



# Installation & Operators Manual



**Eco, Hydro and Duo  
under counter range**

Part number 902.0011  
Revision A



# **Installation and Operation instructions**

For '*Classeq*' under counter range of glass and dishwashers.

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## 1.0 Safety instructions

### 1.1 Warning :



**CAREFULLY READ THESE INSTRUCTIONS, BEFORE INSTALLING AND OPERATING THIS APPLIANCE.**

**INCORRECT INSTALLATION, ADAPTATIONS OR ALTERATIONS COULD RESULT IN INJURY OR DAMAGE TO PROPERTY.**

**MALICIOUS DAMAGE, DAMAGE DUE TO NEGLIGENCE, OR FAILURE TO COMPLY WITH THESE INSTRUCTIONS AND LOCAL LEGISLATION, OR UNAUTHORISED TAMPERING WILL INVALIDATE ANY WARRANTY AND RELIEVE THE MANUFACTURER OF ALL LIABILITY**

**DAMAGE TO THE MACHINE CAUSED DUE TO LIMESCALE WILL NOT BE COVERED BY THE MANUFACTURERS WARRANTY**

### 1.2 Installation :

Installation should only be carried out by a '**Classeq**' approved technician, and in accordance with current regulations and within our instructions.

### 1.3 Modification :

'**Classeq Limited**' reserves the right to modify either the appliance or the contents of these instructions without notice.

### 1.4 Operation :

The appliance should only be used by a trained operator as instructed in section 5 of this manual.

### 1.5 Failure / malfunction :



In the event of a failure / malfunction, the mains electrical and water supplies **MUST** be isolated at the wall and not just at the machine.

### 1.6 Repairs and spare parts :

The appliance must only be repaired by a '**Classeq**' approved technician, using genuine '**Classeq**' spare parts.

## 2.0 The appliance

### 2.1 Unpacking :

Use suitable means and protective equipment to avoid injury whilst unpacking and handling the appliance. Remove all outer packaging and the protective film from the outer panels of the appliance prior to installation.

Ensure all packing materials are disposed of in accordance with local regulations.

### 2.2 Items included :

The following items are included within the appliance

- 2 x Baskets
- 1 x Cutlery basket (*Dishwashers only*)
- 1 x Water inlet hose
- 2 x Primary filters
- 2 x Secondary filters (*Only 1 on Gravity drain machines*)
- 1 x Drain plug (*Gravity drain machines only*)
- 2 x Bottle weight kits (*for Rinse Aid and Detergent tubes*)
- 1 x Installation and Operation Instructions (**Must** be left with the customer)
- 1 x Warranty card (**Must** be left with the customer)

## 3.0 Installation

### 3.1 The site :

Ensure that there is sufficient space for the installation, servicing and easy access to all mains isolator switches / valves (i.e. electricity and water). Ensure that the surface the appliance is going to be installed onto is adequately stable and capable of supporting the appliance during normal operation, listed below are the approximate machine weights when fully laden during normal operation.

Once installed ensure that the appliance is stable and secure, with its weight being distributed equally and does not tilt more than 3° in any direction.

Machine sizes	Weight
400mm <sup>2</sup> basket	90 Kgs
500mm <sup>2</sup> basket	135 Kgs

### 3.2 Electrical connection :

All electrical connections MUST be carried out by an authorised technician and in accordance with local regulations.

As a minimum '**Classeq**' recommends that the following standards are maintained :

- All appliances are connected via a residual current device (R.C.D.) or earth leakage protection device.
- **EN 60204**  
Supply isolator switch must have all pole separation of more than 3mm.
- **EN 60335**  
The appliance must be connected to a equi-potential conductor, the connection stud is located at the rear of the appliance (a suitable ring terminal shall be required), this is in addition to the earthed electrical supply.

Prior to connecting the appliance, ensure that the voltage and the supply fuse complies with the rating plate on the appliance.

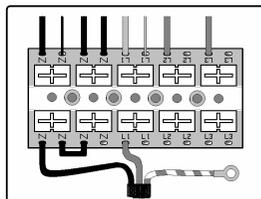
#### 3.2.1 Electrical rating :

Within the '**Classeq**' range several of the 500mm<sup>2</sup> basket appliances can be either down rated or up rated electrically, such a procedure MUST be carried out by a '**Classeq**' approved technician.

The down / up rating of the machine is carried out by configuring the terminal block within the appliance to the following

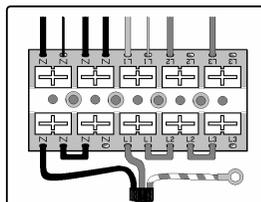
##### 13 Amp – Single phase

- Links removed between L1, L2 and L3
- Ensure link remains between neutrals (N)



##### 30 Amp – Single phase

- Ensure all link remains between lives terminals (L1, L2 and L3)
- Ensure link remains between neutrals (N)



##### Three phase

Only Eco3, H750, Duo3 and Duo750 appliances can be converted to three phase, this is performed by removing electrical links at the terminal between L1 L2 & L3, then installing a new 5 core supply cable, i.e. L1, L2, L3, N and Earth (PE).

### 3.3 Water connection :

The appliance comes with a water supply hose requiring a 3/4" BSP male threaded connection at the mains water supply, upon installation and commissioning all water joints must be checked for leaks).

#### 3.3.1 Water supply restrictions :

Water supply constraints must be adhered to :

- Incoming water temperature
  - 4°C minimum
  - 55°C maximum
- Supply water dynamic pressure (*air break machines, minimum water pressure 0.25 bar, all other parameters apply*).
  - 0 to 2 bar Rinse booster pump required
  - 2 to 4 bar No modifications required
  - 4 to 6 bar Flow restrictor required
  - 6 bar plus Pressure reducing valve required

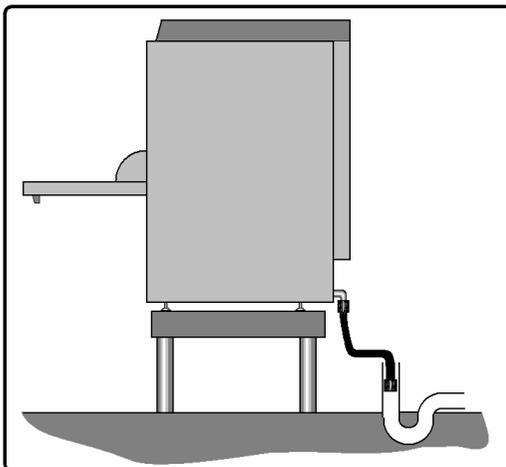
***If the above requirements are not adhered to, the performance of the appliance will be impaired***

#### 3.3.2 Drainage systems

Appliances are available as either gravity drain or pumped drain, upon installation the waste hose and stand pipe must be configured as shown within this manual, also all installations must be with a running / 'P' trap to ensure hygiene, to identify your appliance see page 9 of this manual :

##### All models

- Flexible waste hose must be securely attached to the waste outlet elbow on the rear of the machine.
- The waste hose must flow down from the waste outlet to the drain.
- Ø35mm (Ø1 1/4") standpipe required, must be lower than the baseline of the appliance
- Standpipe must not be higher than 300mm on drain pump machines & 100mm on gravity drain machines



## 4.0 Commissioning

### 4.1 Rinse aid & detergent :

Chemical pump(s) are located behind the front lower panel, prior to removing any panels all electrical supplies MUST be isolated.

A coil of PVC hose is attached to each chemical pump, un-coil PVC hose and feed through either the right or left hand slots located at the front of the base of the machine, prior to feeding the PVC hose into the chemical bottle, slide one of the rigid grey plastic tubes over the end of the PVC hose, then push the bottle weight supplied onto the end of each PVC hose.

Ensure the correct chemical tubes now go to the corresponding chemical bottles. (*i.e. rinse aid hose into rinse aid bottle*).



**WARNING** : Only rinse aids and detergents developed for commercial glass and dishwashers are to be used, rinse aids must be suitable for water temperatures down to 40°C.

#### 4.1.1 Priming of Rinse aid & Detergent :

This procedure is only required when commissioning the machine and not in normal operation

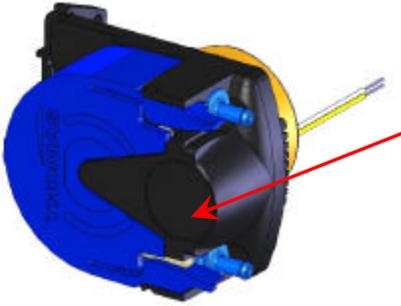
- Ensure the machine is empty of water
- Switch the water supply OFF
- Now switch the machine ON at both the mains supply and at the fascia for 90 seconds only
- Now switch the machine at the OFF at the fascia
- Turn the water supply ON

The rinse aide will now be primed, the machine can now be switch ON and allowed to fill & heat as normal.

#### 4.1.2 Chemical dosage :

Chemical doses are pre-set, however they can be adjusted to suit the individual site requirements, such adjustment is made by turning an adjuster screw on each chemical pump.

The chemical pumps are located behind the front lower panel.



- Detergent pump is the right hand pump
- Rinse aid pump is the left hand pump

Adjustments are made by rotating the adjuster screw in the front of the pumps

+ Increase dosage, rotate screw clockwise ↻

- Decrease dosage, rotate screw anticlockwise ↺

#### 4.2 Rinse & wash tank temperatures :

The water temperatures on 'Classeq' range of machines are adjustable, but have been preset to.

Machine type	Temperatures	
	Rinse water	Wash water
Glasswashers	70°C	55°C
Dishwashers	80°C	

#### 4.3 Interlock options :

All appliances have three interlock options, to select such an option remove the front lower panel, then located towards the centre of the machine you will find four cables tied together, each wire having a different coloured cover (*black, green, red & white*), by connecting different combinations together you will obtain the appropriate interlock option

- **Interlock removed**  
Will start at any temperature  
Connect the **Black** crimp to the **White** crimp
- **Quick start (default setting)**  
Will start if the rinse tank is above 55°C  
Connect the **Green** crimp to the **White** crimp
- **Interlock**  
All tanks must be up to temperature, before a cycle will start  
Connect the **Red** crimp to the **White** crimp

#### 4.4 **Demonstration :**

'**Classeq**' recommends that prior to leaving the site / installation, the installer demonstrates the following to the end user, as this will ensure the appliance is correctly used

- What to do in case of an emergency, i.e. how to isolate the mains electricity and water (*see section 1*).
- Switching the appliance on.
- Operating the appliance.
- Draining down.
- Switch the appliance off.
- Clean the appliance, including removal and replacement of all filters.
- Replenishing and priming of rinse aid and detergent.

Upon completion of the installation and commissioning of the appliance, this manual **MUST** be left with the end user.

## 5.0 **Operation**

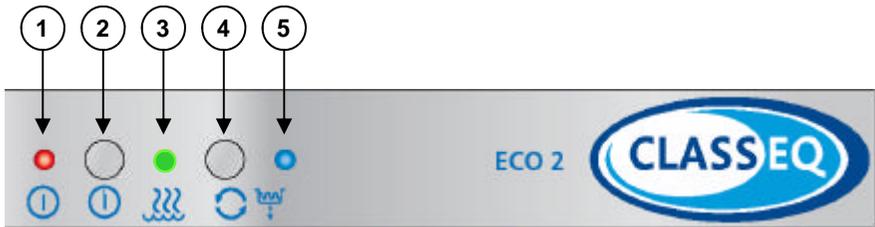
### 5.1 **Machine description :**

The design of commercial glass and dishwashing machines differ from their domestic versions as they are designed to run nearly continually for many hours.

Commercial appliances, wash results can be effected by external considerations such as incoming water temperature, pressure, hardness and choice of chemicals, '**Classeq**' recommends that your appliance is either connected to a water softener or a softened water supply, for further details on water softeners please contact the supplier of your appliance.

## 5.2 Controls :

Prior to switching the machine ON, ensure that you are familiar with the controls on the front fascia of the appliance and the location of the isolator for mains electricity and water supply.



1. ON / OFF lamp
2. ON / OFF switch
3. Machine ready lamp
4. Cycle switch
5. Cycle lamp

Note !

Appliances fitted with a drain pump, the Cycle switch and lamp double as the drain down switch and lamp

 Drain pump appliances will have this symbol located below the Cycle lamp (5), as shown on the above fascia.

If the symbol this is not present, the machine will have been despatched as a gravity drain machine.

If in doubt please contact '**Classeq**' for advise.

### 5.3 Switch the machine on :



Ensure that both the water and electrical supply are connected and switched on, then depress the 'ON/OFF' switch located on the fascia of the machine.

The machine will now automatically fill and heat, during this process the door should remain closed, allowing the process to be completed quickly.

### 5.4 Machine ready to operate :

The appliance is designed to only start a cycle when the correct temperatures are achieved, so there may be a pause between a cycle being selected and the cycle starting

### 5.5 Starting a cycle :

To start a cycle, open the door, load the first basket, ensuring that bottom and top arms rotate freely.



Close the door, then depress the 'Cycle' switch, the cycle will now start once the appliance has achieved its correct temperatures, during the cycle the 'Cycle' lamp will be illuminated.



Once the 'Cycle' lamp has gone out (at the end of the cycle) open the door and remove the basket, then reload the machine and repeat as required

### 5.6 Draining :

During normal operation your appliance will automatically drain away any excess water.

'Classeq' recommends if your appliance is not being used for a prolonged period of time the machine must be completely drained down

## 5.6 Draining (cont.) :

**Gravity drain** (typically *Eco1* and *Eco2*).

- Switch appliance OFF at fascia.
- Remove drain plug from wash tank.
- Your appliance should now drain under gravity.
- Once completed replace the drain plug.
- Now isolate mains water and electricity at the wall.

**Drain pump appliances** (optional on *Eco1*, *Eco2*)

- Switch appliance OFF at fascia.
- Close the door.
- Now depress the 'Cycle' switch, the 'Cycle' lamp will now illuminate to indicate that the drain cycle is in progress..
- Once the 'Cycle' lamp goes out, switch the appliance Off at the wall, DO NOT switch isolate the appliance while in the drain down cycle.

### Note !



Once empty '**Classeq**' recommends that the mains water and electricity supplies are isolated at the wall and the machine be cleaned as instructed in section 6 of this manual



For hygiene reasons it is recommended that once the appliance has been drained that the door is left open to assist in natural drying of the wash chamber

## 6.0 Cleaning

### 6.1 Prior to cleaning :



Switch off and isolated electrical supply before cleaning the appliance

#### **WARNING**

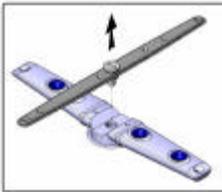


**DO NOT** use cleaning agents that contain CHLORINE, BLEACH or HYPOCHLORITE.

**DO NOT** use STEEL WOOL, WIRE BRUSHES or any other abrasive materials.

**DO NOT** jet wash or hose pipe the appliance down either internally or on the exterior

### 6.2 Internal cleaning :



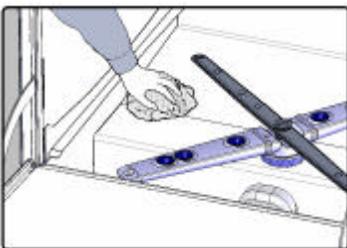
Remove the wash and rinse arms from the appliance, once removed wash in warm soapy water, ensuring all debris are removed, before reassembling the arm

Remove all the filters from within the appliance and again wash in warm soapy water, ensuring all debris are removed.

#### **WARNING**

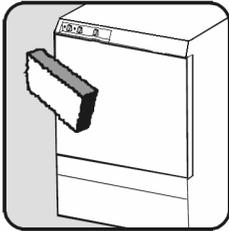


Before cleaning the wash chamber, ensure all sharp items, such as broken glass or other items which could cause injury are removed carefully



Now wipe the inside of the wash chamber ensuring any debris are removed and the chamber is clean, now reassemble all filters and wash arms.

### 6.3 Exterior cleaning :



Wipe the exterior of the appliance with a damp sponge (NOT WET)

Once dry, clean using a STAINLESS STEEL cleaning agent

## 7.0 Trouble shooting

- Before placing a service call , please check the following:
- Check the appliance is connected to the mains water and electricity supply and both are turned on.
- Check levels of chemicals within the rinse aid and detergent bottles.
- Check the drain / stand pipe is correct for the appliance (refer to section 3.3.2 of this manual).

### NOTE

**In the event of a service call being made under Warranty, and it is found that the fault(s) are due to non-observance of instructions in this manual, the call will be charged at current rates.**

### 7.1 Appliance does not fill : Appliance does not start : Appliance does not rinse :

- Check water supply is turned ON.
- Check water supply hose is not trapped or kinked.
- Check that the appliance is switched ON.
- Drain appliance fully, then try again to fill the machine, drain as per instructions 5.6 of this manual..

## 7.2 Appliance fills slowly :

- Check water supply tap is fully open.
- Check water supply pressure, should be above 2 bar, if not ask your dealer to install a booster pump to increase water pressure.
- Check and clean rinse jets (located on the wash arms within the appliance).
- Check water supply hose is not trapped or kinked.
- Remove any pressure regulator or reducer from the water supply.

## 7.3 Appliance not heating :

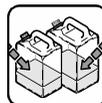
- Drain appliance fully, then try again to fill the machine, drain as per instructions 5.6 of this manual..
- Check the temperature of the mains water, as variations in water temperature will affect the heating of the appliance.
- Check that the wash chamber is full of water.

## 7.4 Appliance not draining :

- Check and clean all filters within the appliance.
- Check that the stand pipe / drain is not clogged / blocked.
- With drain pump appliance, bleed the pump as stated in section 3.3.2. of this manual.

## 7.5 Poor wash results :

- Check and replenish chemicals.
- Check and clean wash and rinse jets on wash arm assembly.
- Clean filters within appliance and check that they are fitted correctly.



- Check water supply is ON and fully open.
- Rinse dishes of any food debris before placing into the dishwasher.
- Glasses may need to be renovated.
- If glasses are 'Blooming' you may need a water softener, call your dealer to advise on size of water softener required.
- If a water softener is fitted, replenish the salt within the softener, as per the water softener instructions.

## **7.6 Overfilling :**

- Drain appliance fully, then try again to fill the machine, drain as per instructions 5.6 of this manual.
- Check and clean all filters within the appliance.
- Check stand pipe / drain height is configured correctly shown in section 3.3.2. of this manual
- Check that the stand pipe / drain is not clogged / blocked.
- With drain pump appliance, bleed the pump as stated in section 3.3.2. of this manual.
- If the appliance continues to overfill isolate both the mains electricity and water, before call a service technician.

## **7.7 Will not switch ON :**

- On an 13 amp appliance check and replace the fuse in the plug, ensuring the replacement fuse is of the correct rating.
- On other amperage appliances check and reset circuit breaker within the sites fuse board, if the circuit breaker continues to trip call a service technician immediately.

## **7.8 Will not switch OFF :**

- Isolate at mains electricity before calling for a service technician immediately.





Affix  
Stamp

**CLASSEQ SERVICE DEPARTMENT**

**CLASSEQ**

**WINTERHALTER HOUSE**

**ROEBUCK WAY**

**KNOWLHILL**

**MILTON KEYNES**

**MIK5 8WH**



Thank you for buying a quality 'Classeq' product, please complete and post this form without delay

# WARRANTY

Your new appliance is supplied with a full 12 months warranty, protecting you against failure due to workmanship or component failure

The information you supply to '**Classeq**' is covered by the DATA PROTECTION ACT. This data will also assist us to speed up the process, if you require a service visit.

From time to time we may wish to contact you regarding any future developments, if you do not wish to be contacted please tick the box.

AFIX  
RATING PLATE  
HERE

Rating plate

## YOUR DETAILS

SITE \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

POST CODE \_\_\_\_\_

TELEPHONE \_\_\_\_\_

## PRODUCT DETAILS

MODEL NO \_\_\_\_\_ SERIAL NUMBER \_\_\_\_\_

GLASSWASHER       DISHWASHER

DATE OF PURCHASE / INSTALLATION \_\_\_\_\_

PURCHASED FROM \_\_\_\_\_

CONTACT NAME \_\_\_\_\_

POSITION \_\_\_\_\_

ARE YOU INTERESTED IN EXTENDED WARRANTIES ?

Please tick the box      YES       NO