

orto alresa

About centrifugation

User manual



Distillers



Please, read manual before installation and start up.

V2.9 (June 2022)

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1. The Company:

Alvarez Redondo, S.A management system has been certified by SGS under ISO 9001 and ISO 13485 standards.



1.1. Environmental Policy:

Our commitment to the environment implies a responsibility that can be seen at all levels: from production processes to management.

We use materials that are coherent with this concept, enabling our teams to include more than 95% recyclable components, thus prolonging the life of raw materials and avoiding the exhaustion of natural resources.

RoHS. We avoid the use of dangerous substances in the manufacturing processes, complying with the RoHS Directive, on the restriction of hazardous substances.

We have developed equipment such as the Gas Release System, which reduces the emission of aerosols into the atmosphere, and accessories that minimise impact on the health of the user, such as hermetic lids on rotors and buckets, with easily identifiable autoclavable materials.

We comply with **WEEE Directives**, for management of waste electrical and electronic equipment, belonging to the Foundation ECOASIMELEC, which as an integrated system for managing WEEE, offers our company, distribution chain and final user the necessary coverage for correct collection and recycling of equipment at the end of its useful life.

In our sustainable manufacturing line, in refrigeration systems we only use fluorinated gases of low impact on the ozone layer in the centrifuges, i.e., those that produce the least greenhouse effect compared with commonly used products. In this sense, we have anticipated the coming into force of regulations on new gases, incorporating them into our equipment before they become mandatory. Thus, we ensure that equipment manufactured before these regulations come into force can be easily maintained.

We select quality packaging that protects the equipment delivered while at the same time occupies the least space possible and is certified as compliant with international regulations on phytosanitary measures, as well as being 100% recyclable.

Regarding energy consumption, our equipment has an automatic disconnection system that is time adjustable, thus reducing its carbon footprint. Our equipment is designed to work in laboratories, considering this environment with a pollution degree 2 (PD2)

This attitude is not taken as an extra effort, but rather as a way of positioning ourselves in view of future challenges.

2. Getting started:

Thank you very much for purchasing Ortoalresa product.

Your water still has been designed with function, reliability and safety in mind. It is your responsibility to install it in conformance with local electrical codes. For safe operation, please pay attention to the alert symbol through the manual.

This manual contains important operating and safety information. You must carefully read and understand the contents of this manual prior to the use of this equipment.



Warning

Warning alerts you to a possibility of personal injury.



Caution

Caution alerts you to a possibility of damage to the equipment.



Note

Notes alert you to pertinent facts and conditions.



HOT

Hot surface

Hot surface alert you possibility of burning injury by hot instrument surface.



Explosive

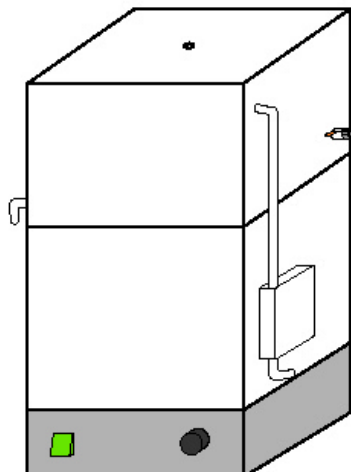
Explosive alerts you to possibility of explosion by high pressure.

3. Product overview:

ORTOALRESA water still produces distilled water from tap water with space saving design and effective distilled water production.

Unique design with a water float switch provides automatic operation. By lack of water, the heating is automatically switched off to protect greater from overheating.

Water still is easy to clean-up by just removing upper part of the body (condenser unit). By controlling cooling water flow, you can save a lot of water wasted before.



4. Technical Characteristics:

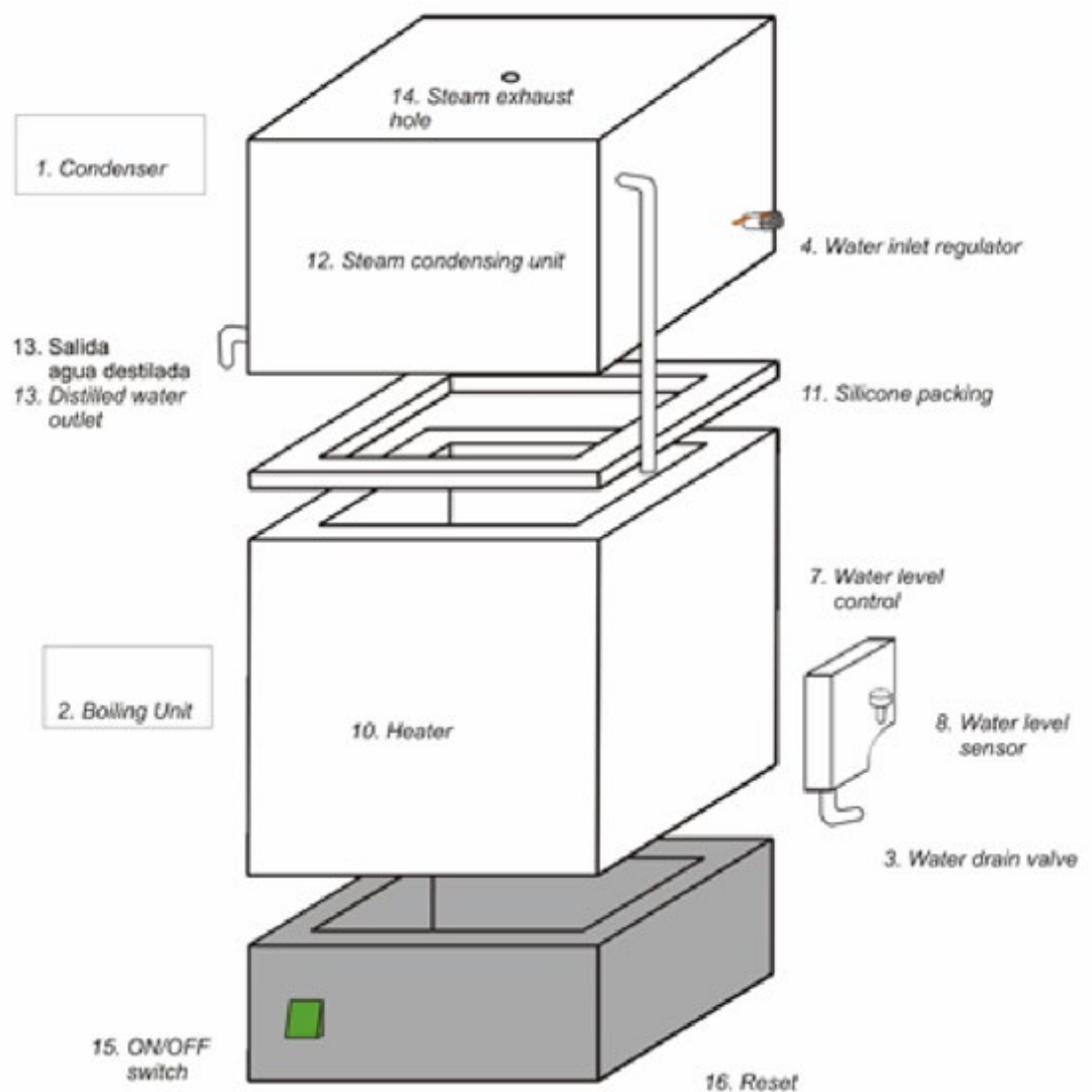
	Distillers		
Reference	DA 005	DA 007	DA 006
Capacity	4 l / hour		8 l / hour
Dimensions (mm)	370 (W) x 220 (D) x 435 (H)		370 (W) x 260 (D) x 635 (H)
Heater	3 KW		6 KW
Cooling water	Approx. 60 l / h		Approx. 84 l / h
Inner	Stainless Steel		
Inner heater	Stainless Steel Incoloy 825		
Outer	Stainless Steel and Epoxy Coating		
Security	Security Thermostat		
Electrical requirements	220V, 50 / 60 Hz	110V, 50 / 60 Hz	220V, 50 / 60 Hz
Switch	Main power with Pilot Lamp		
Sealing	Silicone Gasket		
Safety	Low Water & Over Heating Cut-Out		

5. Parts and Functions

5.1. Main controller:



1. - Main Power: Main electrical power supply switch



6. Operating:

6.1. Before operating

- 1) The main voltage must correspond to the voltage given on the nameplate.
- 2) Electrical wiring must be appropriate protections and at least:

DA 005	14 Amp.
DA 006	30 Amp.
DA 007	28 Amp.
- 3) Place water still on a flat surface.
- 4) Place water still nearby water supply.

6.2. Tubing connection

- 1) Connect the water inlet tap (4) with a hose to the water mains. Fasten hose with hose tie firmly.
- 2) Connect a hose to the water outlet (3) and place its end in a drain on a lower level.
- 3) Connect a hose to the distilled water outlet (13) and place its end in a distilled water reservoir on a lower level.

6.3. Operation

- 1) Turn the water supply on and check if there is any water leakage between the tubing connections.
- 2) Switch on (15). The pilot lamp in the main switch will glow.
- 3) The water still will automatically start when water in the chamber reaches appropriate level.

7. Warnings:



Make sure the electric supply is the same of electrical label.

Place water still on a flat surface.



Do not touch top of the instrument. During operation, surface of the top of the water still and steam exhausted from the hole is very hot.



HOT



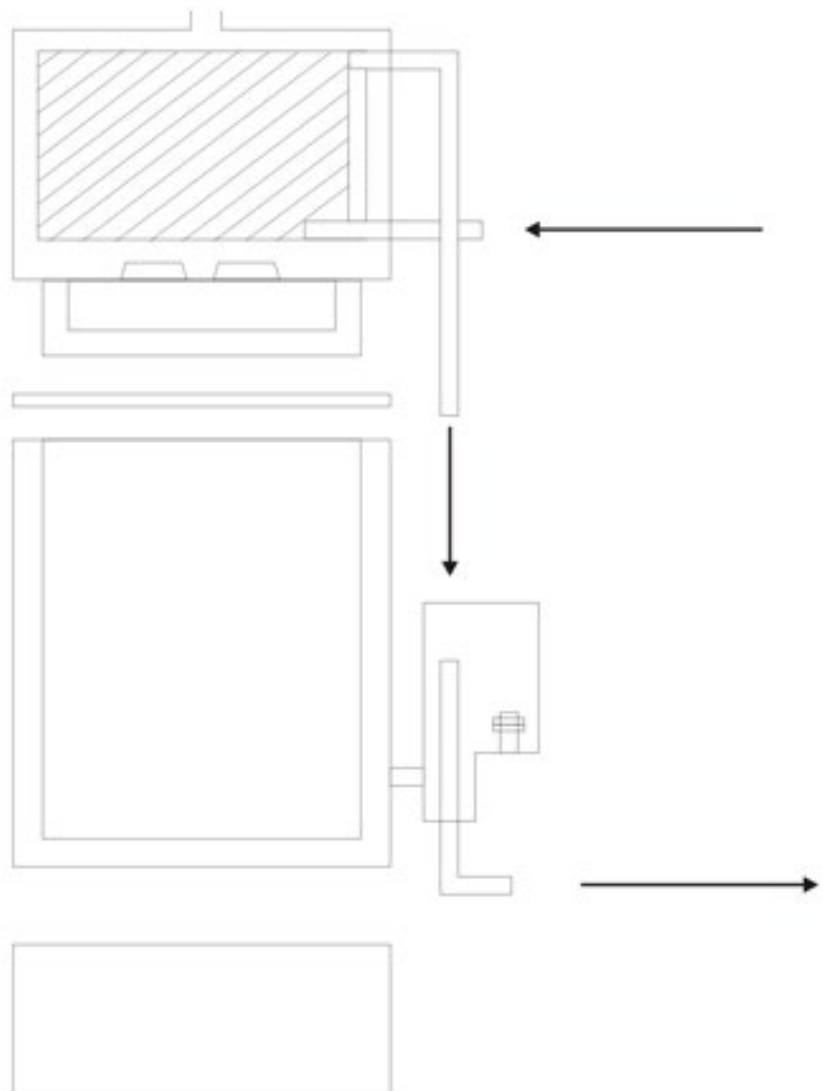
Lime deposit should be removed from the evaporator once or twice a month depending on the degree of hardness of the tap water. Take off the upper part of the water still and remove the silicone packing. A mixture of 10% formic acid, 10% acetic acid and 80% distilled water is recommended for cleaning the apparatus. Fill the solvent into the evaporator to just above the highest lime deposit and switch on the water still. The evaporator is clean after approx. 10 to 15 minutes. Pour

out the lime and solvent mixture thoroughly rise with water.

8. Troubleshooting:

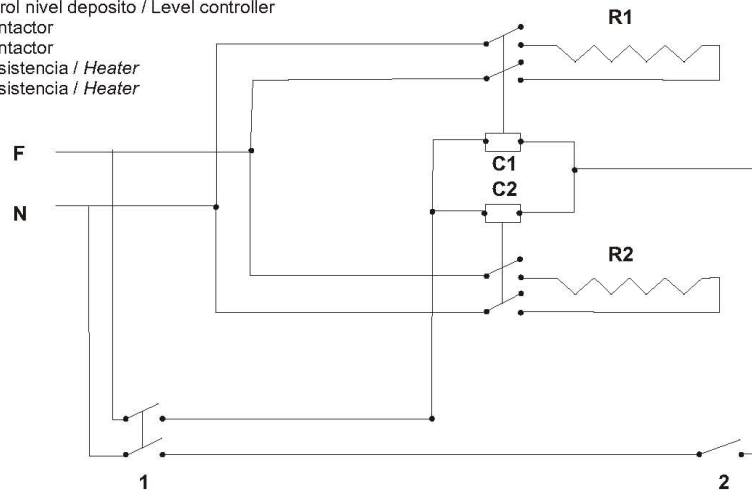
Trouble	Check first	Troubleshooting
Power Failure.	Check Electric supply.	Plug firmly into the electric supply.
Power on but water doesn't boil.	Check water supply.	Supply water enough and appropriate heater.
	Check heater.	Replace heater.

9. Water flow diagram:



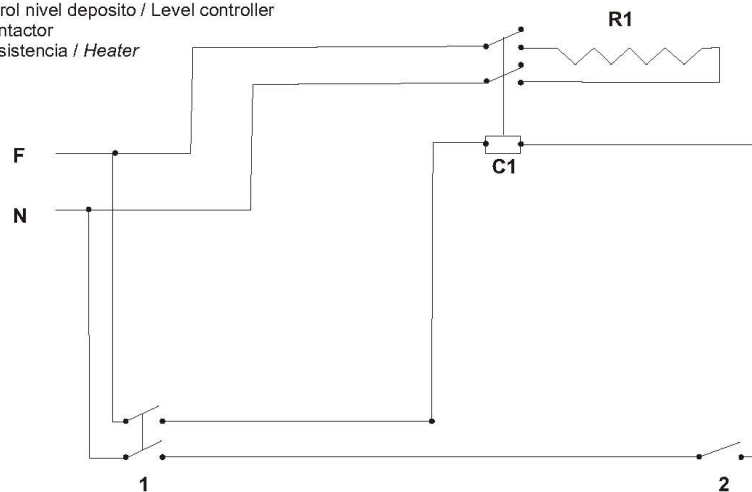
10. Circuit diagram:

1 -> Interruptor / Switch
 2 -> Control nivel deposito / Level controller
 C1 -> Contactor
 C2 -> Contactor
 R1 -> Resistencia / Heater
 R2 -> Resistencia / Heater



DS 006

1 -> Interruptor / Switch
 2 -> Control nivel deposito / Level controller
 C1 -> Contactor
 R1 -> Resistencia / Heater



DS 005

11. Spare parts

- .- Heater 100V
- .- Heater 230V
- .- Silicone gasket DS 005
- .- Silicone gasket DS 006
- .- Level switch

12. Warranty:

1.- ALVAREZ REDONDO, S.A. warrants this equipment for any manufacturing defect in both materials and workmanship.

2.- The coverage of this warranty is on the spare parts necessary for the repair.

3.- Coverage period: 24 (twenty-four) months, from the date of issuance of the purchase invoice.

4.- The authorized distributor, upon receipt of the merchandise, must check that it is free from damage or defects, noting any incident on the delivery note and communicating it to the seller with immediate effect.

5.- In the event that the authorized distributor notifies that the equipment does not comply with the warranty offered, he must make the defective product available to the seller.

6.- This warranty WILL NOT COVER breakdowns that, in the opinion of the Ortoalresa Technical Service, were caused by:

- improper installation,
- misuse or inappropriate use,
- manipulations carried out by people outside the Ortoalresa Technical Service, in the duration of this guarantee.

Liability for normal wear and tear is excluded.

Any device whose manufacturing number has been removed or altered is considered out of warranty

7.- If more than 6 months passed from the date of sale of the equipment, the warranty must be carried out at the Ortoalresa facilities at the following address:

Calle Los Frailes 121
Polígono Industrial Los Frailes
28814 Daganzo-Madrid-España

8.- Any acknowledgment of compensation for direct or indirect damages of any nature suffered by people or things is expressly excluded.

9.- The warranty applies only to newly manufactured equipment and accessories.

13. Declaration of Conformity



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28814 Daganzo-Madrid-España
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info@ortoalresa.com
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DECLARACIÓN UE DE CONFORMIDAD EU DECLARATION OF CONFORMITY



Esta declaración de conformidad se expide bajo la exclusiva responsabilidad del fabricante
This declaration of conformity is issued under the sole responsibility of the manufacturer

El siguiente equipo cumple con todos los requisitos esenciales para la salud y seguridad de las Directivas Europeas.
The following machinery complies with all the essential health and safety requirements of the European Directives

Descripción - Description of device	DESTILADOR DE AGUA / WATER DESTILLER
Fabricante - Manufacturer	ÁLVAREZ REDONDO, S.A.
Marca - Trade Mark:	ORTOALRESA
Modelo - Model:	Destilador de agua 4L/h - Destilador de agua 8L/h // Water destiller 4L/h - Water destiller 8L/h
Tipo - Type	DA 005 / DA 006 / DA 007

Directivas Europeas. European Directives:

Directiva relativa a las máquinas 2006/42/CE.
Directive on machinery 2006/42/EC.

Directiva de comercialización de material eléctrico destinado a utilizarse con determinados límites de tensión 2014/35/UE.
Directive on the market of electrical equipment designed for use within certain voltage limits 2014/35/EU.

Directiva de compatibilidad electromagnética 2014/30/UE.
Directive to electromagnetic compatibility 2014/30/EU.

Directiva sobre restricciones a la utilización de determinadas sustancias peligrosas en aparatos eléctricos y electrónicos (RoHS) 2011/65/UE.
Directive related to the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) 2011/65/EU.

Directiva sobre residuos aparatos eléctricos y electrónicos (RAEE) 2012/19/UE.
Directive on waste electrical and electronic equipment (WEEE) 2012/19/EU.

The object of the declaration described above is in conformity with the relevant Union harmonization legislation.
El objeto de la declaración descrita anteriormente está en conformidad con la legislación de armonización de la Unión pertinente.

Normas armonizadas aplicadas. Applied harmonized standards

EN 61010-1 EN 61010-2-010 EN 62321-1
EN 61010-2-051 EN 61326-1 EN 61326-2-6 EN 61010-2-081

Los ensayos de las normas están certificados por laboratorio acreditado.
The tests of the norms are certified for accreditation laboratory.

En Daganzo a 28 de julio de 2021

J.A. ÁLVAREZ REDONDO
Dirección Técnica y de Calidad/Quality and Technical Manager

Álvarez Redondo, S.A. - CIF/VAT: ESA 78757903

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