

Enter Serial No.	here.
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In the event of an enquiry please quote this serial number.



## **OPERATING AND MAINTENANCE MANUAL**

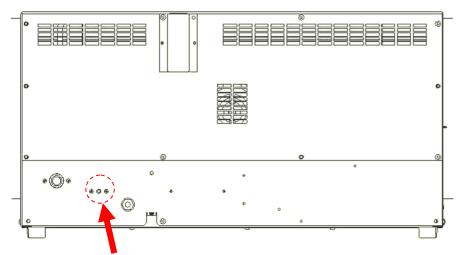
# COMPACT

**643** 3 TRAY OVEN

**FILE 52** 

#### To conserve heat do not keep door open longer than needed.

## **ATTENTION**



IF OVEN FAILS TO HEAT UP, WHEN FIRST CONNECTED TO A POWER SUPPLY OR DURING USE AT ANYTIME, PRESS RESET BUTTON

LOCATED THROUGH THE REAR BACK PANEL.
(DO NOT REMOVE BACK PANEL)

### **SAFETY SYMBOLS**

The following safety symbols are used throughout this product documentation and manual (available at www.monoequip.com).

Before using your new equipment, read the instruction manual carefully and pay special attention to information marked with the following symbols.



**WARNING** 

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING** 

Indicates a hazardous situation which, if not avoided, will result in electric shock.



**CAUTION** 

Indicates a hazardous situation which, if not avoided, will result in minor or moderate injury.

## ELECTRICAL SAFETY AND ADVICE REGARDING SUPPLEMENTARY ELECTRICAL PROTECTION

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

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

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

#### We Recommend:

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

#### Your attention is drawn to:

#### 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 includes:

- 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.



The supply to this machine must be protected by a 30mA Type A RCD



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

> Mr Craig Petherbridge Quality & Compliance Manager

Mr Alex Davies Engineering Manager

QD 001 Dated 01/11/2022

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PART 9.0  PART 10.0  PART 11.0	Operation Instructions  Maintenance  Steam System Maintenance

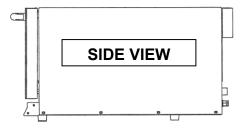
#### 1.0 INTRODUCTION

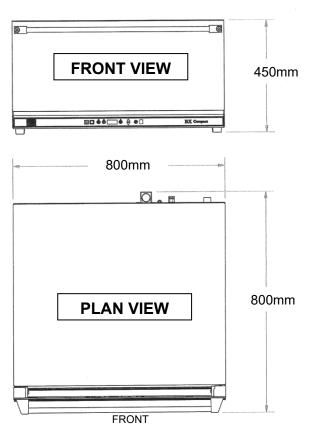
#### The MONO 643 COMPACT oven

is a compact, electric oven with a capacity for three 60cm x 40cm baking trays.

- ☐ The oven is robustly made of **stainless steel** with a bake chamber shaped to allow the unit to be **easily cleaned**.
- □ It has very high levels of **insulation for safety** and to **help save energy**.
- ☐ A great deal of attention has been given to keeping the **front areas cool**.
- ☐ It is has an exceptionally **easy to operate** control panel that will save up to nine programs.
- MONO COMPACT is designed to be stackable, without the requirement for a separate support and will grow with your business without occupying a large area of your valuable retailing space.

#### 2.0 DIMENSIONS





#### 2.1 OUTER DIMENSIONS

Height: 450mm.

Depth, door closed:800mm.Depth, door open:1065.

Width: 800mm.

#### Operational clearance:

50mm (2") clearance is required at the back and sides of the oven and 250mm (10") above to allow adequate circulation of air.

## 3.0 SPECIFICATIONS

Total Power: 2.7 kW.

Electric Supply: Single-phase 50Hz fused at 13A.

Supply Cable: 2 metres of cable supplied.

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The supply to this machine must be protected by a 30mA Type A RCD

Water connection 3/4" B.S.P. and should be at a pressure of 2 bar to 4 bar.

(normal domestic water supply is usually within these limits).

Maximum bake temperature250 degrees CMaximum bake time99 MinutesMaximum steam time20 seconds

Maximum number of programs 9

Noise Level: Less than 85dB.

WEIGHT 55KG

#### 4.0 SAFETY

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

To safely use this convection oven, read this owner manual completely and follow the warnings below, as well as all other warnings in this manual.

The oven is designed for the baking of bread, confectionery, and savory products.
 Do not use it for baking other items without first consulting the supplier.



All repairs and maintenance of electrical units must only be carried out by an authorized service technician.



Electrical access panels must not be opened except by an authorized service technician and the oven power cord must be unplugged.



- While the oven is in operation, and for some time after use, DO NOT TOUCH the oven window and surrounding area as these surfaces may be hot.
- The oven must be operated as described in this manual.
- Authorised service technicians should only use original manufacturer spare parts on the oven.
- The construction of the oven must not be changed or altered.
- This appliance must be disconnected from the power supply before moving or cleaning/servicing.
- Check for frayed or bare cables.
   The machine must not be used if frayed or bare cables are visible.



- Oven gloves should be worn when moving products in or out of the oven.
- Unless trays/containers for the purpose of holding the oven products are supplied
  with the oven by the manufacturer, it is the responsibility of the customer to ensure
  that the nature and surface conditions of materials likely to come into contact with
  food shall be such that they cannot contaminate or spoil the food.

#### 5.0 INSTALLATION

The supply to this machine must be protected by a **30mA Type A RCD** 



- **CAUTION** Because of the weight, lifting the oven should not be attempted by one person.
  - Ensure that the oven base is level or a level working height surface capable of supporting at least 100kg is used.
  - The **COMPACT oven** should be connected to a local means of isolation.
  - Operational clearance of 50mm (2") is required at back and sides of oven and 250mm (10") top clearance to allow circulation of air.
  - In the interests of hygiene, before using the oven for the first time, we strongly recommend that you wipe the inside of your 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 your first bake if this is not done.

#### **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)

#### 6.0 ISOLATION

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

#### 7.0 CLEANING INSTRUCTIONS

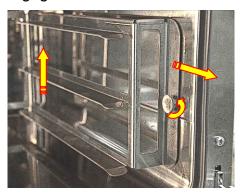


NOTE: BEFORE CLEANING, ISOLATE OVEN FROM MAINS SUPPLY AND ALLOW TO COOL.

#### **IMPORTANT**

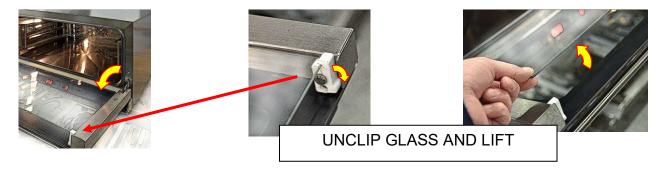
NEVER SPRAY THE OVEN WITH A HOSE OR HIGH PRESSURE WASHING DEVICE.
TO AVOID ELECTROCUTION OR OVEN DAMAGE –NEVER ALLOW WATER, STEAM,
CLEANING SOLUTION, OR OTHER LIQUIDS TO ENTER THE ELECTRICAL PANELS OR
CONNECTIONS.

- The equipment is to be cleaned daily using a solution of mild detergent and hot water.
- Remove the tray racks by unscrewing the fixing knob at the front and lifting the rack up slightly to disengage the back locator. Withdraw the racks and wipe over.



TRAY RACK REMOVAL

- Sweep any debris left in the chamber (after it has been allowed to cool) onto trays and remove. Wipe out the chamber with a damp cloth that has been soaked in a solution of mild detergent and hot water. Be careful not to damage the probe on the left hand side at the back.
- With the door open, release the glass retaining clips (one each side). Lift the inner glass and clean both exposed surfaces. Lower the inner glass gently and ensure the clips are engaged both sides.



- Brush down and wipe outer oven front, back and sides.
- Wipe clean outer oven front, back and sides with a damp cloth that has been soaked in a solution of mild detergent and hot water (do not soak the lower control panel area with water).

#### 8.0 OPERATING CONDITIONS

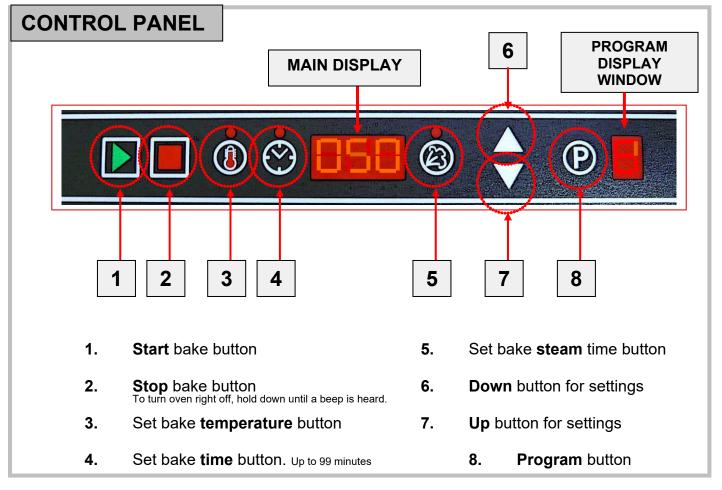
#### CAUTION

Because of the weight, lifting the oven should not be attempted by one person. Ensure that the oven base is level or a level working height surface capable of supporting at least 80kg is used.

- For the most efficient operation, the oven should be used in ambient temperatures not exceeding 40°C (115°F). The life of components will be reduced, and your warranty will be affected if run above 40°C.
- The ventilation of steam from the oven should be sufficient to ensure water does not condense on or around the oven. Any water ingress could affect your warranty.
- It is the customers' sole responsibility to arrange for adequate ventilation and operational clearance at the back and sides of the oven to allow circulation of air. Refer to Outer dimensions 2.1.

Any component malfunctioning during the guarantee period that is found to have been subjected to excessive humidity or ambient working temperatures above 40°C (115°F) will not be covered by the component manufactures guarantee, or **MONO**'s product warranty.

#### 9.0 OPERATING INSTRUCTIONS



### TO BAKE USING PRESET PROGRAMS

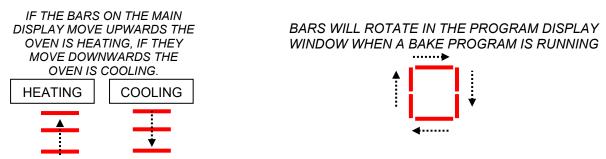
- 1. Connect power to the oven.

  Panel will show "OFF" in the main display window.
- 2. Press start 1 button

  Temperature will flash in main display.
- 3. Press up 6 or down 7 buttons to get the program number required.

  Temperature will flash in main display until the temperature required by the program is reached.
- 4. When display stops flashing, load the oven and press start. 1

  This starts the timer countdown and activates the steam.



7. At the end of the bake a beep will be heard. Press stop 2 to stop.

## **TO SET A BAKE PROGRAM (or MANUAL BAKE)**

#### **NOTE**

If the new settings are to be saved, select the program number to be saved before changing the values then proceed as follows.

If the new settings are for one bake only (manual bake), proceed as follows:

n me	new settings are for one bake only (manual bake), proceed as follows:
1.	Connect power to the oven.  Panel will show "OFF" in the main display window.
2.	Press start 1 button Temperature will flash in main display.
3.	Press temperature button 3
	The set value will show in the main display window and the red dot above the button will illuminate.
4.	Press up 6 or down 7 to change the temperature value.
5.	Press temperature button 3 again to set the value. (or wait a few seconds and the red dot will go out).
6.	Do the same procedure to set time 4 and steam 5.
7.	If saving the values to a program number, press Program 8 button for six seconds until a beep is heard. The values chosen are now set to the program number (this will remove any values that were saved to the program number before).  NOTE If new settings are not saved, the old settings of the program number showing on the screen will be used the next time the program is chosen.
	The oven will now climb to the desired temperature (it is pre-heating). The temperature display will stop flashing and the oven will beep to confirm it has reached temperature.
8.	Load oven and press start. 1
9.	At the end of the bake a beep will be heard. Press stop 2 to stop.

## **TO SET PARAMETERS**

1.	With the oven in standby (OFF showing in display), press stop 2 and program 8 together and hold for about six seconds until a beep is heard. "1" will show in the program display window.
2.	This is the fan forward/reverse time.  The time the fan goes in each direction before changing.  Maximum of 180 seconds.  Press up 6 to increase or 7 to decrease the time required.
3.	Press start 1 and "2" will show in program display window. This allows the settings to be in degrees C or F Press up 6 or 7 to change.
4.	Press start 1 and "3" will show in program display window. This is the "standby delay time setting. 00 = disabled. Setting can be up to 90 minutes (maximum) in 10 minute increments.
5.	Press start 1 and "4" will show in program display window. This shows the latest firmware revision.
6.	Press stop 2 to exit setup and save the parameters.

#### 10.0 MAINTENANCE

#### **General maintenance**



#### 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 or your appointed service agent.
- Check for frayed or bare cables.
   The machine must not be used if frayed or bare cables are visible.
- Follow cleaning instructions meticulously.
- There is no special maintenance required.

### 11.0 STEAM SYSTEM MAINTENANCE

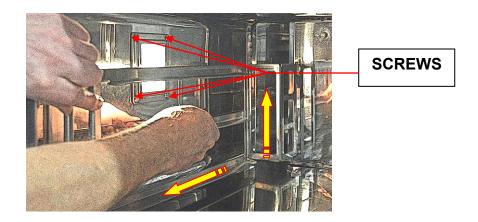
If it is noticed that the steaming operation has deteriorated, perhaps due to hard water scaling, please contact your oven supplier.

#### 12.0 BULB REPLACEMENT

REPLACEMENT BULB = B857-94-007

In the event of a bulb failure, Instructions on how to change a bulb are as follows: -

- 1. Ensure oven is isolated from mains supply and allow cooling.
- 2. Remove the left hand tray rack by unscrewing the fixing knob at the front and lifting the rack up slightly to disengage the back locator. (See illustration, section 7.0).
- 3. Remove the four fixing screws and take glass, frame and gasket off lamp unit.



4. Remove the bulb by pulling in the direction of the arrow shown below and replace with a new bulb.



- 5. Refit glass front, taking care that the gasket is in position around stainless steel frame.
- 6. Re-connect oven to the power supply and test.



## 13.0 Spares Information

Spares Tel. +44(0)1792 564039 email: spares@monoequip.com

## **REAR MAIN ELECTRICAL PANEL PARTS**

RELEASE THE FIXING SCREWS EACH SIDE TO ALLOW EASY ACCESS TO PARTS AS SHOWN 8. FAN UNIT 9. HEATING ELEMENT 1. POWER SUPPLY 2. HEATER RELAY 3. FAN FORWARD RELAY 3.FAN REVERSE RELAY 4. LIGHT RELAY **TERMINAL BLOCKS** MOTOR CAPACITOR (SUPPLIED WTH MOTOR) 5. OVERHEAT THERMOSTAT 6. WATER SOLENIOD

SEE NEXT PAGE FOR PART NUMBERS

## **ELECTRICAL PARTS LIST**

1. POWER SUPPLY	B801-93-005
2. HEATER RELAY	B723-37-001
3. FAN FORWARD RELAY	B723-37-021
3. FAN REVERSE RELAY	B723-37-021
4. LIGHT RELAY	B723-37-021
5. OVERHEAT THERMOSTAT	B888-30-014
6. WATER SOLENIOD	158-17-00400
OVEN CONTROLLER PCB	B705-97-025
8. FAN UNIT	B720-74-004
9. HEATING ELEMENT 230V	B854-04-119
10. CONTROL FUSE	B842-85-039
11. CONTROLLER FUSE	B842-85-013
12. LIGHT FUSE	B842-85-042
TERMINAL BLOCKS - BLUE	B852-50-012
TERMINAL BLOCKS - BEIGE	B852-50-013
TERMINAL BLOCKS - FUSED	B852-39-004
TERMINAL BLOCKS - EARTH	B852-86-005
LAMP UNIT 230V 20W HAL	B721-67-011
DOOR SWITCH ASSEMBLY	B842-07-037
THERMOCOUPLE	B873-95-002
13 AMP PLUG	B835-25-002
LIGHT BULB - HALOGEN	B857-94-007

#### NON-ELECTRICAL PARTS LIST

TRAY RUNNER FRAME RH 148-01-02301

TRAY RUNNER FRAME LH 148-01-02300

DOOR INNER GLASS ASSEMBLY 148-03-00900

DOOR SEAL 148-03-03400

DOOR HINGE A900-27-255

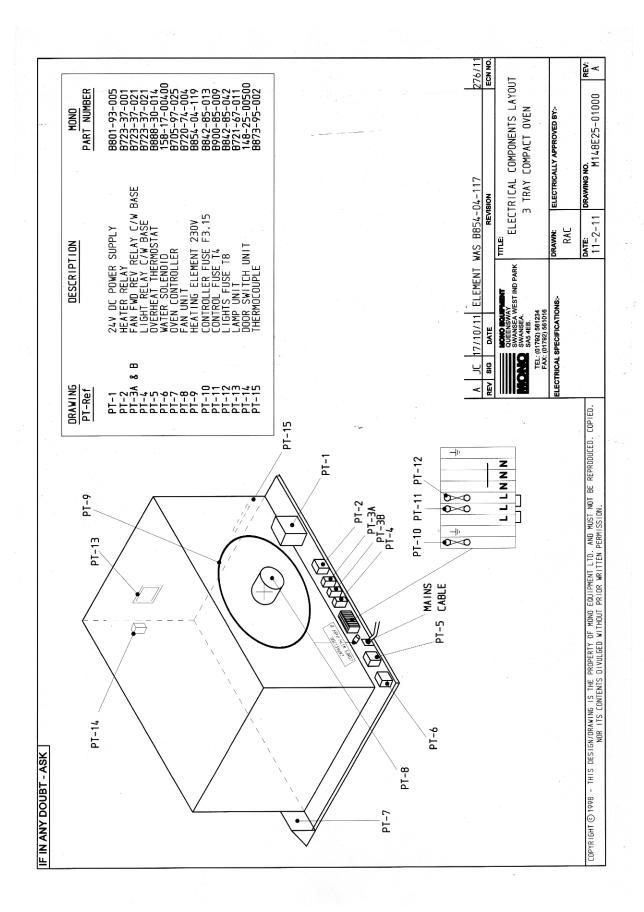
DOOR FRONT FABRICATION 148-03-00600

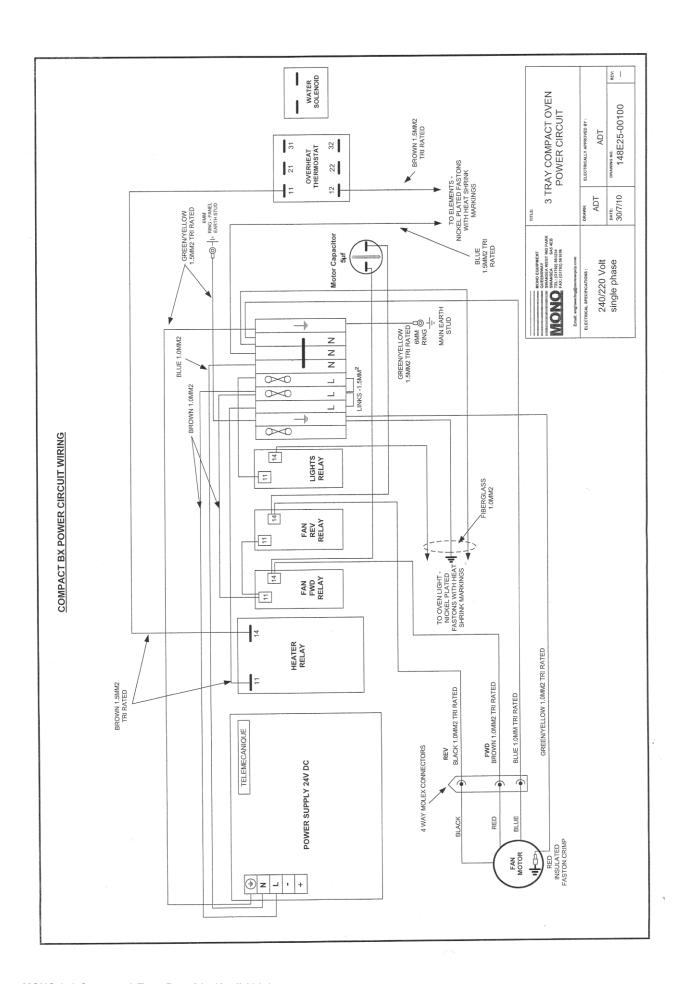
(OTHER PARTS NEEDED FOR COMPLETE DOOR. PLEASE RING FOR DETAILS)

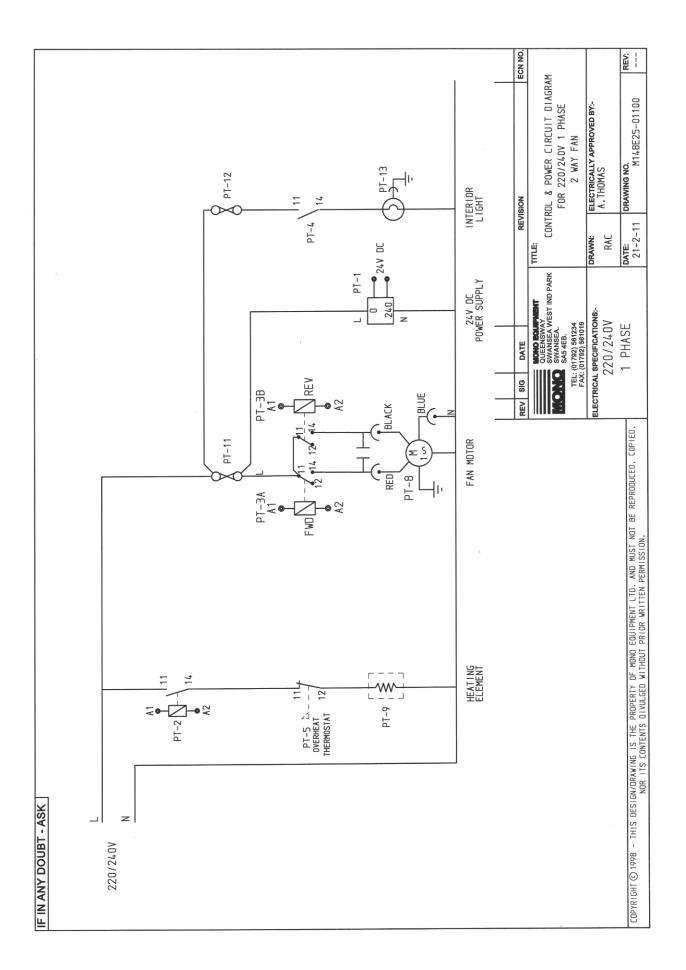
Spares Tel. +44(0)1792 564039 email: spares@monoequip.com

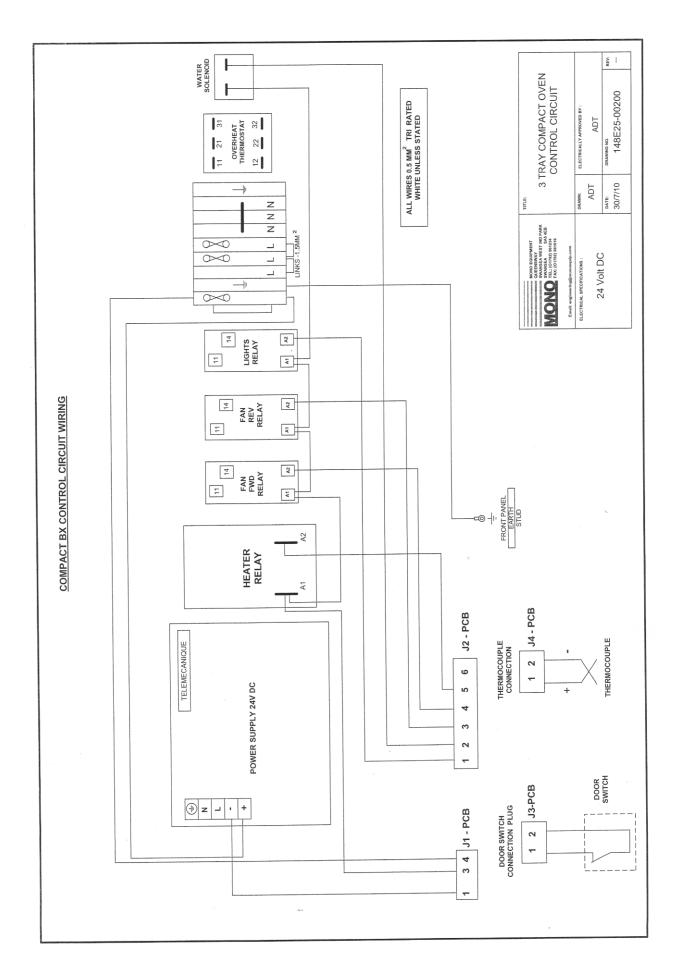


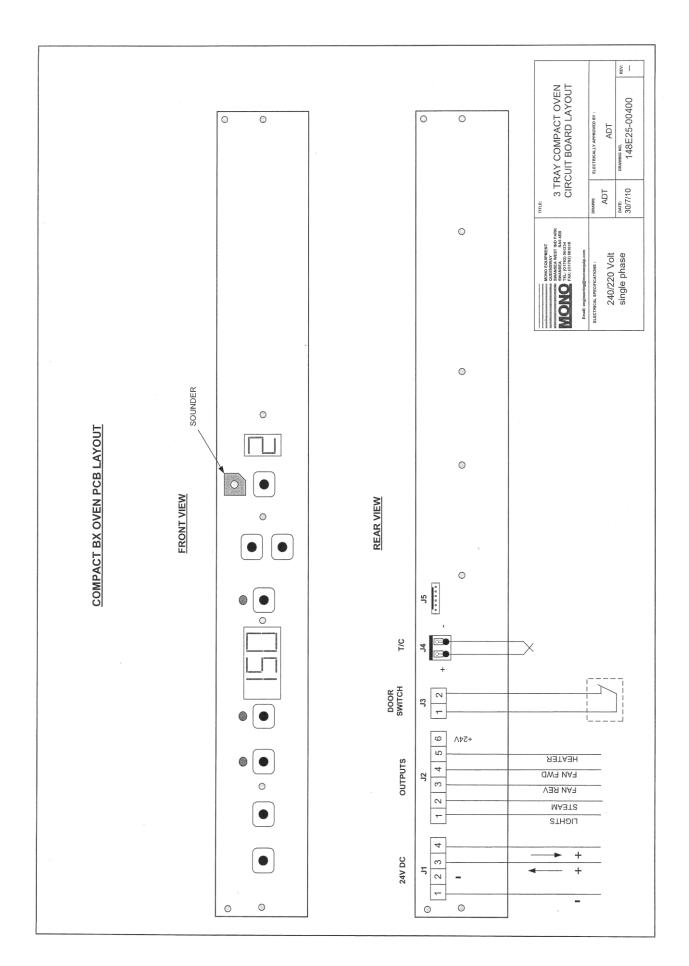
## 14.0 ELECTRICAL INFORMATION

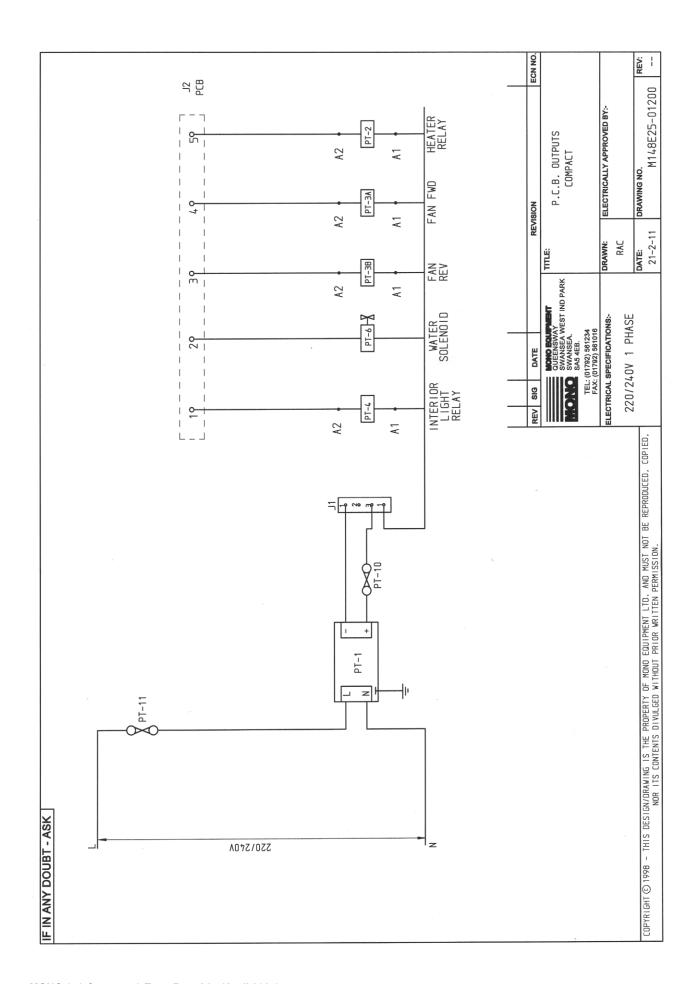


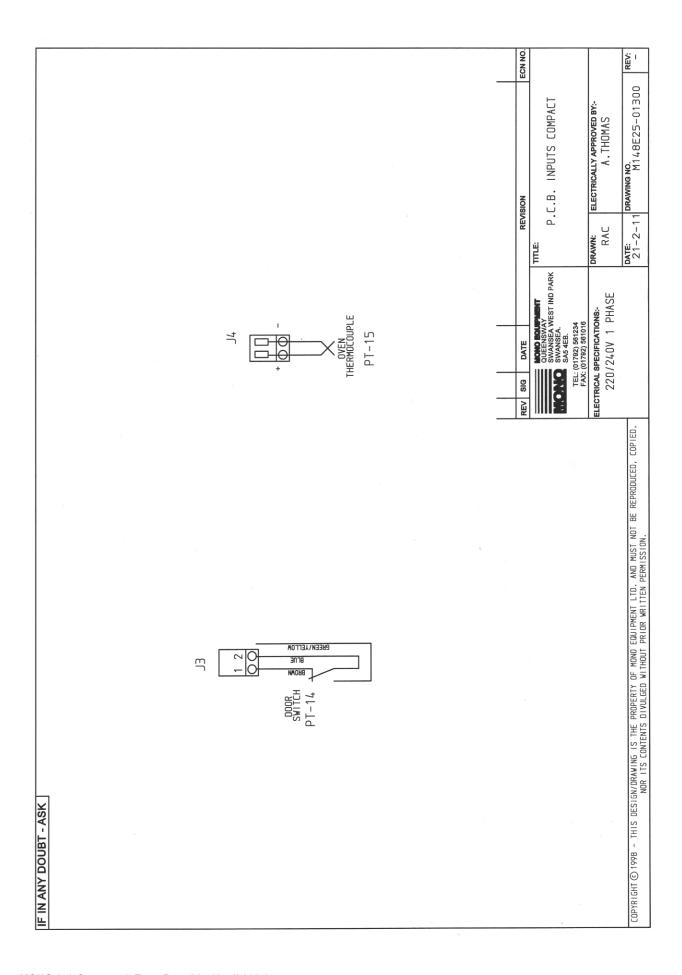


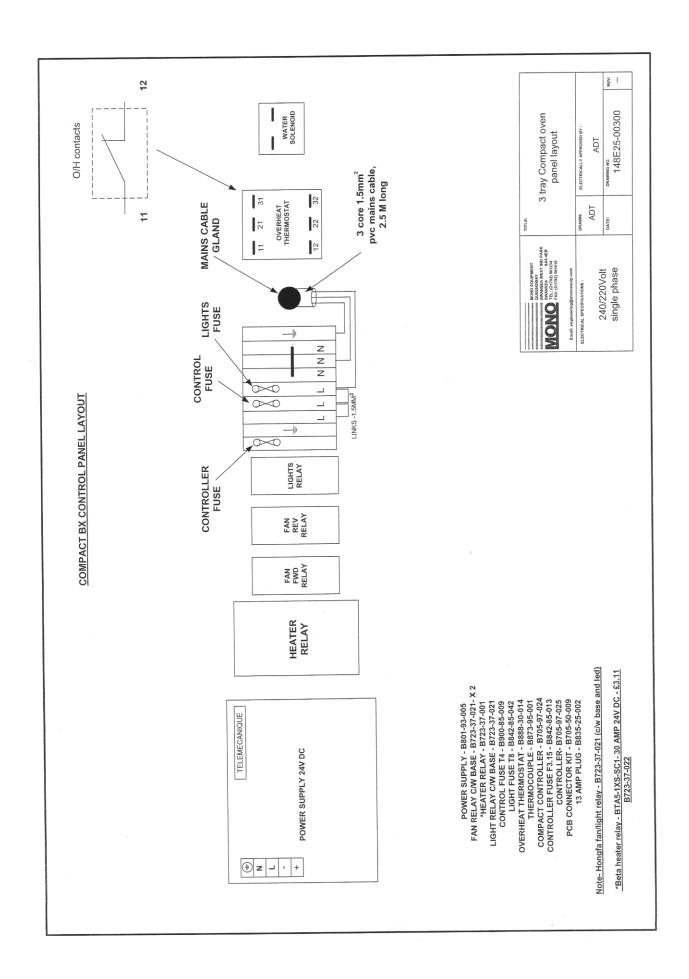














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☐ DISPOSAL

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)