



# Operating Instructions EN



# **GUÍA DE SEGURIDAD**

Congratulations for having purchased the OREKA water softener system.

Read and follow all steps and guides carefully before installing and using your softener system.

Before use, check the box and softener to ensure that it has not suffered any damage during transport. Any claim for handling damage must be submitted, along with the name of the carrier (such must also be communicated to the carrier), within 24 hours maximum, after having received the goods.

For efficient softener, the OREKA requires periodical maintenance.

When you are away from your house for any period of time, you must shut off the water from the device.

For correct installation, contact CEASA's technical service.

The softener system operates with pressures between 2 bar and 6 bar. For higher pressures, a pressure reducing valve must be installed in the water inlet leading to the softener.

Do not use the softener in environments with temperatures above 40 °C or with connections to hot water installations.

The device must also be sheltered from frost. To avoid fire or electrocution risks, do not expose the softener to rain or humidity.

The drain must be placed below the overflow level, both in DF and UF systems. In any case, it must not exceed a 30 cm height from the softener base.

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Appendix 1:Technical data and dimensions

Appendix 2. Programming values

## **1. INSTALLATION CHART**

## 1.1 Installation diagram



## 1.2 Components

Softener equipment is made up of the following elements (see installation chart in fig. 1):

#### 1. Sediment filter:

Element containing a water filtering cartridge, which has the purpose of retaining particles larger than 20 microns in suspension.

#### 2. Valve:

This element contains mechanisms to perform the automatic regeneration of resins, through a programming system, either by time or by volume of water consumed.

#### 3. Resin tank:

Recipient element containing ionic-exchange resins, which are those which perform the softening process.

#### 4. Salt tank:

Recipient element which accumulates salt. Its capacity allows significant autonomy in salt replenishment, which is where the brine necessary to the softening process is produced.

#### 5. Siliphos filter:

Element that contains a siliphos cartridge aimed at protecting pipes against corrosion.

#### 6. By-pass:

Three-key system which allows isolation of the softening equipment's general pipe, in case of a malfunction or equipment maintenance. The function of the by-pass is to prevent the passage of water through the softening equipment. Thus, it is not necessary to cut off general network water flow when performing a filter change or repair.

Key B closed and keys A and C open: This is the position necessary for the water to go through the softening equipment from the general network, so that softened water may be obtained.

Key B open and keys A and C closed: In this position, water does not go through the softening equipment; however, in case of repair or maintenance, water will be available within the remainder of the installation.

\*NOTE: The sediments filter (1), the siliphos filter (5), and the by-pass (6) are sold sepparately.

# 2. INSTALLATION AND START-UP

The softener that you have purchased is provided with an installation kit. Unpack the softener and make sure that the listed accessories are included.

Description	Quantity	
Bag containing the drainage connection kit Bag containing the brine deposit connection kit Valve power supply box By-pass box	1 un. 1 un. 1 un. 1 un.	

Notice: Discard the plastic bags since they may be dangerous for children.

The installation of your **OREKA** softener must be carried out by the authorized technical service, in accordance with the country's legislation.

Before proceeding to the installation of your softening system, close the main water inlet to the house, and open a faucet in order to depressurize the installation.

## 2.1 By-pass mounting:

The by-pass assembly is formed with 2 compact bodies (1), 2 toothed rings (2), 2 connectors of 1 " (3), 2 flat joints (4) and 1 volumetric meter(6). (Fig. 2)

1 - Remove the two rings (2) that fix and hold the compact body (1) and the connectors (3).

2 – Extract the adaptors from the compact body.



3 – Assembly the flat joints (4) into the threaded zone of the connectors.

4 – Thread the connectors to the valve.

5 – Assembly the by-pass compact body to the connectors threaded to the valve.

6 –Place again the toothed rings in both connections.

7 – Connect the valve terminal in the volumetric meter connection (5). The nail should be connected completely.

Note: Check that the volumetric meter (6) found inside the by-pass, does not fall down. The meter is placed in the valve water outlet hole .

## 2.2 Steps for a correct installation:

1. Choose an adequate place for the installation of the equipment, provided with a continuously functioning 230V-50Hz electrical outlet and a nearby connection to the drainage.

2. Make sure that all pipes are clean and free of calcium and iron deposits. The installation must be in conformity with current legislation.

3. Install a sediment filter at the softener's entrance to protect the equipment from water impurities. (Fig. 3)

4. Install an additional by pass to the one on the valve (or the one you added on the valve). This guarantees a water supply in case of failure or maintenance. (Fig. 4)

5. Install a siliphos filter in the softener's outlet to reduce corrosion of the installation. (Fig. 5)

6. Connect the softener's water inlet and outlet according to the arrows on the valve or on the adaptor (by-pass) located at the rear of the unit. (Fig. 6)









7. Connect the valve drainage exit (drain) to your home drainage using the tube supplied in the drainage connection kit. Connect the tube directly to the drainage (siphon).

NOTE: The drain conduit must never be directly inserted in a screen, sewage system or siphon. An air gap must always be left between the drain conduit and the residual water to avoid a possible return flow of residual water to the softener. (Fig. 8)





8. Install also a tube from the overflow pipe's exit to the drainpipe in order to avoid a possible flood resulting from an incorrect programming or water leakage caused by incorrect setup or valve malfunction. This tube comes already installed with the system. The drainage level must be under the overflow level. In any case, it must not be higher than 30 cm from the base of the softener. (Fig. 9)



<u>IMPORTANT</u>: Do not connect the overflow outlet to the outlet tube of the valve's ou drainage. This may result in the accidental fill up of the brine deposit and overflow. To avoid this, install two independent tubes.

## 2.3 Start up

1. In kits provided with a "by-pass", set it in the "by-pass" position. (see fig. 17). Turn on a water feed, as well as a cold water inlet, past the softener, and allow water to circulate a few minutes to eliminate dirt in the pipes. Once clean, close the valves..

2. Set the by-pass in service mode (see fig. 18) and allow for the bottle to fill up. When the water flow stops, open a nearby cold water valve and let the water flow until the air in the system has been purged. Finally, close the valves.

3. Once the depressurization has been completed, connect the equipment at the working pressure of the installation and make sure there are no water leaks at any of the joints.

4. Plug in the valve to an electrical outlet. The valve will set itself to the service mode. After doing this, the equipment is ready for use.

5. Verify the valve programming and set the water volume between regenerations that should be programmed. Check the step 3 of the operating instructions (programming).

6. Perform a manual regeneration of the system This has the purpose of removing the air that can remain at the resin bottle. Check the step 3.4 to perform the manual regeneration. Leave a time of approx. one minute in every regeneration step.

## 2.4 Water hardness adjustment.

Once the start up and the programming of the cycles have been done, the residual water hardness should be adjusted, by using the valve by-pass.

The by-pass allows mixing in the adequate proportion the inlet hard water with the softened outlet water. It is recommended to leave a residual hardness of  $7-8^{\circ}F$  ( $1^{\circ}F=10ppm$ ).

The by-pass has three positions:

Closed: Neither water entry to the valve nor the by-pass. It is archieved placing a valve in by-pass position and the other one in service. (Fig. 10)

By-pass: By-pass position; exit water has the inlet water. Both valves must be placed in by-pass position. (Fig. 11)

In-Serv: All the water enters the valve; exit water is softened. Both valves in service position. (fig. 12)



#### Water hardness measurement:

Perform an analysis of the network water hardness, with the help of TH METRO. This analysis must be performed with the bypass totally closed.

Write down the water hardness here:

#### **By-pass start-up:**

The mixing adjustment is done turning it manually until the arrow matches with the desired graduation level. To perform this adjustment you should follow the following steps:

1) Place the valve by-pass in the service position (working position).

2) Leave water flow until it is clear.

3) Open the by-pass, turning it slightly counter-clockwise, until it reaches the position 1.

4) Analyze the water with the TH metro. If the result is 7-8°F TH, your setting is correct.

If the result is under 7-8°F TH, open the by-pass more by turning it counter-clockwise (to a superior number) and repeat the analysis operation until you obtain a TH of 7-8° F.

If the result is over 7-8°F TH, close the by-pass a little by turning it clockwise (to an inferior number) and repeat the analysis operation until you obtain a TH of 7-8°F.



# 3. PROGRAMMING VOLUMETRIC VALVES (OREKA 85 V DF AND 100 V UF)



## 3.1 Programming the valve cycles

- 3.1.1 The icon **b** shows that the keyboard is locked. To unlock it (to be able to enter the manual functioning mode and make programming changes), press the keys UP and DOWN simultaneously until the key icon disappears.
- 3.1.2 Press the "<u>menu/set</u>" key to enter the menu. The wrench symbol will appear on the screen.
- 3.1.1 Press again the "<u>menu/set</u>" key. The wrench icon and the hour value will flicker. By using the UP and DOWN keys, set the valve clock to the actual day time.
- 3.1.1 Press again the "<u>menu/set</u>" key to change the minutes. Again, use the keys UP and DOWN to change the minutes.
- 3.1.2 Press again the "<u>menu/set</u>" key. The valve will emit a sound and the display will stop flickering. The hour value will then be correctly adjusted.

#### 3.2 Regeneration programming

3.2.1 **Delayed or instantaneous:** Once the time is adjusted in the previous step, press the DOWN key, to enter into the regeneration type configuration.

A -- 01 = delayed regeneration (the regeneration will always be done at a fixed hour, once the water volume is exhausted).

A -- 02 = instantaneous regeneration (the regeneration will be done when the preset water volume is exhausted, independently of the current day time).

To modify it press the "<u>menu/set</u>" key. The 01 or 02 value will flicker on the screen. Press the UP or DOWN key to adjust the regeneration mode, and confirm it with the "<u>menu/set</u>" key. Usually, it will be set at the delayed regeneration position (A - 01).





# 3.2.2 **Regeneration hour (Only in case of delayed regeneration)**: Press again the DOWN key, so that the regeneration time appears.

Modify the time pressing the "menu/set" key, and then adjust it using the keys UP and DOWN.

Press again the "<u>menu/set</u>" key to adjust the minutes and adjust them with the keys UP and DOWN. Press again the "<u>menu/set</u>" key to confirm the adjustment. The valve will emit a sound.

Normally it will be left at 2:00 A.M, which is the factory preset time.

3.2.3 **Backwash interval (Only for up-flow valves** *UF***):** Press the down key. On the screen will appear the F indication, followed by two numbers, which correspond to the "<u>backwash interval".</u> That is to say, the number of regenerations in which the valve will not perform a backwash. For up-flow valves it may not be necessary to perform a backwash in each regeneration.

Example:

- F-00: A backwash will be done in each regeneration.
- F-01: One regeneration will be left with no backwash.
- F-02: Two regenerations will be left with no backwash.
- F-03: Three regenerations will be left with no backwash.

To adjust it, press "<u>menu/set</u>". The numerical value will flicker. Change the value with the keys UP/DOWN until the desired value is reached. Press "<u>menu/set</u>" to confirm. It is recommended to leave this adjustment at F - 00.

## 3.2.4 Cubic meters between regenerations.

NOTE: The m<sup>3</sup> values between regenerations and the cycle times, necessary for the valve programming are in the tables of the Appendix I. Programming values.

Press the DOWN key. On the screen will appear the amount of water that will pass through the resin after the regeneration process. Press again the "<u>menu/set</u>" key and the value will start flickering. You can modify this value with the keys UP/DOWN.

Press the key "<u>menu/set</u>" to adjust the decimals. Modify this amount with the keys UP/DOWN.

Program the correct quantity depending on the quantity of resin (liters) and the water hardness. Check the corresponding value on the table 1 of the Appendix 4.

Finally, confirm with the "<u>menu/set</u>" key. The valve will emit a sound.

## 3.3 Setting the cycle times

The regeneration cycle times have been preprogrammed by the softener manufacturer. However, you can modify them in the advanced programming mode, as it is explained in the following steps.

3.3.1 **Backwash duration**: From the previous state, press again the DOWN key until the program 2 appears on screen, which is the duration of the backwash (in minutes). See attached image

Press again the "menu/set" key to set the first cycle. The minutes value will flicker.

With the help of the UP and DOWN keys set the duration of the backwash time of the softener (in the table of the appendix 2 will appear the corresponding value for each model).





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Press again the "menu/set" key to confirm the adjustment. The valve will emit a sound.

3.3.2 **Duration of the brine suction:** Press the DOWN key to adjust the values for the second cycle. The light will indicate program 3, which corresponds to the <u>brine absorption</u> minutes.

Adjust the minutes following the same procedure shown in the step 3.1.

3.3.3 **Duration of brine refill**: Press the DOWN key to adjust the values of the third cycle. The light will indicate program 4, which corresponds to the <u>brine loading time</u> (in minutes)

Adjust the minutes following the same procedure shown in the step 3.1.

3.3.4 **Duration of fast rinse:** Press DOWN key to adjust the 4th cycle values. The light will indicate program 5, which corresponds to the <u>fast rinse</u> time.

Adjust the minutes following the same procedure shown in the step 3.1.

3.3.5 **Maximum days between regenerations:** Press the DOWN key to set it up. The screen will show the program H, which corresponds to the <u>maximum days between regenerations.</u>

Example:

H-00D: The function will be disabled. H-01D: A regeneration will be started every 2 days H-02D: A regeneration will be started every 3 days H-03D: A regeneration will be started every 4 days

Adjust the value with the same procedure shown in the step 3.1. It is recommended to leave it at H-30D.

3.3.6 To end the process just press the DOWN key again. The current time will appear.

After one minute, the valve will lock automatically, appearing on the screen the symbol

## 3.1 Manual regeneration

To force a manual regeneration of the system, proceed in the following way:

- 3.1.1 Unlock the system pressing the keys UP and DOWN at the same time, until the key icon disappears.
- 3.1.2 Press the key "<u>manual/return</u>" to start the manual regeneration. The valve will follow the programming cycles according to the programmed times, until the regeneration process has finished.
- 3.1.3 If you wish to move forward to the next cycle, press "<u>manual/return</u>" again. The valve will automatically advance to the next regeneration cycle.

## 3.2 Programming steps summary



# 4. PROGRAMMING SEMIAUTOMATIC VALVES (OREKA 100 SA UF)



As the picture 5 shows, the valve has 5 indicators and a push button.

#### Valve programming

While the system is in service, push the program button. It will start an automatic regeneration.

When the regeneration begins, the system will complete a whole regeneration process. (The time values cannot be changed).

It is possible stop the regeneration process if you push the program button again. The valve then starts the next step of the regeneration.

The programmed times for each cycle can be seen in the appendix 2: programming values.

Follow also this procedure whenever it is necessary to perform a manual regeneration.

# **5. MAINTENANCE**

## 5.1 Practical advice

Periodically check to see that the softener clock matches the real time of the day.

Periodically check the salt level in the tank.

Clean or change the optional sediment filter periodically.

It is recommended to clean and hygienise resins once a month. Use CEASA's special cleaning product for resins.

Use only special salt tablets for softeners.

## 5.2 Salt tank

The salt tank must be checked periodically to ensure that it always has salt in it. The recommended salt level should be slightly more than half of the tank. Avoid allowing a decrease of the level past 20 cm from the bottom of the tank, since regeneration would not take place correctly (see fig. 22).



#### 5.3 Cleaning and replacement of the sediment and siliphos filter

To clean or replace the filter candles of the filters, the following steps must be followed:

- 3.1) Lock the key to the general water way.
- 3.2) Open a tap to depressurize the network.
- 3.3) Shut the filter bypass.
- 3.4) Remove the glass that contains the cartridge.
- 3.5) If there is a filtering cartridge, clean it with a flow of water or replace it with a new one if necessary.

(OPTIONAL) If there is a siliphos cartridge, replace it with a new one if the level of the balls is below the minimum safety level.

It is recommended to go through the cleaning process every time the filtering cartridge turns brown. This will depend on the water in each area

# 6. EQUIPMENT HYGIENISATION (RECOMMENDATION)

In order to prolong the useful life of the resin and ensure optimum quality of softened water at all times, it is recommended to hygienise the equipment once a month.

The product used for hygienisation is Kalaphos CleanFilters, a cleaning product specially developed for the maintenance of softeners.

Steps for hygienisation:

- 1. Open the cover of the salt tank.
- 2. Open the cover of the protection chimney for the brine suction pipe (see fig. 23).
- 3. Pour a dose of Kalaphos CleanFilters into the chimney.
- 4. Cleaning will occur automatically during the next regeneration.



# 7. PROBLEM SOLVING GUIDE

PROBLEM	ORIGIN	SOLUTION
1. The softener does not perform regeneration.	<ul> <li>A) Failure in the electric connection.</li> <li>B) Faulty programmer.</li> <li>C) Temporal power supply cut.</li> <li>D) Water meter does not function.</li> </ul>	<ul> <li>A) Check the electrical installation.</li> <li>B) Replace the programmer. Contact SAT</li> <li>C) Reprogram the current time.</li> <li>D) Check Bypass valve in service position.</li> <li>Contact SAT.</li> </ul>
2. Hard water.	<ul> <li>A) Mixer or by-pass valve open.</li> <li>B) Lack of salt in the deposit.</li> <li>C) Incorrect programming of regeneration cycles.</li> <li>D) The reading of water consumption does not change.</li> <li>E) Excessive service flow.</li> <li>F) Excessive water consumption between regenerations.</li> <li>G) Lack of water in the salt tank</li> <li>H) Power supply cut</li> <li>I) Internal leak on valve or distributor</li> </ul>	<ul> <li>A) Turn bypass valve to the SERVICE position adjusting the mixing to level 1 or 2.</li> <li>B) Add salt and maintain its level over the water.</li> <li>C) Reprogram following instructions. Contact SAT.</li> <li>D) Check meter. Contact SAT.</li> <li>E) Adequate maximum flow to the value indicated by the installer.</li> <li>F) Reprogram water volume between regenerations. Check that there are no water leaks in the installation.</li> <li>G) Pressure or time insufficient. Adjust according to the instructions. Contact SAT.</li> <li>H) Verify electrical installation. Program time and do a manual regeneration.</li> <li>I) Contact SAT.</li> </ul>
3. High consumption of salt.	<ul> <li>A) Incorrect adjustment of the salt dose.</li> <li>B) Excessive amount of water in the salt deposit.</li> </ul>	<ul><li>A) Pressure or tank refill time are too high. Adjust according to instructions. Contact SAT.</li><li>B) See anomaly 7.</li></ul>
4. Loss of outlet water pressure.	<ul> <li>A) Service flow too high.</li> <li>B) Inlet filter saturated.</li> <li>C) Resin bed of the softener is dirty</li> <li>D) Resin damage due to chlorine excess</li> <li>E) inlet and outlet conductions are dirty</li> </ul>	<ul> <li>A) Adequate maximum flow to the value indicated by the installer.</li> <li>B) Replace or change filter</li> <li>C) Increase backwash time. If not solved, contact SAT to clean resin bed.</li> <li>D,E) Contact installer or SAT.</li> </ul>
5. Loss of resins through the drain or service outlet.	<ul><li>A) Crepines or distribution tube damaged or misadjusted,</li><li>B) Resin damaged due to chlorine excess.</li></ul>	A,B) contact SAT <u>Note</u> : during the first liters water has a yellow color due to small fragments of resin.
6. Iron in the outgoing water.	A) Resin dirty.	A) Check regeneration cycles. Increase the regeneration frequency. Contact SAT.
7. Excess water or overflow in the salt deposit.	<ul> <li>A) Excessive refill time.</li> <li>B) Excessive inlet pressure.</li> <li>C) Insufficient brine suction.</li> <li>D)Obstruction of the salt valve.</li> <li>E) Inadequate injector</li> <li>F) Blocked programmer</li> </ul>	<ul> <li>A) Correct refill time. Contact SAT.</li> <li>B) Reduce pressure to 4 bar. Contact Installer or SAT.</li> <li>C) See point 8.</li> <li>D,E,F) Contact SAT</li> </ul>
8. The softener does not suction the brine.	<ul> <li>A) Inlet water pressure insufficient.</li> <li>B) Air in the brine suction line.</li> <li>C) Exit to drain blocked.</li> <li>D) Aspiration valve/probe blocked.</li> <li>E) Injector blocked.</li> </ul>	<ul> <li>A) Increase pressure to 2 bar minimum.</li> <li>B) Tighten connections in the suction line and verify seal. Contact SAT.</li> <li>C) Check and/or clean exit to drain.</li> <li>D) Clean probe/valve. Contact SAT.</li> <li>E) Contact SAT.</li> </ul>
9. Continuous regeneration	A) The programmer does not function correctly.	A) Change the programmer. Contact SAT.
10. Continuous drainage of water into the drain or salt tank.	<ul><li>A) Dirtiness in the valve interior.</li><li>B) Adjustment of the ceramic discs.</li><li>C) Valve blocked</li></ul>	A,B,C) Consult technical service

# 8. SPARE PARTS

Spare parts for the OLYMPIA softeners:



Note: In the front sticker of the valve you can see if it is a DF or UF model.





# 9. WARRANTY

#### CUSTOMER DETAILS

Name	
Address	
City	
Province	Post Code
Serial number	Date

The installed equipment comes with a two-year warranty from the date of installation. This warranty includes any breakdown due to the manufacturing faults of any component of the equipment, provided that it has been installed according to the guidelines for installation corresponding to this model.

The warranty will be automatically become invalid if spares other than the original manufacturer's spares are used.

Any manipulation performed by non-authorized staff will void this warranty, and no subsequent claim will be recognized.

DISTRIBUTOR:



Contacte con su instalador para recambios o mantenimiento.

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