	22	11	12	12
		79 L	42	21	20	10
		115 L	63	42	30	20
		175 L	90	30	51	34



STAINLESS STEEL TRAY SUPPORT WITH HEIGHT ADJUSTABLE TRAYS*

Reference		SRA-1	SRA-5	SRA-2	SRA-3	SRA-4	SRA-2-3	SRA-4-3
Dimensions Ext. Ø x H mm		270x390	270x680	370x560	370x810	470x740	370x190	470x250
Max. number trays/support		8	14	11	16	15	4	5
Trays	Ref.	TSRA-1/5	TSRA-1/5	TSRA-2/3	TSRA-2/3	TSRA-4	TSRA-2/3	TSRA-4
	Dim. Ø x H mm	252x20	252x20	356x20	356x20	454x20	356x20	454x20
For autoclaves with the following chamber volumes		33 L	1	-	-	-	-	-
		55 L	-	1	-	-	-	-
		79 L	-	-	1	-	-	3
		115 L	-	-	-	1	-	4
		175 L	-	-	-	-	1	-



BSRA
Set of 30 individual
fastening clips.

*The purchase of a tray support includes a set of 3 trays and 9 fastening clips. Likewise, the purchase of a tray includes a set of 3 fastening clips.

Vertical autoclaves with prevacuums and drying

Accessories

FLEXIBLE “HEART” TEMPERATURE PROBE PT-100 CLASS A

- After installing this accessory, the temperature regulation of the sterilization cycle can either be controlled by the main chamber temperature sensor or both the main chamber temperature sensor and the temperature sensor of the flexible heart temperature probe.
- The temperature control by the flexible heart temperature probe is especially advantageous for processes involving the sterilization of large volumes of liquids, where the sterilization process is regulated by both the temperature achieved in the center of the liquid sample as well as the temperature achieved in the sterilization chamber. Furthermore, should the autoclave be opened at chamber temperatures higher than 80°C there is a risk of liquids boiling over which can be avoided if the temperature of the sample is controlled throughout the sterilization procedure.
- Must be installed in our facilities.

Reference: **PT-2-B**



EXTERNAL TEMPERATURE PROBE ADAPTER



- External adapter for continuous validation processes that allows the access of an external probe (Ø 3-6 mm) to obtain a temperature reading independent from that of the equipment microprocessor.
- It is located on the door of the autoclave.
- Must be installed in our facilities.

Reference: **EXT-TP**

INTEGRATED THERMAL PRINTER



- Prints program number, cycle number, temperature, pressure, date and hour of the run and error messages.
- Selectable printing cadence between 10 and 240 seconds.
- Must be installed in our facilities.

Reference: **IT/TS**

Consumable:
Paper: **PAPER-IT**

TRANSPORT TROLLEY



- Auxiliary trolley to assist the loading and unloading of the autoclave.
- Built in chromed iron and plastic.
- The surface of each shelf is textured to prevent the load from shifting.
- Rubber coated wheels to reduce noise.
- Dimensions (LxDxH):
730 x 490 x 700 mm.

Reference: **TR-TR**

CABLE GLANDS



- Installation of up to 8 cable glands within the sterilization chamber walls to enable external temperature probe access in multiple locations for autoclave calibration and validation procedures.
- These ports can either be of 2 or 4 mm of diameter.

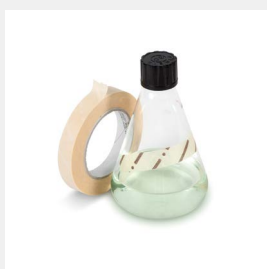
References:

PRENSACLAV (8 holes Ø 2mm),
PRENSACLAV2 (8 holes Ø 4mm).



Accessories

STERILIZATION CONTROL TAPE



- Class 1 indicator for steam sterilization. The change of color indicates that the materials have been processed, without being a guarantee of proper sterilization, additional methods are needed such as biological indicators (EN ISO 11138).

- Tape roll of 50 m x 19 mm.

Reference: **TEST-CT**

20 min 121°C
Color change.

BOWIE DICK TEST PACK



- Class B indicator that checks the correct steam penetration in porous loads.

- Indicator printed with non-toxic inks and laminated.

- Box of 20 tests.

Reference: **TEST-BD**

AUTOMATIC WATER FILLING KIT

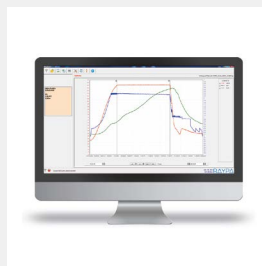


- Water pump to automate the feed of the independent clean water tank with purified water.
- Compatible with installations that either have a purified water network, a purified water tank or facilities that have an unpurified water network, in the latter case, the kit should be supplied with two other accessories: water purifier (ECOPUR-500) and purified water tank (TANK-KLL).

- Must be installed in our facilities.

Reference: **KLL-B**

SW8000 SOFTWARE



- Communication software between the equipment and the PC that allows the real-time and posterior visualization and registry of each cycle. Cycles can also be exported to Excel or printed.

- Connection to PC via Ethernet, data can also be exported directly with USB stick.

- Supplied with an Ethernet cable, an USB stick that includes the software and installation drivers and an Ethernet to USB adapter.

Reference: **SW8000**



ECO-EFFICIENT WATER PURIFIER



- Direct flow eco-efficient water purifier without water accumulation capable of filtering 1,3L/min with LED display.












- The installation of this accessory requires the joint installation of the external tank (TANK-KLL) and the automatic water filling system (KLL-B) corresponding to each model.

Reference: **ECOPUR-500**

Exterior dimensions L x D x H mm	Purity (TDS) ppm	Electrical conductivity µS	Hardness mmol/l
220 x 425 x 415	0,0005	>1	0,0125

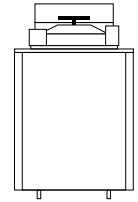
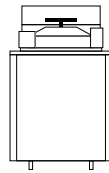
Vertical autoclaves with prevacuums and drying

TECHNICAL SUMMARY OF AE-B SERIES AUTOCLAVES

 General classification	Recommended setting	Industry and research laboratories
	Equipment placement	Floor-standing
	Load direction	Top-loading
	Chamber profile	Round
 Recommended type of load	Liquids and culture media	✓
	Laboratory waste bags	✓✓
	Glassware	✓✓
	Plastics	✓✓
	Wrapped, unwrapped and porous objects, including fabric loads	✓✓
 Sterilization technology features	Method to generate steam	Independent integrated steam generator
	Type of purge	Vacuum
	Prevacuum pulses by vacuum pump	✓
	Vacuum drying by heating jacket and vacuum pump	✓
 Transfer of data	Ethernet & USB	✓
 Batch printers	Integrated printer	0
 Sterilization chamber and door specifications	Sterilization chamber volume	55 - 175 L
	External building material	AISI-304
	Sterilization chamber material	AISI-316L
	Vacuum pump	Membrane
	Gasket material	Silicone rubber
	Min.- max. sterilization temperature	105 - 134°C
	Maximum pressure (above atmospheric pressure)	2,1 Barg
	Mechanism to open the door	Manual wheel
	Direction in which the door opens	Lateral
	Automatic locking with pressure	✓
Thermally insulated door	✓	
 User interface and microprocessor	Screen display	TFT touchscreen
	Screen size	5"
	Total number of available programs	50
	User management with administrator hierarchy	✓
	Automatic microprocessor control	✓
 Special cycles and process optimization	Timer start	✓
	Auto-preheating	✓
	Vacuum leak test	✓
	Bowie Dick test	✓
	Final postvacuum drying (to completely dry solid loads)	✓
	Temperature regulation by heart probe	0
 Adjustable cycle parameters	Number of prevacuum pulses	1 - 3
	Temperature of sterilization phase	105 - 134°C
	Duration of sterilization phase	1 - 250 min
	Duration of drying phase	1 - 360 min
	Temperature regulation by heart probe	On/Off
	Sterilization mode (solids or liquids)	✓
 Other specifications	Air intake with bacteriological filter	✓
	Independent clean water tank capacity	9 - 20 L
	Flexible heart probe	0
	Premium casters with brakes	✓
	Pressure gauge	✓
	Electric customization (115-230M V/230-400T V)	0
 Services	Third-party qualification (IQ/OQ/PQ)	0

✓: Standard 0: Optional

TECHNICAL DATA



Specifications

Reference	AE-50-B	AE-75-B	AE-110-B	AE-150-B
Total/usable chamber volume L	55/50	79/75	115/110	175/153
Usable chamber dimensions Ø x H mm	300 x 710	400 x 600	400 x 850	500 x 760
Independent clean water tank volume L	9	12	12	20
Exterior dimensions L x D x H mm	505 x 580 x 1290	610 x 700 x 1185	610 x 700 x 1435	750 x 820 x 1400
Loading height mm	975	870	1120	1085
Power W	3200	3200	4500	6000
Gross weight Kg	110	140	180	265
Voltage* V	230V (1P+N) 16A	230V (1P+N) 16A	400V (3P+N) 32A	400V (3P+N) 32A
Frequency Hz	50/60	50/60	50/60	50/60

*Other voltages available under request.

Safety features

- Safety valve.
- Safety thermostats with manual rearm for the heating jacket and the steam generator.
- Pneumatic door blocking system while positive pressure exists inside the sterilization chamber.
- Open door sensor.
- Thermally insulated door.
- Water level detector in the independent integrated steam generator.
- Water level detector (min./max.) in the independent clean water tank with overflow drainage.
- Bacteriological filter for inlet air.
- Several visual and acoustic safety and warning alarms.

Regulations

All our AE-B Series autoclaves are designed to comply with the strictest international directives and standards, including the following regulations:

- **EN-61010-1** Safety requirements for electrical equipment for measurement, control and laboratory use. Part 1: General requirements
- **EN-61010-2-040 Part 2-040:** Requirements for laboratory autoclaves
- **EN-61326** Electrical equipment for measurement, control and laboratory use. EMC requirements
- **AD 2000 Merkblatt** Pressure vessels
- **2014/35/UE** Low voltage
- **2014/30/UE** Electromagnetic compatibility
- **2014/68/UE** Pressure equipment

General features

Adjustable sterilization temperature	105 - 134°C
Adjustable sterilization time	1 - 250 min
Adjustable prevacuum pulses	1 - 3
Adjustable drying time	1 - 360 min
Max. pressure	2,1 Barg
Sterilization control system	Fully automatic microprocessor control by either chamber temperature probe or flexible heart temperature probe
Air purge system	Mechanical displacement by vacuum pump
Heating system	Independent integrated steam generator
Vacuum drying system	Vacuum pump plus heating jacket
Prevacuum system	Vacuum pump
External building material	AISI-304 stainless steel
Sterilization chamber material	AISI-316L stainless steel
Gasket material	Silicone rubber
Connection to PC	Ethernet
Connection to printer	Integrated
Number of programs	50 (14 preset and 36 user free)
Programmable auto-start	Unlimited range
Screen type	5" TFT touchscreen
Opening door mode	Horizontal swiveling door with blocking wheel
Monitoring of sterilization parameters	Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values
Pressure display	Pressure gauge on control panel, digital display on screen, registry on software and printer tickets
Water management	Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network
Drainage system	Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank
Casters	Included swiveling premium casters with brakes


+ info





CLICK!
ACCESS
THE AE-B
SERIES
VIDEO

Find out more about our **AE-B Series autoclaves** on our **Youtube Channel**

 Installation guide available under request, please contact us.

RAYPA

Avinguda del Vallès, 322
Pol. Ind. "Els Bellots"
08227 Terrassa (Barcelona) Spain

raypa@raypa.com
www.raypa.com

Tel. +34 937 830 720

R. ESPINAR, S.L.

