

# Installation & Operation Instructions

## The Classeq Under Counter Range



### Glasswashers

ECO 1  
ECO 2  
ECO 3  
DUO 2  
DUO 3

### Dishwashers

HYDRO 400  
HYDRO 700  
HYDRO 750  
DUO 400  
DUO 750



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# Accessories and Extras

## Detergents and Hygiene Products

| <i><b>Product Application</b></i> | <i><b>Product Name</b></i>                     | <i><b>Quantity</b></i> | <i><b>Order Code</b></i> |
|-----------------------------------|------------------------------------------------|------------------------|--------------------------|
| <b>Glasswashing Products</b>      | Super clean glasswashing detergent             | 2x5l                   | GW2-5                    |
|                                   | G3 glass rejuvenator                           | 1x10kg                 | G3/10                    |
|                                   | Super shine glasswashing rinse aid             | 2x5l                   | GWRA5-5                  |
|                                   | Glasswasher starter pack glasswasher detergent | 2x5l                   | SPG                      |
|                                   | Glasswasher starter pack rinse aid             | 2x5l                   |                          |
| <b>Dishwashing Products</b>       | Super clean dishwashing detergent              | 2x5l                   | DW2-5                    |
|                                   | Super clean dishwashing detergent              | 1x20l                  | DW1-20                   |
|                                   | Super shine dishwashing rinse aid              | 2x5l                   | DWRA2-5                  |
|                                   | Super shine dishwashing rinse aid              | 1x20l                  | DWRA1-20                 |
|                                   | Dishwashing starter pack detergent             | 2x5l                   | SPG                      |
|                                   | Dishwashing starter pack rinse aid             | 2x5l                   |                          |
|                                   | Super descaler                                 | 2x5l                   | DE 2-5                   |
| <b>Salt</b>                       | Table Salt DuoMatik                            | 25kg                   | SALT T                   |
|                                   | Granulated                                     | 25kg                   | SALT                     |

## Stands



| <i><b>Product Name</b></i>                                        | <i><b>Order Code</b></i> |
|-------------------------------------------------------------------|--------------------------|
| Eco 1-2, Hydro 400 stainless steel 457(w) x 497(d) x 410(h)       | SS-400                   |
| Duo 2, Duo 400 stainless steel 575(w) x 552(d) x 421(h)           | SS-400D                  |
| Eco 3 Hydro 750 stainless steel 555(w) x 550(d) x 410(h)          | SS-500                   |
| Duo 3, Duo 750 stainless steel 575(w) x 552(d) x 421(h)           | SS-500D                  |
| Steel coated stand ( Eco 1-2, Duo 2, Hydro 400)                   | BWS400                   |
| Steel coated stand ( Eco 3, Duo 3, Hydro 700, Hydro 750, Duo 750) | BWS500                   |

## Baskets

| <i><b>Product Name</b></i>                       | <i><b>Order Code</b></i> |
|--------------------------------------------------|--------------------------|
| Eco 1 glass                                      | 400SBG-P                 |
| Eco 2, Duo 2 glass, Hydro cup                    | 500GBP                   |
| Eco 3, Duo 3 glass, Hydro 750, Hydro 857-957 cup | 700GBP                   |
| Alto cup, Hydro 400 plate                        | 500P RP                  |
| Hydro 750 plate, Alto plate                      | 700DRP                   |



## Basket Inserts

| <b>Product Name</b>                  | <b>Order Code</b> |
|--------------------------------------|-------------------|
| Wire plate holder Eco 2, Duo2, Hydro | WS8-SK            |
| Hydro, 8 Compartment cutlery         | CBP               |



## Water treatment



| <b>Description</b>        |                      | <b>Order code</b> |
|---------------------------|----------------------|-------------------|
| Eco, Duo and Hydro ranges | 8 litre              | WS8-SK            |
|                           | 12 litre             | WS12-SK           |
|                           | 16 litre             | WS16-SK           |
|                           | 20 litre             | WS20-SK           |
|                           | Automatic            | WSAUTO            |
| Hydro ranges              | 20 litre             | WS20-SK           |
|                           | Automatic            | WSAUTO            |
|                           | Automatic hot water  | WSHC10            |
| Alto ranges               | Automatic – DuoMatik | 51-01-206         |
| Viso ranges               | Automatic            | WSAUTO            |
|                           | Automatic hot water  | WSHC10            |

## Accessories

| <b>Description</b> |                                                          | <b>Order Code</b> |
|--------------------|----------------------------------------------------------|-------------------|
| Boostermatic       | Pressure Pump (where water pressure is below 45psi/3bar) | 99-05-039         |
| Fixing Bracket     | For Pump                                                 | 99-32-002         |
| Mixer Valve        | For hot water installations                              | 99-32-001         |

## Service and Maintenance Contracts

Enjoy complete peace of mind with Classeq's range of tailored service contracts. We will be happy to discuss your requirements and provide a proposal which will cater for all your warewashing service needs.

|                    |                                                                                             |
|--------------------|---------------------------------------------------------------------------------------------|
| Four Star<br>★★★★  | Break down cover only. Call out and labour included. All replacement parts will be charged. |
| Five Star<br>★★★★★ | Break down cover with call out, labour and parts included                                   |

Dear Customer

Thank you for choosing **Classeq**, the machine you have selected has been designed to give you lasting service.

Please read these instructions before installing, commissioning and operating this machine.

The information contained herein is provided to avoid accidental risks and/or damage to either yourself or your machine.

Make sure you and any other users understand the controls prior to using your machine.

Please keep these instructions in a safe place for future reference.

If you have any questions, or are not sure about any information contained in this manual please contact either your distributor or **Classeq**, details are provided inside the back cover.

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Explanation of symbols used

The following symbols have been used in this manual



**Danger**

Warning against potential serious or fatal injuries to persons if the described precautionary measures are not taken.



This symbol refers to a chapter with more detailed information



**Warning !**

Warning against potential minor injuries to persons or potential material damage if the described precautionary measures are not taken.



Refer to foot note at bottom of page



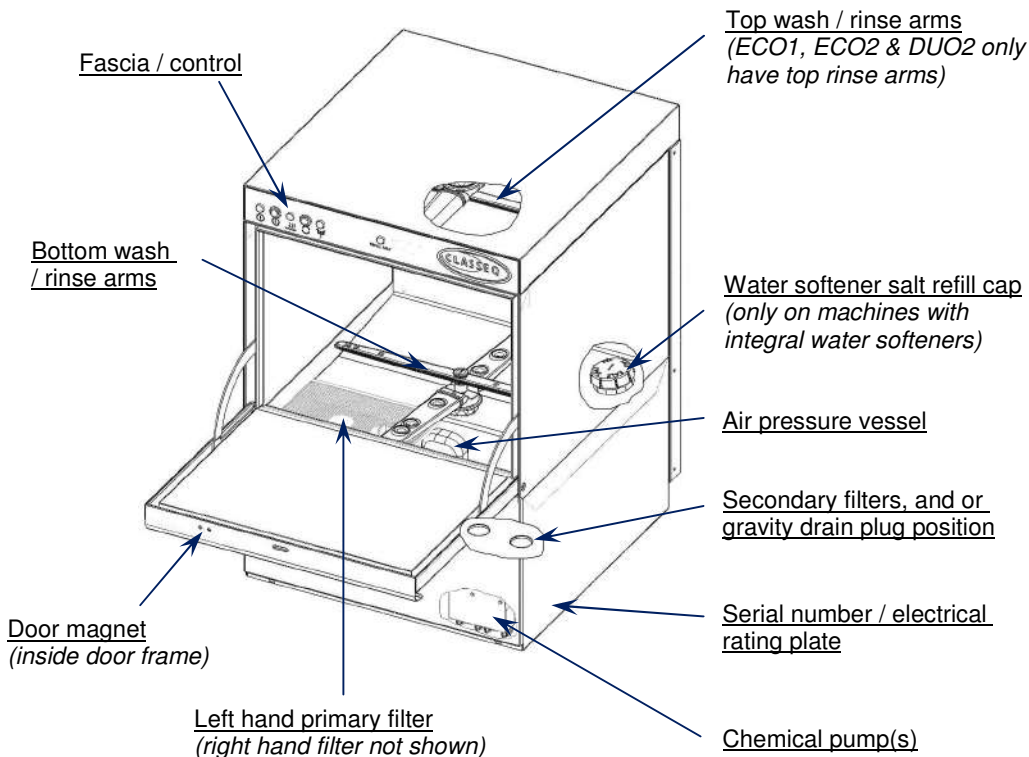
**Caution**

Warning against defects in or destruction of the product if the described precautionary measures are not taken.

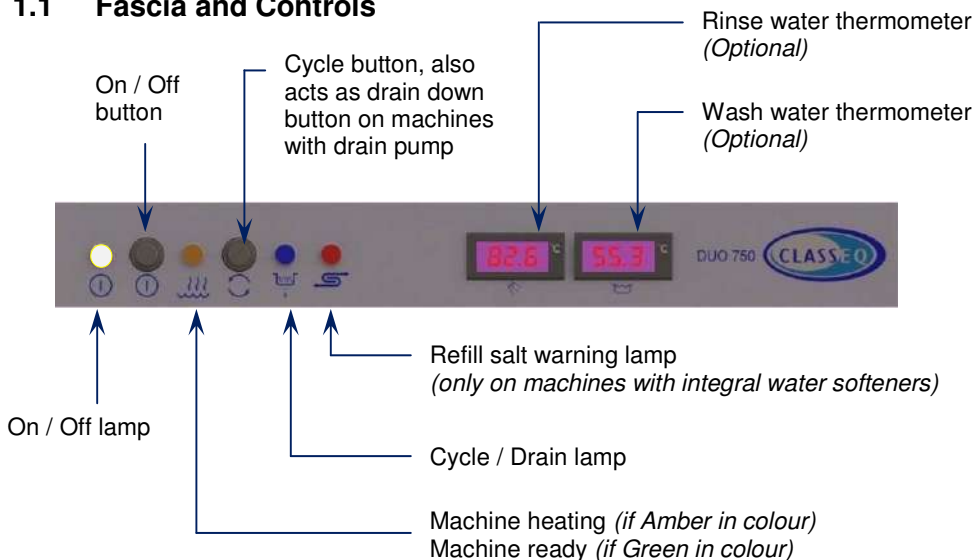


Recycle

# 1. Know Your Machine

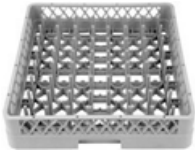


## 1.1 Fascia and Controls

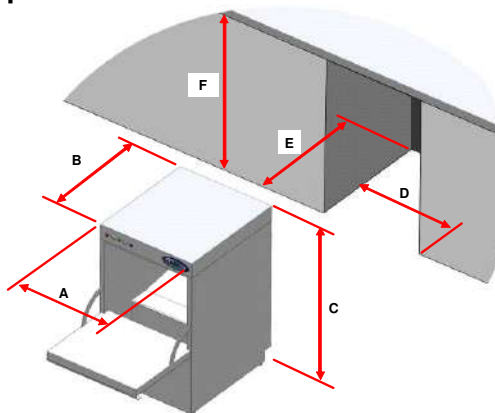


## 1.2 Contents of Your Machine

Items included within machine

|                                                                                     |                                                                                                 |                                                                                     |                                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
|                                                                                     | 1 x Installation and Operation Instructions                                                     |                                                                                     | 1 x Good Practice Guide                                                      |
|     | Open basket<br>x2 ( <i>glass washer</i> )<br>x1 ( <i>dishwasher</i> )                           |    | 2 x Secondary filters<br>( <i>only 1 on gravity drain machines</i> )         |
|    | Sectioned basket<br>x1 ( <i>dishwasher only</i> )<br>( <i>400mm basket differs from image</i> ) |    | 1 x Drain plug<br>( <i>only on gravity drain machines</i> )                  |
|    | Cutlery basket<br>x1 ( <i>dishwasher only</i> )<br>( <i>400mm basket differs from image</i> )   |    | Primary filters<br>x1 Left hand filter<br>( <i>all machines</i> )            |
|   | 1 x Water inlet hose                                                                            |   | Primary filters<br>x1 Right hand filter<br>( <i>Drain pump machines</i> )    |
|  | 2 x Bottle weights<br>( <i>for Rinse Aid and Detergent tubes</i> )                              |  | Primary filters<br>x1 Right hand filter<br>( <i>Gravity drain machines</i> ) |

## 1.3 Machine specification



| Glass washers                           |                  | ECO 1  | ECO 2     | ECO 3                  | DUO 2   | DUO 3   |
|-----------------------------------------|------------------|--------|-----------|------------------------|---------|---------|
| Dishwashers                             |                  |        | HYDRO 400 | HYDRO 700<br>HYDRO 750 | DUO 400 | DUO 750 |
| <b>Machine</b><br>(mm)                  | A = width        | 410    | 450       | 550                    | 470     | 570     |
|                                         | B = depth        | 510    | 535       | 625                    | 535     | 625     |
|                                         | C = height (min) | 640    | 740       | 825                    | 750     | 835     |
| <b>Recess</b><br>(mm)                   | D = width (min)  | 413    | 453       | 553                    | 473     | 573     |
|                                         | E = depth (min)  | 530    | 555       | 645                    | 545     | 645     |
|                                         | F = height (min) | 660    | 760       | 845                    | 770     | 855     |
| Basket size (mm)<br>(square basket)     |                  | 350    | 400       | 500                    | 400     | 500     |
| Load capacity (pint glasses)            |                  | 13     | 17        | 30                     | 17      | 30      |
| Load capacity (dishes)                  |                  | -      | 9         | 18                     | 9       | 18      |
| Machine fully loaded weight (kg)        |                  | 45     | 61        | 105                    | 64      | 110     |
| Rinse water temperature (glass washers) |                  | 70 °C  | 70 °C     | 70 °C                  | 70 °C   | 70 °C   |
| Rinse water temperature (dish washers)  |                  | 82 °C  | 82 °C     | 82 °C                  | 82 °C   | 82 °C   |
| Wash water temperature                  |                  | 55 °C  | 55 °C     | 55 °C                  | 55 °C   | 55 °C   |
| Operating noise level                   |                  | <70 db | <70 db    | <70 db                 | <70 db  | <70 db  |

## 2. Warning and safety information

The machine should only be operated on the voltage specified on the rating plate (►1). The installer and user are responsible for ensuring the installation and operation of this machine are in accordance with local and national regulations.

Each day allow your machine to heat up before the first wash cycle (►6.4).

Only use commercial grade detergents and rinse-aids within your machine.

**DO NOT** use electrical extension lead(s) to supply power to your machine.

The door of this machine must **NEVER** be used to stand on.

Damage to the machine caused by lime scale, or poor water quality will **NOT** be covered by the **Manufacturer's Warranty**.

Children should be supervised to ensure that they do not play with, or operate the machine.

When disconnecting your machine from the mains electrical supply:

- Machines with an electrical plug, always pull the plug. Never pull the cord itself.



- Machines hard wired (*i.e. no plug*), this must be disconnected in accordance with local and national regulations; **Classeq** recommends this is performed by a qualified electrician.



### For Dishwashers ONLY

Long cutlery, such as ladles and long knives etc., must be placed horizontally on the open basket (►1.2), this will avoid possible collision with wash / rinse arms.



Always remove excess food from the dishes before loading.



**Caution**

**DO NOT** use your machine as a waste disposal unit.

### 3. Pre - Installation

After unpacking your machine, check it for any possible transport damage. Never install and use a damaged machine. If your machine is damaged contact your retailer immediately.

Make sure the water and electricity connections of your machine are in compliance with these instructions.

Remove all outer packaging and the protective film from your machine before positioning it.

Ensure all packaging materials are disposed of in accordance with local and national regulations.

Ensure there is a clearance each side of the machine to allow slight sideways movement for servicing (► 1.3).

When positioning the machine, ensure that the water inlet and drain hoses are not kinked or squashed. Care must also be taken to ensure your machine does not rest upon any of its supply hoses / leads.

Ensure the surface your machine is going to be installed on is stable and capable of supporting it during normal operations (► 1.3)

Once installed use the adjustable feet to ensure your machine is stable, with its weight being distributed equally and does not tilt more than 3° in any direction.

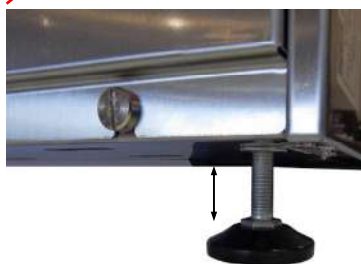
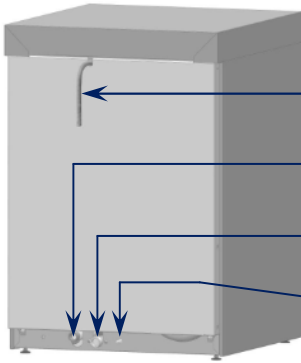


plate on the machine (► 1).

### 3.2 Machine mains supply requirements:



All mains connections are made at the rear of the machine

Mains electrical supply cable

Drain / waste water hose

Water supply hose connection

Earth bonding / Equi-potential stud



### 3.3 Electrical connection (► 3.2):

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

- All machines are connected via a residual current device (*R.C.D.*) or earth leakage protection device.

#### • IEC 60204

Supply isolator switch must have all pole separation of more than 3mm.

#### • IEC 60335

The machine must be connected to an equi-potential conductor, the connection stud is located at the rear of the machine (*a suitable ring terminal will be required*), this is in addition to the earthed electrical supply.

Prior to connecting the machine, ensure that the voltage and the supply fuse complies with the rating

### 3.4 Earth bonding / Equi-potential stud:



**Danger**

For safety reasons your machine **MUST** be earth bonded to adjacent metalwork, or may be earthed so that it is at the same potential (*i.e. voltage*).

Please consult your distributor, **Classeq** or a qualified electrician if you are unsure how to do this.

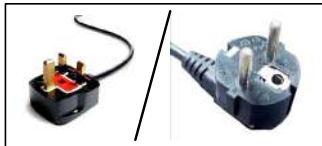


Earth bonding stud

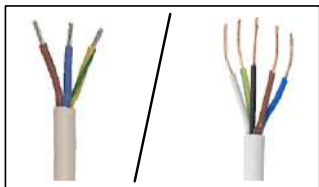
Earth wire

### 3.5 Mains electrical plug:

Depending upon the model and variant of your machine, it may be supplied without a mains electrical plug.



OR



### 3.6 Mains electrical cable specification:

If the mains electrical supply cable is damaged or has deteriorated, it must be replaced by a cable or cord assembly supplied by **Classeq**, or its service agent, and be to the following minimum specification.

For electrical rating of your machine refer to the rating plate (►1).

| Machine rating<br>(Volts / Phase / Amps) |                 | Cable type                                     |
|------------------------------------------|-----------------|------------------------------------------------|
| 220-240V / 1N~/13A                       |                 | PVC 3G 1.5                                     |
| 220-240V / 1N~/20A                       |                 | PVC 3G 4.0                                     |
| 220-240V / 1N~/32A                       |                 | PVC 3G 4.0                                     |
| ★380-415V / 3N~/13A                      |                 | PVC 5G 2.5                                     |
| Temp. rating                             | Length of cable | Conforms to                                    |
| 80°C min.                                | 2.75m           | IEC 60335-2-58<br>&<br>IEC 60227 types 56 & 57 |

### ★ - only ECO3, HYDRO 750, DUQ3 and DUO 750 3.7 Changing electrical rating:

Several of the 500mm basket machines★ can be either down rated or up rated electrically. Such a procedure MUST be carried out by a qualified electrician or service engineer (►11.1).

### 3.8 Water connection (►3.2):

For the longevity of your machine and to ensure you get consistently good results, it is essential your machine is either fed from a soft water supply, or your **Classeq** machine is connected to an appropriate water softener.

**IMPORTANT - All supplier warranties are void if lime scale is present within your machine.**

Commercial machine wash results will be affected by external conditions such as incoming water temperature, pressure, hardness and choice of chemicals.

#### 3.8.1 Water supply hose:

Your machine comes with a new water supply hose (►1.2), requiring a G<sup>3</sup>/<sub>4</sub>" (¾" BSP) male threaded connection at the mains water supply. This hose is to be connected to the machine and the mains water supply.



**Warning**

Old existing, defective or damaged water supply hoses are NOT to be used when installing your machine.

3.8.2 Water supply restrictions:

Incoming water temperature

- 4 °C minimum
- 55 °C maximum

Supply water dynamic pressure

- 0 to 2 bar (0 to 200 kPa)  
*Rinse booster pump required*
- to 4 bar (200 to 400 kPa)  
*No modifications required*
- to 6 bar (400 to 600 kPa)  
*Flow restrictor required*
- 6 bar plus (600 kPa plus)  
*Pressure reducing valve required*

If the above requirements are not adhered to, the performance of the machine will be impaired.

3.9 Drain / waste water hose (►3.2 and 4.4):

Dependent upon the model of machine you have will change how the waste water hose needs to be configured into your sites drainage system (►4.4)

4. Installation

**Make sure you have read section 3 of this manual to familiarise yourself with the machine before installation.**

4.1 Recommended hand tools  
**Classeq** recommends the following hand tools to aid installation of your machine.

| Recommended Hand Tools                                                            |                                    |
|-----------------------------------------------------------------------------------|------------------------------------|
|  | 2.5mm and 4mm hex key              |
|  | Screw driver flat and pozi (small) |
|  | Wire cutters                       |
|  | Spirit level                       |

4.2 Electrical supply connection

Your machine must be connected directly to the mains electricity using the mains electrical cable provided.

Prior to connecting your machine, ensure the electrical supply has a suitable and adequate circuit breaker / fuse. For the electrical rating of your machine refer to the rating plate (►1). Contact your distributor, qualified electrician or **Classeq** if you are unsure how to check this.



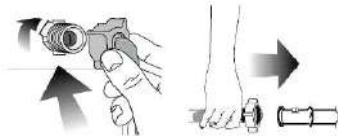
**All mains electrical work must be carried out in accordance with local and national regulations, and by a qualified electrician.**

### 4.3 Water supply hose connection

#### (►3.8.1)

**Classeq** recommend installing a shut off valve in the mains water supply line near the machine such that it is easily accessible.

Connect the 90° bend end of the water supply hose to your machine (►3.2) and the straight end to your water mains supply.



Ensure the rubber seals within the ends of the hose are in place.

Ensure all connections are water tight before using your machine.

### 4.4 Drain hose connection

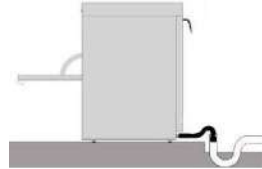
Fit the drain hose of your machine to the waste plumbing without kinking it.

Secure your hose firmly to the waste pipe to avoid it coming off during the machine's operation.

The waste plumbing must only be connected into the foul drains and not the surface water drainage system.

### 4.4.1 Gravity drain machines

- Drain hose must flow down from the waste outlet to the drain.
- Ø40mm (1 ½") standpipe required, must be lower than the bottom of the machine.
- Ensure the joint between standpipe and drain hose is water tight.

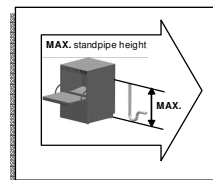


### 4.4.2 Drain pump machines

- Drain hose can flow down from the waste outlet to the drain (►4.4.1).
- Ø40mm (1 ½") standpipe required, must be lower than the bottom of the machine.
- Ensure the joint between standpipe and drain hose is water tight.

**OR**

- Drain hose can be inserted into a standpipe with the maximum height indicated by the sticker on the rear of the machine.



- Ø40mm (1 ½") standpipe required.

## 5. Commissioning

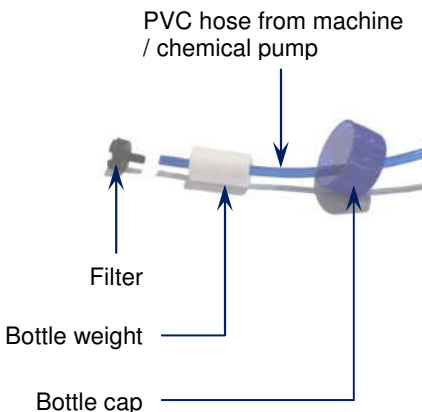
### 5.1 Installing chemical bottle weights

A coil of PVC hose is attached to each chemical pump.

- Blue = rinse aid
- Clear = detergent

The above coils of PVC hose are taped to the exterior of the machine during transit, these are to be un-coil and routed to the chemical bottles.

After routing these PVC hoses to the chemical bottles, push the supplied bottle weight and filter onto the end of each PVC hose, see diagram below.



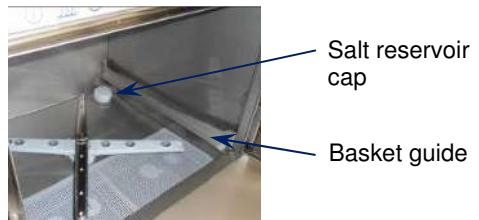
Only rinse aids and detergents developed for commercial glass and dishwashers are to be used. Rinse aids must be suitable for water temperatures down to 40 °C.

### 5.2 Integral water softener

*(Not on all models)*

Check the water hardness of your water supply. Once you have this data, isolate the mains electrical supply to the machine, remove the lower front panel and select the corresponding water hardness setting as shown on the label on the wash tank, now replace the lower front panel and reconnect your electrical supply.

Now remove the right hand basket guide and the 'Salt reservoir cap'.



**Only use granulated salt**  
(max. grain size 5 – 7 mm).  
Salt tablets are not suitable.

Using the funnel supplied, fill the softener with salt (approx. 1.5 kg), using the funnel supplied.

Remove any spilt salt from the wash cabinet. Now replace the salt reservoir cap, ensuring the cap is secure and water tight.



The 'Refill Salt' /  amp may stay illuminated for up to 3 complete wash cycles after filling / refilling the salt reservoir with salt.

**DO NOT** run the machine if there is no salt in the salt reservoir, as this will allow lime scale to build up, also any lime scale will invalidate your warranty

**DO NOT** add any other chemicals, such as detergent or rinse aid. These will cause damage to the machine.

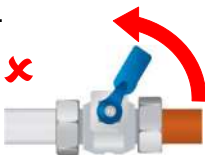
### 5.3 Priming of rinse aid & detergent

This procedure is only required when commissioning or if your chemical bottle has run dry for a number of cycles. It is not required during normal operation:

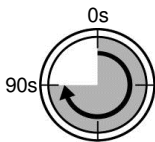
- Ensure chemicals are attached (*external to machine*).



- Ensure your machine is empty of water.
- Turn the mains water supply OFF.



- Turn machine ON at both the mains supply and at the fascia for 90 seconds only.



- Turn machine OFF at the fascia.
- Turn the water supply ON.



- The chemicals will now be primed and the machine can now be operated (►6).

### 5.4 Chemical dosage:

The chemical pumps have been pre-set to a standard dosing rate. The dosing can be adjusted to suit individual site requirements (►11.2).

### 5.5 Rinse & wash tank temperatures:

Water temperatures are pre-set, however **Classeq** recommends these are checked / calibrated to ensure compliance to local and national regulations.

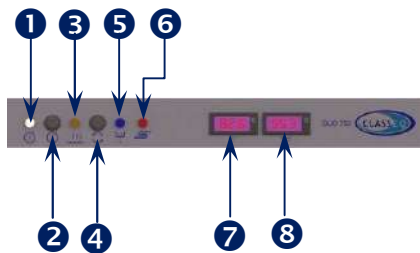
## 6. Operation

### 6.1 Machine description:

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

### 6.2 Controls:

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



- ① On / off lamp
- ② On / off button
- ③ Machine heating (if Amber in colour)★
- ③ Machine ready (if Green in colour)★★
- ④ Cycle button, also acts as drain down button on machines with drain pump
- ⑤ Cycle / Drain lamp ★★★
- ⑥ Refill salt lamp (▶10)
- ⑦ Rinse water thermometer (Optional)
- ⑧ Wash water thermometer (Optional)

★ - If your machine has an amber light, it will illuminate while the machine is heating.

★★ - If your machine has an green light, it will illuminate while once the temperature interlock has been achieved.

★★★ - If your machine is fitted with a drain pump, this button also acts as a drain down button.

### 6.3 Switch the machine on:

Ensure both the water and electrical supplies are connected and switched on, ensure the door to your machine is closed.

Now depress the on/off button ② located on the fascia of the machine. The on/off lamp ① will now be lit.

The machine will now automatically fill and heat, during this process the door MUST remain closed.

### 6.4 Machine ready to operate:

It is IMPORTANT after turning the machine on for the first time each day to allow time for it to heat up (see table below) before starting the first wash cycle, regardless of whether the Ready light ③ is illuminated.

| Machine rating<br>(Volts / Phase / Amps) | Minimum<br>initial heat up<br>time |
|------------------------------------------|------------------------------------|
| 220-240V / 1N~/13A                       | 45 min                             |
| 220-240V / 1N~/20A                       | 35 min                             |
| 220-240V / 1N~/32A                       | 25 min                             |
| 380-415V / 3N~/13A                       | 25 min                             |

These times may vary depending on your incoming water temperature.

Your machine is designed only to start a cycle when the correct temperatures are achieved; there may be a pause between a cycle being selected and the cycle starting.

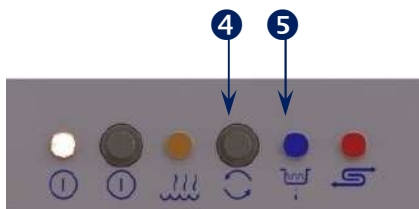
## 6.5 Starting a cycle:

Always remove excess food / debris from any dishes / glasses to be washed.

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



Close the door and depress the cycle ④ button. The cycle will start once the machine has achieved its correct temperatures. During the cycle the cycle lamp ⑤ will be lit. Do NOT open the door during a cycle.



Once the cycle lamp ⑤ has gone out (at the end of the cycle) open the door and remove the basket, then reload the machine and repeat as required.



## 6.6 Draining:

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



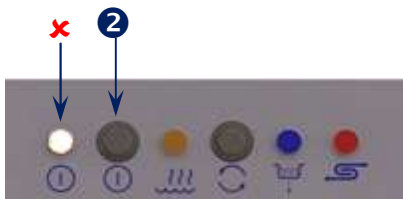
Caution

***It is very important the machine is drained down at the end of each working day and the door is left open to allow drying.***

***The machine should never be left full of water if you are turning the machine off.***

### 6.6.1 Gravity drain machine

- Turn machine OFF at on/off button ②.



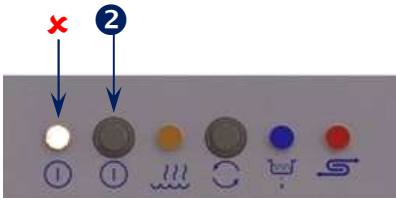
- Remove the drain plug from the wash tank.



- The machine should now drain under gravity.
- Once drained replace the plug.
- Now turn off the mains water and electricity at the wall.

### 6.6.2 Drain pump machine

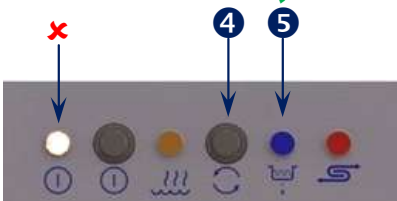
- Turn machine OFF at on/off button ②.



- Close the door.



- Now depress the cycle button ④. The cycle lamp ⑤ will be lit indicating the drain cycle is in progress.



- Once the cycle lamp ⑤ has gone out, turn off the mains water and electricity at the wall.



**Caution**

**DO NOT** turn off electrical supply to the machine while in the drain down cycle.

### Note!

Once empty **Classeq** recommends the mains water and electricity supplies are turned off and the machine is cleaned (► 7).

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

## 7. Servicing & Maintenance

**DO NOT** spray the exterior or interior of the machine and the surrounding area (*panels, base*) using a water hose, steam-jet air ejector or high-pressure cleaner.

Ensure the base of the machine is never submerged or standing in water when operating the machine.

### 7.1 Prior to cleaning:

Ensure the machine has first been drained down (►6.6).

Turn off the mains electrical supply before cleaning the machine.



**Warning**

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

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

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

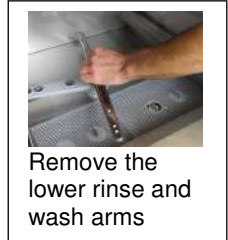
### Daily internal cleaning:

The machine does not have a self-cleaning programme; it is recommended the machine is cleaned daily to ensure the wash action of the cycle is maintained.

### 7.2 Cleaning interior:



Open the machine door



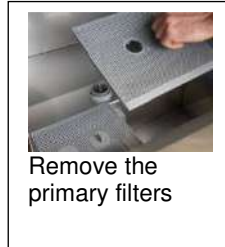
Remove the lower rinse and wash arms



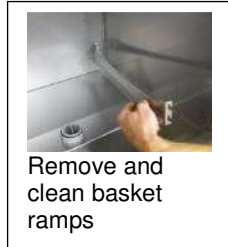
Remove upper rinse / wash arms



Remove the drain plug (*Gravity drain machines*)



Remove the primary filters



Remove and clean basket ramps



Check and refill the salt reservoir, with granulated salt (►10) (*only on machine with integral softener*)



Clean the filters and drain plug



Clean the wash and rinse arms

If the interior of the machine is dirty: Clean the interior with a sponge and a brush.

Clean any build-up from inside the air pressure vessel (►1).



Remove and clean the secondary filters located in bottom of wash cabinet.



Re-mount all filters and drain plug (where applicable)



Re-mount the basket ramps



Remove the lower rinse and wash arms

### 7.3 Exterior cleaning:

Wipe the exterior of the machine with a damp (*NOT WET*) sponge.



Once dry, clean using a STAINLESS STEEL cleaning agent.

### 7.4 Lime scale:

For best results ensure your machine is operated with soft water.

If your machine has an integral water softener, ensure when the 'Refill Salt' /  lamp is lit, the salt reservoir is topped up with granulated salt (►10)

If your machine is connected to an external softener, ensure this is routinely 'regenerated' as per the instruction of the water softener.

If your machine is operated with hard water without the relevant water treatment, the internal working and all water lines can become scaled and your results will deteriorate and the machine will not perform.

The visual signs of lime scale being:-

- White marks may appear on glasses, dishes and cutlery.



- Dishes may appear dirty even after a wash.
- Build-up of lime scale within the wash cabinet of your machine



Your local water board should be able to tell you if the water in your area is hard or soft. As a guide refer to the map in Appendix C (►12).

If you find a build-up of white powder like material in the wash tank of your machine, you may need to de-scale your machine (►11.3).

Damage to the machined caused by lime scale will NOT be covered by the **Manufacturer's Warranty**.

## 8. Trouble Shooting

Before placing a service call, please check the following:

- Machine is connected to the mains water and electricity supply and both are turned on.
- The level of chemicals within the rinse aid and detergent bottles and the bottle weights and tubes are correctly positioned.
- The drain / stand pipe is correct for the machine (►4.4).

### 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.**

### 8.1 Machine does not fill:

- Check water supply is turned ON.
- Check water supply hose is not trapped or kinked.
- Check that the machine is switched ON.
- Check that the door is closed and the door magnet is in place (►1).

### 8.2 Cycle does not start:

- Check wash tank is full.
- Ensure compliance with recommended waiting times before starting a cycle (►6.4).

### 8.3 Machine does not rinse:

- Check water supply is turned ON.
- Check water supply hose is not trapped or kinked.
- Check that the machine is switched ON.
- Drain machine fully as per instructions (►6.6), then try again to fill the machine.

### 8.4 Machine fills slowly:

- Check water supply tap is fully open.
- Check water supply pressure (►3.8.2) and remove any pressure regulator or reducer.
- Check and clean rinse jets (*located on the rinse arms within the machine*).
- Check water supply hose is not trapped or kinked.

### 8.5 Machine not heating:

- Drain machine fully (►6.6), then try again to fill the machine.
- Check the temperature of the mains water (►3.8.2).
- Ensure enough time has been allowed for machine to reach correct temperatures (►6.4).
- Check that the machine is full of water.

### **8.6 Machine not draining:**

- Check and clean all filters within the machine.
- Check that the stand pipe / drain is not clogged / blocked / kinked.
- With a drain pump machine, bleed the pump by blowing into the drain hose.

### **8.7 Poor wash results:**

- Check and replenish chemicals.
- Check and clean wash and rinse jets on the wash and rinse arm assemblies.
- Clean filters within machine 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 showing signs of deterioration you may need a water softener, call your dealer to advice on size of water softener required.
- If a water softener is fitted, replenish the salt within the softener, as per the manufacturer's instructions.

### **8.8 Overfilling:**

- Drain machine fully (►6.6), then try again to fill the machine.
- Check and clean all filters within the machine.
- Check stand pipe / drain height is configured correctly shown in (►4.4).
- Check that the stand pipe / drain is not clogged / blocked / kinked.
- With a drain pump machine, bleed the pump by blowing into the drain hose.
- If the machine continues to overfill, turn off the electricity and water supplies to the machine, before calling a service technician.

### **8.9 Wash water foaming:**

- Check chemicals are manufactured for use in commercial glass- and dish-washers.
- Check wash water is up to temperature.
- Drain, refill and allow to reheat.

### **8.10 Will not turn ON:**

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

### 8.11 Will not turn OFF:

- Turn off the mains electrical supply at the wall / isolator or junction box before calling for a service technician immediately.

## 9. Decommissioning

If for any reason you require to remove or decommission your machine, and then do so in accordance with local and national regulations. As a minimum **Classeq** recommends the following procedure is followed.

- Remove chemical tubes from the chemical bottles, ensuring the bottles are then capped to prevent any further spillage; refer to all safety statements on chemical bottles prior to this and for dealing with any spillage.
- Ensure the machine is fully drained (►6.6), once completed remove the waste hose from the drain standpipe; ensure any spilt liquid is dried prior to advancing to the next step.
- Turn off the mains electrical supply at wall / isolator / junction box.
- If the machine is connected via an electrical plug, remove this from the socket.
- If the machine is hardwired into the mains, then this must be disconnected by a **qualified electrician** in accordance with local and national regulation.

- Once the electrical supply has been disconnected, ensure the earth bonding / equipotential wire is removed from the stud at the rear of the machine.
- Turn off the water supply to the machine and disconnect the water supply hose from mains water supply, ensuring any spillage is dried prior to moving onto next step.
- Remove the front lower panel using a 4mm hex key.



- Now locate the '*Boiler drainage hose*' as shown. Ensure this protrudes from the front of the machine and you have a container large enough to hold 8 litres of water.



### Caution

**CAUTION** If the machine is being drained immediately after use, water draining from the '*Boiler drainage hose*' may reach up to **82°C**.

- Loosen the jubilee clip and remove the stainless steel drain plug, ensuring the water flows into the container mentioned above. Once fully drained replace the stainless steel plug and retighten the jubilee clip.
- Replace the front panel, and ensure all cables and hoses are secured to the machine to prevent tripping hazards. The machine is now ready to be removed.



**RECYCLING** If you are recycling or disposing of your machine, please ensure this is done in accordance with local and national regulations.

## 10. Appendix A

### 10.1 Integral Water Softener:

The machine will fill and heat as described in this manual (►6).

On the front fascia of the machine there is a 'Refill Salt' or  indicator light ⑥, this will only illuminate when the salt reservoir needs refilling with granulated salt (*not table salt*).



**DO NOT** run the machine if there is no salt in the salt reservoir. This can cause lime scale to build up within the machine and as a result may invalidate your warranty.

**DO NOT** add any other chemicals in the salt reservoir, such as detergent or rinse aid. These will cause damage to the machine.

#### Only add regenerating salt to the salt tank

The salt used has to be granulated salt (*max. grain size 5-7mm*). Salt tablets are not suitable.

### 10.2 Refilling the Salt Reservoir

The 'Salt Reservoir' is located within the wash tank and must be filled with regenerating salt when the 'Refill Salt' or  light illuminates on the fascia panel. You can do this while the machine is *On*, you do not have to switch *Off* the machine or drain the water.



Salt reservoir cap

The 'Refill Salt' or  light ⑥ will go out at the latest after the third cycle.

- Remove the right hand basket ramp (►7.1).
- Remove the cap from the 'Salt Reservoir'
- Fill the salt reservoir up to the rim with fresh water (*only necessary the first time the machine is used*).
- Place the funnel into the charging hole and pour in **1.5kg** of granulated salt.



- Remove the funnel and clean the filling area from salt residues. Replace the cap back on the salt reservoir and screw on tightly without tilting it.
- Then perform a wash cycle immediately to flush away any excess salt residue, otherwise there is a risk of **rust forming** on the filling area.

For replacement granulated salt contact **Classeq** or your dealer.

## 11. Appendix B



### **DANGER!**

Only Qualified Electricians or **Classeq** Engineers are to carry out the changes to electrical rating due to high **risk of death or serious injury.**

### 11.1 Changing electrical rating:



Changing the electrical rating of the machine will have an effect on the performance of your machine.

Down / Up rating of your machine is carried out by re-configuring the terminal block within the machine to the following:

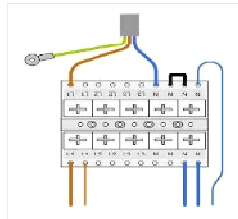
The terminal block is located inside the top of the machine. Access is gained by removing the 2 x 2.5mm Allen key type screws found on the underside of the top of the door frame, then by sliding back and removing the top panel.



2.5mm hex key screws

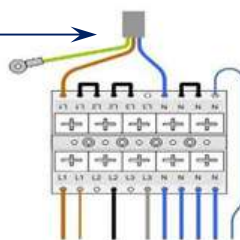
#### 11.1.1 Changing rating to 220-240V / 1N~ / 13A:

- Remove links between L1, L2 and L3
- Ensure link remains between neutrals (N)
- Mains electrical cable required (► 3.5)



#### 11.1.2 Changing rating to 220-240V / 1N~ / 20A:

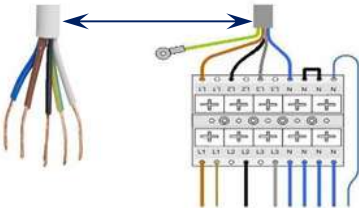
- Remove links between L2 and L3
- Ensure link remains between neutrals (N)
- Mains electrical cable required (► 3.5)



### 11.1.4 Changing rating to 380-415V / 3N~ / 13A:

Only ECO 3, HYDRO 750, DUO 3 and DUO 750 machines can be converted to three phase.

- Remove links between L1, L2 and L3
- Ensure link remains between neutrals (N)
- Mains electrical cable required (► 3.5)



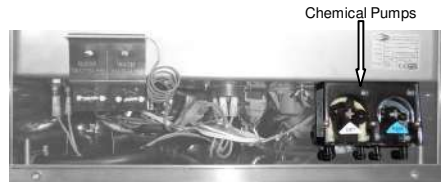
### 11.2 Chemical dosage adjustments:

If installed in your machine, rinse aid and detergent dosing pumps will be located behind the front lower panel.



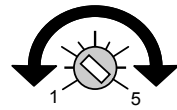
Turn off all electrical supplies to your machine before removing any exterior panels

To access the pumps remove the lower front panel, a 4mm hex key is required for this operation.



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

- + Increase dosage, rotate screw ↻
- Decrease dosage, rotate screw ↻



Adjuster



Detergent



Rinse Aid

Chemical pumps only operate while your machine is filling or trying to fill with water.

The pumps also pulse on and off, unless set to their maximum or minimum settings.

Ensure all exterior panels are in place and secure before turning the electrical power back on to the machine.

**Classeq** recommends that after any adjustments, your machine is run through at least 10 cycles before making any further adjustments.



De-scale must not remain in the machine for more than 2 hours.

### 11.3 De-scaling:

You can de-scale the wash tank of your machine yourself with the help of the following notes; to de-scale the rinse boiler you will need to contact your service engineer or **Classeq**:

- Drain the machine (► 6.6).
- Remove the PVC hoses from the chemical bottles, or set the chemical pumps to the minimum setting (► 5.3).
- Fill the machine (► 6).
- Wait till the machine is ready for operation.

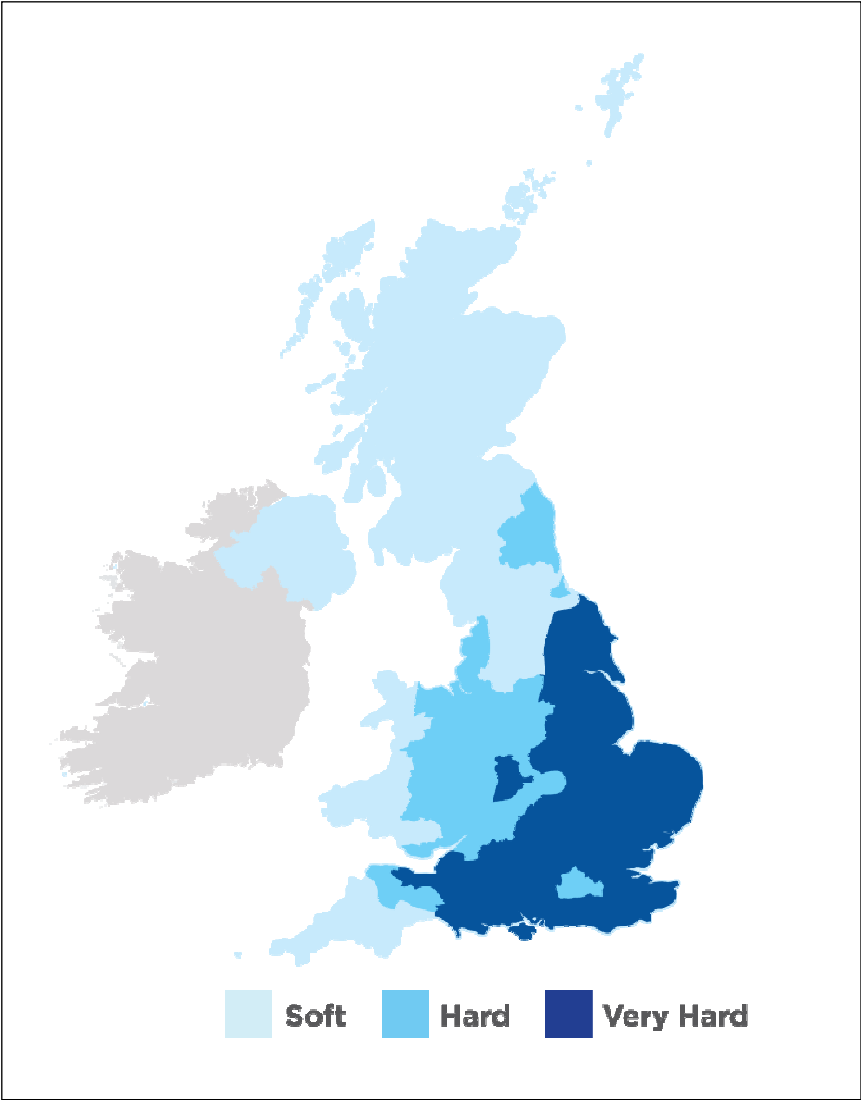
- Fill the machine (► 6.3).
- Run 2 or 3 complete wash cycles to remove the remaining de scale from the washing system.
- Drain the machine again (► 6.6).
- Reconnect and set the rinse aid and detergent (► 5.3).



When handling chemicals, observe all safety notes and dosing recommendations printed on their packaging. Wear protective clothing, protective gloves and protective goggles when handling chemicals.

- Use the recommended dose of de-scale, as stated on the packaging.
- Run 5 or 6 complete wash cycles (► 6.5).
- Drain the machine (► 6.6).

12.     **Appendix C**



For more detailed information regarding your water hardness, please contact your water supplier.

*Map correct at time of going to print*

### **13. Parts and Labour Warranty Terms**

#### **Classeq Glass & Dishwashing Systems Ltd. Parts and Labour Warranty Terms**

The user is entitled to free replacement and fitting of any part found to be faulty in material or workmanship, including any parts rendered inoperative by the effect of a faulty component, for a period of one year, or as specified by the vendor at the time of purchase.

#### **Exceptions**

All faults or conditions caused by Operator misuse, including (but not exclusively):

- Incorrect Installation.
- No fault found.
- Problems with electricity supply or plumbing e.g. water and waste.
- Failure to follow instructions in the User Handbook.
- Use of incompatible chemicals or chemical set at incorrect concentration.
- Drain pump or drain system blocked or damaged by foreign bodies.
- Wash pumps damaged due to foreign bodies entering the wash system.
- Use of un-softened (hard) water.  
The use of a faulty water softener

or the failure to properly regenerate a water softener.

- Use of excessive force on the machine, e.g. switches etc.
- The cost of replacing any item found to be lost or missing.
- Use of non-compatible cleaning materials.
- Incorrect assembly after cleaning.
- Damage to machine caused by any 3<sup>rd</sup> party.

**13.1 Useful Contact Details:**



[www.classeq.net](http://www.classeq.net)

To help when contacting please quote  
the serial number and model of  
machine

*Document no. - 902.0011  
Revision - D (Feb 2013)  
Language - English*

***Classeq*** is a trade name of Classic Glass and Dishwashing Systems Ltd.