

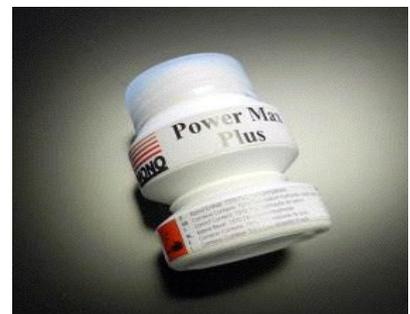
ECO Connect+ Wash Convection Oven

EN Installation and Operation



Product Versions

- FG174 (10 trays)
- FG175 (4/5 trays)
- ECO Connect+ Wash touchscreen
- Variable fan speed
- UK specifications



Product Serial Number

Condenser Serial Number (if fitted)



Thank you

Thank you for purchasing MONO's ECO Connect+ Wash Convection Oven.

Before using your new oven for the very first time, please read and familiarise yourself with the contents of this User Manual and keep it handy for future reference.

If you have any queries regarding your oven, please contact MONO Equipment directly:

- +44 (0)1792 561234
- sales@monoequip.com
- spares@monoequip.com
- techsupport@monoequip.com

We wish you the very best of success with your new professional ECO Connect+ Wash Convection Oven.

Happy baking!

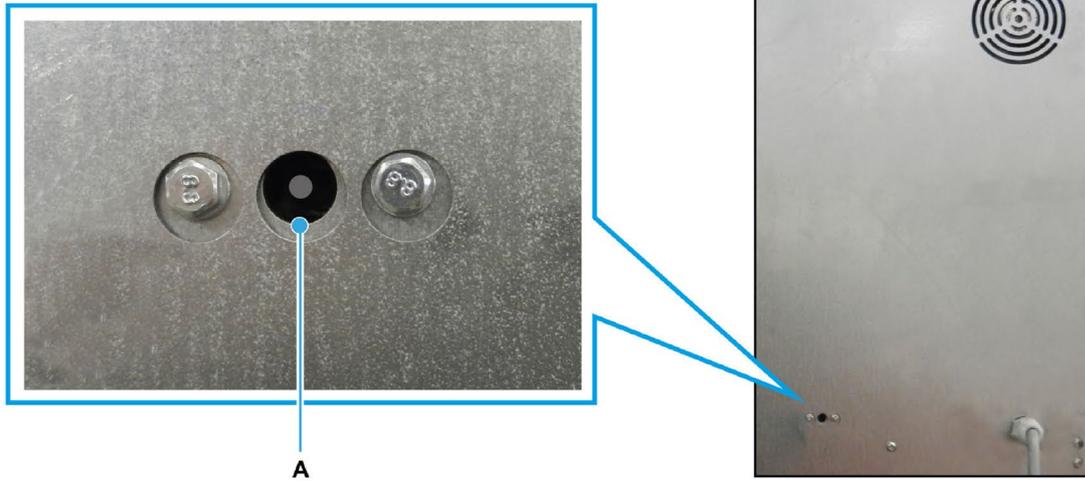
The MONO Team



Attention

**NOTE**

- If the oven fails to heat up when first connected to a power supply or during use at any time, press the **reset button** located through the hole on the rear panel.
Do not remove the back panel.



A. Reset button on the rear panel of the oven

Safety Symbols

The following safety symbols are used throughout this user manual (available electronically at [MonoEquip.com](https://www.monoequip.com)). Before using your new equipment, read the user manual carefully and pay special attention to information marked with the following symbols.

**DANGER**

- Indicates an immediate hazard with a high risk which, if not avoided, will result in death or serious physical injury.
-

**WARNING**

- Indicates a potential hazard with a medium risk which, if not avoided, could result in death or serious physical injury.
-

**CAUTION**

- Indicates a hazard with a low risk which, if not avoided, could result in minor or moderate physical injury.
-

Electrical Safety Notice

Advice regarding supplementary electrical protection

Commercial kitchens and food service areas are environments where electrical appliances may be located close to liquids, operate in and around damp conditions or where restricted movement for installation and service is evident.

The appliance installation and periodic inspection should only be undertaken by a qualified, skilled, and competent electrician and connected to the correct power supply suitable for the load as stipulated by the appliance data label.

The electrical installation and connections should meet the mandatory requirements of the local electrical wiring regulations and any safety guidelines.

We recommend:

- Supplementary electrical protection with the use of a residual current device (RCD)
- Fixed wiring appliances incorporate a locally situated switch disconnecter to connect to, which is easily accessible for switching off and safe isolation purposes. The switch disconnecter must meet the specification requirements of IEC 60947.

Your attention is drawn to the following: BS 7671:2018 – Guidance Note 8 – 8.13: Other locations of increased risk

It is recognised that there may be locations of increased risk of electrical shock other than those specifically addressed in Part 7 of BS 7671. Examples of such locations could include laundries where there are washing and drying machines in close proximity, and water is present, and commercial kitchens with stainless steel units, where once again, water is present. Where, because of the perception of additional risks being likely, the installation designer decides that an installation or location warrants further protective measures, the options available include:

- Automatic Disconnection of Supply (ADS) by means of a residual current device having a residual operating current not exceeding 30 mA;
- Supplementary protective equipotential bonding; and
- Reduction of maximum fault clearance time.

The provision of RCDs and supplementary bonding must be specified by the host organisation's appointed installation designer or electrical contractor and installed by a suitably qualified and competent electrician so as to comply with Regulations 419.2 and 544.2.



WARNING

- The supply to this machine must be protected by a 30mA-rated Type 'A' Residual Current Device (RCD).
 - Always fit a wall-mountable isolator switch to isolate the oven from the electrical supply completely. The isolator must be visible, labelled as an emergency shut-down device, and easily accessible.
-

Water Leak Safety Notice

**WARNING**

Take action immediately to get a water leak fixed and prevent death or serious injury from electrocution.

It is essential to regularly check for any signs of a water leak from an oven installation. If there is evidence of a water leak, do not ignore it. Immediately report it to a manager or as applicable to your organisation.

Furthermore:

- Disconnect or completely isolate the oven from the electrical supply.
- Place an out-of-service notice on the oven.
- Contact your oven supplier or MONO Equipment for technical assistance.

Ovens must be maintained and serviced at appropriate intervals to ensure the oven operates at optimum levels.

Declaration of Conformity Certificate



Declaration of Conformity



We the manufacturer: **MONO EQUIPMENT**
 Queensway,
 Swansea West
 Industrial Park,
 Swansea
 SA5 4EB
 UK

Machine:

FG Code:

Serial No:

Hereby declare that this machine conforms with and complies with the following directives:

- The Machine Directive **2006/42/EC**
- The Low Voltage Directive **2014/35/EC**
- The Electromagnetic Compatibility Directive 2014/30/EU Incorporating Standards **EN 55014-1:2017/A11:2022 & EN 55014-2:1997+A1:2001+A2:2008**
- The General Safety of Machinery and Food Processing Standards
- Materials and Articles Intended to Come into Contact with Food – Regulation **(EC) No. 1935/2004**
- Good Manufacturing Practices (GMP) for Materials Intended to Come into Contact with Food - Regulation **(EC) No. 2023/2006**

A technical construction file for this machine is retained at MONO Equipment

MONO Equipment is a business name of **AFE Group Ltd** Registered in England No. 3872673
 VAT Registration No. 923428136
 Registered office: Unit 35,
 Bryggen Road,
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Mr Craig Petherbridge
 Quality & Compliance Manager

Mr Alex Davies
 Engineering Manager

QD 001

Dated 01/11/2022

General Notices



NOTICES

■ Warranty information

- Ambient working temperatures for electrical components, such as solenoid switches, circuit breakers and motors, should not exceed 40 °C (115 °F). Manufacturers of these and other electrical components advise that any ambient temperature above this affects the functionality of the components. Any related guarantees become void.
- It is the owners' responsibility to ensure adequate ventilation is provided. Any component malfunctioning during the guarantee period found to have been subjected to excessive humidity or ambient working temperatures is not covered by the component manufacturer's or MONO Equipment's product warranty.
- Failure to adhere to the cleaning and maintenance instructions detailed in this User Manual also could affect the warranty of this machine.
- Visit the [MONO Parts and Labour Warranty page](#) for further information.

■ Continuous improvements

- Our policy is to improve our machines continuously, and we reserve the right to change specifications without prior notice.

■ Engineers/Electricians-only sections of the User Manual

- Technical sections of this User Manual are for suitably experienced and qualified persons (SEQP) only. Customers must never make any modifications or repairs to MONO's machines.

■ Door handing

- Depending on the model code, ovens are in a Left-Hand (LH) or Right-Hand (RH) configuration.
- LH ovens have the main door hinged on the left-side and the touchscreen control panel is on the right-side.
- RH ovens have the main door hinged on the right-side and the touchscreen control panel is on the left-side.

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1. Introduction

1.1. The MONO ECO Connect+ Wash Convection Oven

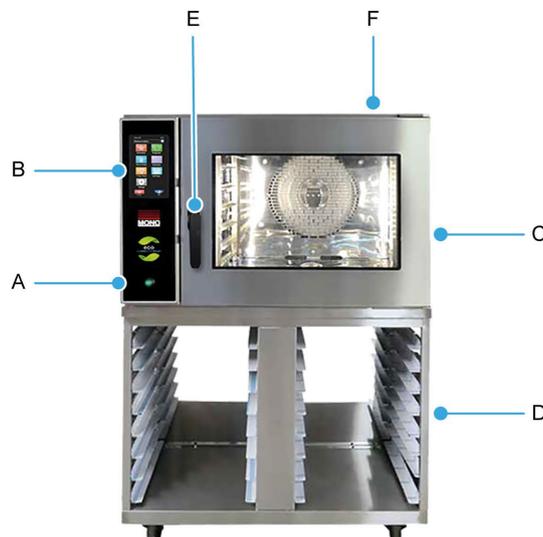
MONO Equipment's Eco Connect+ Wash Self-Clean Bakery Oven System incorporates a high-end, totally integrated Self-Wash system which provides the perfect alternative solution to a combi oven, whilst offering a highly effective solution for baking, roasting and cooking a variety of foods without cross contamination of odours/flavours.

The Self-Wash system uses MONO's "Power Max Plus" environmentally friendly cleaning cartridges to quickly and easily remove all odours and food from the oven chamber, enabling retailers to switch between different food groups such as bacon and croissants in just 35 minutes.

Key features

- Variable speed oven fan for baking delicate products
- Five powerful wash programs
- 7-inch High-Definition touch-screen controller
- MONO Connect enabled (cloud-based asset monitoring and update system)

Figure 1.1: ECO Connect+ Wash Convection Oven features



- A. Power ON/OFF button
- B. Touchscreen display
- C. Stainless steel construction
- D. Optional racked base unit
- E. Double-catch door handle (see [Section 4.1 on page 10](#))
- F. Damper

Key benefits

- Each oven features an innovative, highly advanced Self-Wash facility which offers five specialist cleaning programmes: **Hot flush** which cleans, de-greases and deodorises the oven in just 35 minutes, **Gentle Wash, Standard Wash** and **Power Wash** along with a custom wash facility which can be used to design your own unique wash programme to suit your specific needs.
- Significant benefits of the wash programmes:
 - Only 35 minutes to go from meat to sweet when using the **Hot Flush** wash programme
 - Reduced risk of fire by preventing the build-up of grease and food deposits on the fan
 - No need for on-going expensive, professional deep cleaning
 - Removes odours and charred deposits to prevent cross contamination of food
 - MONO's "Power Max Plus" environmentally friendly cleaning cartridges enables ovens to be connected to the domestic drain system.
- The wash oven combines an easy-to-clean industrial stainless steel design and up-to-date technology. All models of the wash oven are supplied with:
 - LCD touch displays for a user-friendly, frustration-free experience.
 - Variable speed fan, heating elements, and steam system give efficient air circulation to produce a professional bake across a range of products, and they work together to produce excellent conditions for the wash cycle.
 - Solid State Heating Control System to accurately control the temperature during baking.
 - A double-glazed door to increase the efficiency of the oven's well-insulated baking chamber. LED door lights provide excellent chamber illumination and up to 88% energy saving on traditional bulbs.
 - An essential safety feature to automatically lock the main door to prevent contact with cleaning fluids or water during the cleaning cycle.



NOTE

- Visit the [ECO Connect+ Wash Convection Ovens web page](#) for the latest information about the ECO Connect+ Wash Convection Oven. Here you will find PDF downloads of the latest product literature and up-to-date product information.

2. Safety

2.1. Oven safety

Only fully trained and authorised persons are permitted to do any work on the oven. Qualified electricians must carry out all electrical repairs and maintenance. Always disconnect or completely isolate the power supply before starting any maintenance or cleaning work on the oven.

A responsible Bakery Manager or Supervisor must carry out daily safety checks. Bakery staff must not, under any circumstances, remove covers or panels to access any internal parts of the oven.



WARNING

- Before using the oven:
 - Check that all covers, panels, and cabling are secure.
 - Visually examine the oven for obvious damage/signs of tampering.
- If the oven is damaged, malfunctioning, or missing parts:
 - Stop using it.
 - Do not attempt any repairs to the oven.
 - Contact MONO Equipment for technical assistance.
- Never operate the oven with any covers or panels removed.
- All utility connections to the oven must comply with the statutory requirements of the country.
- Ensure this User Manual is read thoroughly before operating the oven. Operate and maintain the oven only as described in this user manual.
- Do not block the damper vent on the top of the oven.



**WARNING**

- An electrical socket must be protected by a 30mA-rated Type 'A' Residual Current Device (RCD) before installation and commissioning of the oven.
- There should always be a local disconnection switch for any person to isolate the electrical power in an emergency. The disconnection switch must be visible, labeled as an emergency shutdown device, and easily accessible.
- Check the electrical requirements on the oven's information plate before plugging in the power cable and turning the power on for the first time. Contact MONO Equipment if the electrical ratings are incorrect for your site.
- Before installation, it is recommended that a qualified and competent electrician first tests the electrical outlet (power socket) for electrical safety.
- Always ensure your hands are dry before touching any electrical components, including cables, switches, and plugs.

**CAUTION**

- Be aware of hot surfaces:
 - Do not touch the oven door with bare skin.
 - Always use oven gloves when loading or unloading the oven.
 - Allow time for the oven to cool completely before cleaning it.
 - While baking (and for some time after use), touching the oven door or the surrounding panels is not advisable because of conducted heat.
- When removing products from the oven, ensure the following:
 - Tins are knocked out and stored directly onto a tin storage trolley or rack. Do not leave hot tins on the floor or tables.
 - Trays are put into a rack and then wheeled to a safe cooling area.
- Fully train operatives before they use the machine. Anyone undergoing training must be under direct supervision of someone experienced.
- Ensure there are no trip hazards around the oven, e.g. trailing cables.
- Check that the floor around the oven is not slippery, e.g. no liquid spills.
- Do not store items on top of or behind the oven.
- Never climb onto the roof of the oven.
- Only use the oven for baking bread, pastries, and cakes. Contact MONO Equipment for other product-baking machines.
- No unauthorised modifications to the oven are permitted.

2.2. General safety



CAUTION

■ Magnets information

- Magnetic fields in magnets, used in devices and machinery, can inhibit pulse generators for Implantable Cardioverter Defibrillators (ICDs) and pacemakers. Magnets can activate a switch prohibiting the ICD from delivering vital signals such as lifesaving shocks.
 - If you have an ICD or pacemaker, avoiding close or prolonged contact with magnets or their magnetic fields is advisable. Keep magnets at least six inches from where your device is implanted. **If you feel any interference in any way, immediately move away from the source.**
-

3. Installation

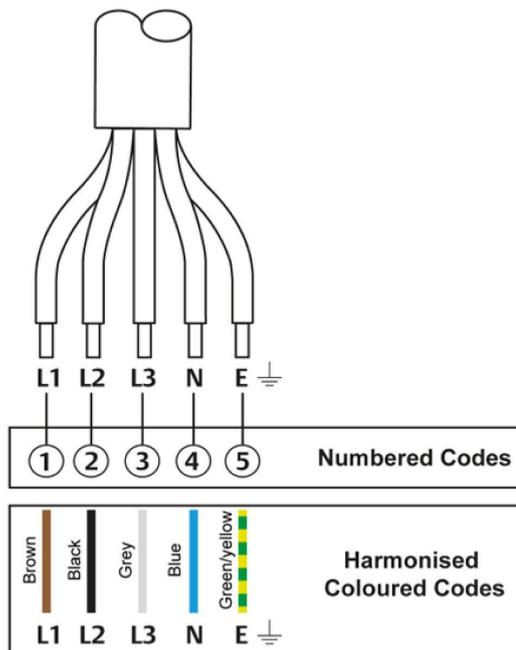
3.1. Power supply



WARNING

- An electrical socket must be protected by a 30mA-rated Type 'A' Residual Current Device (RCD) before installation and commissioning of the oven.
- There should always be a local disconnection switch for any person to isolate the electrical power in an emergency. The disconnection switch must be visible, labeled as an emergency shutdown device, and easily accessible.
- Check the electrical requirements on the oven's information plate before plugging in the power cable and turning the power on for the first time. Contact MONO Equipment if the electrical ratings are incorrect for your site.
- Before installation, it is recommended that a qualified and competent electrician first tests the electrical outlet (power socket) for electrical safety.
- Always ensure your hands are dry before touching any electrical components, including cables, switches, and plugs.

Figure 3.1: Power supply connections



NOTE

- L2 and L3 are for three-phase installations only.
- See [Appendix A](#) for electrical specifications.

3.2. Ventilation

Suitable ventilation must be available.

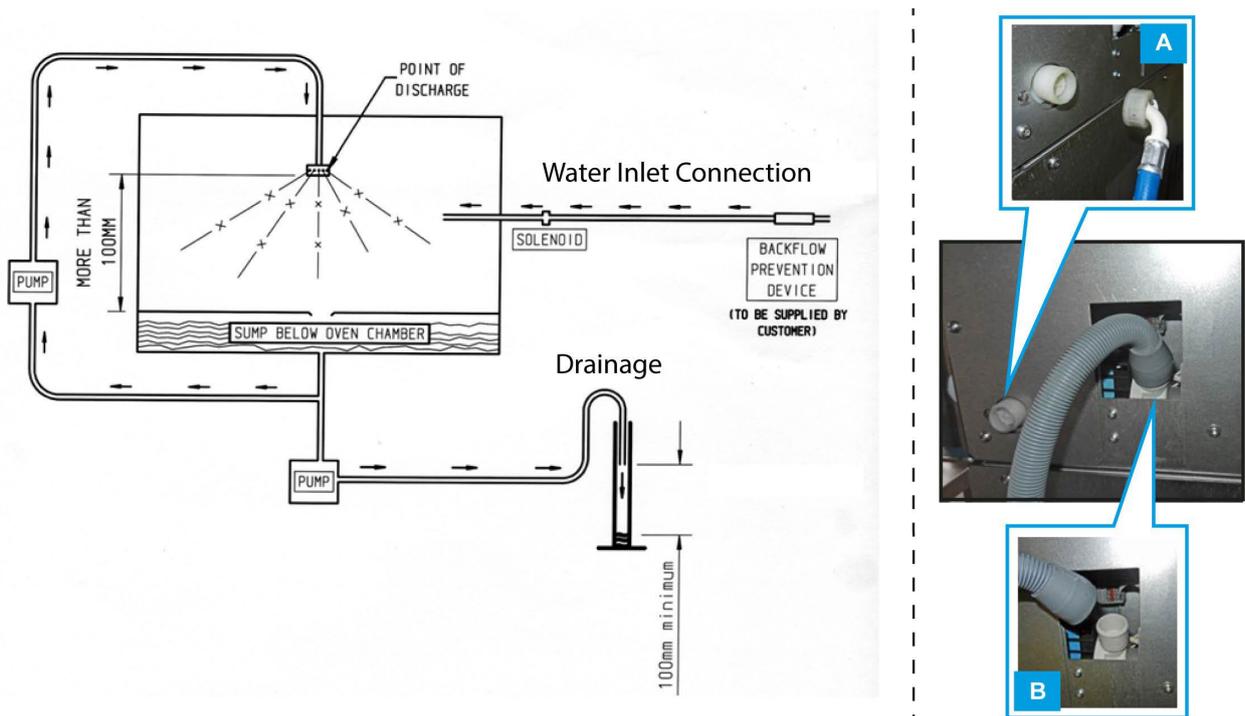
- The customer is responsible for arranging suitable ventilation, which should be sufficient to ensure water does not condense on or around the oven.
- A 50 mm gap is recommended at the sides and rear of this oven and 250 mm above.
- Chimneys and evacuation ducts fitted above MONO ovens should be insulated to stop condensate flowing back into the oven.

3.3. Water hose connections

A pressurised clean water supply must be available.

- The wash oven must be connected to a suitable clean water supply, making sure that the pipes are flushed out to remove all foreign bodies, i.e. flux or solder.
- Refer to the water specifications in [Appendix A](#) for water quality requirements.

Figure 3.2: Self-Wash water system



A. Water supply connection on rear of oven.

B. Drainage connection on rear of oven.

**NOTE**

- Customers are responsible for installing and maintaining an adequate water supply to the oven, which should comply with local water regulations (check with your local water authority).
- A water conditioning unit is advised for 'hard water' areas.

3.4. Drain hose connections

Drainage must be available.

- Push one end of the drainage hose onto the outlet tube on the rear of the oven ([Figure 3.2](#)), ensuring it is on as far as it can go.
- Connect the other end of the drainage hose to a drain via a standpipe or a drainage pipe that does not allow wastewater to flow back into the oven.

**NOTE**

- Customers are responsible for providing a suitable drainage for the wastewater coming from the oven, which should comply with local water regulations (check with your local water authority).

3.5. Before first use of the oven

The following actions are recommended before the first use of the oven.

- For hygiene reasons, MONO strongly recommends thoroughly cleaning the baking chamber and accessories using a cloth soaked in warm and soapy water before using the oven for the first time. Although the utmost care is taken during assembly and pre-delivery inspection, there is always a possibility of contaminating the first bake if this is not done.
- For safety reasons, ensure that the lockable wheel castors on a base unit are locked into position.

3.6. Safety

- Review the safety information in [Chapter 2](#).
- Allow sufficient space for the oven door to open fully and easy loading and unloading of product trays without people coming in contact with hot surfaces.
- Racks should be available to allow cooked products to cool safely.
- Oven gloves must always be available.

3.7. Ambient working temperatures

Ambient working temperatures for electrical components, such as solenoid switches, circuit breakers, and motors, should not exceed 40 °C (115 °F). Manufacturers of these and other electrical components advise that any ambient temperature above 40 °C (115 °F) affects the functionality of the components, and any related guarantees become void. For example, motors are not sufficiently cooled, contactor efficiency is seriously impaired, and electronic components shut down.

It is the customer's sole responsibility to arrange for adequate ventilation. Any component malfunctioning during the guarantee period found to have been subject to excessive humidity or ambient working temperature above 40 °C (115 °F) would not be covered by the component manufacturer guarantee or MONO's product warranty.

3.8. Further information

**NOTE**

- This Installation and Operating Manual is available in Adobe PDF format at [MonoEquip.com](https://www.monoequip.com).
-

4. Oven Operations

4.1. How to open the double-catch door

Procedure

1. Turn the handle left to release the catch halfway.
 - This step allows the steam and heat to escape.
2. Turn the handle right to release the door fully.
3. Open the door.



NOTE

- These instructions apply to both left-hand and right-hand ovens.
- The door does not open unless power is connected to the oven. If the door does not open, push it fully shut and try to open.
- The door is locked shut during a wash cycle and cannot be opened.
- **To open the door**, touch the lock icon on the screen and allow the door to unlock before pulling the door open.
- **To close the door**, firmly push it fully shut and the door lock automatically takes over to lock the door.
- **Do not restrict the unlocking by holding the door as this will cause the door lock to malfunction. If this happens and the lock icon has turned gold, press it between one and three times until the problem is cleared.**



Closed door.

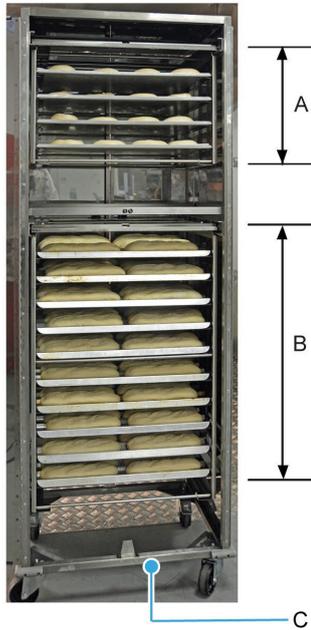
Step 1. Turn left.

Step 2. Turn right.

4.2. Unloading the oven if the cassette system is fitted

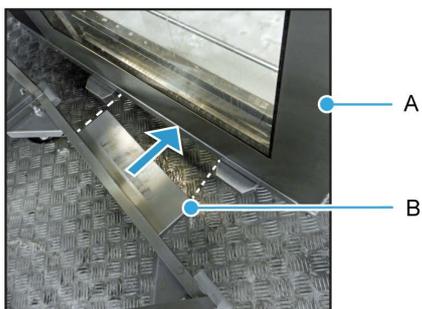
Procedure

1. Slide full trays onto the runners in the cassette-holding rack at the positions required.



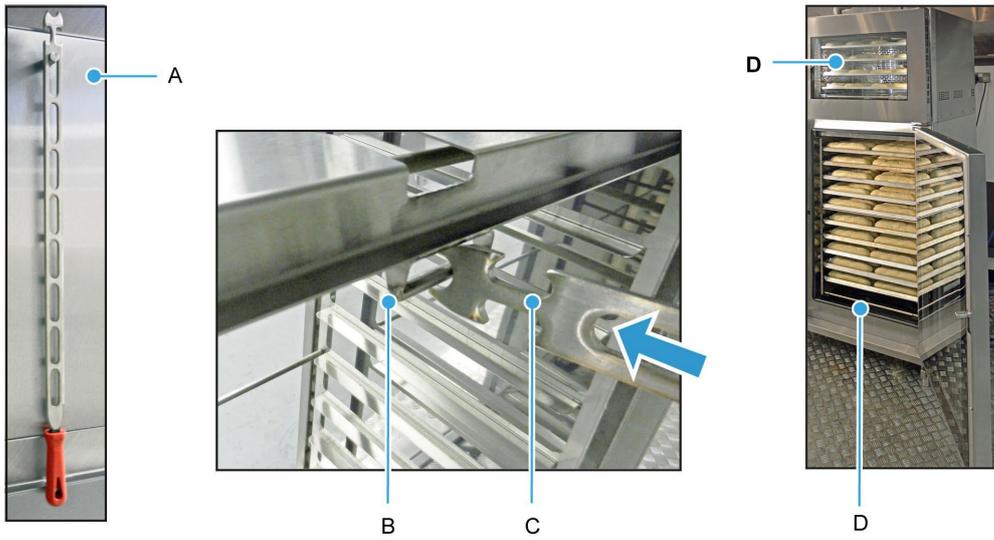
-
- A. Top oven cassette (4-tray capacity)
 - B. Bottom oven cassette (10-tray capacity)
 - C. Rack
-

2. When the oven is up to temperature and ready to bake, open the door(s) and push the loaded rack(s) up to the oven. Use the central locator on the bottom-front edge for correct positioning.



-
- A. Oven
 - B. Central locator on the rack
-

- Using the push-pull tool, push the cassette from the rack into the oven as far as it can go.



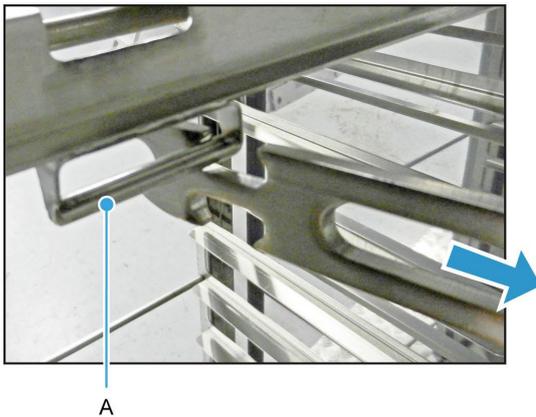
-
- A. Push-pull tool stored on the storage hook at the side of the cassette rack
 - B. Tool locating bar
 - C. Tool pushing the cassette into the oven
 - D. Loaded oven
-

- Pull the rack away from the oven and close the door(s) as soon as possible to minimise the heat escaping.

4.3. Loading the oven if the cassette system is fitted

Procedure

1. Stop the oven and open the door when the bake is finished.
2. Place the rack back into position.
3. Hold the rack in position and then hook the push-pull tool onto the bar on the cassette.
4. Unload the oven by pulling the cassette out and back into the rack.
 - **Remember, the trays and rack are hot. Always use oven gloves.**



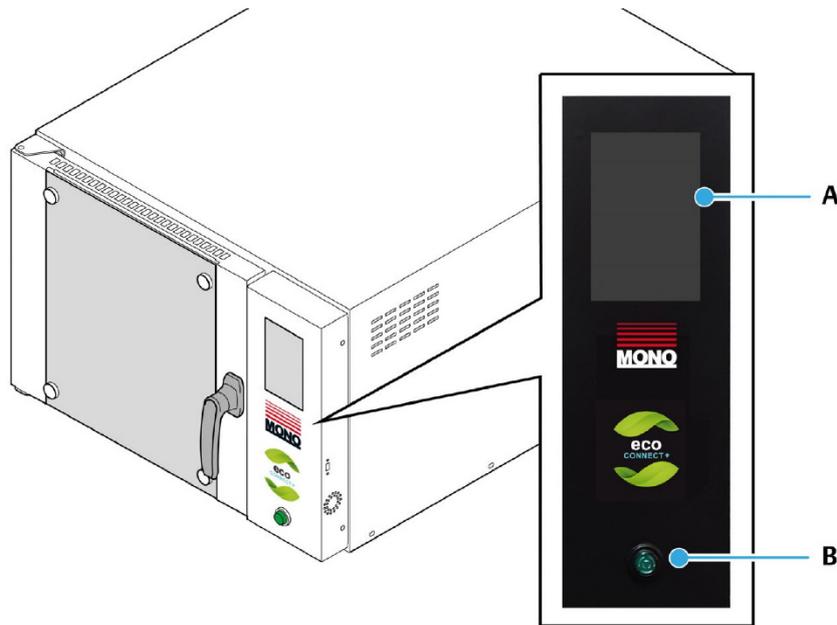
A. Pull the cassette out of the oven with the push-pull tool hooked onto the bar on the cassette

5. Move the rack away from the oven and close the door to stop heat loss.
6. Transfer the hot trays to a cooling rack using oven gloves.
7. The cassette is ready to be loaded with more products.

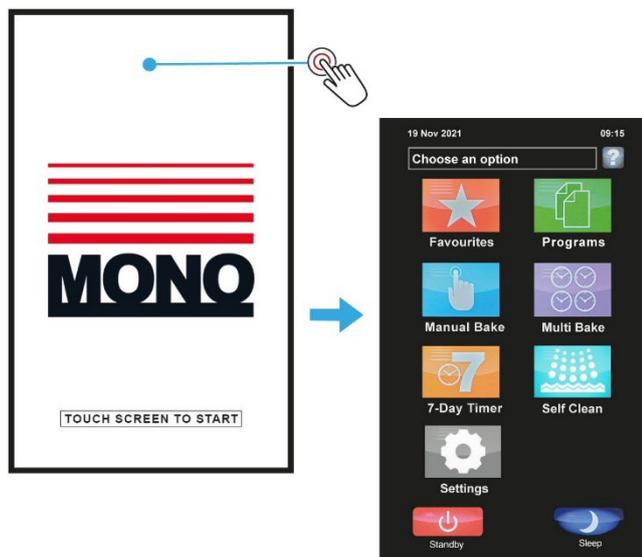
5. Touchscreen Operations

5.1. Switching on the oven

1. Ensure the power, water supply hose, and drainage hose are safely connected to the oven.
2. If the display (A) is off, press the green power button (B) at the bottom of the front panel.



3. Wait while the oven goes through the start-up sequence.
4. When the start screen (wallpaper) appears, touch the display to show the Main Menu of functions.



5.2. Main Menu Functions

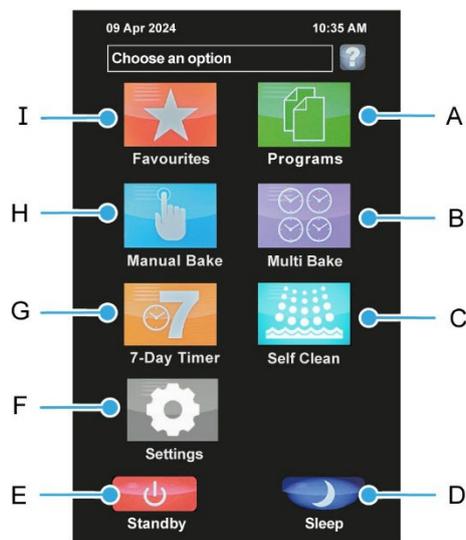
A main menu function is selected by touching a specific area on the display, which makes a new window appear or activates that function.



NOTICE

- Do not use excessive force to operate the touchscreen panel.
- Screen images may have some small differences from your oven.

Figure 5.1: Main Menu of the ECO Connect+ Wash Oven

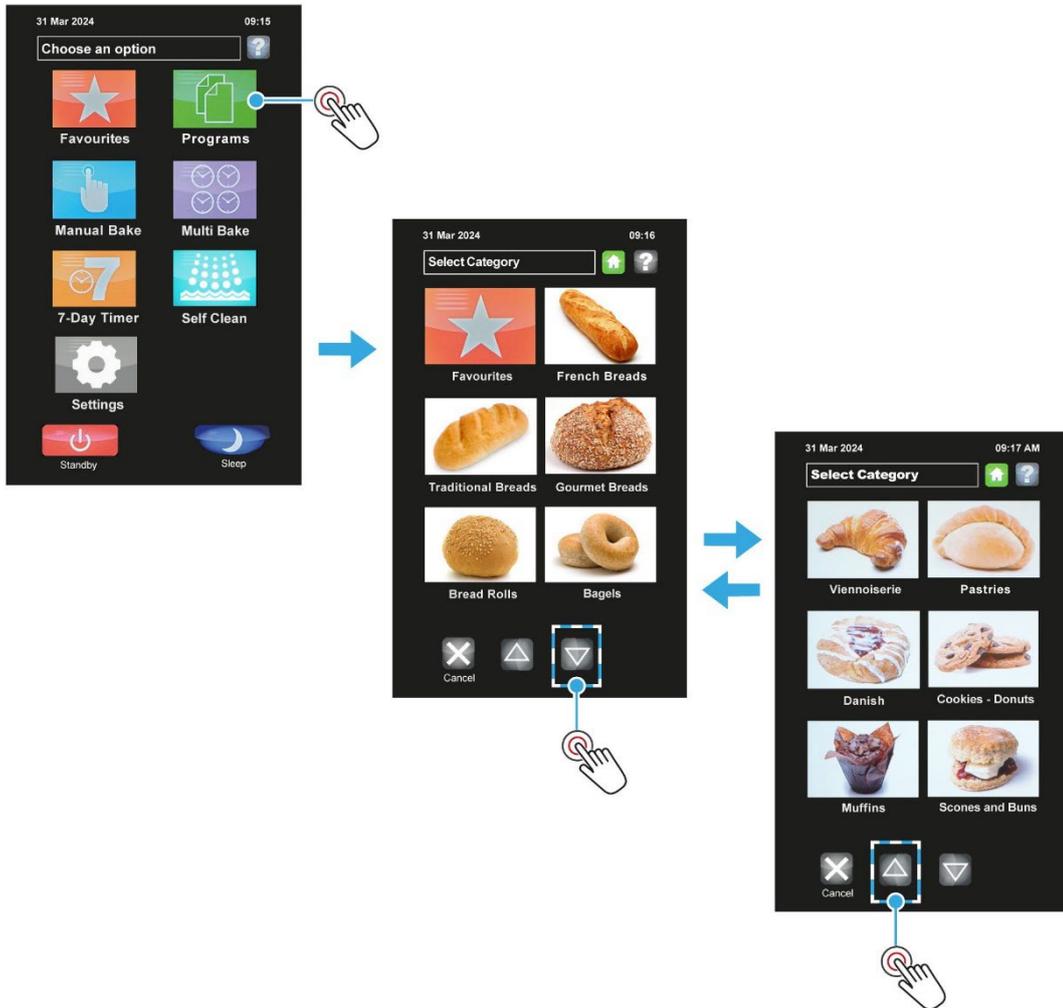


Callout	Function	Purpose of the function
A	Programs	Access to saved baking recipe programs. Create new recipe programs.
B	Multi Bake	Create up to four simultaneous bakes with different timings.
C	Self Clean	Wash programs - see Section 5.7 on page 25 .
D	Sleep	Sleep mode - see Section 5.11 on page 36 .
E	Standby	Standby mode - see Section 5.10 on page 36 .
F	Settings	Access to general and factory settings, including changing passcodes.
G	7-Day Timer	Create an oven on/off schedule for every day of the week.
H	Manual Bake	Baking using manual controls.
I	Favourites	Easy selection of most frequently used baking recipe programs.

5.3. Using the Programs menu function

Procedure

1. Touch the **Programs** tile on the **Choose an option** screen.



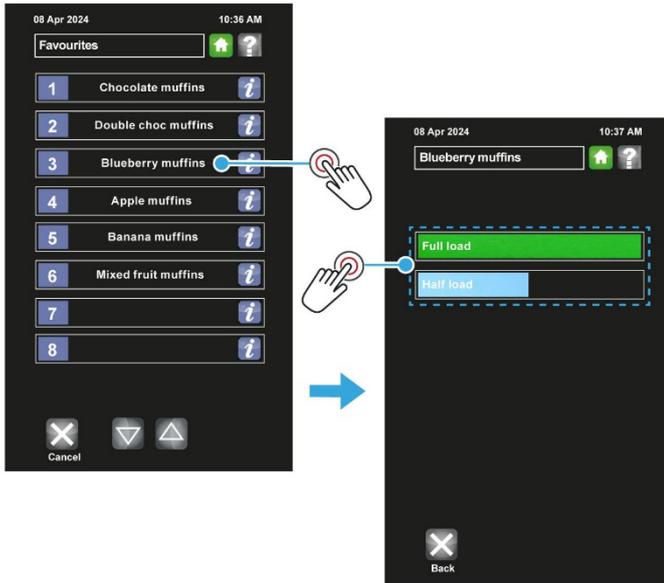
2. Select a product category.
 - a. Touch the scroll up and down buttons to change category pages.
 - The **Cancel** button returns the display to show the **Choose an option** screen.
 - b. Touch the tile of a product type you require (e.g., muffins).
 - A list of recipes then displays for that product type.



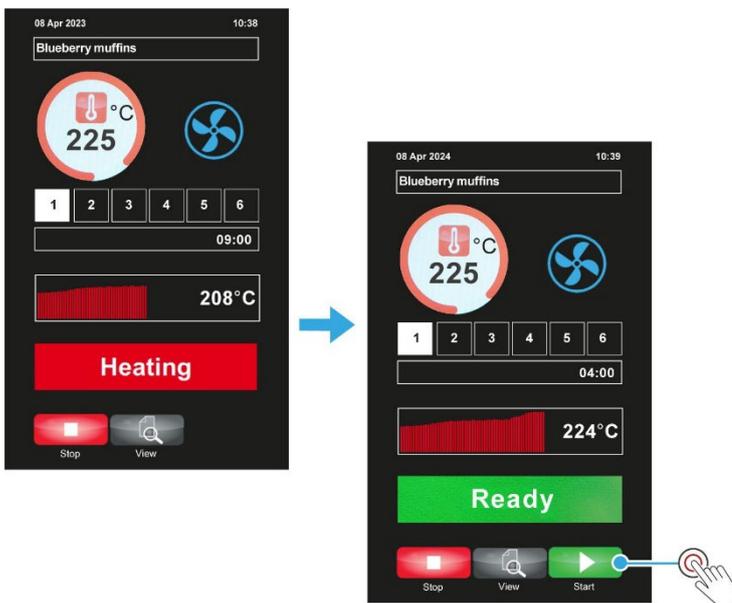
NOTE

- Tiles show a product group image or a program number group, depending on how the oven was factory configured.

3. Select a baking recipe.
 - a. Touch the baking recipe required e.g., blueberry muffins.
 - b. If prompted, select **Full Load** or **Half Load** depending on the oven loading.
 - The half-load program reduces energy usage when the oven is not a fully loaded with product. Some experimentation is needed to establish the optimal settings for a half-load program.



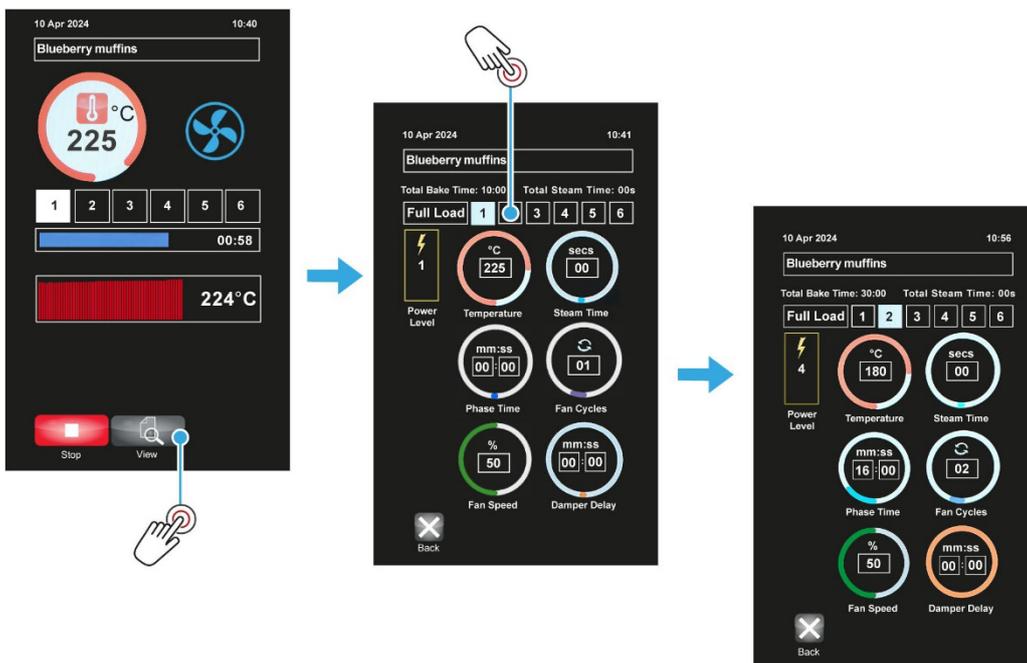
4. A baking screen now appears.
 - a. Wait while the oven heats-up to the temperature pre-set in the recipe program.
 - A **HEATING** message flashes on the screen.
 - b. Load the oven with products when **READY** flashes on the screen.



**NOTE**

- The actual oven temperature fluctuates. It may briefly drop below, or rise above, the required temperature by a few degrees during baking. This is normal and not a malfunction of the oven.
- To minimise heat loss from the oven, do not leave the oven door open for longer than needed. The oven will automatically recover from the heat lost when the door is closed.

5. Touch **Start** to begin baking.
 - The screen now changes to show the baking time remaining.
6. While the bake is in progress, optionally:
 - a. Touch the **View** button to view the recipe program settings for the baking phase in progress.
 - b. Touch the numbered squares (e.g., **2**) to view the settings for any other baking phases.
 - c. When ready, touch the **Back** button to return to the bake in progress screen.

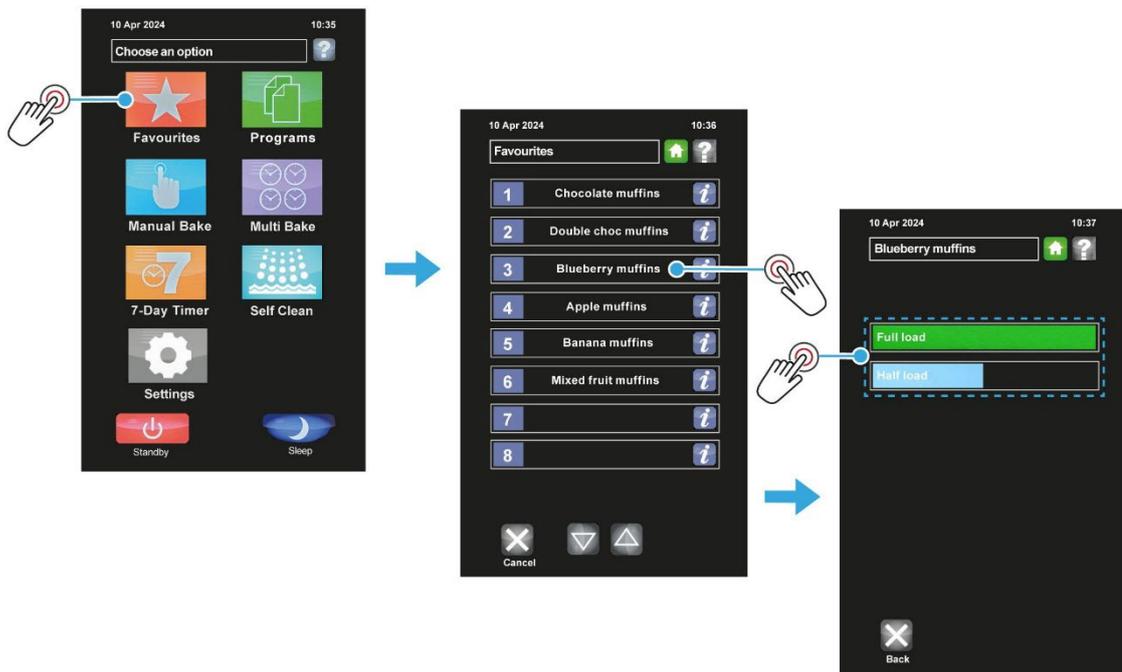


7. Wait for the **BAKE OVER** to flash on the screen and audible alert.
 - Alternatively, touch the **Stop** button to stop the bake early.

5.4. Using the Favourites menu function

Procedure

1. Touch the **Favourites** tile on the **Choose an option** screen.
2. Select a baking recipe.
 - a. Touch the baking recipe required, e.g. blueberry muffins.
 - b. If prompted, select **Full Load** or **Half Load** depending on the oven loading.
 - The half-load program reduces energy usage when the oven is not a fully loaded with product. Some experimentation is needed to establish the optimal settings for a half-load program.



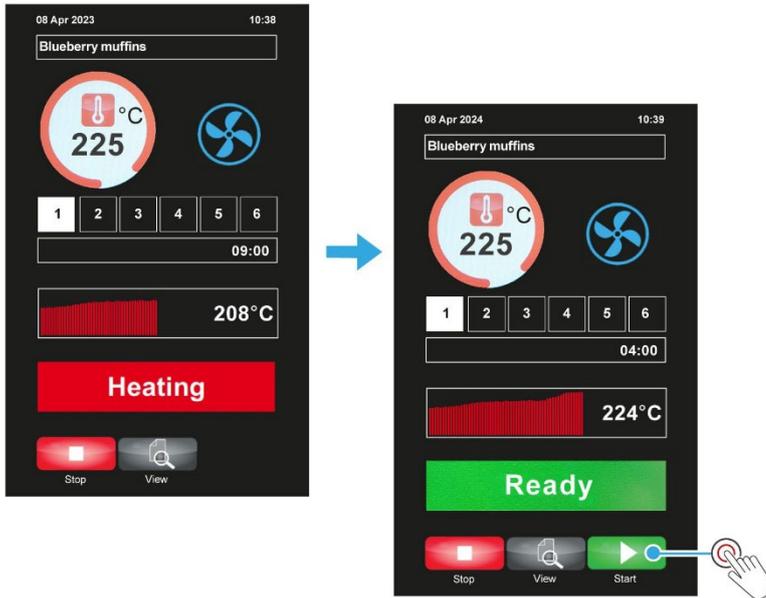
3. A baking screen now appears.
 - a. Wait while the oven heats-up to the temperature pre-set in the recipe program.
 - A **HEATING** message flashes on the screen.
 - b. Load the oven with products when **READY** flashes on the screen.



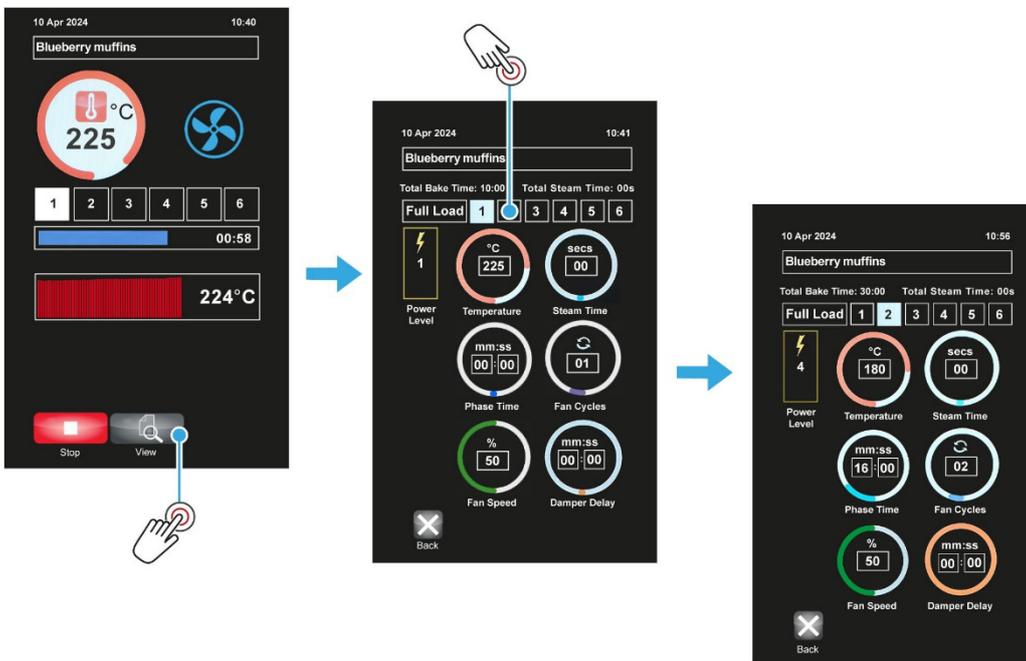
NOTE

- The actual oven temperature fluctuates. It may briefly drop below, or rise above, the required temperature by a few degrees during baking. This is normal and not a malfunction of the oven.
- To minimise heat loss from the oven, do not leave the oven door open for longer than needed. The oven will automatically recover from the heat lost when the door is closed.

4. Touch **Start** to begin baking.
 - The screen now changes to show the baking time remaining.



5. While the bake is in progress, optionally:
 - a. Touch the **View** button to view the recipe program settings for the baking phase in progress.
 - b. Touch the numbered squares (e.g., 2) to view the settings for any other baking phases.
 - c. When ready, touch the **Back** button to return to the bake in progress screen.



6. Wait for the **BAKE OVER** to flash on the screen and audible alert.
 - Alternatively, touch the **Stop** button to stop the bake early.

5.5. Using the Manual Bake function (no program mode)

Procedure

1. Touch the **Manual Bake** tile.
2. Set the baking temperature:
 - a. Touch the **Temperature** circle.
 - b. Key in the baking temperature, and then touch the **OK** button.
3. Set the baking time (optional - see **Note**):
 - a. Touch the **Timer** circle.
 - b. Key in the baking time required, and then touch the **OK** button.



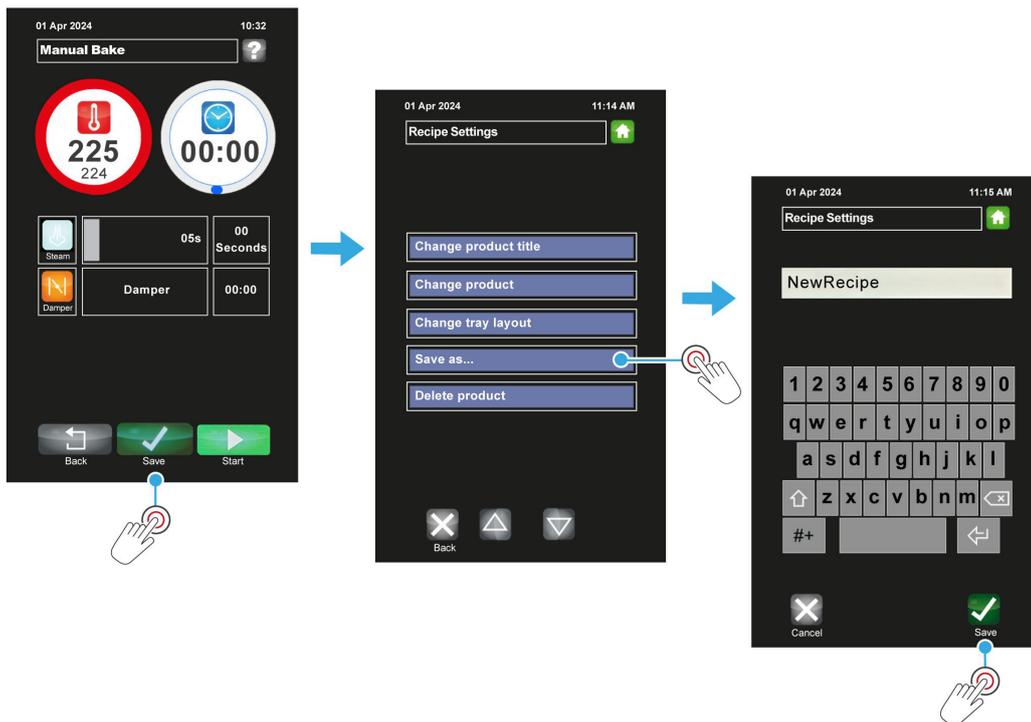
4. When the oven has heated up to the required temperature:
 - a. Load the oven with products.
 - b. Touch **Start** to begin baking.



**NOTE**

- The **Timer** does not have to be set in Manual Bake mode. Only the baking temperature must be set. Wait until the oven reaches the required set temperature and then touch **Start**. The timer will then count upwards instead of downwards.
- Touch the **Stop button** at any time to stop the manual bake.

5. Use the **Steam** and **Damper** functions during a bake if needed (see [Table 5.1 on page 23](#)).
6. When the **Timer** is counting down and reaches **00:00**, an alert is heard and a **BAKE OVER** message flashes on the screen. Touch **Stop** to silence the alert.
7. To save the manual bake as a recipe (option appears when **Timer** is not set):
 - a. Touch **Save** and enter the password.
 - b. Touch **Save as...** or page down and then touch **Add to favourites**.
 - c. Type in a recipe name and then touch **Save**.

**NOTE**

- In Manual Bake mode, only one operation of the steam and damper function is saved.

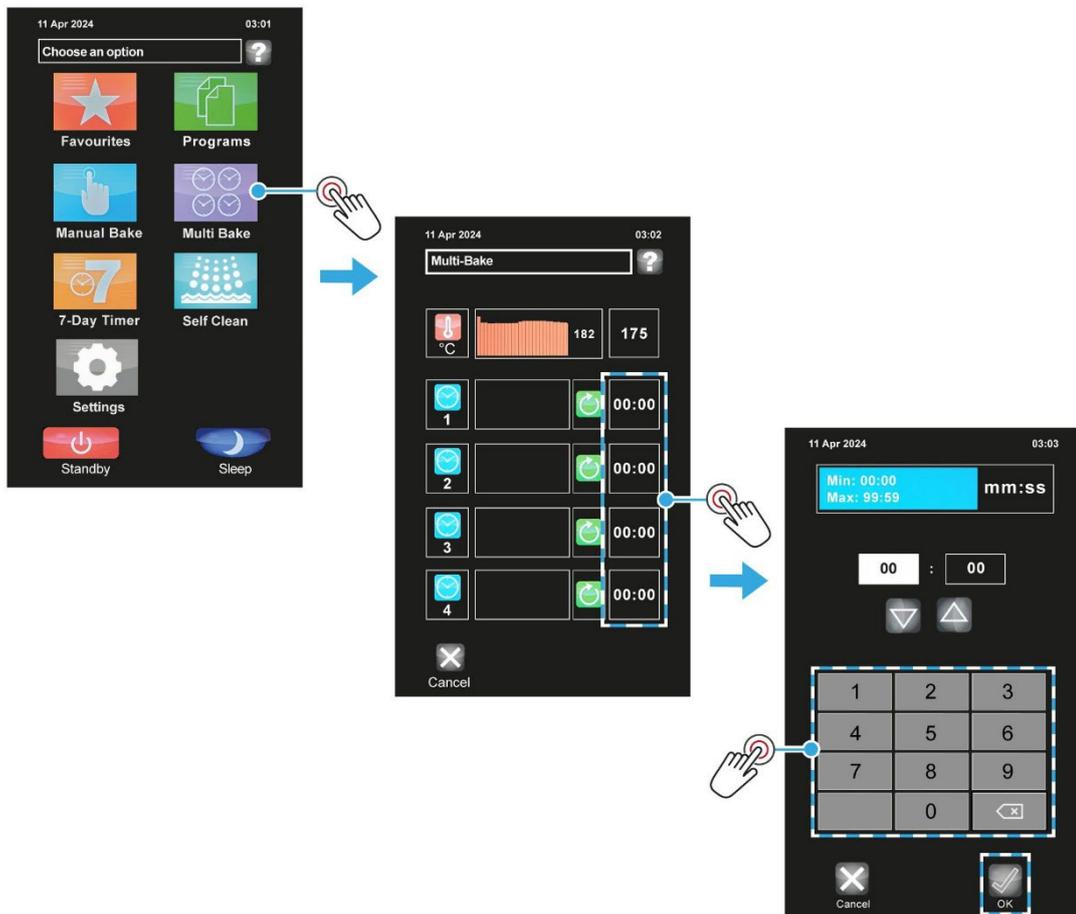
Table 5.1: Steam and Damper button functions

Button	Function	Purpose of the function
	Steam	After touching Start , touch and 'hold' the Steam button for the number of seconds wanted and release.
	Damper	Touch the Damper button to open the damper, and touch again to close. (The button changes colour when the damper is open).

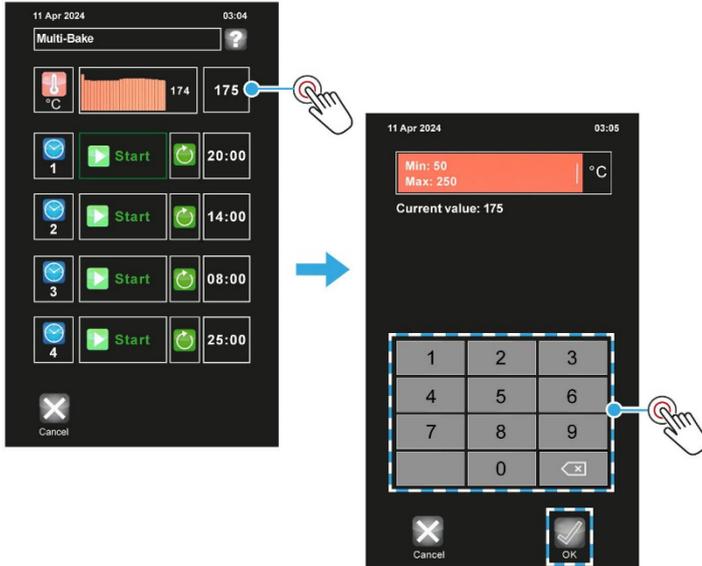
5.6. Using the Multi Bake menu function

Procedure

1. Touch the **Multi Bake** tile.
2. Set a timer:
 - a. Touch a time-setting box.
 - b. Adjust the bake time required using up and down keys, and then touch the **OK** button.
 - c. Repeat steps (a) and (b) to set up to four different bake time sequences, if required.



3. Set the temperature for the bakes:
 - a. Touch the heat-setting box, and then type in the temperature required.
 - b. Touch **OK** to confirm the temperature.

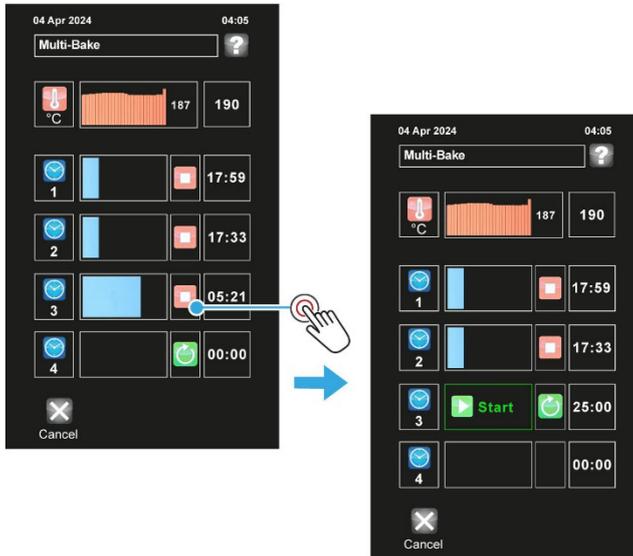


4. Load the oven and then when ready to start a bake:
 - a. Touch the **Start** button (next to the bake time required).
 - b. Wait for the bake to finish.
 - c. Touch the **Stop** button next to the 00:00 time.
 - d. The same multi-bake settings can now be used again by pressing the same **Start** button.



NOTE

- Touch the **Stop** button at any time to end a bake. The same multi-bake settings can be used again.



5.7. Using the Self Clean menu function

**WARNING**

Do not insert anything aluminium when using the wash cycle. The cleaners will damage the item and possibly clog up the wash system.

**NOTE**

To order a box of 10 **Power Max Plus** cleaning cartridges, simply contact our Spares Department and quote the following code: A900-30-030.

Wash cycle information

1. When the wash cycle is required, the oven cools to the wash cycle temperature (80 °C) as part of the chosen program. Opening the door for some time before a wash program is selected speeds up the wash time. The actual wash cycle does not start until this temperature is reached.
2. A **Power Max Plus** cleaning cartridge is screwed into a locator on the rack cassette (if using the cassette system) or at the rear of the oven chamber.
3. Water enters the oven chamber and gets heated by the element and slow-moving fan up to the required temperature.
4. The cleaning solution, now in the sump, is pumped up through the spray nozzle and spreads around the chamber by the action of the fan. The oven is then left to soak.

5. The scrubbing program then starts cleaning by recycling cleaning fluid through the spray nozzle and pulsing the fan. This cleaning process can be set to light, medium or heavy.
6. When the scrub cycle is finished, the oven drains and is left to soak again.
7. After soaking for a while, the oven is flushed with clean water and a rinsing agent, then heated to dry the chamber.
8. A message appears on the display when the oven is dry and ready to use.
9. The cleaning cartridge must be removed before baking starts. The oven reminds you to do this.

Figure 5.2: Self-wash system

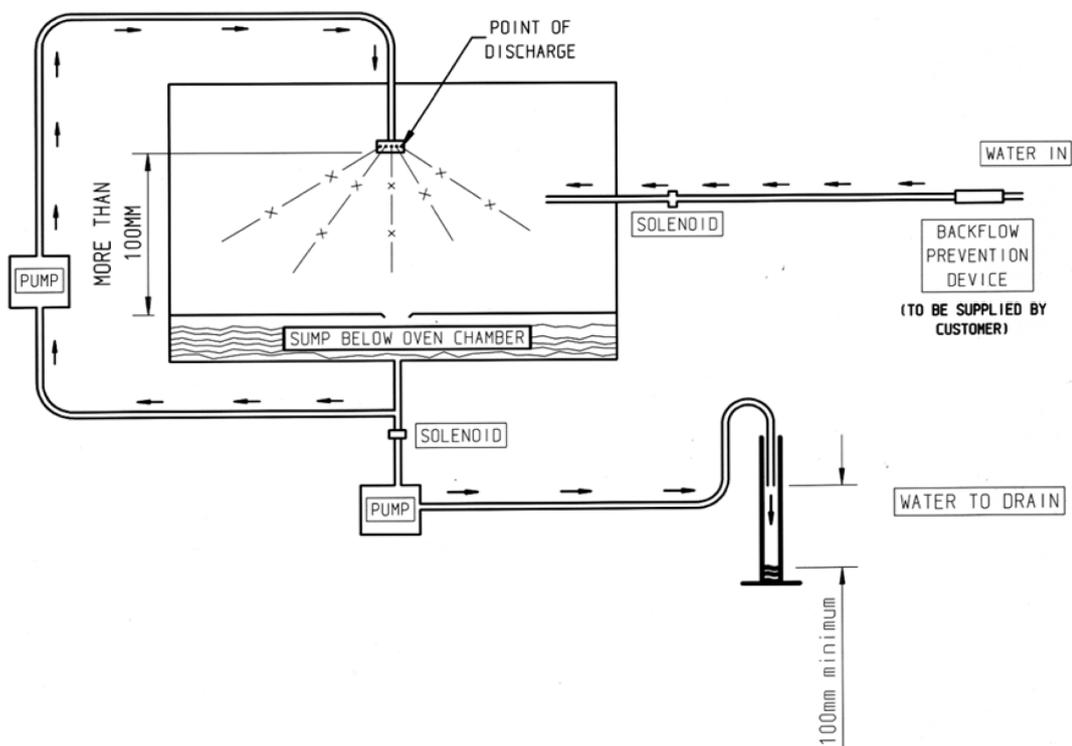


Table 5.2: Available wash profiles

Profile	Wash actions
Hot Flush	Fill, drain, and dry (no cleaning cartridge needed)
Gentle Wash	Fill, 6 x washes, rinse, final rinse, and dry
Standard Wash	Fill, 10 x washes, rinse, final rinse, and dry
Power Wash	Fill, 14 x washes, rinse, final rinse, and dry
Custom Wash	Settings adjustable to meet users requirements

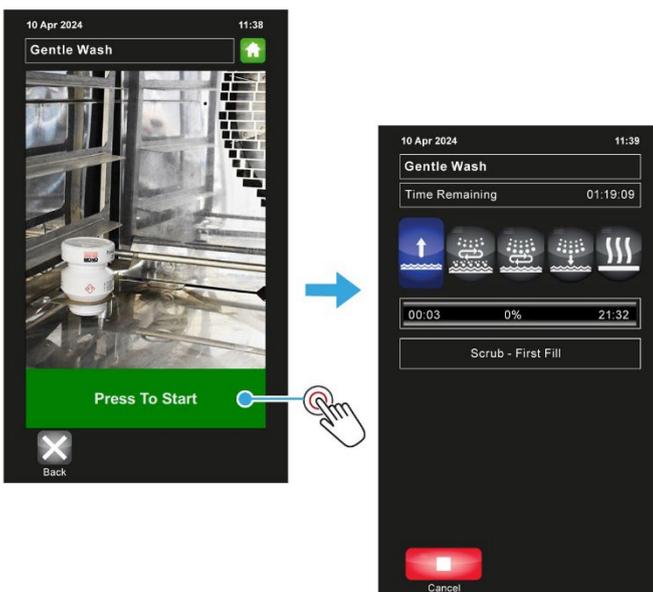
How to operate a wash cycle

Procedure

1. Ensure that the water supply is on and that the door is closed properly.
2. Touch the **Self Clean** tile.
3. Touch the type of wash required, e.g. **Gentle Wash**.



4. Touch **Start**.
5. Follow the on-screen instructions for the selected wash.
6. During the wash, an information screen shows what is happening in the cleaning cycle.



7. After the cooling part of the wash program, the oven instructs the operator to insert a “Power Max Plus” cleaning cartridge. This cartridge must be screwed into the locator on the rack tray-cassette or at the rear of a non-cassette oven. This step is not required if the hot flush program is used.

**WARNING****Safety information:**

- Care should be taken when handling cleaning cartridges.
- Do not break open or use damaged cleaning cartridges.
- Store cleaning cartridges in original packaging.

**INFO**

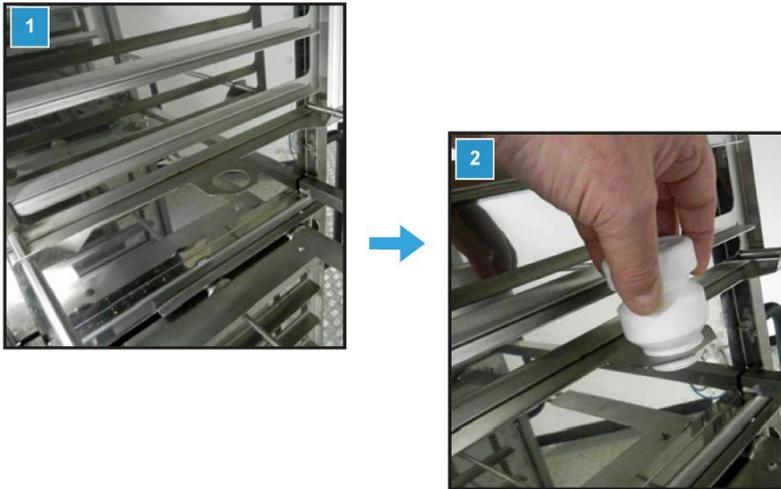
To order a box of 10 **Power Max Plus** cleaning cartridges, simply contact our Spares Department and quote the code A900-30-030.



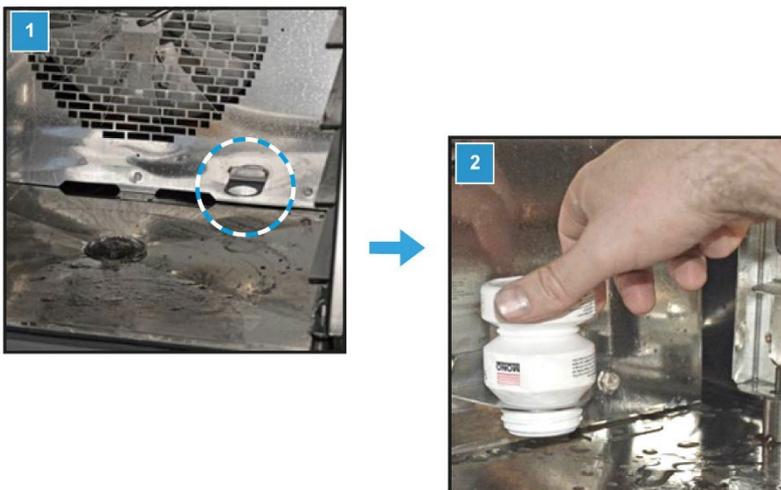
8. Unscrew and remove the protection cap. **Do not try to puncture the wax plug.**



9. Screw the cartridge face down into the locator hole, firmly.
 - a. Cassette system:



- b. Non-cassette system:

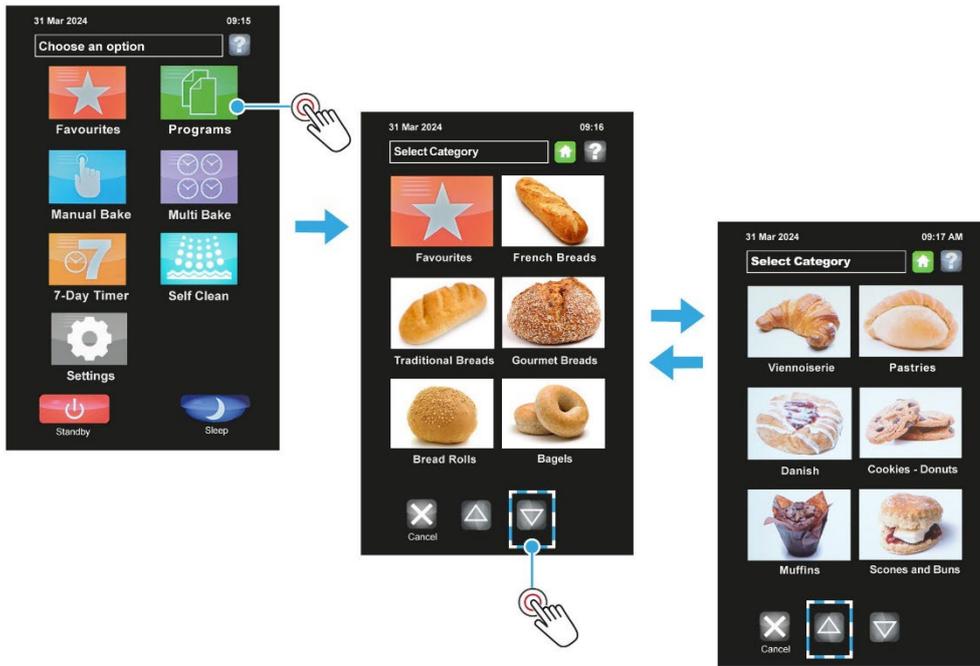


10. Close the oven door firmly and wait for the wash to complete.
11. When the oven chamber drying action has completed, a message appears on the display to say the oven is ready for use.
12. Remove the cleaning cartridge before baking.

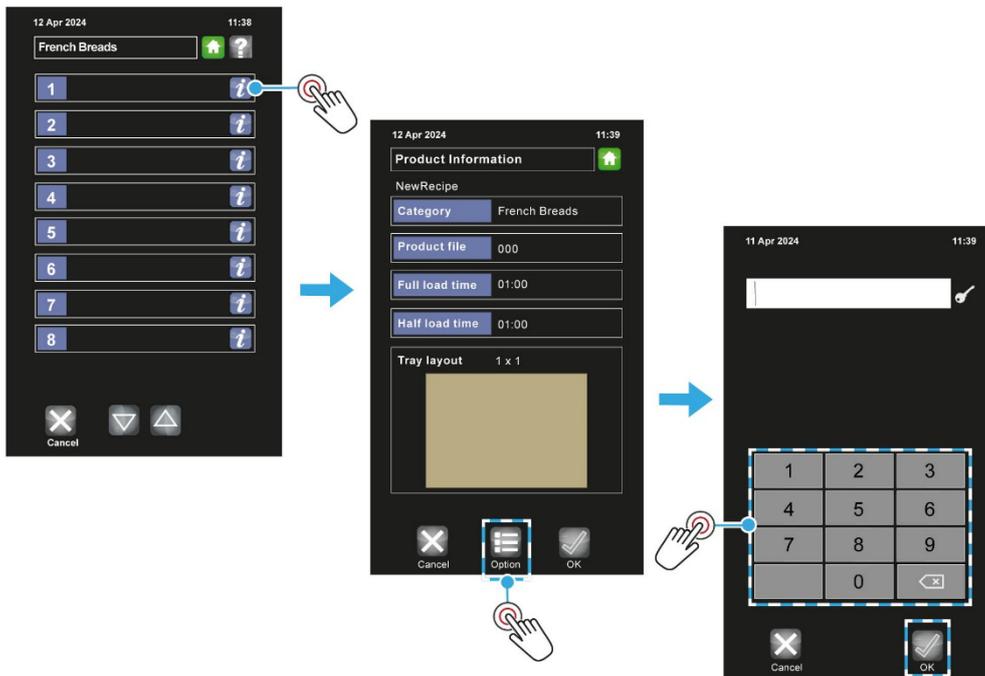
5.8. Creating a new recipe program

Procedure

1. Touch the **Programs** tile.
2. Choose a category or number group.

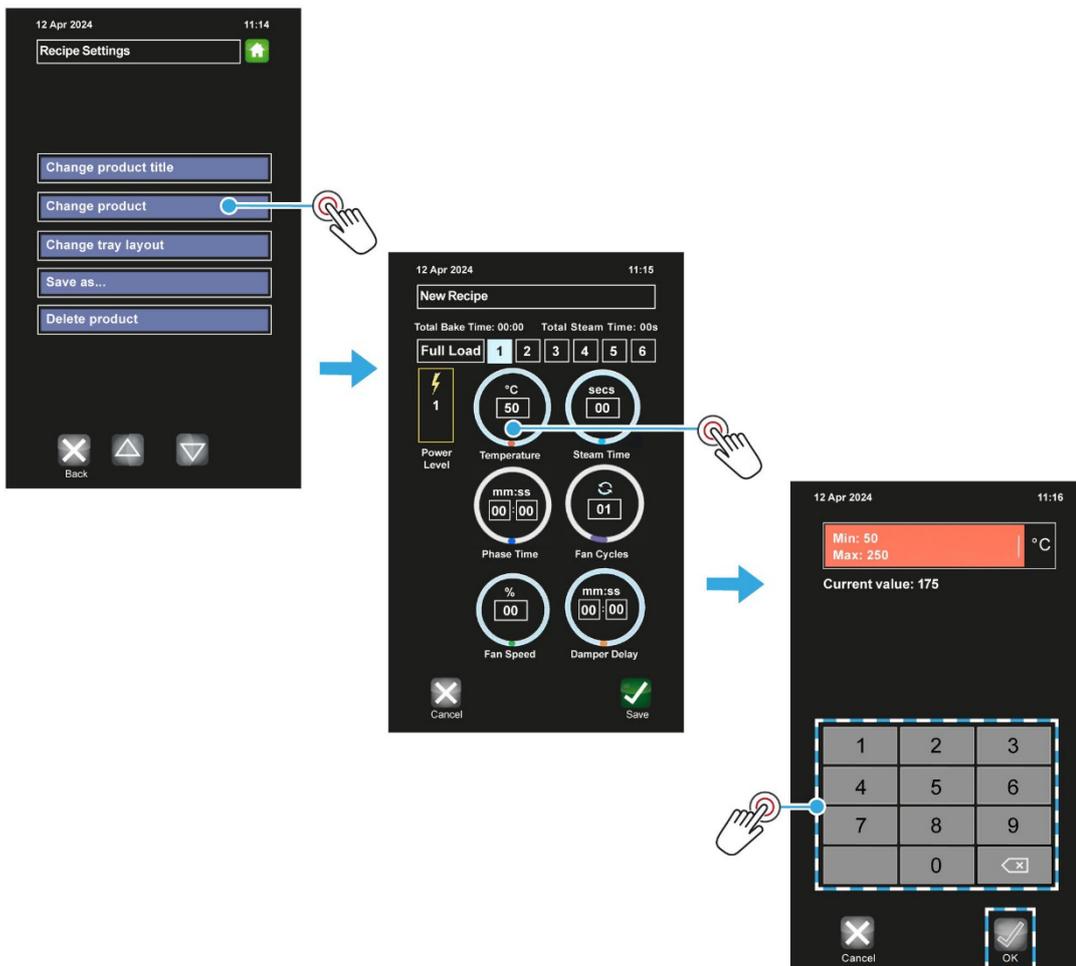


3. Touch the **Info (i)** button of the next free recipe slot.
4. Touch the **Options** button.

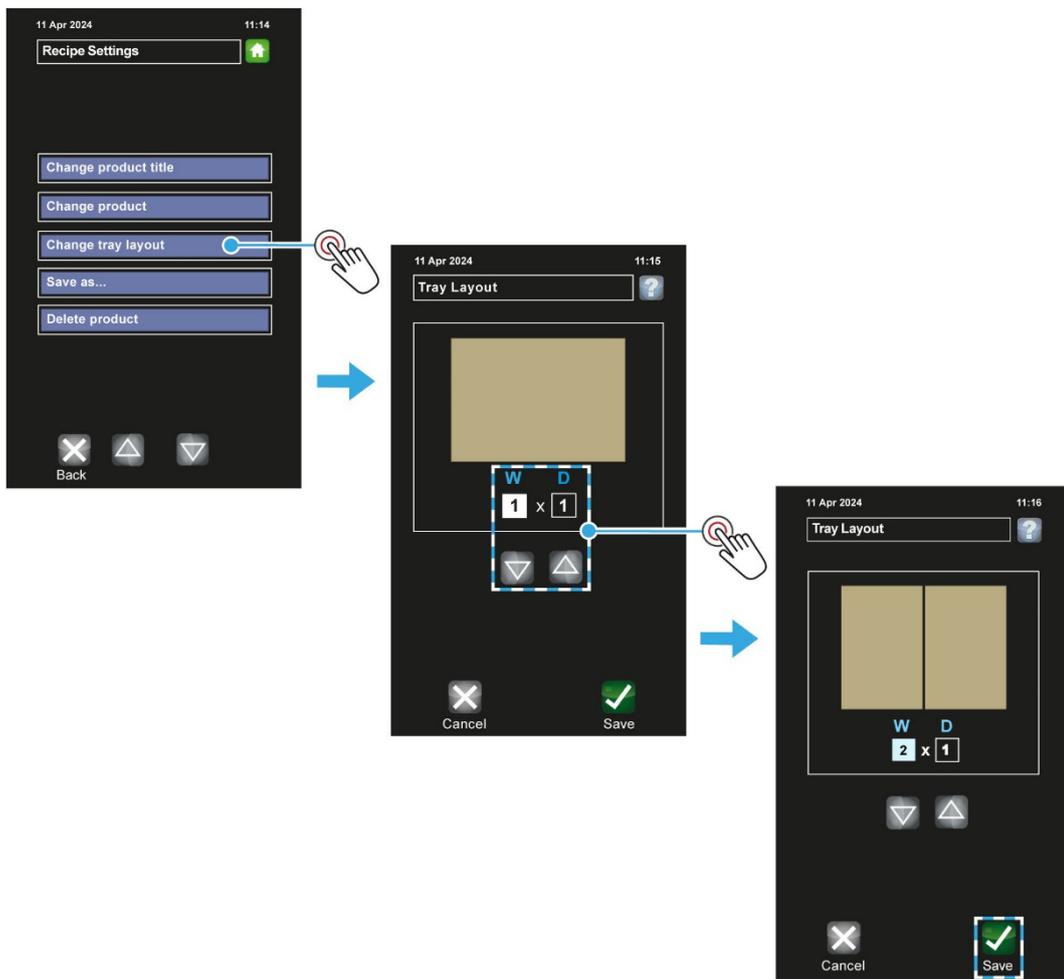


5. Enter the **Operator** password and touch **OK**.

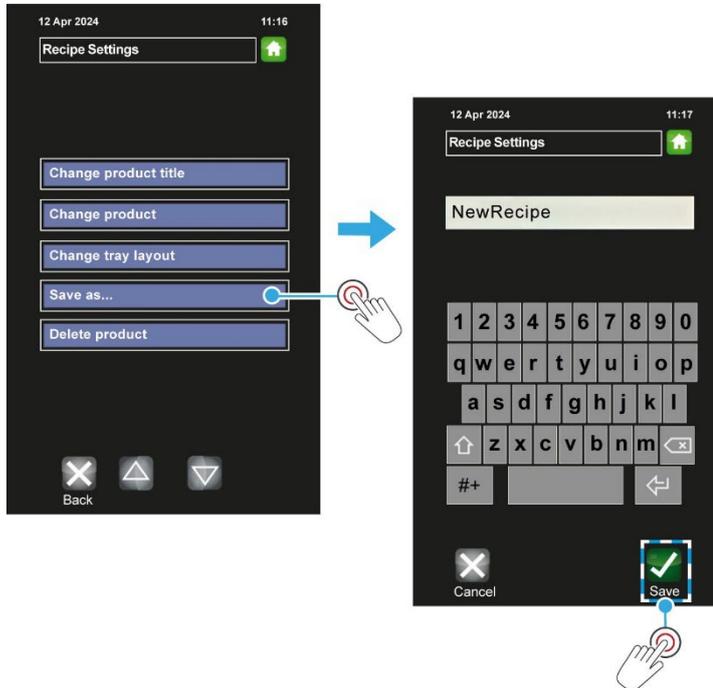
6. Edit a product recipe:
 - a. Choose the **Change product** menu option.
 - b. Choose the **Full-load** or **Half-load** option.
 - c. Select a baking phase number e.g. **1**).
 - d. Touch an item:
 - Temperature, Steam time, Phase time, Fan cycles, Fan speed, Damper delay, or Power level.
 - e. Adjust the setting by typing the amount or, if they appear, using the up and down keys.
 - f. Touch **OK** to confirm the setting value.
 - g. Repeat steps (d) to (f) for each item needed in that baking phase.
 - h. If required, select the next baking phase (i.e. touch **2**) and adjust the items in the same way.
 - i. Touch **Save** to confirm the completed recipe settings.



7. Edit a tray layout for the new product recipe:
 - a. Touch the **Change tray layout** box.
 - b. Touch the **W** (width) box to highlight it.
 - c. Use the up or down arrow key to change quantity across the tray.
 - d. Touch the **D** (depth) box to highlight it.
 - e. Use the up or down arrow key to change quantity down the tray.
 - f. Touch **Save** to confirm the tray layout.



8. Add the new product recipe to the list.
 - a. Touch the **Save as...** box.
 - b. Input a name for the product recipe, and then touch **OK**.



9. Touch the **Home** button to finish.

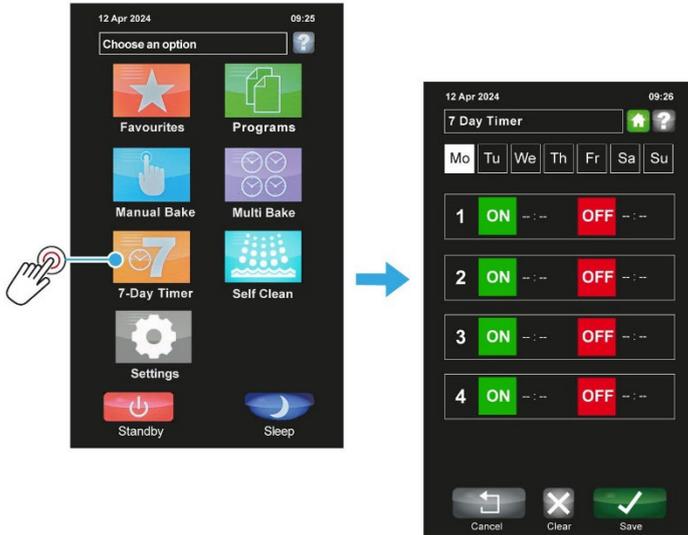
**NOTE**

Default passcodes for the various access levels are in [Appendix B](#). However, for security reasons, the passcodes section may have been removed.

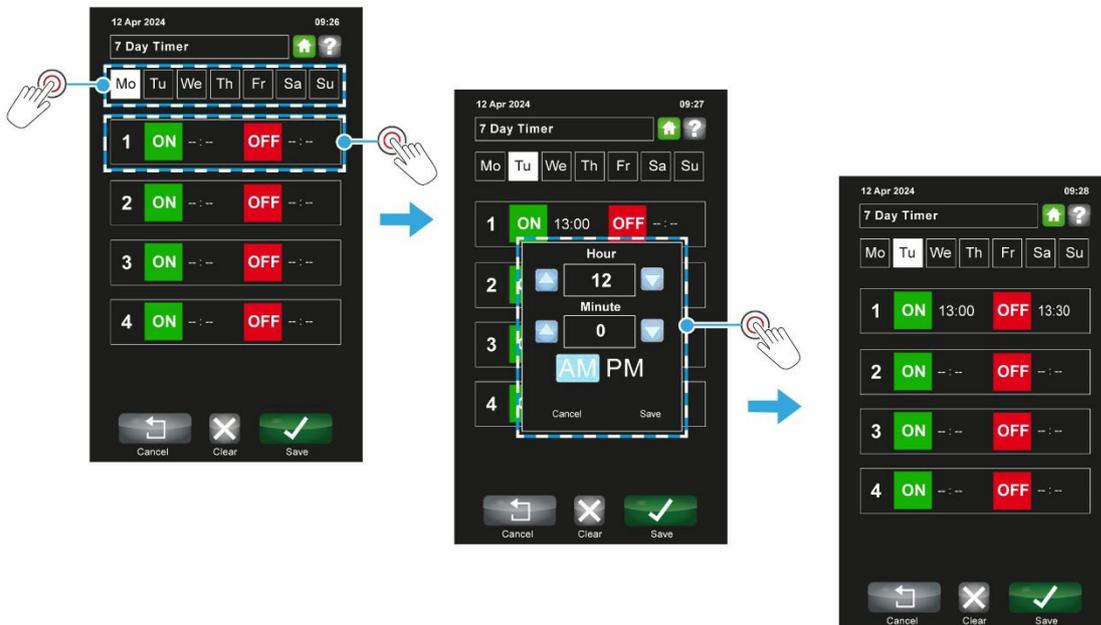
5.9. Using the 7-Day Timer menu function

While the oven is in **standby** mode, the baking chamber can be heated-up to a pre-set temperature at any time on any day. Up to four on/off heating times for each day of the week can be entered into the 7-day timer.

1. Touch the **7 Day Timer** tile.



2. Touch a day of the week, e.g. "Tu" (Tuesday).



3. Set an **ON** time for that day:
 - a. Touch the **ON** tile of a time panel.
 - b. Set the time using the keys in the pop-up box that appears, and then touch **Save**.

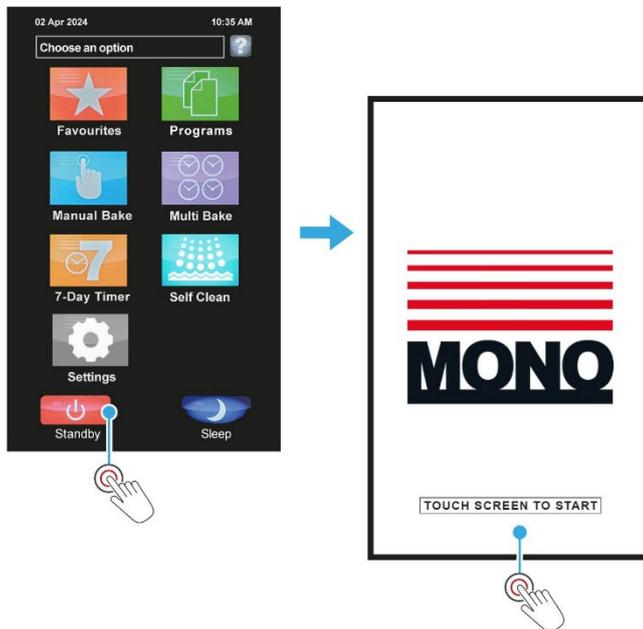
4. Set an **OFF** time for that day:
 - a. Touch the **OFF** tile of the same time panel.
 - b. Set the time using the keys in the pop-up box that appears, and then touch **Save (A)**.
5. If required, set up to three more on/off times for that day.
6. Repeat steps (2) and (5) to set up on/off times for other days.
7. When finished, touch **Save** to confirm all the 7-day settings.

**NOTE**

- Remember to leave the oven in **Standby** mode for this 7-day timer function to operate.

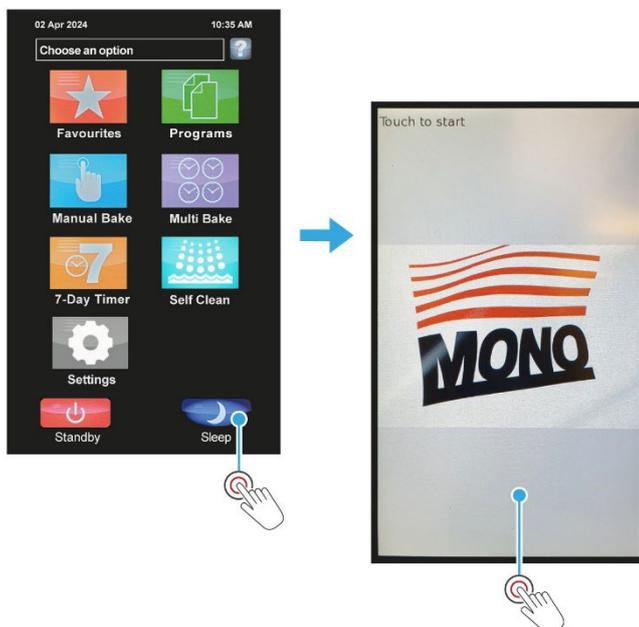
5.10. Putting the oven into Standby mode

The **Standby** button turns the oven off until the screen is touched again.



5.11. Putting the oven into Sleep mode

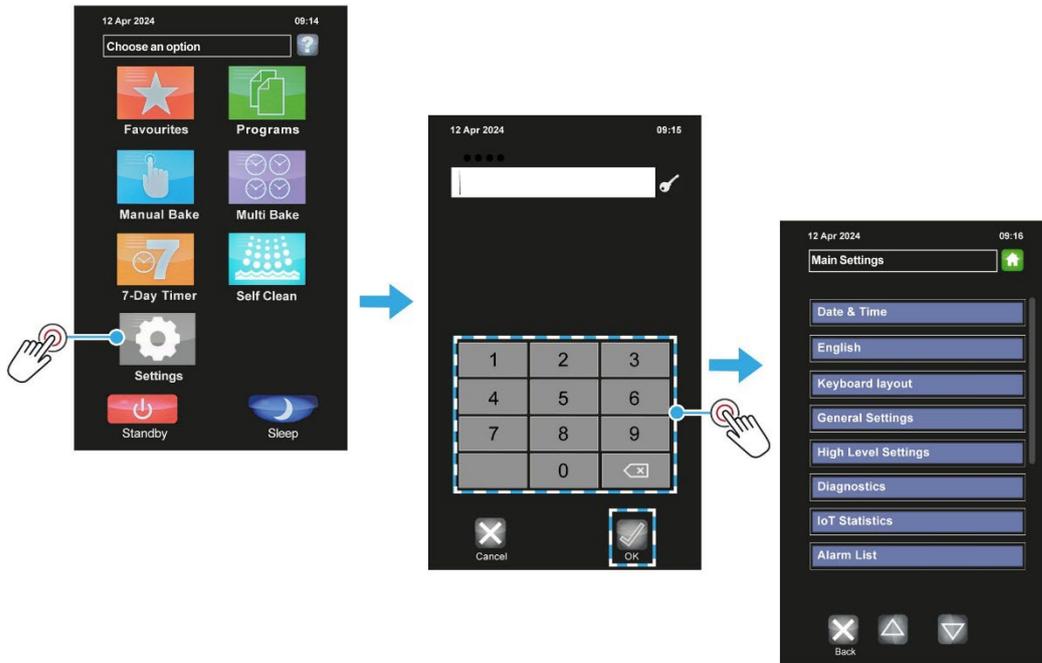
If enabled in the oven settings, the **Sleep** button instructs the oven to maintain temperature to a pre-set value.



5.12. Setting the time and date

Procedure

1. Touch the **Settings** tile.
2. Enter the **Oven Settings** password, and then touch the **OK** button.



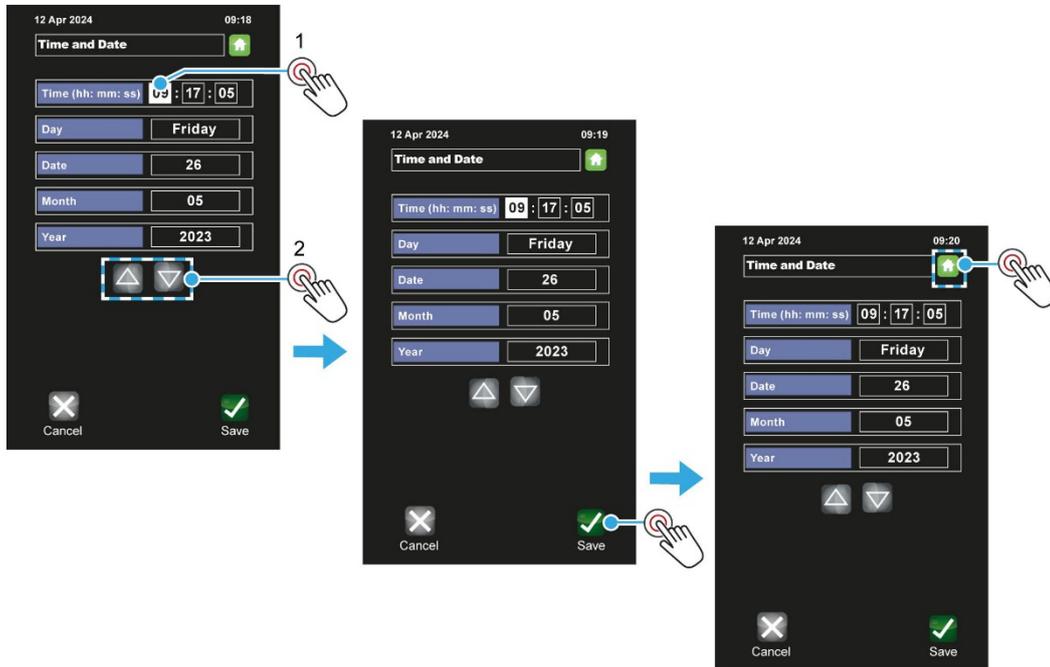
NOTE

- Default passcodes for the various access levels are in [Appendix B](#). However, for security reasons, the passcodes section may have been removed.

3. Touch the **Time and Date** box.



4. Touch the item that needs adjusting, and then use the up or down arrows as required.
 - The time, date, month, and year can be adjusted.
 - The day is not adjustable – it automatically updates using the date, month, and year.



5. Touch **Save** to confirm new settings.
6. Touch the **Home** button to return to the main screen.

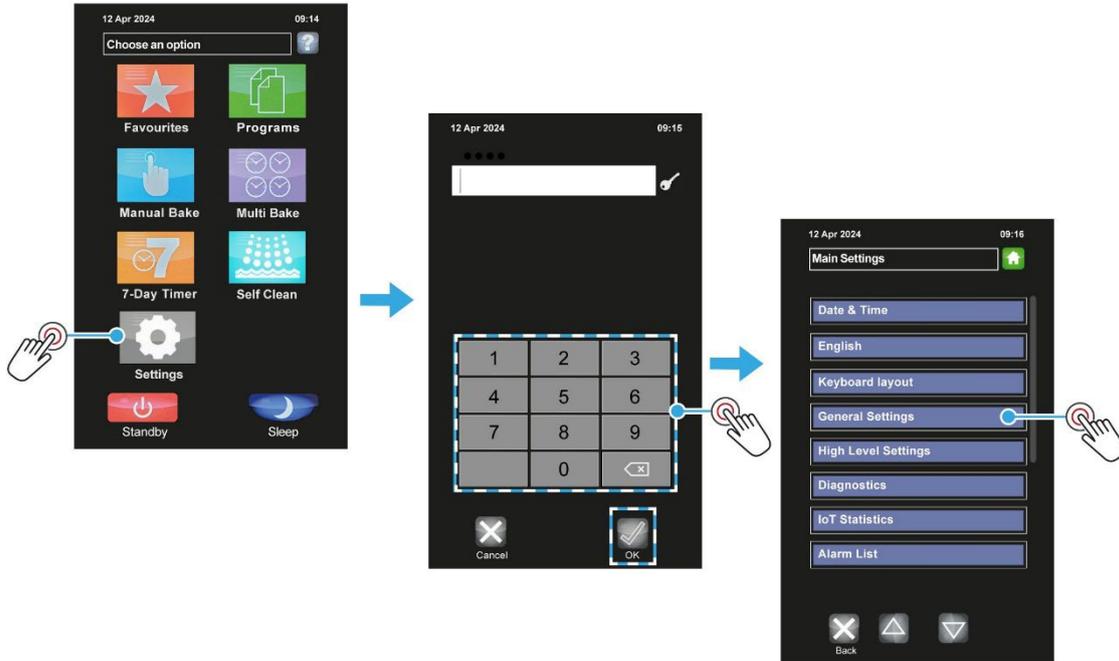
NOTE

- See [Section 5.13](#) for more information about the user settings for the oven.
-

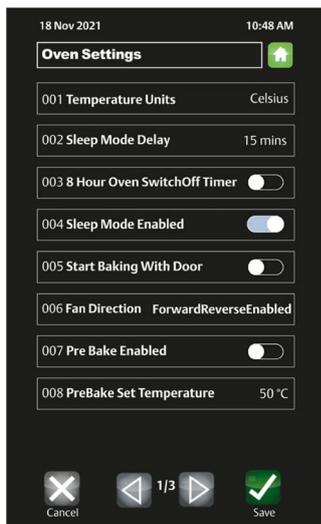
5.13. User settings (oven set-up)

Procedure

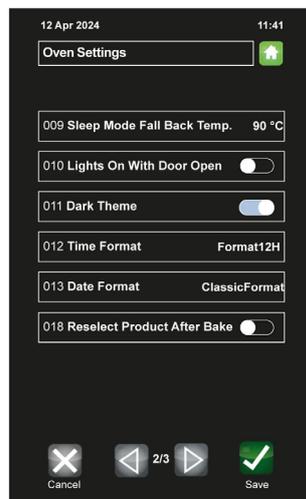
1. Touch the **Settings** tile.
2. Enter the **Oven Settings** password, and then touch **OK**.
3. Touch the **General settings** box.



4. Touch the **Left Arrow** and **Right Arrow** buttons to access the pages of oven settings.
5. To make an adjustment, touch the item and change the setting.



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6. Touch the **Save** button when all the oven settings are as required.

**NOTE**

- Default passcodes for the various access levels are in [Appendix B](#). However, for security reasons, the passcodes section may have been removed.

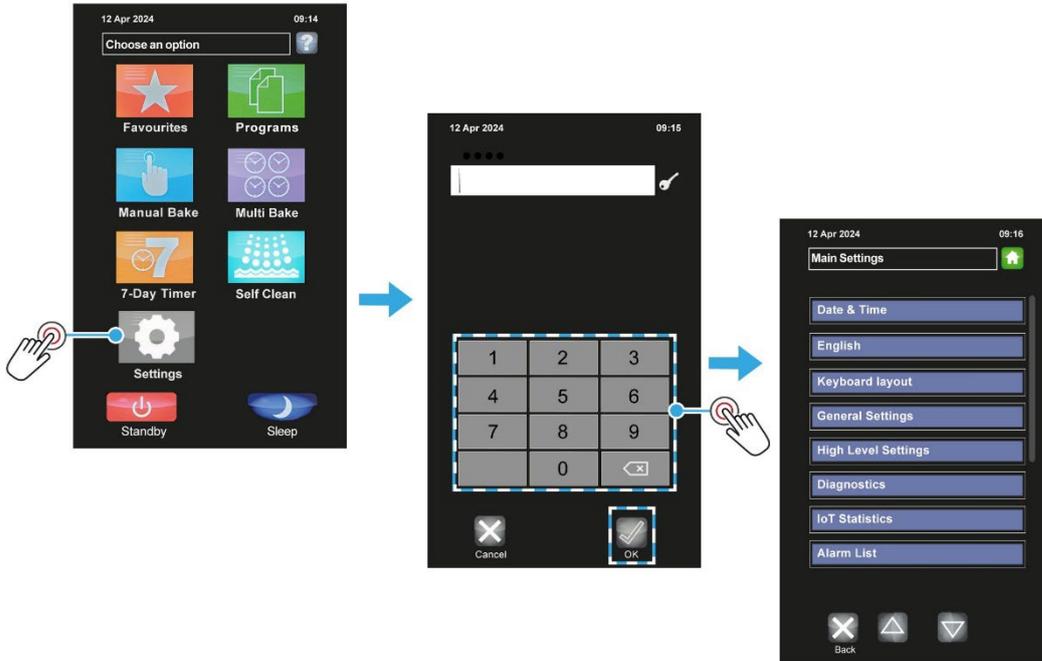
Table 5.3: Oven settings explained (general level)

Oven setting	Description
Temperature Units	Centigrade (Celsius) or Fahrenheit.
Sleep Mode Delay	Oven will go into sleep mode after the set minutes, providing it is up to temperature and has been through at least one bake cycle.
8 Hour Switch Off Timer	After 8 hours the oven gives a warning and then turns off. Press any button for an extra hour if required.
Sleep Mode Enabled	Enable or disables the sleep mode button.
Start Baking With Door	This will start the set bake program as soon as the door closes.
Fan Direction	Fan operating modes.
Pre Bake Enabled	Enable or disables heating-up the oven to a pre-set temperature.
Pre Bake Set Temperature	Pre-set temperature setting for the pre-bake function.
Sleep Mode Fall Back Temp.	Pre-set temperature for the oven to maintain whilst in Sleep Mode.
Lights On With Door Open	Option to switch on the oven light whenever the door is opened.
Extra Time Minutes	Adjusts the extra time at the end of a bake for each "extra time" button press. Maximum setting is 10 minutes.
Dark Theme	Colour scheme selection.
Time Format	Preferred format for displaying the time of day.
Date Format	Preferred format for displaying the date, month, and year.
Displayed Temperature	Options to display different temperatures.
Power Level 1 to 4	Set these as required for each level to be used.
Chart Interval	Time interval in seconds that the bars show on the heat and bake time progress charts.
Screen Brightness	Adjusts the brightness of the viewing screen for user comfort.

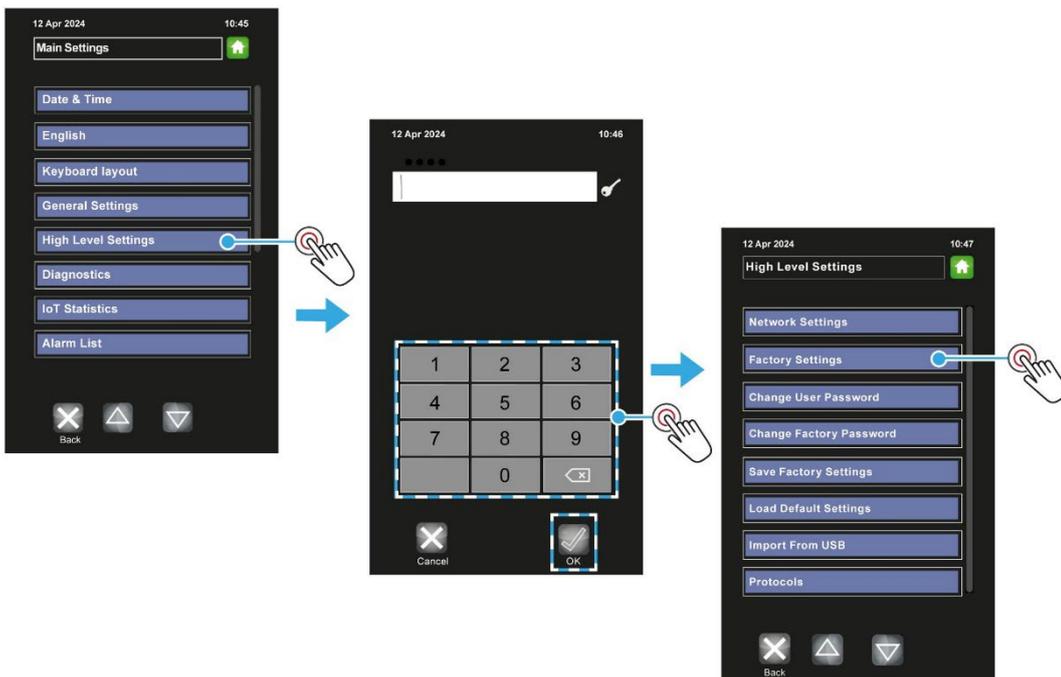
5.14. Factory settings (oven set-up)

Procedure

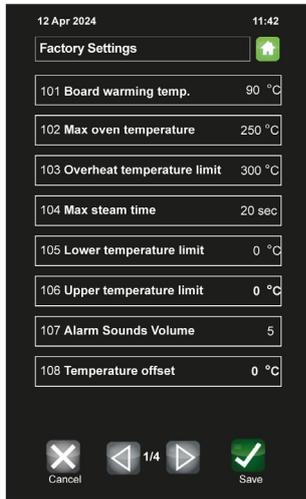
1. Touch the **Settings** tile.
2. Enter the **Oven Settings** password, and then touch **OK**.



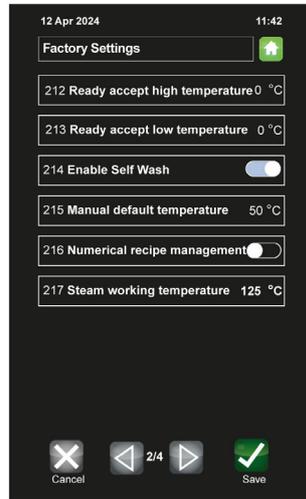
3. Touch the **High level settings** box.
4. Enter the **High level settings** password, and then touch **OK**.
5. Touch the **Factory settings** box



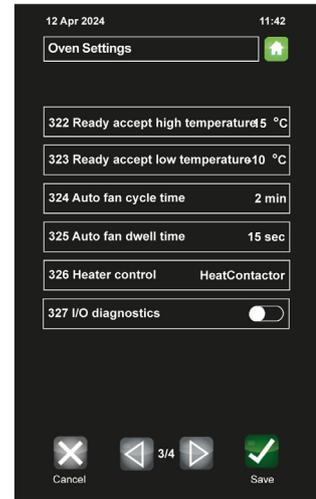
6. Touch the **Left Arrow** and **Right Arrow** buttons to access the pages of oven settings.



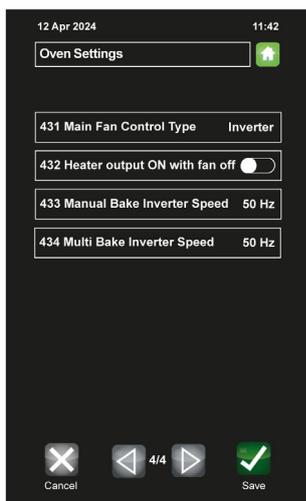
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7. To make an adjustment, touch the item and change the setting.
8. Touch the **Save** button when all the oven settings are set as required.

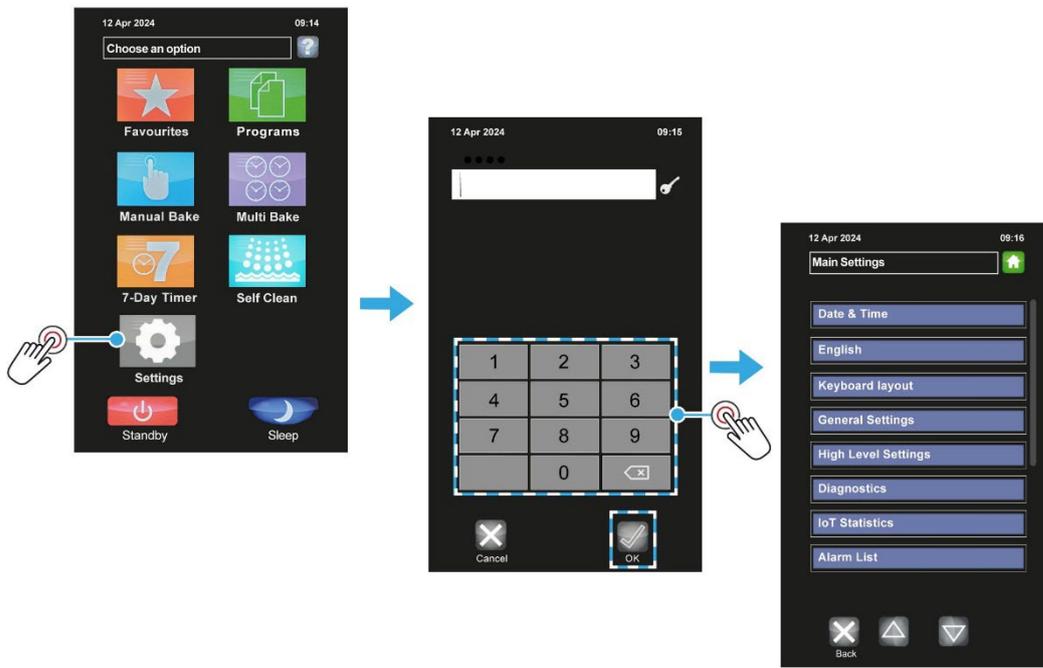
**NOTE**

Default passcodes for the various access levels are in [Appendix B](#). However, for security reasons, the passcodes section may have been removed.

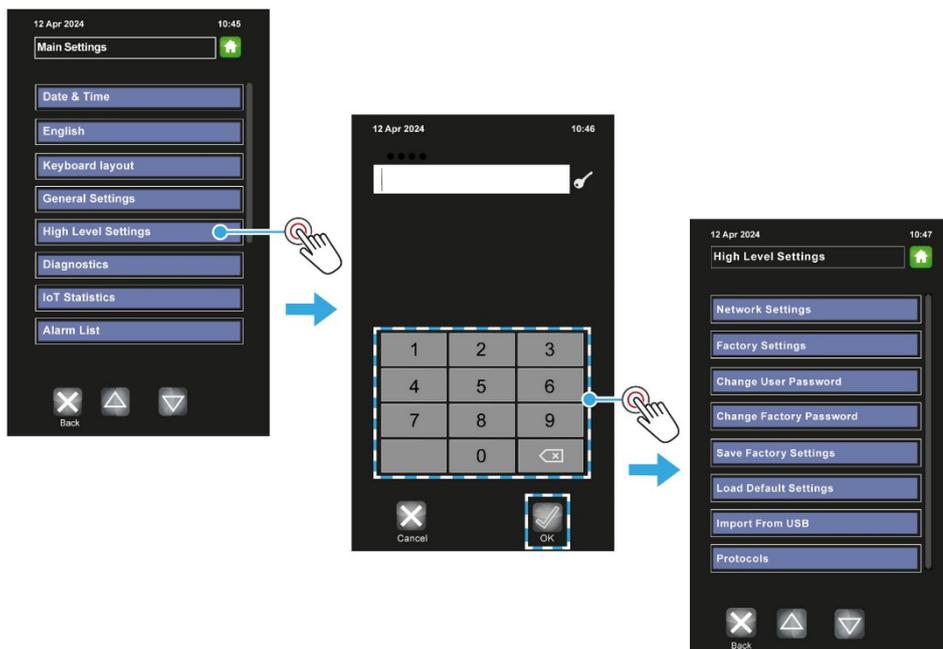
5.15. Changing the passwords

Procedure

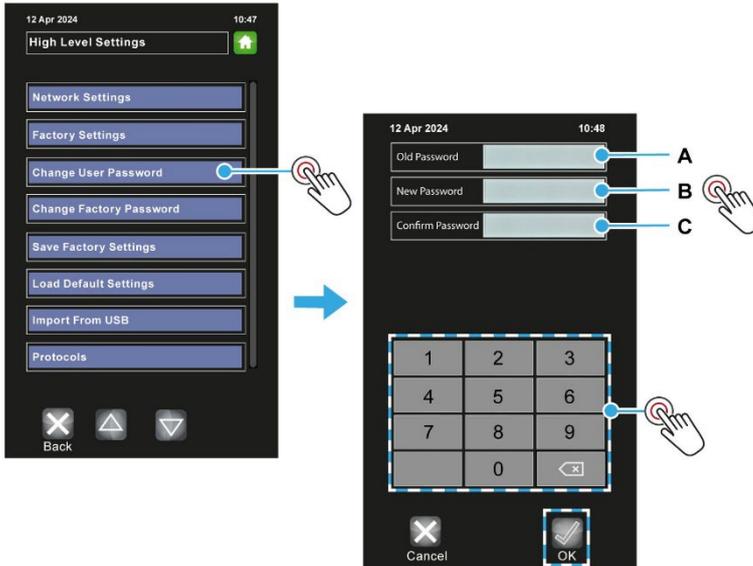
1. Touch the **Settings** tile.
2. Enter the **Oven Settings** password, and then touch **OK**.



3. Touch the **High level settings** box.
4. Enter the **High level settings** password, and then touch **OK**.



5. To change the user settings password:
 - a. Touch **Change user password**.
 - b. Touch the **Old Password** box (**A**) and enter the current password.
 - c. Touch the first **New Password** box (**B**) and enter the new password.
 - d. Touch the **second New Password** box (**C**) and enter the new password again.
 - e. Touch the **OK** button.



6. To change the factory settings (high level) password:
 - a. Touch **Change factory password**.
 - b. Touch the **Old Password** box (**A**) and enter the current password.
 - c. Touch the first **New Password** box (**B**) and enter the new password.
 - d. Touch the **second New Password** box (**C**) and enter the new password again.
 - e. Touch the **OK** button.

**NOTE**

- Default passcodes for the various access levels are in [Appendix B](#). However, for security reasons, the passcodes section may have been removed.

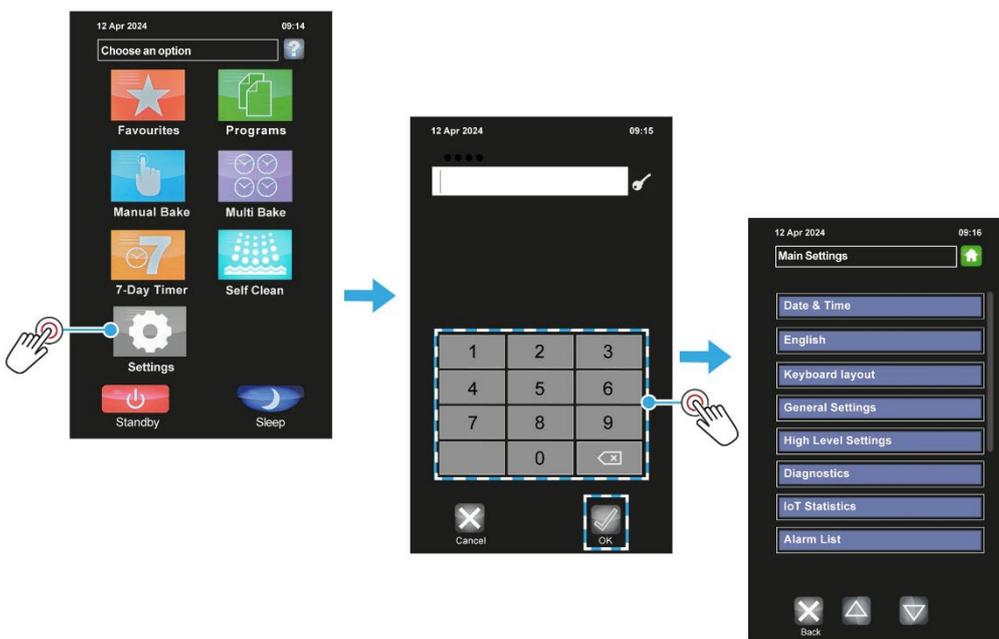
5.16. Diagnostics

The operation of the following items can be checked from the diagnostics screen:

■ Door switch operation	■ Fan forward	■ Lights on/off
■ Fan overload	■ Fan reverse	■ Canopy
■ Overheat	■ Steam solenoid	■ Audio test
■ Heater	■ Damper solenoid	■ Inverter (fan speed)

Diagnostics procedure

1. Touch the **Settings** button.
2. Enter the **Oven Settings** password, and then touch **OK**.



3. Open the Diagnostic screen:
 - a. Touch the **Settings/Service** panel.
 - b. Touch the **Down Arrow** button until the **Diagnostic** box appears.
 - c. Touch the **Diagnostics** box.
 - d. Touch **OK** to clear the **Attention** window.

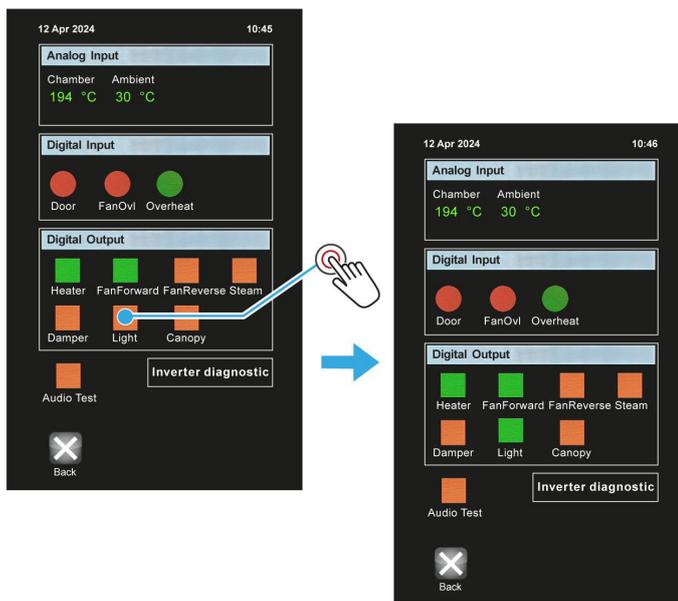
**NOTE**

- Default passcodes for the various access levels are in [Appendix B](#). However, for security reasons, the passcodes section may have been removed.

Using the diagnostics screen

Procedure

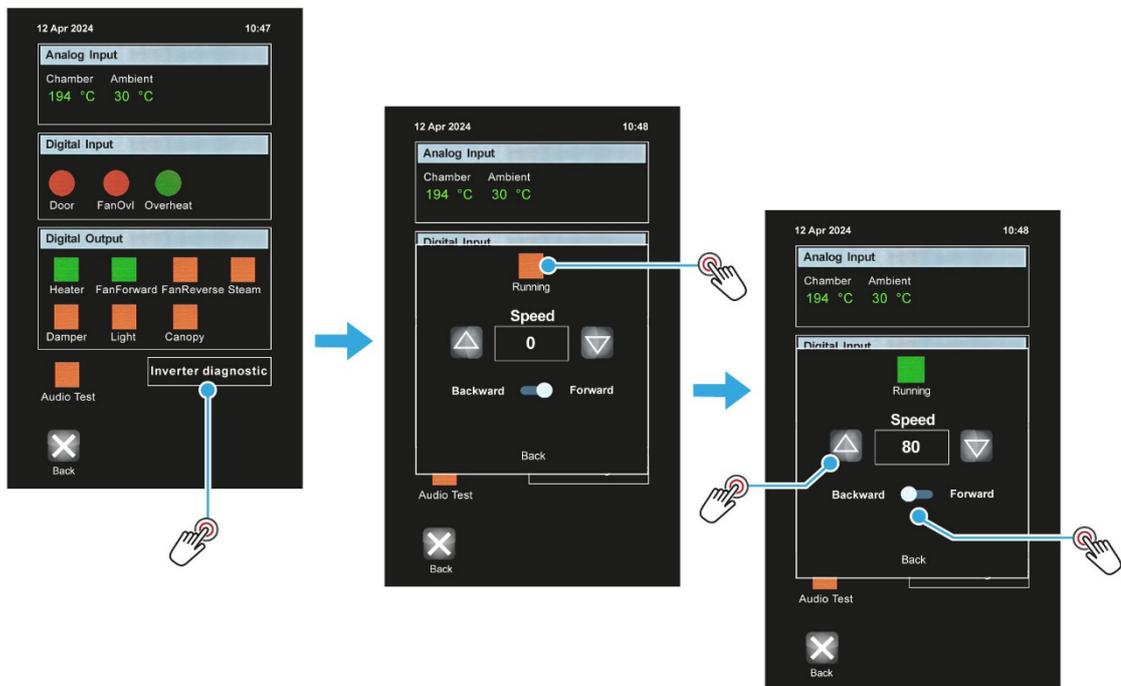
1. Touch the item to be tested (e.g., **Light**).
 - The red square changes to a green square to indicate the testing is active.
2. Touch the same item again to end the test.
 - The green square changes back to a red square to indicate the test is not active.
3. Touch the **Back** button to exit diagnostics mode.



Using the Inverter Diagnostic screen

Procedure

1. Touch the Inverter Diagnostic box.
2. Touch the red square (labelled as “running”) to start the testing.
 - The red square changes to a green square
3. Use the arrows to increase and decrease the fan speed.
4. Slide the direction option to the opposite position.
5. Touch the green square (labelled as “running”) to stop the testing.
 - The green square changes back to a red square
6. Touch Back to exit the screen.



5.17. Using the USB Port for Updates

Importing a recipe archive to an oven with IoT firmware installed

Procedure

1. Insert the USB memory stick (pen drive) into the socket on the oven panel.
 - A rubber plug may have to be removed from the socket first.
 - The USB memory stick only fits in one way. Do not force it into the socket.



2. Touch the **Settings** tile.
3. Enter the Oven Settings password and touch the **OK** button.

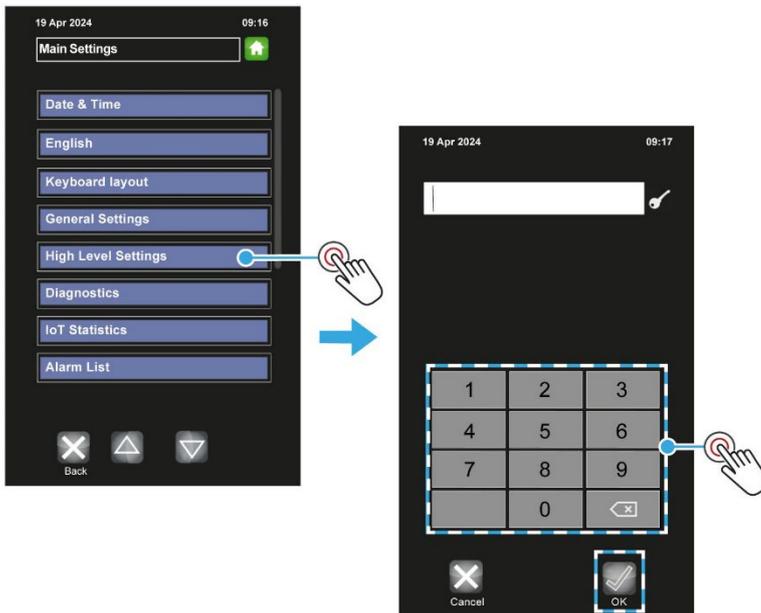


NOTE

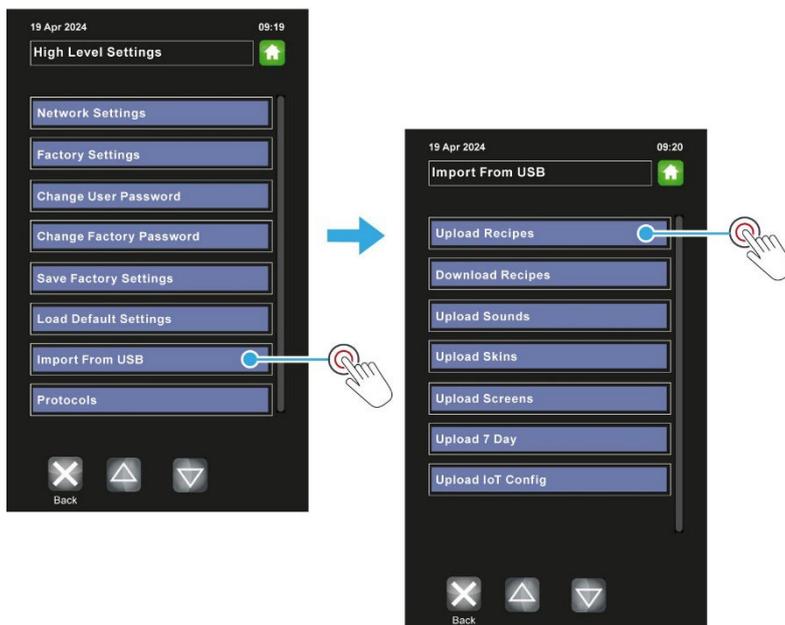


- Default passcodes for the various access levels are in [Appendix B](#). However, for security reasons, the passcodes section may have been removed.

4. Touch the **High Level Settings** box.
5. Enter the **High level settings** password, and then touch **OK**.

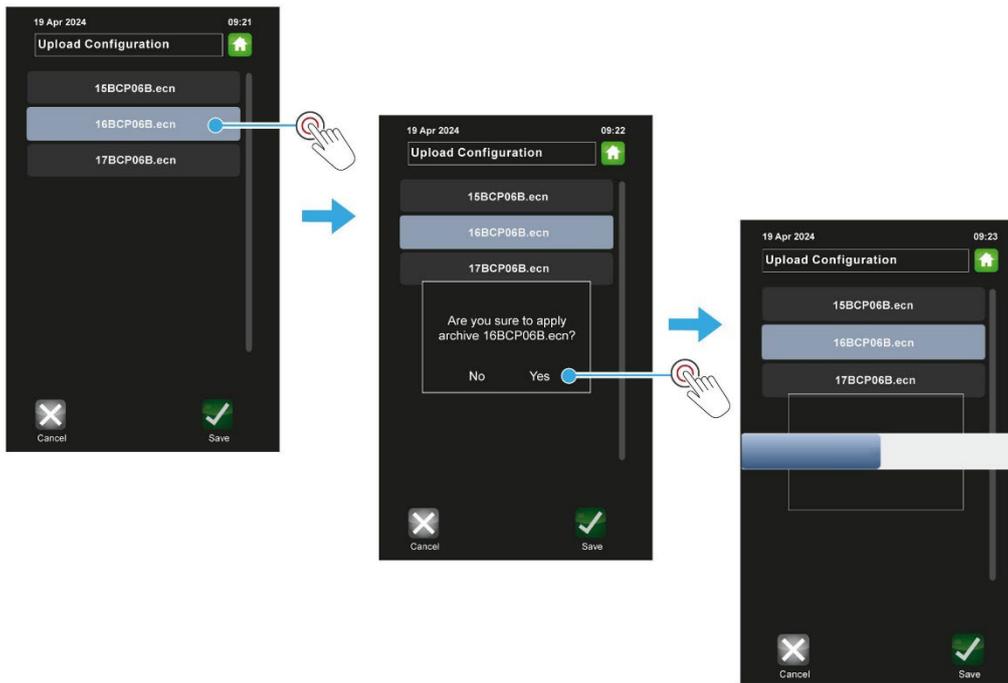


6. Touch the **Import from USB** box.
7. Touch the **Upload recipes** box.



8. Touch the recipe archive required, and then touch the **Upload** button.
9. Touch **Yes** when a pop-up window warns about deleting all current recipes from the oven.

10. Wait for the Operation Completed window to be displayed, and then touch **OK**.



11. Exit by touching the **Cancel** button several times until the Main Menu appears.
12. Remove the USB flash drive from the USB socket.
13. The recipe upload procedure is now complete.

6. Isolation

6.1. Isolating the oven from the electrical supply

To stop the oven in an emergency:

- Switch off the electricity at the wall-mounted isolator switch (if fitted), or
- Unplug the oven from the electrical outlet.



WARNING

- Always disconnect the oven from the consumer power supply if working on the electrical box and panel. Some components stay electrically energised even after the main isolator is in the 0 (OFF) position.
-

6.2. Isolating the oven from the water supply

The water supply should be shut off at the nearest shut-off point.

7. Cleaning

7.1. Cleaning guide for the oven

Regular cleaning and maintenance of an appliance is essential for optimal performance and longevity. Therefore, it is important to follow a manufacturer's recommended cleaning instructions.

Follow our simple cleaning schedules to ensure your MONO oven correctly functions and is durable.

7.2. Safety messages

**WARNING**

- Ensure the oven is switched off at the mains power supply and has been entirely cooled before undertaking any cleaning tasks.
-

**WARNING**

- Do not remove the rear panelling inside the oven. That panel provides access to the fan assembly, which is not safety-interlocked and could cause serious injury.
-

**CAUTION**

- Clean the equipment daily using approved chloride-free cleaning fluid.
 - Never use aggressive chemicals, i.e. solvents, thinners, etc.
 - Take care that liquid does not enter the control panel or any of the other access covers/panels.
 - Never spray the oven with water (or any kind of liquid) using a hose or pressure washer. Never use compressed-air jets on the oven.
 - Care must be taken to not damage parts inside the oven.
-

7.3. Daily cleaning instructions

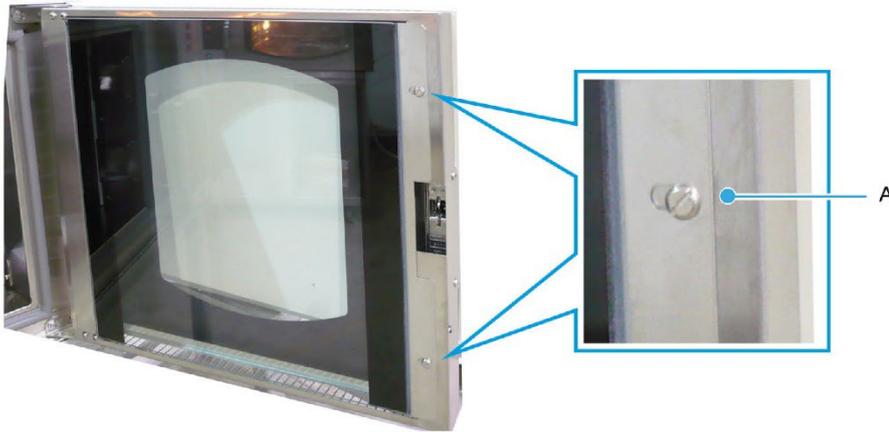
1. Sweep any debris out of the oven after it has been allowed to cool.
 - Cooling down could take several hours.
 - Use a vacuum cleaner with metal attachments (i.e. able to take the heat), if available.
2. Wipe the oven front, back and sides with a damp cloth.
3. Spot clean outside with a damp cloth soaked in a solution of mild detergent and hot water.
 - Do not wash the control screen; wipe it with a damp cloth.
 - Pay particular attention to ensure excess water is not applied near electrical panels.
4. Run the clean cycle if required. (Be aware that this takes some time to complete).

7.4. Inner door glass cleaning instructions

The inner door glass is hinged to enable the cleaning of inner surfaces.

1. Remove the two screws (A) shown in [Figure 7.1](#).
2. Clean the inner surfaces of the door glass using a suitable glass cleaner.
3. After cleaning, secure the inner glass with the two screws.

Figure 7.1: Location of the two screws for releasing the inner glass



8. Maintenance

8.1. Safety notices

**WARNING**

- Switch off and electrically isolate the machine from the mains power supply before commencing any cleaning or maintenance work.
-

**WARNING**

- This appliance must be maintained at regular intervals. The frequency of maintenance will depend upon your specific use and location. The maximum service interval should be 12 months.
 - Service and maintenance should only be undertaken by suitably qualified, trained, and competent engineers.
 - You must immediately report any damage or defect arising with the appliance.
 - Unsafe equipment is dangerous. Do not use the appliance. Isolate the power supply and contact MONO Equipment or your appointed service agent.
-

8.2. General maintenance

The following general maintenance is recommended:

- Check for any visible damage or signs of tampering.
 - Do not use the machine if it is clearly damaged, i.e. frayed or bare wires are visible.
 - Report the damage but do not attempt to make any repairs yourself.
- Follow the cleaning instructions in [Chapter 7](#).

8.3. Steam system maintenance

If it is noticed that the steaming operation has deteriorated, perhaps due to hard water scaling, contact your oven supplier.

8.4. Light bulb replacement

**CAUTION**

- In the event of a light failure, please contact your supplier.
 - There are no customer replaceable parts.
-

9. Service

If a fault arises, please do not hesitate to contact MONO Equipment's Service and Spares department. Be prepared to provide the Serial Number from the machine's information plate or the front page of this User Manual in all communications.

9.1. Contact information for customer services

MONO Equipment Limited

Queensway
Swansea West Industrial Park
Swansea
SA5 4EB
United Kingdom
www.monoequip.com

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+44 (0)1792 564039

techsupport@monoequip.com
+44 (0)1792 564041

service@monoequip.com
+44 (0)1792 564048

Switchboard
+44 (0)1792 564039

9.2. Further information

Visit MonoEquip.com for the latest versions of this user manual. Also find up-to-date information about all MONO's products.

9.3. Environmental disposal

Dispose of the machinery with care when it comes to the end of its working life. Use the most environmentally friendly manner possible by recycling or other means of disposal which complies with local regulations. Only dispose of the machine safely and legally. The Environmental Protection Act 1990 applies in the United Kingdom.

A. Specifications

A.1 Electrical specifications



WARNING

- Check that the electrical data on the oven’s information plate. Contact MONO Equipment if there is a mismatch between the nameplate information and the mains supply at the site.
- The oven must be connected to the mains supply using the factory-fitted mains plug and cable and a 30mA-rated Type 'A' Residual Current Device (RCD).
- The RCD is a safety device, which automatically switches off the supply if an earth fault develops. Test the RCD upon completion of the installation and quarterly for the lifetime of the oven.
- An experienced and qualified electrician must carry out all electrical work in accordance with national and local regulations.

Power supply

See [Table A.1](#) and [Table A.2](#) for supply options.



The supply to this machine must be protected by a 30mA-rated Type 'A' Residual Current Device (RCD) prior to installation and commissioning.

Power cable options

Single, 1.8 m (6 ft.) power cable with mains plug (factory-fitted)

Table A.1: Single supply specifications (UK)

Oven version	Voltage	Phase	Current	Power
FG174 (10-Tray)	415 Vac (50 Hz)	Three-phase power	32 Amps per phase	15 kW ⁽¹⁾
FG175 (4/5-Tray)	415 Vac (50 Hz)	Three-phase power	16 Amps per phase	7.5 kW ⁽²⁾

(1) 2 x 7kW element, 240 Vac, stainless steel.

(2) 1 x 7kW element, 240 Vac, stainless steel.

Table A.2: Single supply specifications (Export)

Oven version	Voltage	Phase	Current	Power
FG175 (4/5-Tray)	400 Vac (50 Hz)	Three-phase power	12 Amps per phase	7.5 kW ⁽¹⁾

(1) 1 x 7kW element, 220 Vac, stainless steel.

A.2 Mechanical specifications

Dimensions	See Table A.3 for all dimensions.
Gastronorm size	GN1/1
Tray size	600 mm x 400 mm
Number of trays	Single oven: 4, 5, or 10; Stacked ovens: 8, 10, 14, or 15
Weight (approximated) without optional base	See Table A.4 for all oven weights.
	 This equipment is too heavy for a single person to lift.
Damper	Butterfly type

Table A.3: Dimensions of all wash ovens

Dimension ⁽¹⁾	4/5 Trays (single oven)	8/10 Trays (stacked ovens)	10 Trays (single oven)	14/15 Trays (stacked ovens)
Height, oven only	672 (26½)	1309 (51½)	1235 (48½)	1871 (73.7)
Height, oven + base unit	1590 (62.7)	2009 (79.1)	1935 (76)	2035 (80.1)
Width	1004 (39½)	1004 (39½)	1004 (39½)	1004 (39½)
Depth, door closed ⁽²⁾	925 (36¼)	925 (36¼)	925 (36¼)	925 (36¼)
Depth, door fully open	1635 (64¼)	1635 (64¼)	1635 (64¼)	1635 (64¼)
Distance between trays (mm)	4/5T: 86/76	4/4T: 86	10T: 91	4/5/10T: 86/76/91

(1) All dimensions are in mm (inches) unless otherwise stated.

(2) Depth measurement includes the door handle.

Table A.4: Approximated weights of wash ovens (no base unit)

4/5 Trays (single oven)	8/10 Trays (stacked)	10 Trays (single oven)	14/15 Trays (stacked)
125 kg (275½ lbs)	250 kg (551 lbs)	265 kg (558 lbs)	390/392 kg (860/864 lbs)

A.3 Water specifications

Connection to oven	¾-inch BSP female connector, flexible hose
Pressure range	2 to 5.5 bar (29 to 80 psi) - typical for domestic water supplies

The following water specifications are recommended for correct operation of the steam system:

Hardness range	0 to 4 grains per gallon
PH range	7.0 to 8.5
Chloride	0 to 30 ppm
Calcium	0 to 4 ppm
Magnesium	0 to 4 ppm
Alkalinity	0 to 20 ppm



NOTE

- Customers are responsible for installing and maintaining an adequate water supply to the oven, which should comply with local water regulations (check with your local water authority).
- A water conditioning unit is advised for 'hard water' areas.

Drainage requirements	The oven must be connected to a drain via a standpipe or be connected to a drainage pipe that does not allow water flow-back into the oven. In the United Kingdom, a backflow prevention device must be fitted.
------------------------------	---

A.4 Environmental specifications

Noise level	Less than 85 dB
Ambient temperature	Up to 40 °C (115 °F)
Clearances	50 mm (2 inches) around the back and sides of the oven. 250 mm (10 inches) above the oven.

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B. Passcodes

B.1 Default passcodes

Table B.1: Default passcodes

Security access	Default passcode
Operator access (for naming and saving programs)	1111
Oven Settings access (time, date, etc.)	2222
Oven Factory Settings Access	2413
Master Override access	3142
Abort Wash (for service technicians only)	4682

Suggestion

To stop unauthorised changes to the oven setup, it is suggested that this page is redacted or removed from this manual and kept in a safe place for future reference.

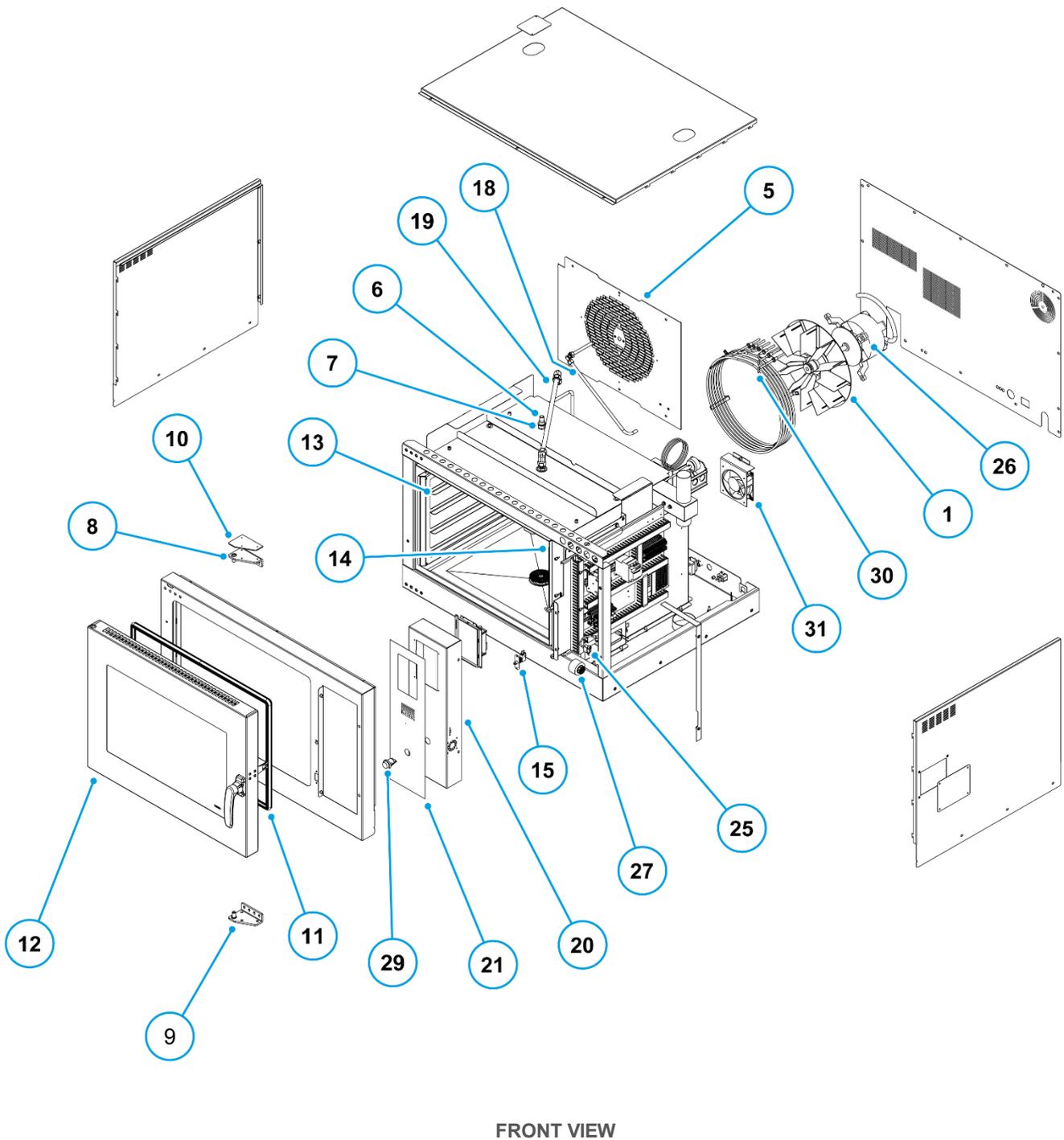
If tampering could be a problem, it is also a good idea to change the passcodes at regular intervals.

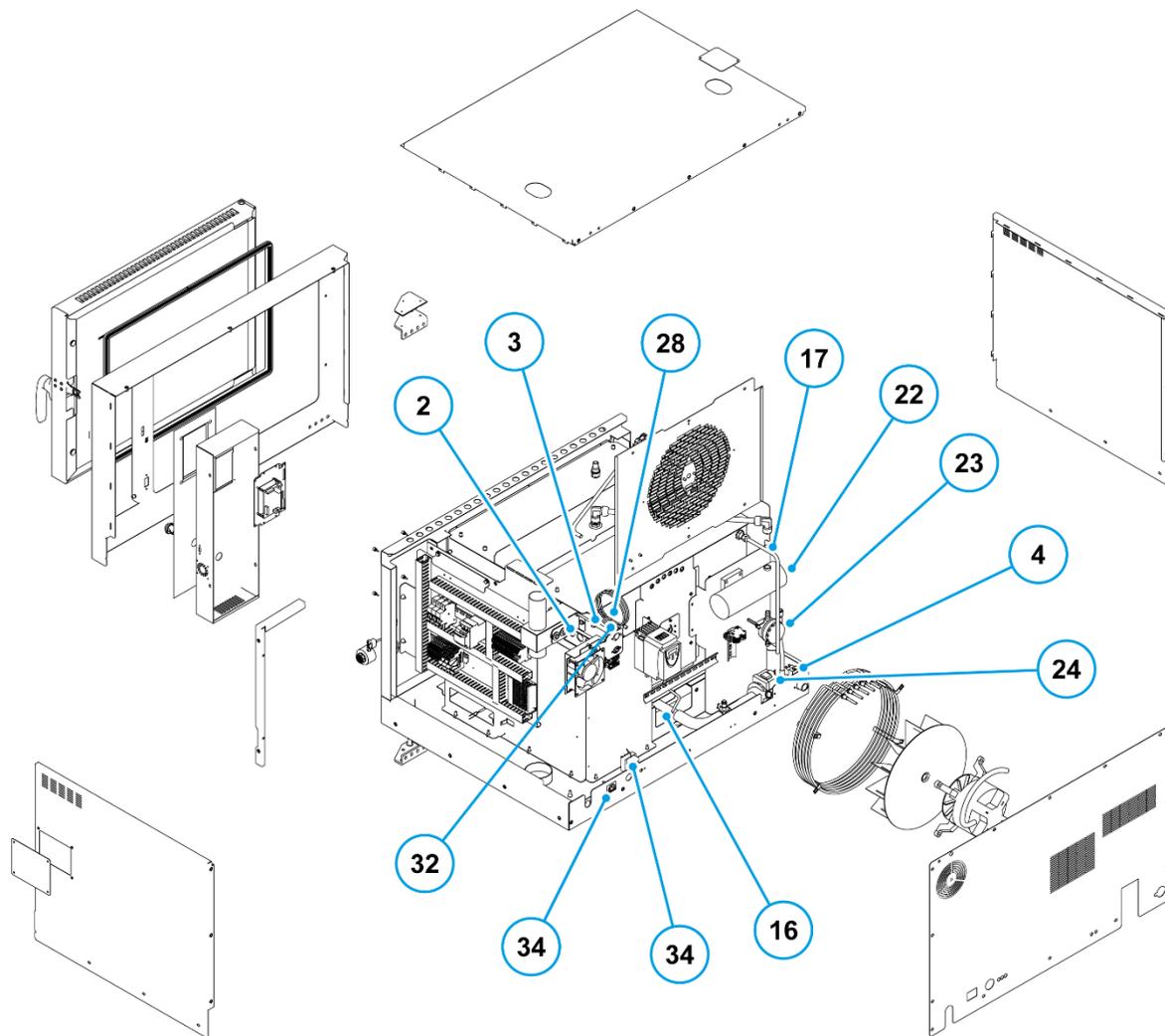
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C. Spares

C.1 Oven Spare Parts Lists

Figure C.1: ECO Connect+ Wash Convection Oven parts





REAR VIEW

Table C.1: ECO Connect+ Wash Convection Oven spare parts list

Item	Part number	Description
1	150-00-11300	Fan, 340mm diameter, 80mm deep
2	150-02-01000	Damper solenoid bracket
3	158-02-00600	Coupling
4	158-17-00300	Water solenoid and black tube (1.2 L/min)
5	175-01-12601	Suction sheet assembly (LH hinge)
6	175-01-13200	Spray nozzle collet
7	175-01-13300	Spray nozzle

Table C.1: ECO Connect+ Wash Convection Oven spare parts list

Item	Part number	Description
8	175-03-08500	Door hinge
9	175-03-08501	Door hinge
10	175-03-08901	Door hinge cover plate (LH hinge)
11	175-03-09100	4/5-tray door seal
12	175-03-11001	Door (LH hinge)
13	175-04-15800	Side panel, LH
14	175-04-15801	Side panel, RH
15	175-05-10400	Door switch plate assembly
16	175-07-00200	Stainless steel drainage pipe
17	175-07-00300	Copper water feed pipe
18	175-07-01000	Stainless steel water feed assembly
19	175-07-01700	Feed tube (LH hinge door)
20	175-25-07701	Control panel (LH oven)
21	175-90-00002	ECO Connect+ Wash Overlay
22	A900-28-007	Main water pump
23	A900-28-008	Inline strainer
24	A900-28-009	Drainage water pump
25	B705-25-009	USB A (Male) to USB A (Female) Extension Cable, 90°
26	B720-74-005	Fan motor, stainless steel bearing
27	B723-92-002	Buzzer, white
28	B749-83-003	Damper solenoid, clockwise, with roll pin (LH oven)
29	B836-07-009	ON/OFF power pushbutton switch, green
30	B847-04-083	Heating element, 7kW (240 Vac)
31	B869-75-018	Cooling fan, compact size
32	B873-95-003	Oven thermocouple with fixing gland (2.1 metre cable)
33	B888-30-014	Thermostat, triple-pole, manual reset
34	B970-06-001	Auxiliary power outlet, snap fit

D. Electrical Drawings

D.1 4/5/10-tray electrical drawings

Electrical specifications: 415V TP+N+E 50Hz.....	page 67
Electrical specifications: 230V 1-Phase Input / 230V 3-Phase Motor Connection	page 68
Electrical specifications: HMI Controller Layout, 24V DC	page 69
Electrical specifications: Digital Input Connections.....	page 70
Electrical specifications: Digital Output Connections	page 71
Electrical specifications: T/C Connections.....	page 72
Electrical specifications: OTB Remote I/O Layout, 24V DC.....	page 73
Electrical specifications: Analogue Input Connections	page 74
Electrical specifications: Analogue Input Connections	page 75
Electrical specifications: Analogue Output Connections.....	page 76

Figure D.2: Electrical specifications: 415V TP+N+E 50Hz

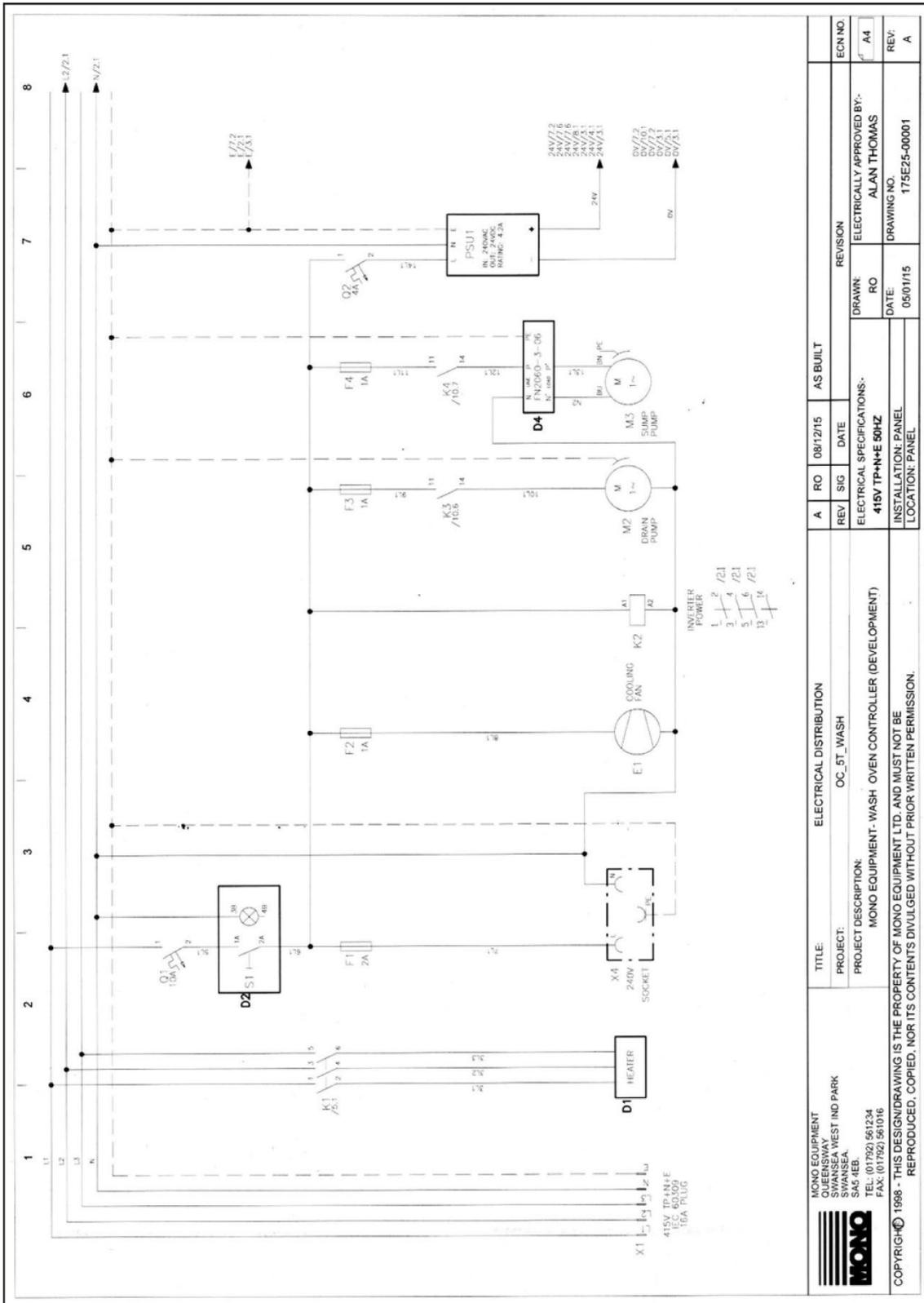
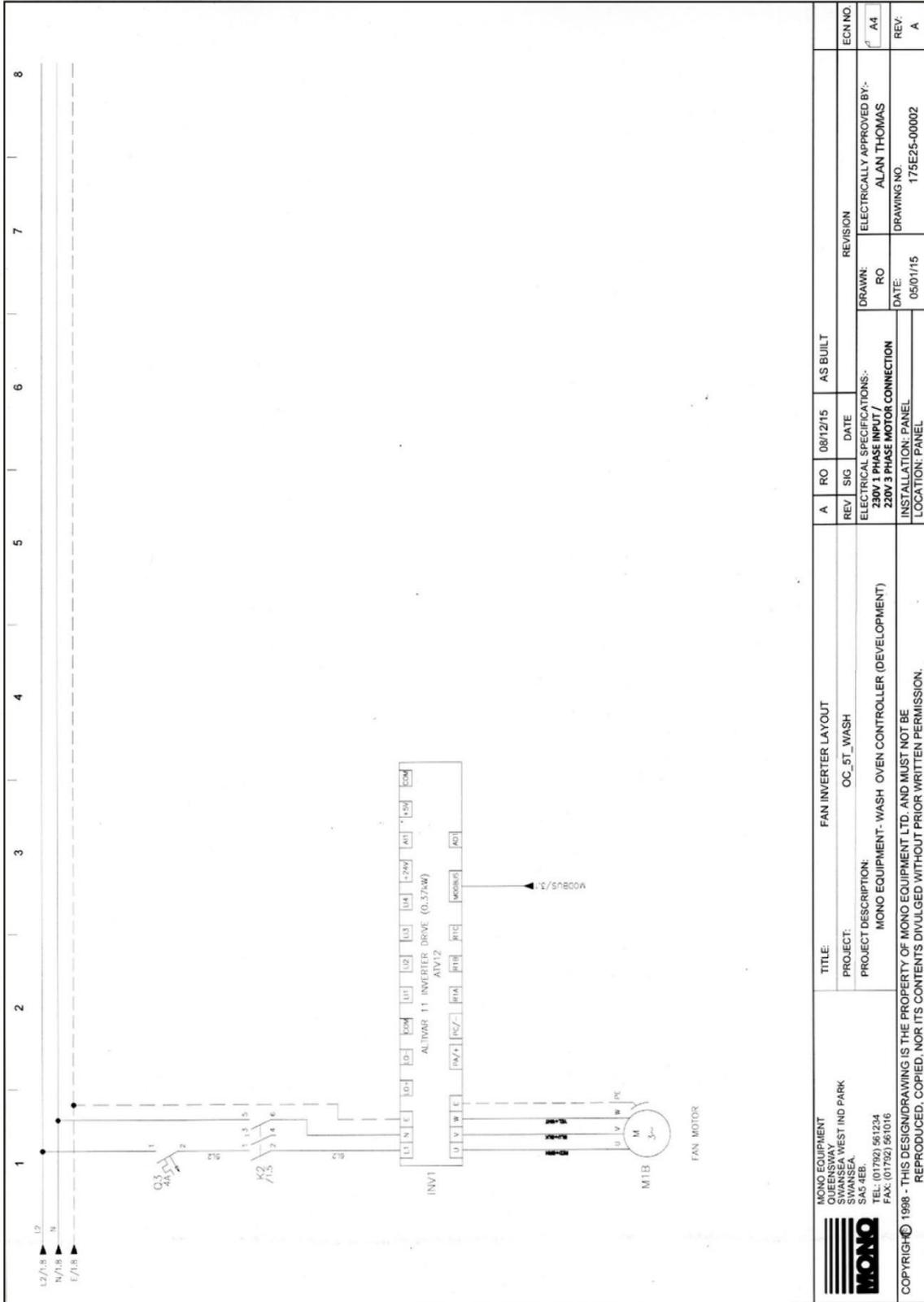


Figure D.3: Electrical specifications: 230V 1-Phase Input / 230V 3-Phase Motor Connection



A		RO	08/12/15	AS BUILT	REVISION		ECN NO:
REV	SIG	DATE	ELECTRICAL SPECIFICATIONS:-		DRAWN:	ELECTRICALLY APPROVED BY:-	A4
			230V 1 PHASE INPUT /		RO	ALAN THOMAS	
			230V 3 PHASE MOTOR CONNECTION		DATE:	DRAWING NO.	REV:
			INSTALLATION: PANEL		05/01/15	175E25-00002	A
			LOCATION: PANEL				
MONO EQUIPMENT				TITLE: FAN INVERTER LAYOUT			
QUEENSWAY				PROJECT: OC_5T_WASH			
SWANSEA WEST IND PARK				PROJECT DESCRIPTION:			
SWANSEA,				MONO EQUIPMENT - WASH OVEN CONTROLLER (DEVELOPMENT)			
SA5-4EB.				COPYRIGHT © 1998 - THIS DESIGN/DRAWING IS THE PROPERTY OF MONO EQUIPMENT LTD. AND MUST NOT BE			
TEL: (01792) 561234				REPRODUCED, COPIED, INOR ITS CONTENTS DIVULGED WITHOUT PRIOR WRITTEN PERMISSION.			
FAX: (01792) 561016							

Figure D.5: Electrical specifications: Digital Input Connections

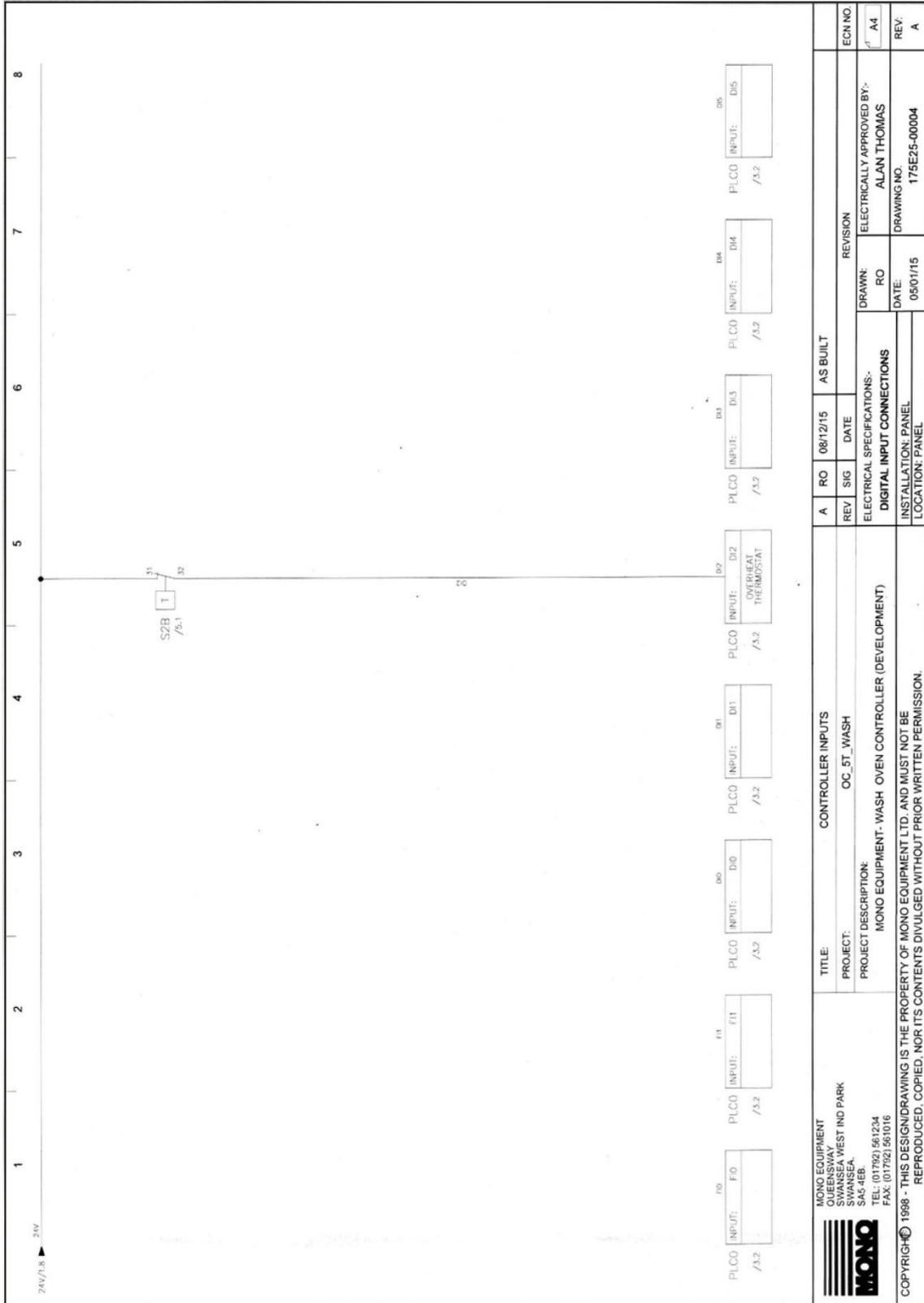
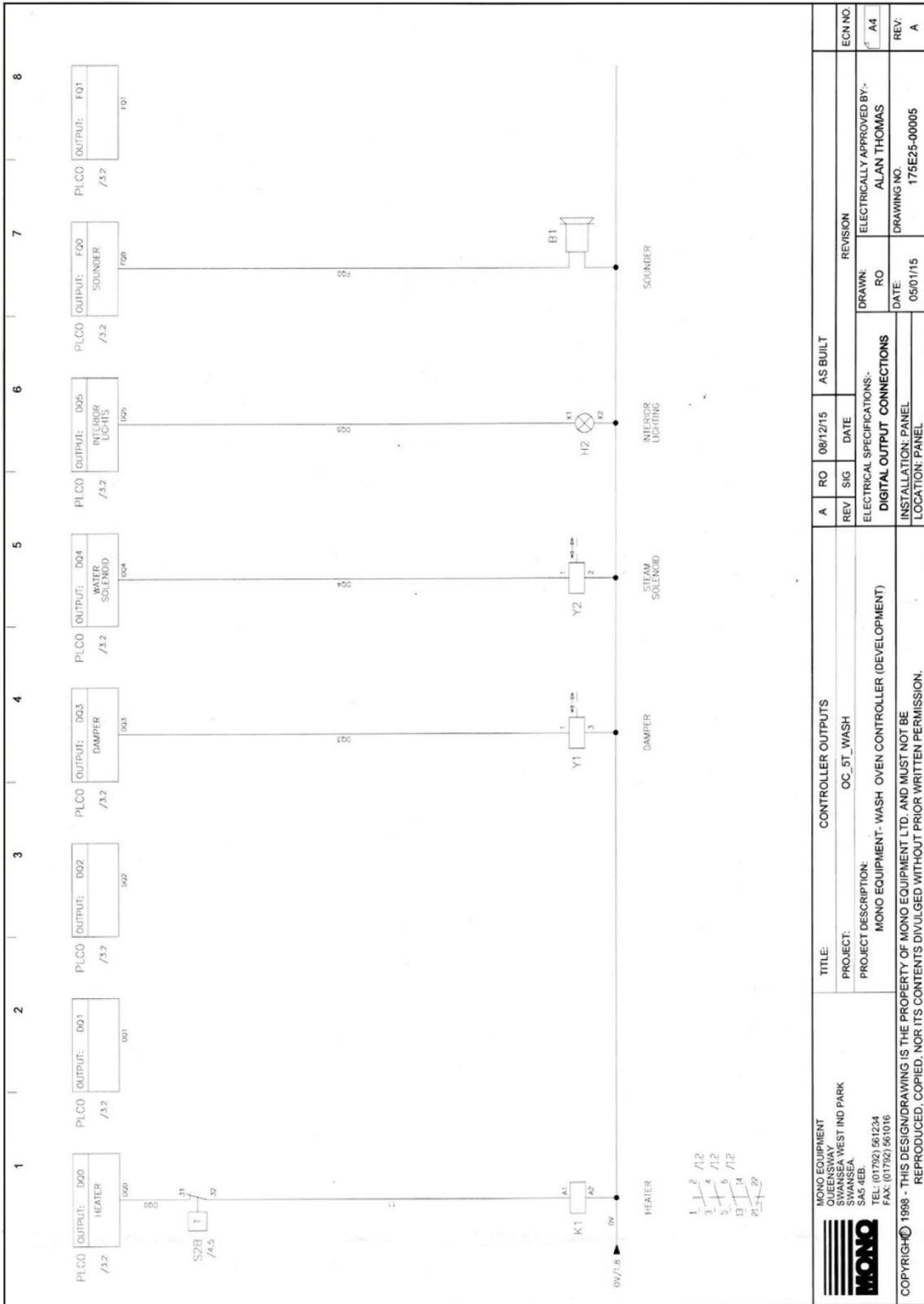


Figure D.6: Electrical specifications: Digital Output Connections



MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA, SA5 4EB. TEL: (01792) 561234 FAX: (01792) 561016		TITLE: CONTROLLER OUTPUTS PROJECT: OC_5T_WASH PROJECT DESCRIPTION: MONO EQUIPMENT - WASH OVEN CONTROLLER (DEVELOPMENT)		A RO SIG DATE AS BUILT REVISION DRAWN: ELECTRICALLY APPROVED BY- RO ALAN THOMAS DATE: 05/01/15 DRAWING NO. 175E25-00005 REV: A	
MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA, SA5 4EB. TEL: (01792) 561234 FAX: (01792) 561016		TITLE: CONTROLLER OUTPUTS PROJECT: OC_5T_WASH PROJECT DESCRIPTION: MONO EQUIPMENT - WASH OVEN CONTROLLER (DEVELOPMENT)		A RO SIG DATE AS BUILT REVISION DRAWN: ELECTRICALLY APPROVED BY- RO ALAN THOMAS DATE: 05/01/15 DRAWING NO. 175E25-00005 REV: A	
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Figure D.7: Electrical specifications: T/C Connections

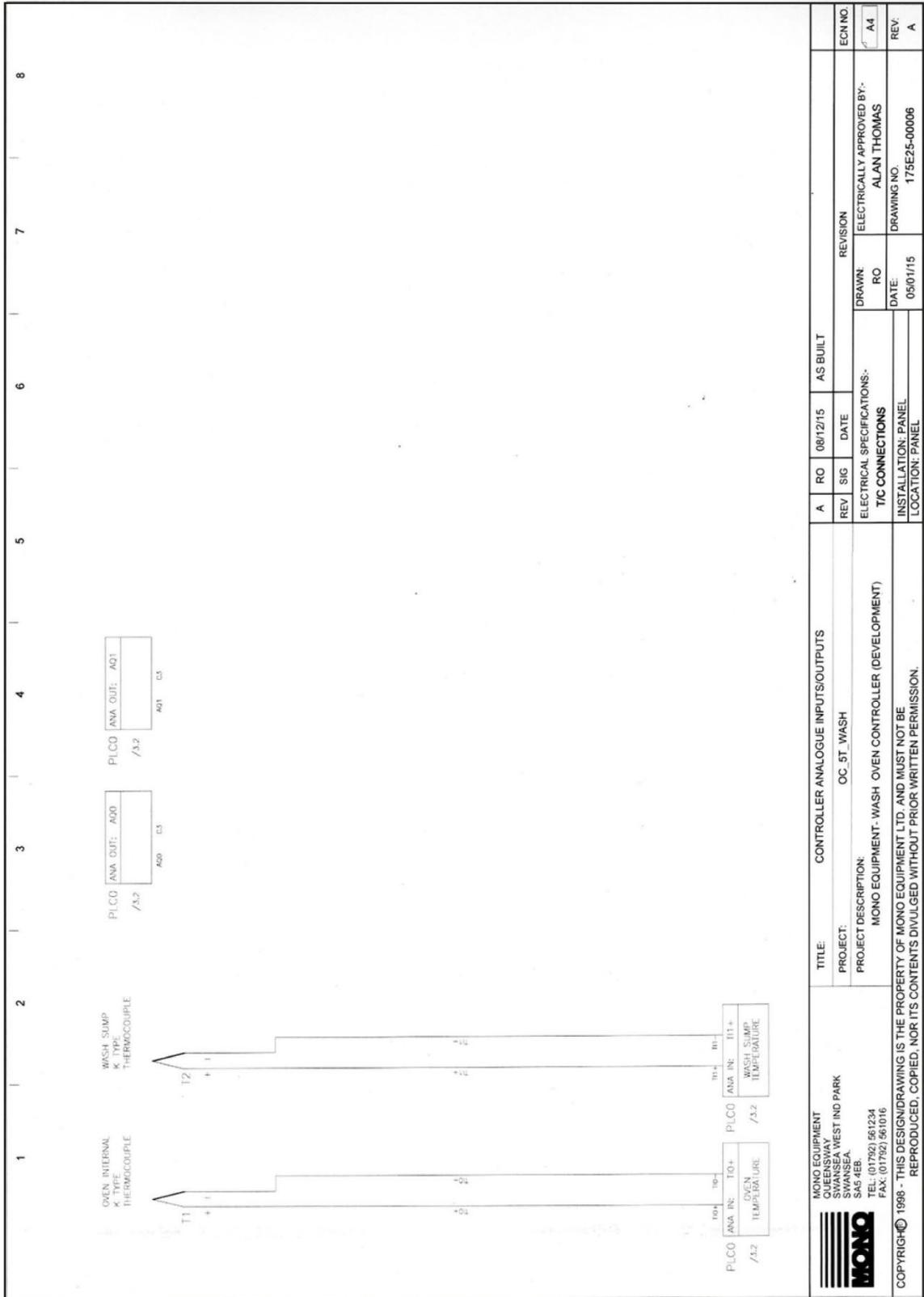
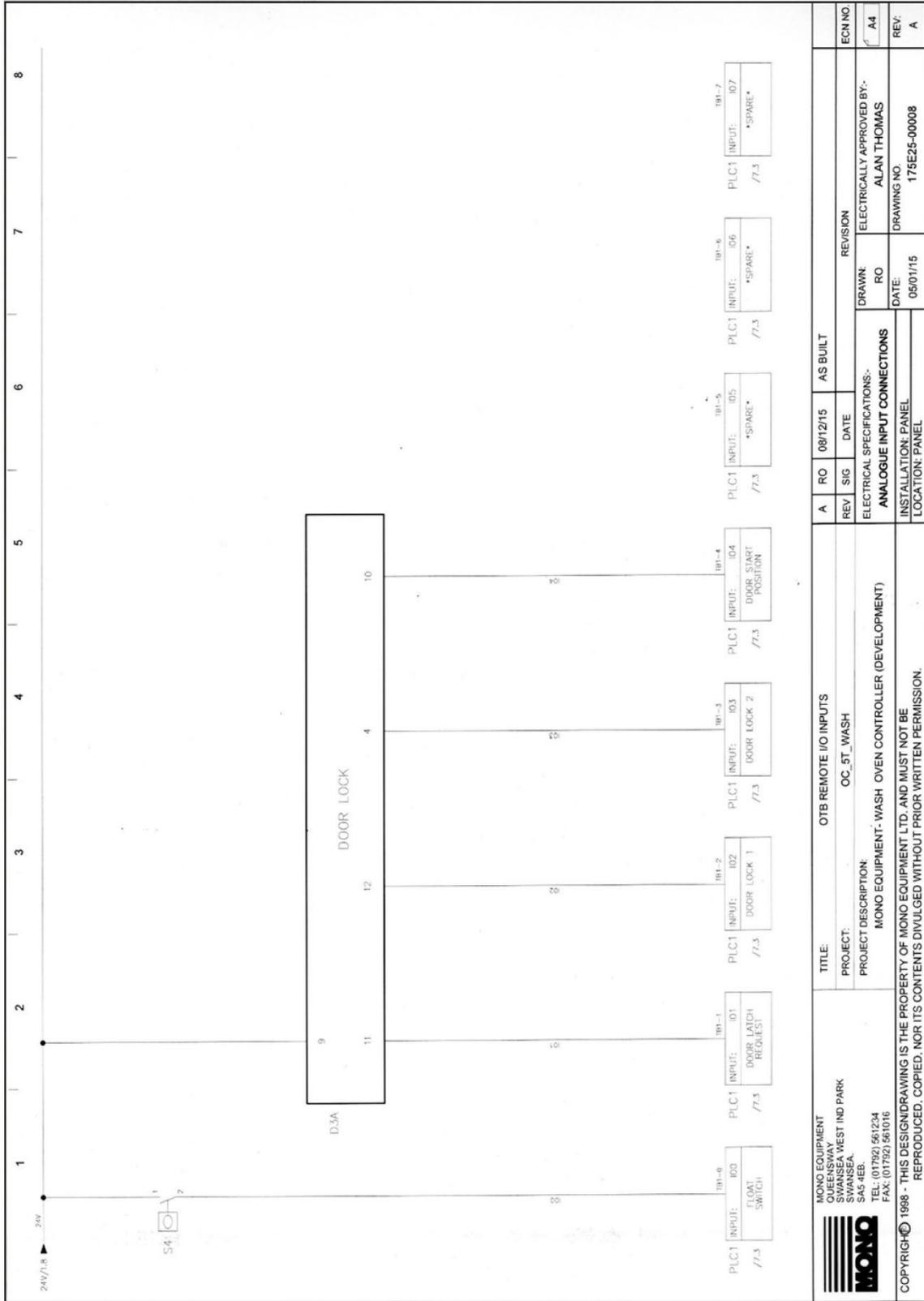


Figure D.9: Electrical specifications: Analogue Input Connections



MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA, SAG-HEB. TEL: (01792) 562234 FAX: (01792) 561016		TITLE: OTB REMOTE I/O INPUTS PROJECT: OC_5T_WASH PROJECT DESCRIPTION: MONO EQUIPMENT - WASH OVEN CONTROLLER (DEVELOPMENT)		ECH NO. A4 REV. A	
A REV SIG	RO DATE	AS BUILT	REVISION	DRAWN: RO DATE: 05/01/15	ELECTRICALLY APPROVED BY:- ALAN THOMAS DRAWING NO: 175E25-00008
ELECTRICAL SPECIFICATIONS:- ANALOGUE INPUT CONNECTIONS			INSTALLATION: PANEL LOCATION: PANEL		

Figure D.10: Electrical specifications: Analogue Input Connections

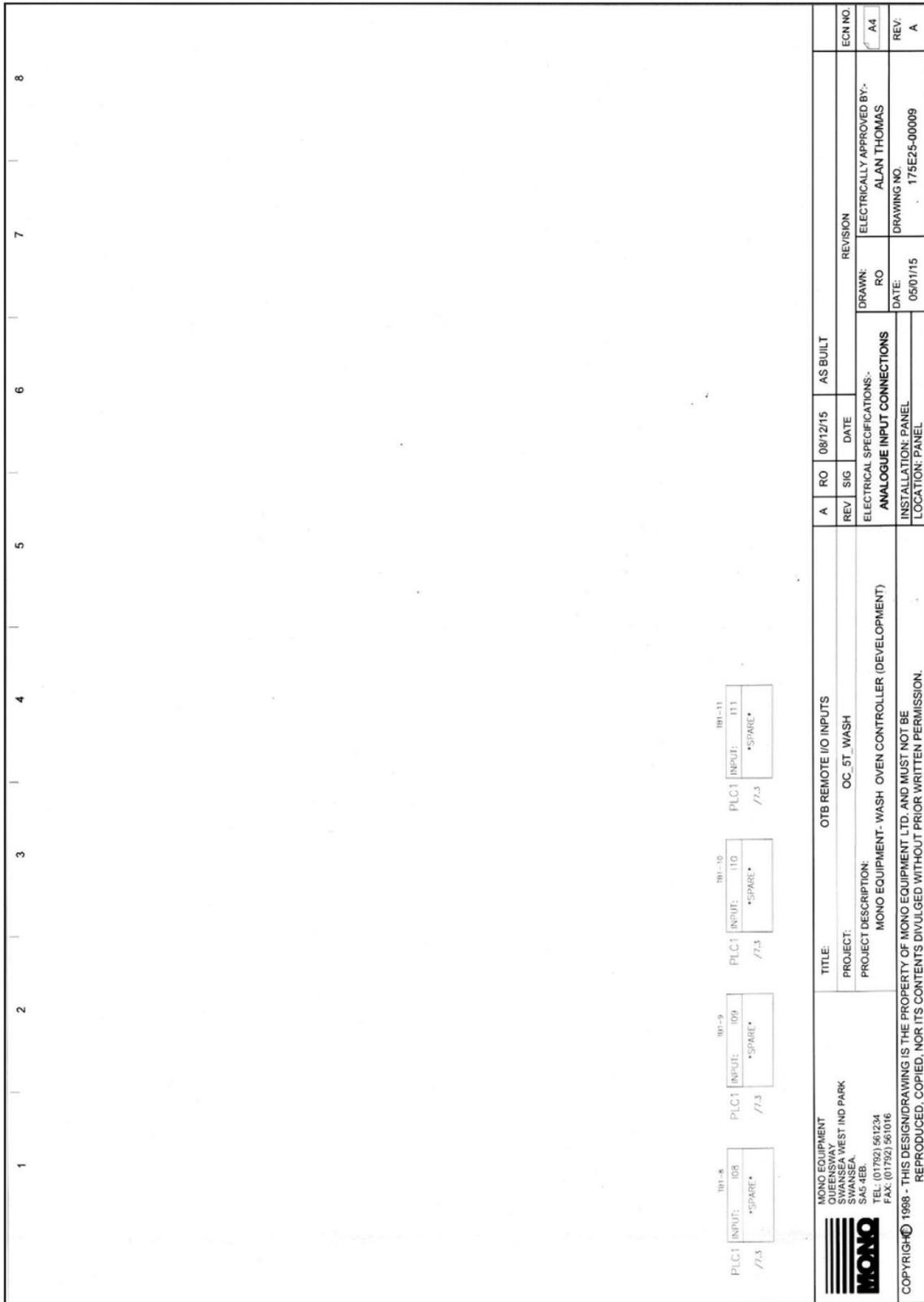
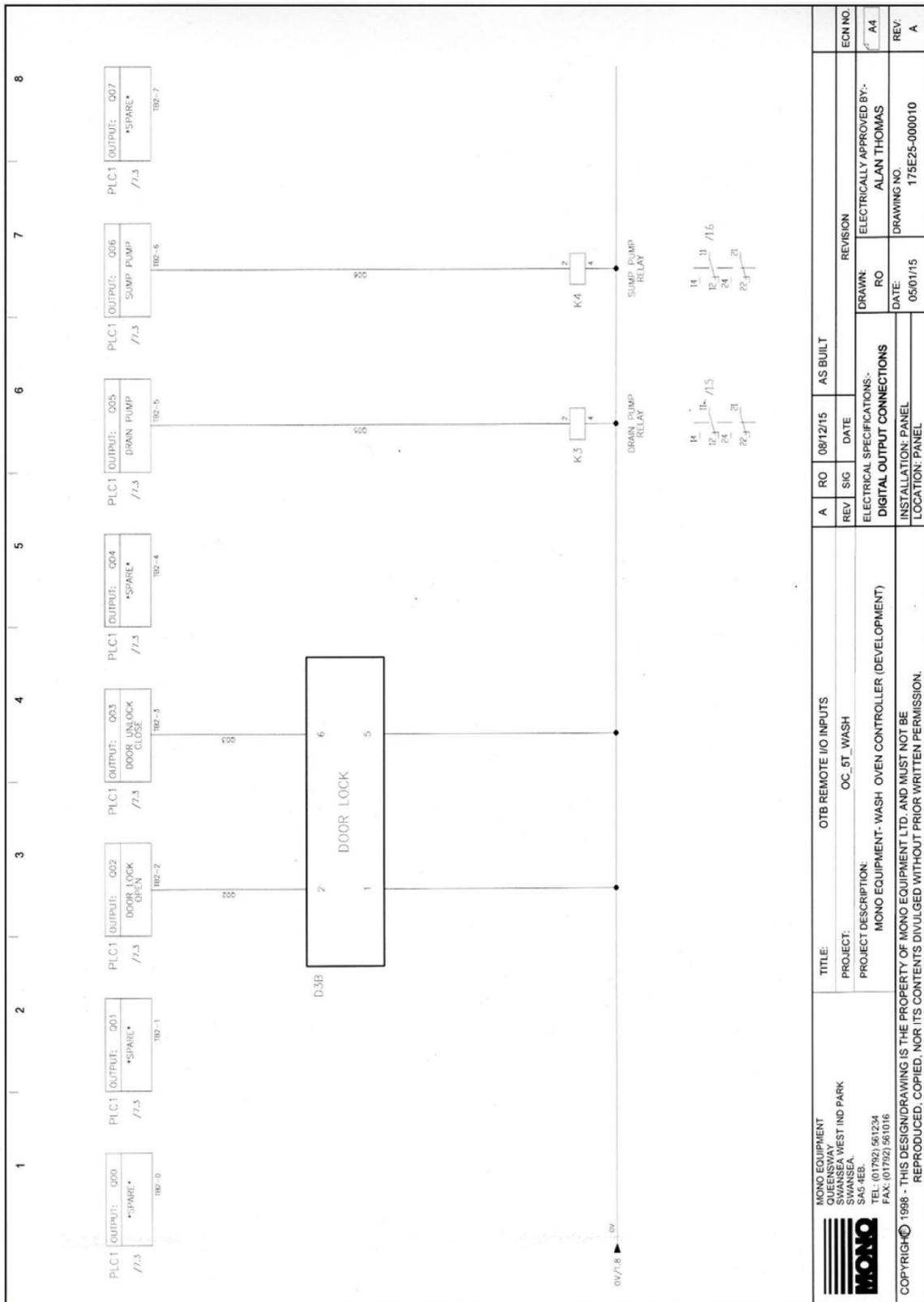


Figure D.11: Electrical specifications: Analogue Output Connections



MONO EQUIPMENT SWANSEA WEST IND PARK SWANSEA, SA5 4EB. TEL: (01792) 561234 FAX: (01792) 561016		TITLE: OTB REMOTE I/O INPUTS		AS BUILT		ECN NO. A4	
PROJECT: MONO EQUIPMENT - WASH OVEN CONTROLLER (DEVELOPMENT)		PROJECT DESCRIPTION: MONO EQUIPMENT - WASH OVEN CONTROLLER (DEVELOPMENT)		DATE: 08/12/15		REVISION ELECTRICALLY APPROVED BY:- ALAN THOMAS	
A REV:		RO SIG:		DATE: 05/01/15		DRAWING NO. 175E25-000010	
DIGITAL OUTPUT CONNECTIONS INSTALLATION: PANEL		LOCATION: PANEL		DATE: 05/01/15		REV: A	

MONO Equipment is the leading designer and manufacturer of bakery equipment in the United Kingdom. This proud heritage of British craftsmanship, combined with a reputation for creating high-quality, innovative products, can be traced back to its origins in 1947.

All our bakery equipment is manufactured to the most stringent NQA ISO9001:2015 & NQA ISO14001:2015 standards and is crafted using the very latest, cutting-edge technology combined with the time-honoured skills of the master craftsman.

MONO Equipment truly excels in providing tailor-made solutions to a diverse range of clients, from the small independent artisan baker to the large retail chains found on every high street and in every out-of-town shopping centre. We can supply everything from a simple Food-2-Go cafe oven to the entire list of bakery equipment needed to set up a full scratch bakery.



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