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Enter **Serial No.** here. _____

In the event of an enquiry please quote this serial number.

OVEN TYPE 153 (4 tray) 138 (7 tray)



Bx OVEN

SET UP AND OPERATION OF OVEN WITH CLASSIC CONTROLLER


Failure to adhere to the operation, cleaning and maintenance instructions detailed in this manual could affect the warranty of this oven.



DECLARATION OF CONFORMITY

We hereby declare that this machine complies with the essential health and safety requirements of :-

- The Machinery Directive 2006 / 42 / EC
- The Low voltage Directive 2006 / 95 / EC
- The requirements of the Electromagnetic Compatibility Directive 2004 / 108EC, 91 / 263 / EEC, 92 / 31 / EEC
Incorporating standards
EN55014-1:2006+A1:2009+A2:2011
EN55014-2:1997+A1:2001+A2:2008
- The General Safety of Machinery and food processing Standards applicable
- Materials and Articles intended to come into contact with food
Regulation (EC) No. 1935 / 2004

Signed	
G.A.Williams – Quality Manager	

Date	
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Machine FG Code.		Machine Serial No.	
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A technical construction file for this machine is retained at the following address:

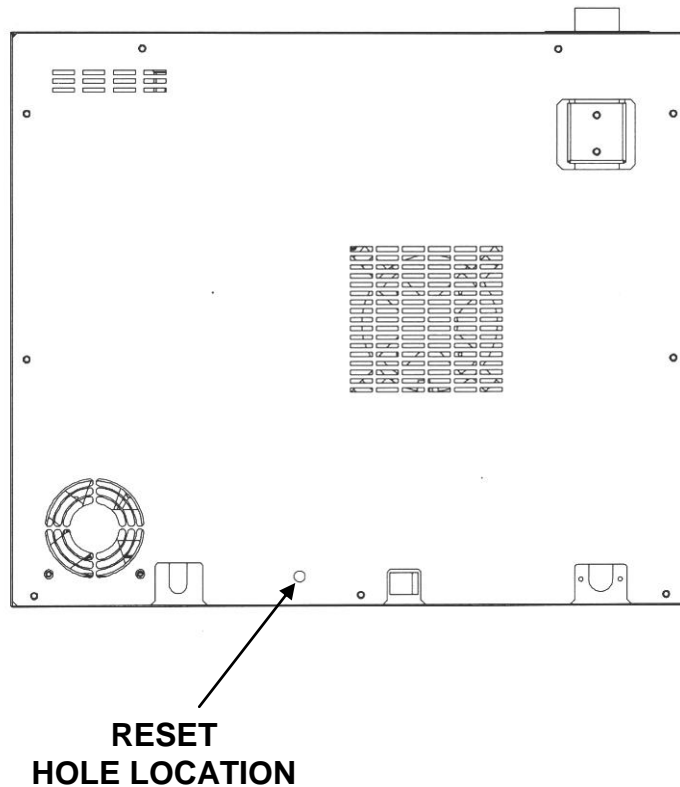
MONO EQUIPMENT
Queensway,
Swansea West Industrial Park,
Swansea
SA5 4EB
UK

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, North Lynn Industrial Estate, Kings Lynn Norfolk, PE30 2HZ

ATTENTION

IF OVEN FAILS TO HEAT UP, WHEN FIRST CONNECTED TO A POWER SUPPLY OR DURING USE AT ANYTIME, PRESS RESET BUTTON(S) LOCATED THROUGH THE REAR BACK PANEL. (DO NOT REMOVE BACK PANEL)



REAR VIEW OF OVEN

IF THIS FAILS TO CORRECT THE SITUATION, PLEASE CONTACT YOUR SUPPLIER

CONTENTS

		PAGE
PART 1.0	Introduction	5
PART 2.0	Specifications 4/5 TRAY AND 7 TRAY	6
PART 3.0	Safety	7
PART 4.0	Installation	8
PART 5.0	Isolation	9
PART 6.0	Daily / Weekly Cleaning	10
PART 7.0	Ideal Operating Conditions	12
PART 8.0	<u>CLASSIC PANEL Operation</u> Running preset programs	13
PART 9.0	Programming Creating and changing program values	15
PART 10.0	Maintenance	18
PART 11.0	LED Light Replacement In the event of a light failure, please contact your supplier. There are no customer replaceable parts.	18
PART 12.0	Electrical diagrams	19
	<i>SERVICE / SPARES</i> Contact Information	22

1.0 INTRODUCTION

- A combination of clean industrial design and the latest technology, the **MONO BX oven range** is designed specifically to take the baking Industry's standard trays.
- The ovens in the range are of **stainless steel construction**
- The smaller ovens are designed to be **stackable** without separate support.
- The high-speed fans and elements give **efficient air circulation** to produce a professional bake across a range of products.
- The doors are **double glazed** to increase the efficiency of the ovens well-insulated baking chamber and also house the energy efficient led lights.
- Ovens are fitted with **LED (classic)** displays for the user-friendly control panels.



2.0 SPECIFICATIONS

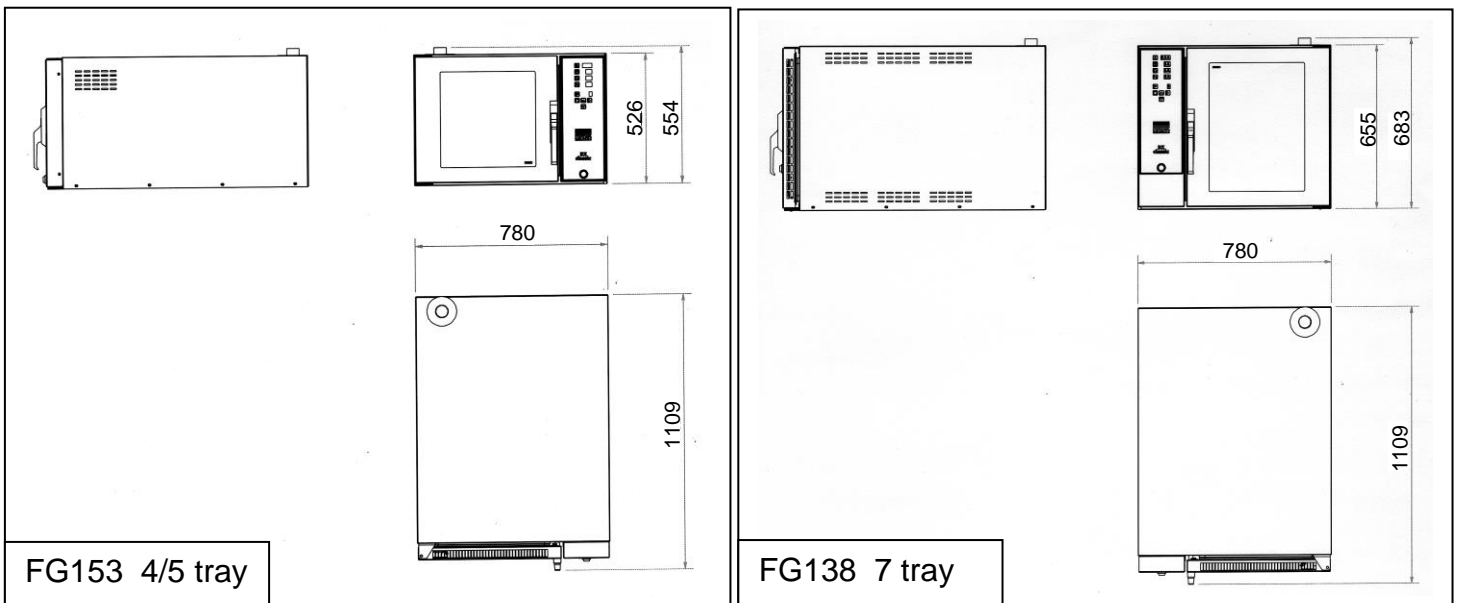
PLEASE CHECK RATING PLATE ON THE OVEN FOR APPLICABLE VERSION

	FG153 4/5 TRAY OVENS	FG138 7 TRAY OVENS
<u>DIMENSIONS</u>		
TRAY SIZE	40x60	40x60
HEIGHT	526mm	655mm
WIDTH	780mm	780mm
DEPTH – DOOR CLOSED	1109mm	1109mm
<u>POWER</u> (3 phase or single phase available)		
3 phase	415v. 3 PHASE + N + E, 50HZ 7.5kW , 11amps per phase.	415v. 3 PHASE + N + E, 50HZ 10kW , 14amps per phase.
Single phase	240v. 50HZ 7.5kW 32Amps	240v. 50HZ 10kW 45Amps

Noise Level: Less than 85dB.

NOTE

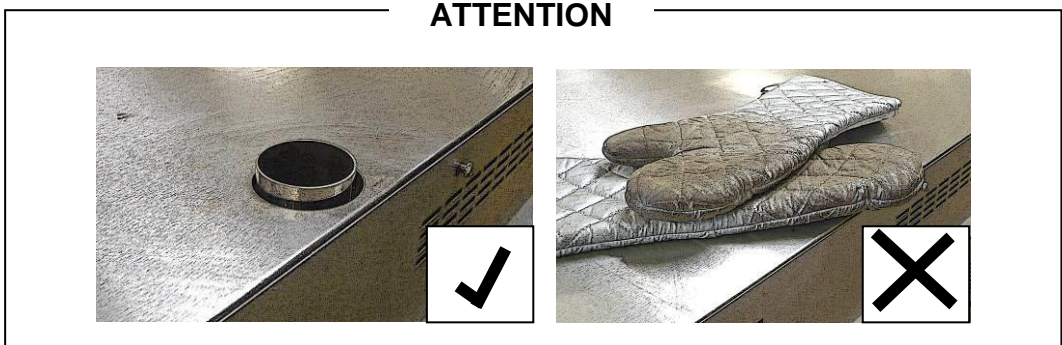
No water supply or drainage is required for this oven.



3.0 SAFETY ---

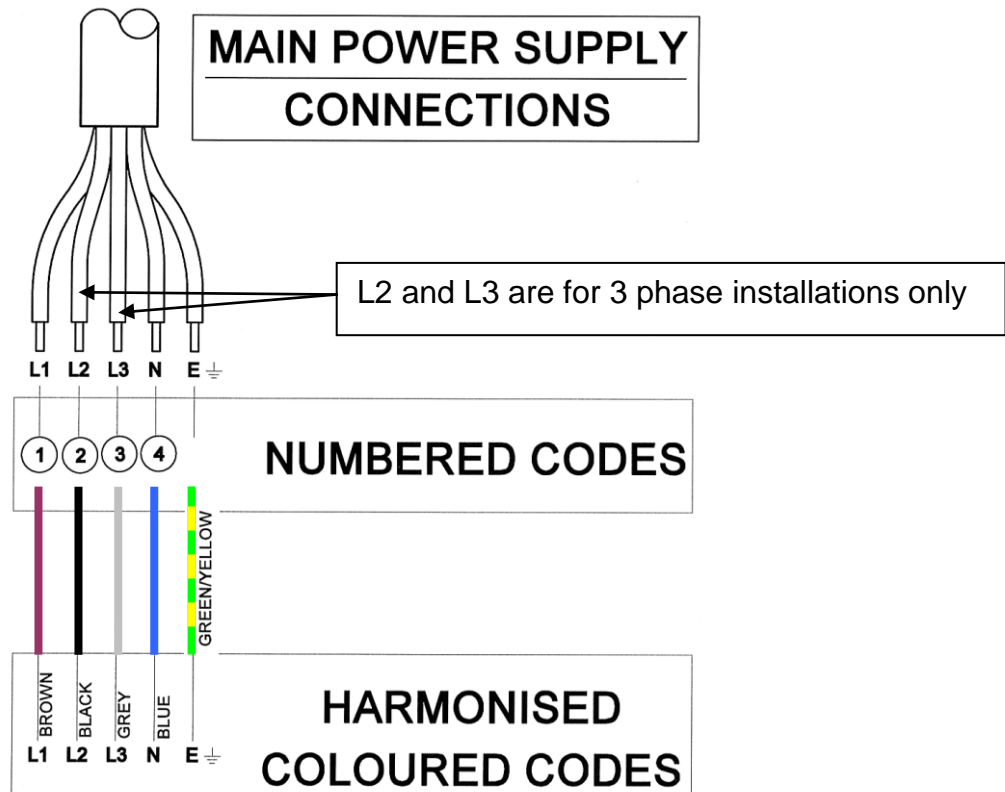
In the interest of safety and efficient operation of the oven, it is essential that this manual should be made available to the operator before work is commenced. The following points should be observed and followed at all times.

1. The oven is designed for baking of bread, confectionery and savoury products only. **DO NOT** use it for any other items without consulting with **MONO**.
2. The oven must be allowed to cool before any form of cleaning is started.
3. All repairs and maintenance of electrical units must be carried out by authorised electricians; even then, electrical access panels must not be opened unless the mains supply to the oven is isolated.
4. All connections to the oven must be made in accordance with the statutory requirements of the country of installation.
5. While the oven is in operation (and for some time after use), **it is inadvisable to touch the oven window or the surrounds because of conducted heat.**
6. The oven must be operated as described in this manual.
7. Only **MONO** spare parts should be used on this oven.
8. The construction of the oven must not be changed.
9. The owner of the oven is legally obliged to instruct staff of these safety points and of the safe operation of the oven.
These instructions should not be removed from the working area.
10. To prevent door glass from shattering - **DO NOT CLEAN OVEN GLASS WHEN HOT.**
11. Oven gloves should be worn when moving products in or out of the oven.
12. Do not block the flue outlet pipe on top of the oven.
(see photos below)



4.0 INSTALLATION

1. The oven should be connected to a wall isolator.



2. **It is the customers' sole responsibility to arrange adequate ventilation** and it should be sufficient to ensure water does not condense on or around the oven. A 50mm gap is required at the sides and rear of this oven and 150mm above. Chimneys and evacuation ducts, fitted above mono ovens should be insulated.
3. **In the interests of hygiene**, we strongly recommend that before using the oven for the first time you wipe the inside of the oven and all accessories thoroughly with a clean cloth soaked in warm soapy water. Although the utmost care is taken during assembly and pre-delivery inspection, there is always a possibility of residue contaminating the first bake if this is not done.
4. **Ensure that the locking castors on the base unit (if supplied) are locked into position.**
5. **AMBIENT WORKING TEMPERATURES.**
Ambient working temperatures for electric/electronic components such as solenoid switches, circuit breakers, motors etc should be **no more than 40°C (115° f)**

Manufacturers of these and other electrical components advise that any ambient temperature above 40 °C affects the functionality of the components and any related guarantees become void. For example, above this temperature motors are not satisfactorily cooled, contactor efficiency is seriously impaired and electronic components shut down. It is the customers' sole responsibility to arrange for adequate ventilation. Any component malfunctioning during the guarantee period that is found to have been subject to excessive humidity or ambient working temperature above 40°C (115°F) will not be covered by the component manufacturers guarantee or MONO's product warranty.

5.0 ISOLATION

ELECTRICITY SUPPLY

To stop the oven in an emergency,
switch off electricity at the wall isolator.

WATER

There is no water supply required for this oven.

6.0 CLEANING INSTRUCTIONS

DAILY CLEANING

**NOTE: BEFORE CLEANING,
ISOLATE OVEN FROM MAINS SUPPLY AND ALLOW TO COOL.**

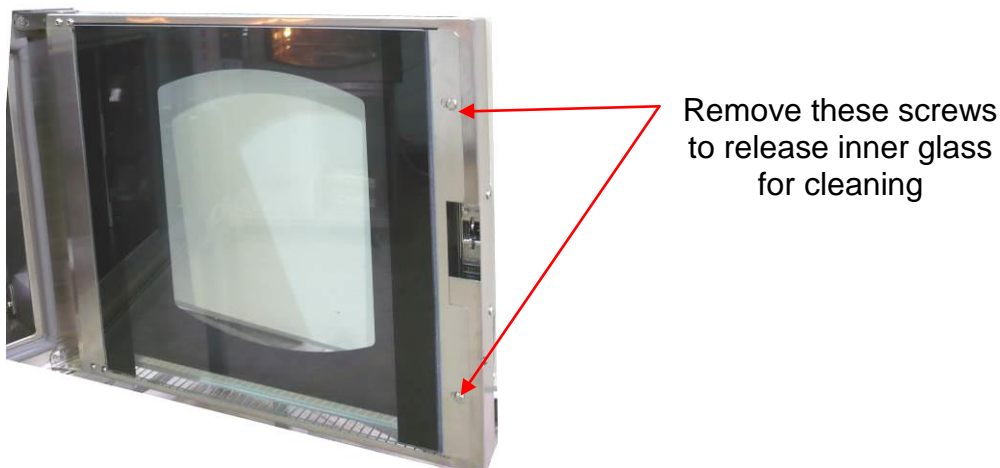
- The equipment is to be cleaned daily using approved chloride-free cleaning fluid
- Sweep any debris (after it has been allowed to cool) onto oven removable trays and remove for cleaning.
- Brush down and wipe oven front, back and sides.
- Wipe clean with a damp cloth that has been soaked in a solution of mild detergent and hot water.

NOTE

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

To open, remove the two screws shown in the picture below.

The internal surfaces of the door glass can then be cleaned using a suitable glass cleaner.



Ensure both screws are replaced after the glass has been cleaned.

IMPORTANT:

TAKE CARE WATER DOES NOT ENTER THE CONTROL PANEL OR REAR ACCESS PANEL.

DO NOT REMOVE THE REAR PANNELING INSIDE THE OVEN.

THIS ALLOWS ACCESS TO THE FAN ASSEMBLY WHICH IS NOT SAFETY INTERLOCKED AND COULD CAUSE INJURY

WEEKLY CLEANING (OR SOONER IF REQUIRED)

**NOTE: BEFORE CLEANING, ISOLATE OVEN FROM MAINS SUPPLY
AND ALLOW TO COOL.**

Complete daily check on the previous page then

- Clean any burnt-on debris by careful use of a proprietary oven cleaner, carefully following the manufacturer's instructions. Do not allow the oven cleaner to get onto the control panel.
- Scrub cabinet wheels (if fitted), with a mild detergent and hot water using nylon cleaning brush.

7.0 IDEAL OPERATING CONDITIONS ---

- Room should be allowed for the door to open fully to allow easy loading and unloading of product without people coming in contact with hot surfaces.
- To ensure that operators do not slip. The floor area around the oven should be kept clean and free from spilt fat etc
- Racks should be available to allow cooked products to cool safely.
- Oven gloves should be available at all times.
- It is the customers' sole responsibility to arrange adequate ventilation and it should be sufficient to ensure water does not condense on or around the oven. A 50mm gap is required at the sides and rear of this oven and at least 150mm on top.
- Chimneys and evacuation ducts, fitted above mono ovens should be insulated

AMBIENT WORKING TEMPERATURES.

Ambient working temperatures for electric/electronic components such as solenoid switches, circuit breakers, motors etc should be **no more than 40°C (115° f)**

Manufacturers of these and other electrical components advise that any ambient temperature above 40°C affects the functionality of the components and any related guarantees become void. For example, above this temperature motors are not satisfactorily cooled, contactor efficiency is seriously impaired and electronic components shut down. It is the customers' sole responsibility to arrange for adequate ventilation. Any component malfunctioning during the guarantee period that is found to have been subject to excessive humidity or ambient working temperature above 40°C (115°F) will not be covered by the component manufacturers guarantee or MONO's product warranty.

Bx CLASSIC

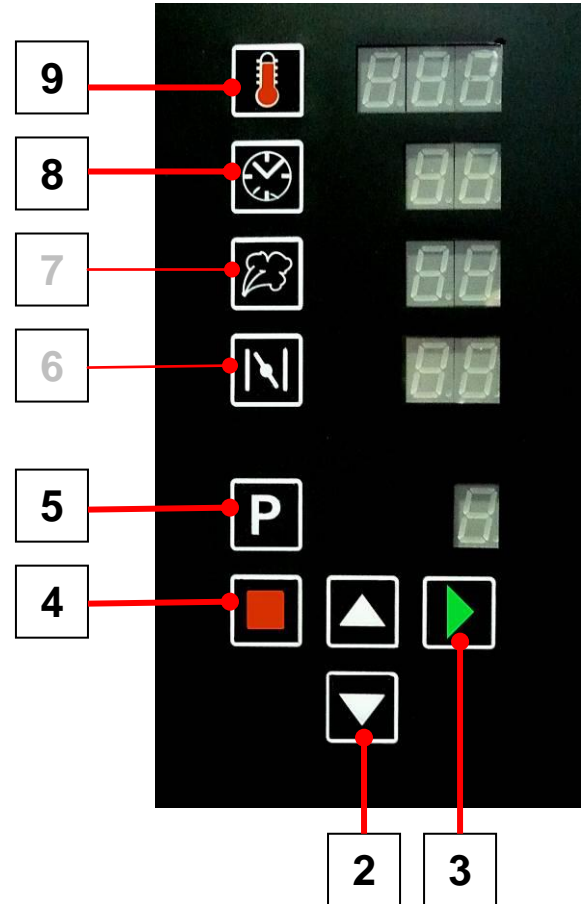
Operating Instructions

Section 8

RUNNING PRE-SET PROGRAMS

REFER TO CONTROL PANEL ILLUSTRATION (SEE RIGHT)

- 1 **Switch on power** by pressing green button (1).
- 2 **Select required program (shown at P)** using UP/DOWN scroll keys (2).
- 3 **Press START** key (3) to begin bake cycle.
 - Oven will heat to set temperature and display will flash actual temperature.
 - **When set temperature is reached** the display will stop flashing. The oven is now ready
- 4 **Load product.** Close door.
- 5 **Press START** key (3).
Display will show the following:-
 - (9) • Actual temperature.
 - (8) • Remaining bake time in minutes.
Display will automatically switch to show remaining seconds during the last minute of bake time.
 - Bake time can be increased if required. Press time key (8), then up/down keys (2) to add more time amount required. Press time key (8) then start (3).
 - (7) • NOT USED ON NON-STEAM OVEN
 - (6) • NOT USED ON NON-STEAM OVEN
 - (5) • Program number/bake cycle indicator.
Display will alternate between program number and the spinning bake cycle indicator.
- 6 Press **STOP** key (4) when “bake over” alarm sounds



9.0 BX 'CLASSIC' PROGRAMMING INSTRUCTIONS

CREATING PROGRAMS/CHANGING PROGRAM VALUES.

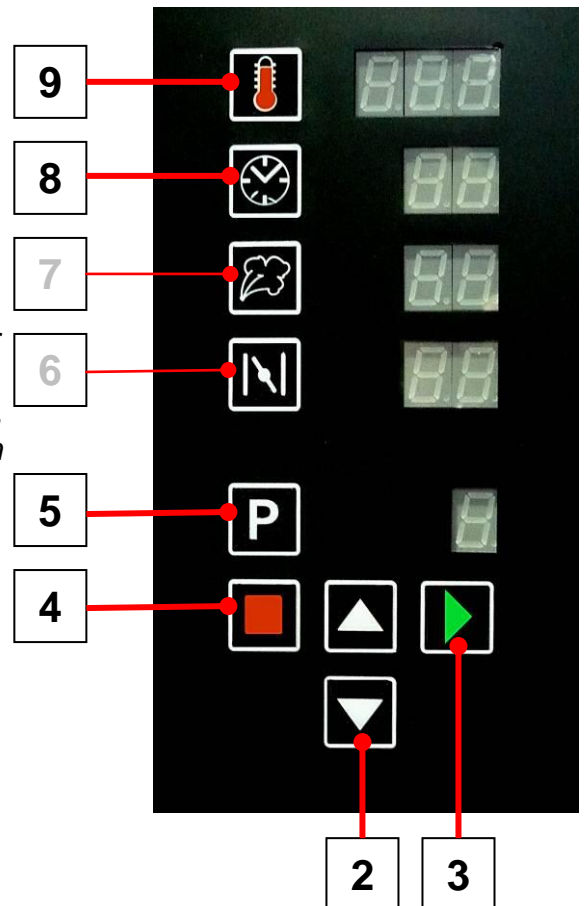
Pre-set values for bake temperature and bake time may be modified at any point.

CREATING/CHANGING PROGRAM VALUES

1. Switch on power by pressing green button (1).
2. Select required program (shown at P) using UP/DOWN scroll keys (2).
3. Press the key associated with the change required (temperature (9), time (8)).
A selection indicator will flash in the right hand side of the selected window.
4. Use up/down arrow keys (2) to modify the value

The operator now has the option to save the changes, or run the program with temporary values.
If the operator chooses not to save the modifications, then the program will reset to its original values upon reselection.

5. Press START (3) to bake (see next page for further baking instructions)
or save the values as follows



SAVING PROGRAM VALUES

6. Press and hold the P key (5) for 5 seconds. *During this time, all displayed values will flash. The controller will beep at the end of this period to acknowledge the program save.*

Note:
Programs cannot be saved during a bake cycle.



OTHER SETTINGS AVAILABLE ON THE CLASSIC PANEL

1. SETTING PREBAKE TEMPERATURE (if enabled)

Press (9). (one dot flashes)
Press (9) and hold for 3 seconds (3 dots flash).
Use up/down arrow keys (2) to set temperature.

Pre-set values for bake temperature; bake time, sleep mode etc. may be modified at any point.

2. FAN DELAY ENABLING -- NOTE: This facility is only functional on a 3 phase oven. If it is activated on a 1 phase oven, the fan will stop.

Hold the **P** key (5), together with the **STOP** key (4) for 5 seconds.
Press start (3) - "FAN" is displayed
press (8) to change to 00 (disable) or 01 (enable)
press up/down (2) to change next display to between 00 and 60 seconds
00 = no delay 60= 60seconds delay

3. OVEN PREBAKE ENABLING

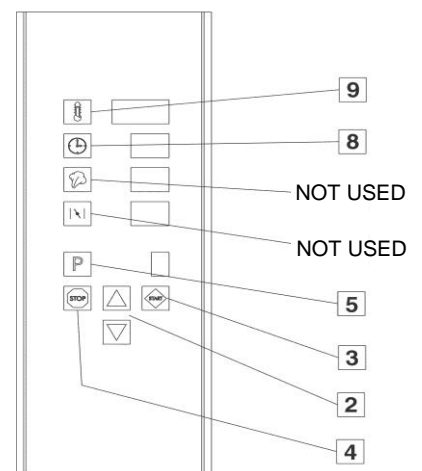
Hold the **P** key (5), together with the **STOP** key (4) for 5 seconds.
or if already done for above setting, continue by
pressing start 3 - "**Prb**" is displayed
Press (8) to show "- 0" for disabled or again to show "-1" for enabled.

4. CHANGING TEMPERATURE FROM C TO F

Hold the **P** key (5), together with the **STOP** key (4) for 5 seconds.
or if already done for above setting, continue by
pressing start (3) - "**F**" OR "**C**" is displayed
Press arrow key (2) to change this.

5. SLEEP MODE ENABLING

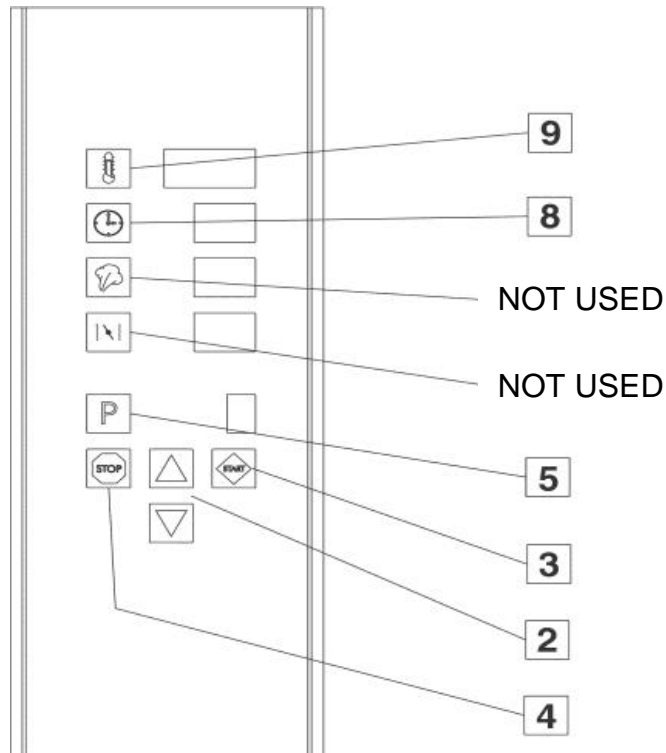
Hold the **P** key (5), together with the **STOP** key (4) for 5 seconds
or if already done for above setting, continue by
pressing start (3) - "**Slp**" is displayed
press up/down (2) to change next display to between 00 and 60
00 = disabled 1-60= 60 minutes delay before sleep.



6. TEMPERATURE SET POINT/CHAMBER DISPLAY

Hold the **P** key (5), together with the **STOP** key (4) for 5 seconds.
or if already done for above setting, continue by
pressing start (3) - “**dsp**” is displayed
press (8) to change between “**sp**” = set point temperature displayed
or “**ct**” = chamber temperature displayed.

Pressing start (3) again sets the display back to
normal operating mode.



7. PROGRAM “0” ENABLE (Temperature and time only control)

Hold the **P** key (5), together with the **STOP** key (4) for 5 seconds.
or if already done for above setting, continue by
pressing start (3) - “**P0E**” is displayed
press (8) to change to -0 (disable) or -1 (enable)

8. EIGHT HOUR TIMER (20 minute warning of 8hrs of operation)

Hold the **P** key (5), together with the **STOP** key (4) for 5 seconds.
or if already done for above setting, continue by
pressing start (3) - “**8HR**” is displayed
press (8) to change to -0 (disable) or -1 (enable)

10.0 MAINTENANCE ---

- Check for frayed or bare cables.
The machine must not be used if frayed or bare cables are visible.
- Follow cleaning instructions.

11.0 INTERIOR LIGHT REPLACEMENT ---

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

12.0 ELECTRICAL WIRING INFORMATION

IF IN ANY DOUBT - ASK

REV	SIG	DATE	REVISION	ECN NO.

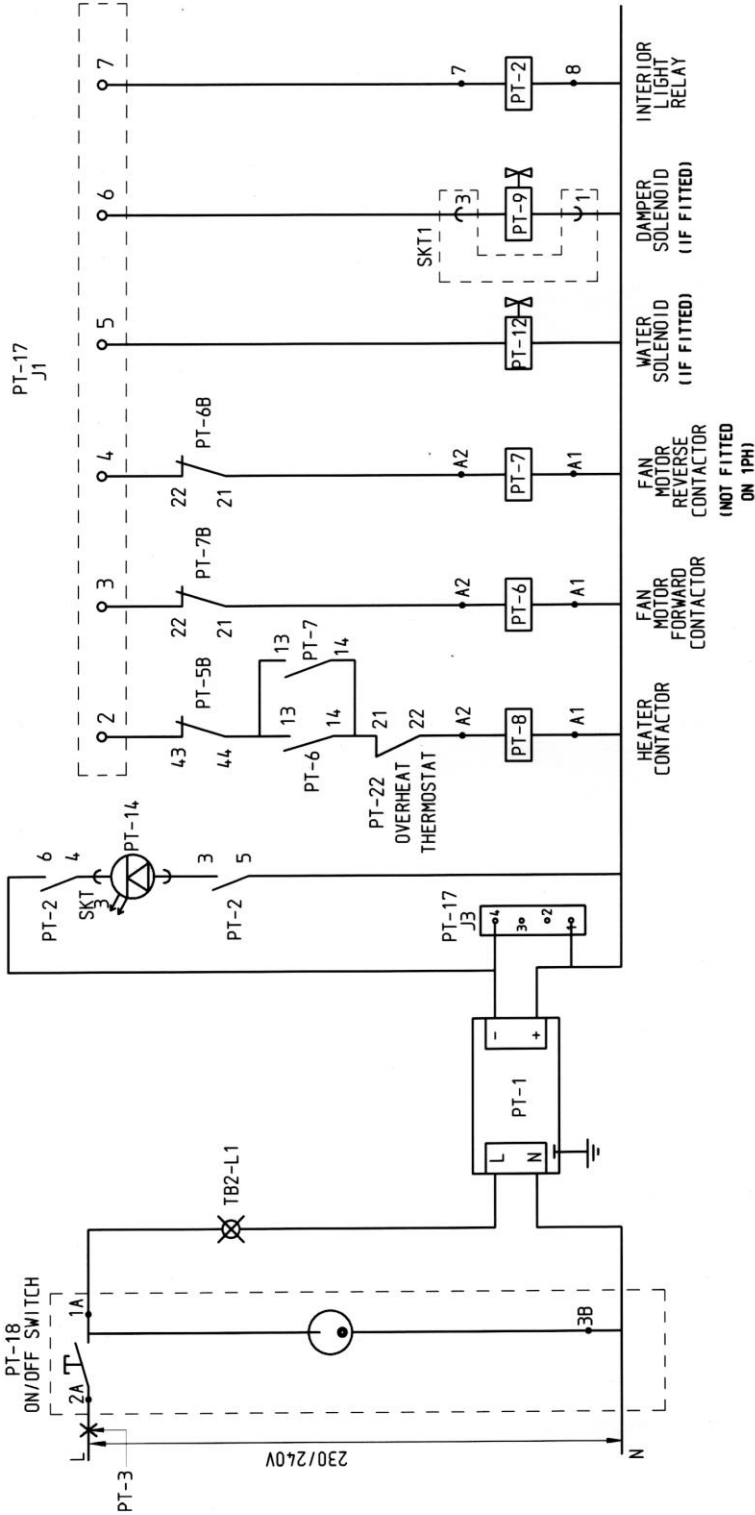
DRAWING PT-Ref	DESCRIPTION	MONO PART NUMBER
PT-1	24V DC POWER SUPPLY UNIT	8801-93-005
PT-2a	INTERIOR LIGHT RELAY	8723-37-004
PT-2b	INTERIOR LIGHT RELAY BASE	8723-36-001
PT-3	CONTROL CIRCUIT M.C.B.	8872-22-062
PT-5a	FAN MOTOR OVERLOAD UNIT	8801-03-020
PT-5b	FAN MOTOR OVERLOAD AUXILIARY CONTACT	8801-14-012
PT-6	FAN MOTOR FORWARD CONTACTOR	8801-08-031
PT-7	FAN MOTOR REVERSE CONTACTOR (NOT FITTED ON IPH)	8801-08-031
PT-8	HEATING ELEMENT CONTACTOR	8801-08-021
PT-10	FAN MOTOR UNIT	8720-74-001
PT-11	HEATING ELEMENT (7kW 240V) (8kW 220V)	8847-04-067 8847-04-073
PT-13	DOOR SWITCH	8842-07-023
PT-16	THERMOCOUPLE	8873-95-006
PT-17	MAIN P.C.B.	8705-97-027
PT-18	MAIN ON/OFF SWITCH	8836-07-009
PT-19	REAR COOLING FAN	8869-75-018
PT-22	OVERHEAT THERMOSTAT	8888-30-014
PT-27	FAN FUSE	8842-85-025
PT-28	AUX FUSE	8842-85-039
PT-29	AUX SUPPLY SOCKET	8970-06-001
DOOR MOUNTED LED LIGHT UNIT		153-03-03900

MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA, SAS 4EB.	TEL: (01792) 561234 FAX: (01792) 561016	TITLE: ELECTRICAL COMPONENTS LAYOUT 4 & 7 TRAY 40 X 60 CLASSIC LED DOOR LIGHT/NO STEAM VERSION	DRAWN: JC/RAC ELECTRICALLY APPROVED BY: A. THOMAS
ELECTRICAL SPECIFICATIONS:- 380/415V 3PH 50HZ 240V/1PH/ 50HZ		DATE: 8/3/16	DRAWING NO. M153E25-30100
REV		REV	REV

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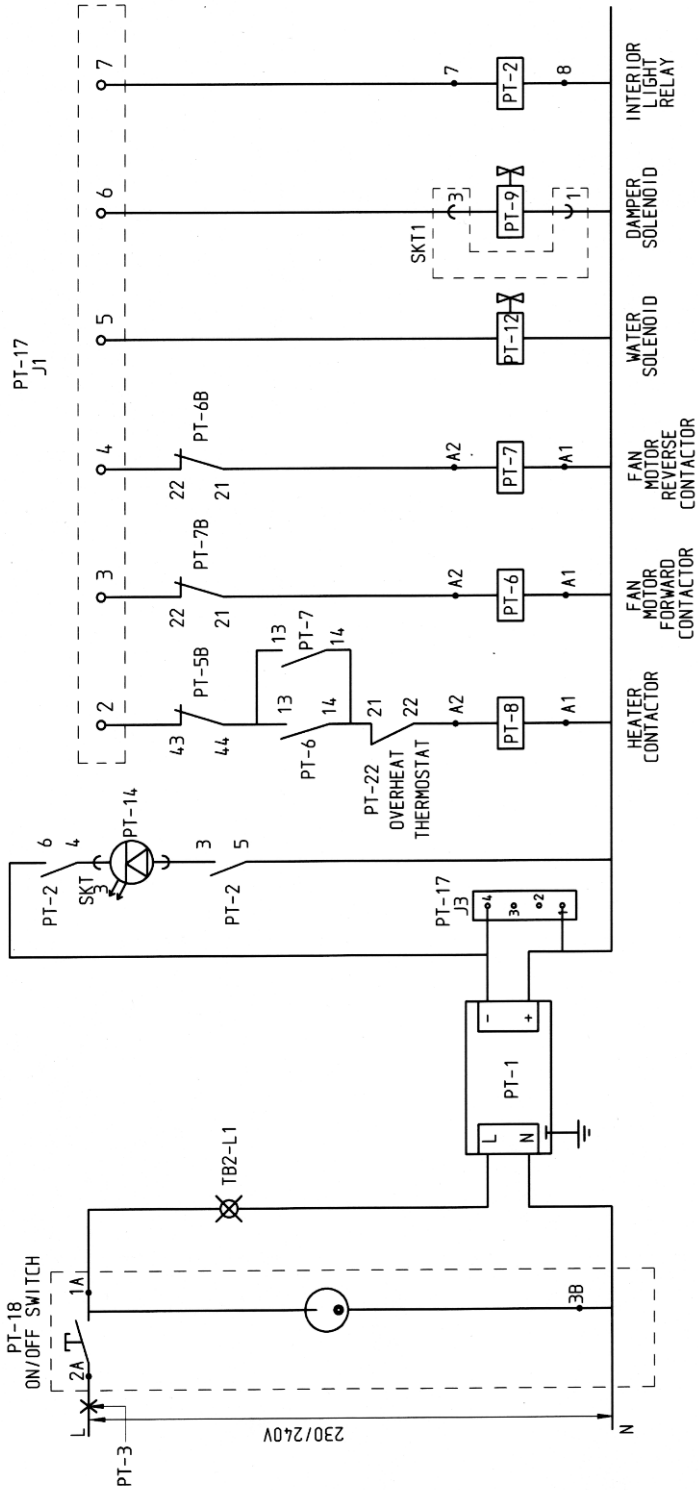


REV	SIG	DATE	REVISION	ECN NO.
<p>MONO EQUIPMENT QUEENSWAY 4 & 7 TRAY CLASSIC L.E.D. OVEN SWANSEA SA5 4EB TEL: (01792) 561234 FAX: (01792) 561016</p>				
<p>MONO</p>				
<p>ELECTRICAL SPECIFICATIONS:- 380/415V 3PH 50HZ 240V/1PH/ 50HZ</p>				
<p>TITLE: P.C.B. OUTPUTS 4 & 7 TRAY CLASSIC L.E.D. OVEN LED DOOR LIGHT VERSION</p>				
<p>DRAWN: RAC ELECTRICALLY APPROVED BY:- A. THOMAS</p>				
<p>DATE: 09/03/16 DRAWING NO. M153E25-30300</p>				
<p>REV. --</p>				

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IF IN ANY DOUBT - ASK

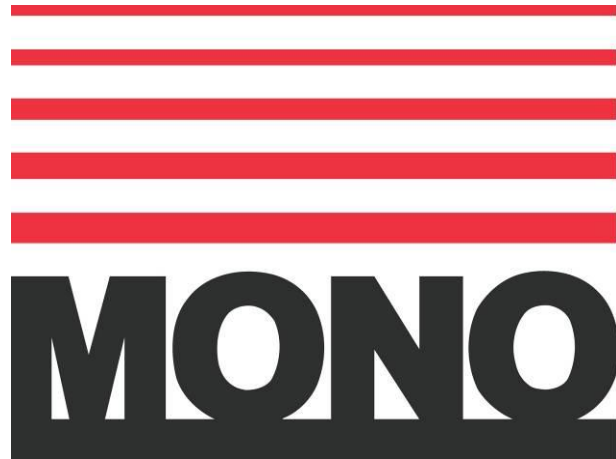


REV	SIG	DATE	REVISION	ECN NO.
MONO QUEENSWAY SWANSEA WEST IND PARK SWANSEA, SA5 4EB. TEL: (01792) 581234 FAX: (01792) 581016				
TITLE: P.C.B. OUTPUTS 4 TRAY CLASSIC L.E.D. OVEN LED DOOR LIGHT VERSION				
ELECTRICAL SPECIFICATIONS:- 380/415V 3 PHASE 50HZ				
DRAWN: MT/RAC ELECTRICALLY APPROVED BY:- AT				
DATE: 09/03/16 DRAWING NO. M153E25-30300 REV: --				

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If a fault arises, please do not hesitate to contact the
Customer Service Department, quoting the **machine serial number**
on the silver information plate of the machine and on the front cover of this manual



MONO

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□ **OVEN DISPOSAL**

CARE SHOULD BE TAKEN WHEN THE MACHINE COMES TO THE END OF ITS WORKING LIFE. ALL PARTS SHOULD BE DISPOSED OF IN THE APPROPRIATE PLACE, EITHER BY RECYCLING OR OTHER MEANS OF DISPOSAL THAT COMPLIES WITH LOCAL REGULATIONS.

(IN UK, ENVIRONMENTAL PROTECTION ACT 1990 APPLIES)