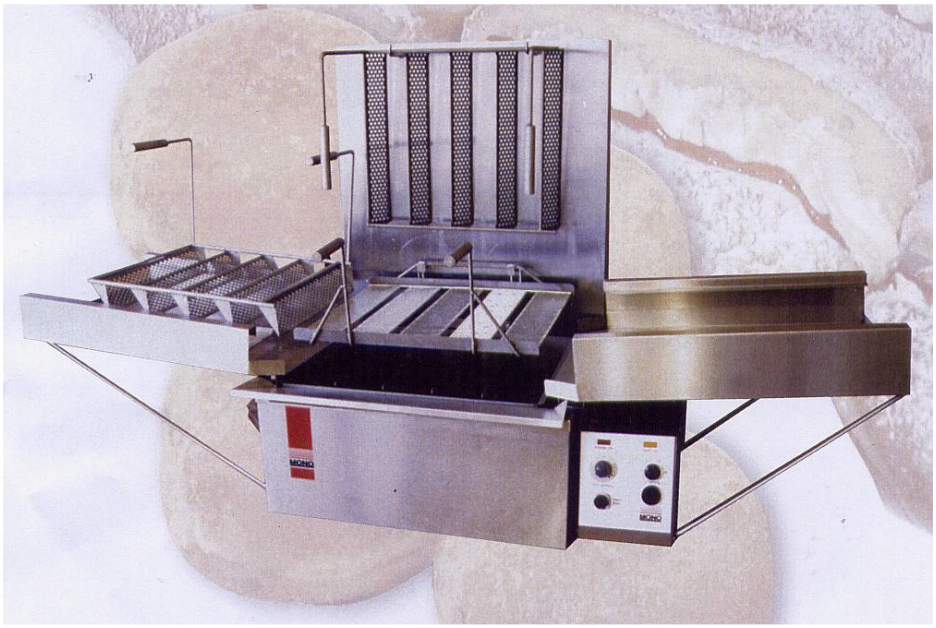
www.monoequip.com

Enter **Serial No.** here._____

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



OPERATION AND MAINTENANCE MANUAL

TABLE TOP DOUGHNUT FRYER

ELECTRICAL SAFETY AND ADVICE REGARDING SUPPLEMENTARY ELECTRICAL PROTECTION:

Commercial bakeries, kitchens and foodservice 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.

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

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 2014 / 35/ 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	

Machine FG Code.		**Machine Serial No.**	

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 9, Bryggen Road,
North Lynn Industrial Estate,
Kings Lynn,
Norfolk,
PE30 2HZ

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.

HSE
Health & Safety Executive

CATERING INFORMATION SHEET No. 17

Safety during emptying and cleaning of fryers

HSE information sheet

Introduction

This information sheet was produced by the Hospitality and Catering Industry Liaison Forum, which has members from trade and professional associations, unions and enforcement authorities. Members' associations are free to reproduce and distribute this guidance to catering establishments. The guidance is issued by the Health and Safety Executive.

This sheet provides advice to employers in the catering industry on safe emptying and cleaning of fryers. It gives guidance on manual emptying and cleaning and guidance on fryers with automated or semi-automated filtering (using enclosed portable filtering units).

Automated and semi-automated filtering processes avoid operators coming into contact with hot oil, significantly reducing the risks. This enables filtering to take place safely even while the oil is at normal cooking temperature. Most automated or semiautomated systems require an oil temperature of at least 100 °C for the filtering process to work effectively.

You should only carry out manual emptying and filtering of fryers when the oil has been cooled to 40 °C or below.

Key messages

■■ Burns from hot oil can be very serious.

■■ Oil takes only 6–7 minutes to heat up but can take 6–7 hours to cool down again.

What the law says

The Health and Safety at Work etc Act 1974 (the HSW Act) places a duty on employers to ensure, so far as reasonably practicable, the health, safety and welfare of their employees. This duty extends, amongst other things, to providing and maintaining systems of work which are, so far as reasonably practicable, safe and without risks to health. The HSW Act also places a duty on employees to take reasonable care of their own and others' health and safety.

Whichever type of fryer is used, you must:

■■ ensure the fryer is well maintained and any attachments used are suitable for their purposes, as recommended by the manufacturer – a procedure for reporting faults will help you comply with this duty;

■■ train staff in a safe system of work for emptying and cleaning;

■■ provide staff with suitable protective equipment where required by the risk assessment, eg eye protection, heat-resistant gloves, aprons.

When to empty and clean

■■ Many catering establishments are closed overnight. For fire safety and economy switch off fat fryers when unattended. Carry out oil filtering and cleaning as a **first task of the day rather than as part of the closing-down procedure.**

Hazards

The hazards in emptying and cleaning fryers include:

■■ fire;

■■ burns from hot oil;

■■ contact with hot surfaces;

■■ fumes from boiling cleaning chemicals;

■■ boiling chemicals overflowing;

■■ eye injuries from splashes;

■■ slips from oil spillage;

■■ strains and sprains from lifting and moving containers of oil. If the catering service runs for 24 hours and the appliance is required continuously, there are two safe options:

■■ Use more than one fryer and clean them in rotation.
■■ Use an automated filtering system or a semiautomated portable filtering unit that removes the hot oil directly from the fryer, filters the oil and holds it safely.

Automated and semi-automated filtering

Automated filtering systems

An automated system consists of an inbuilt oil filtration system. The oil is drained into an enclosed reservoir and an electric pump circulates it through a filter system and internal pipework back into the fryer. Since this process is enclosed within the equipment, the operator does not come into contact with hot oil, greatly reducing any risk.

Portable oil filtering units (semi-automated)

These units are not part of the fryer, but sit alongside it. The operator attaches an extension pipe to the fryer and the hot oil is drained into an **enclosed** container within the portable unit. The oil is then filtered and returned to the fryer.

If you have a fryer with automated oil draining system or a portable oil filtering unit, refer to the manufacturer's guidelines for draining/filtering temperatures and safe operational requirements. These, together with your own risk assessment, will determine the need for suitable protective equipment. If there is still a risk from contact with hot surfaces or oil splashing, you may need to provide staff with eye protection, a protective apron and/or heat-resistant gloves/gauntlets.

Manual oil filtering

This involves the operator draining the oil from the fryer through a filter into a suitable metal-holding or heat-resistant hard, plastic container and manually lifting it back into the fryer (fryer oil is often supplied in hard, plastic, rigid containers). Serious accidents have occurred where oil that has not sufficiently cooled has been drained back into an empty plastic container and the base of the container has given way.

To drain oil safely and in the correct sequence, follow these guidelines:

■■ Turn off the appliance and the power supply at the wall socket for electric appliances, and the on/off control for gas appliances.
■■ Allow the oil to cool, ideally for at least six hours, and check the temperature using a suitable probe thermometer before draining. Do not drain if the temperature is above 40 °C.
■■ Follow the manufacturer's instructions and use the correct equipment (eg a detachable spout for the type of fryer you are emptying), making sure to bring any equipment you need to the fryer before you start.
■■ Depending on the type of fryer, drain the oil by drain valve, removable spout, lifting container or by tilting.
■■ If the oil is too cold to drain easily, reheat it briefly and agitate with the fryer basket for no more than one minute. Switch the appliance off and check the temperature again before emptying.
■■ Using a filter, run the oil into a suitable metal holding or heat-resistant hard, plastic container. These containers will generally need carrying handles and a cover or lid. Before moving, make sure that the lid or cover is secure.
■■ Make sure the container is empty and big enough to take the volume of oil being drained at any time.
■■ When you are draining large volumes of oil it is safer to drain off in smaller amounts. This avoids overfilling the container and will reduce the chance of spillages when you move it. Smaller amounts will also be easier to carry.
■■ Place the container in a safe place where it cannot be contaminated with chemicals, water or foreign bodies. Place the container on top of a drip tray to avoid any floor contamination.
■■ Do not dispose of waste oil down the drain – disposal must comply with environmental legislation.
■■ Clean up any spillages **immediately**.
■■ Make sure floor areas around equipment are completely clean and dry to avoid slip risks *(see also Preventing slips and trips in kitchens and food service).*

Other precautions

Make sure the design of the drain-off tap prevents it being turned on accidentally:

■■ Mark clearly on it that the tap should not be touched.
■■ Place warning signs near the tap.
■■ If possible, remove the tap handle when the fryer is switched on.

Cleaning procedure

This section applies to all types of fryers.

■■ Turn off the appliance, and the power supply at the wall socket for electric appliances and the on/off control for gas appliances.

■■ Wear suitable protective equipment, including eye protection (if appropriate).

■■ Check that other activities will not be put at risk by the cleaning activity.

■■ Check that the oil has been thoroughly drained and that there are no spillages that may cause slipping.

■■ Remove loose debris from the internal surfaces.

■■ Thoroughly wash all internal and external surfaces with suitable cleaning chemicals and check for any leaks.

■■ For stubborn residues, fill the fryer with your recommended cleaning agents and leave or simmer according to instructions.

■■ Do not leave the fryer unattended or allow it to boil as this may cause it to cascade liquid onto the floor, causing additional scalding and slipping hazards.

■■ Drain the appliance and rinse thoroughly with plenty of water.

■■ Dry all internal surfaces and make sure there is no water left in the fryer.

■■ Check the drain valve is closed and working properly, then refill and switch on as required.

■■ When refilling the fryer with oil, the oil container may be too large or heavy for one member of staff. Where possible, use smaller containers.

■■ Do not overfill the fryer. Follow the manufacturer's guidelines.

■■ Clean up any spillages **immediately**.

■■ Make sure floor areas around the equipment are completely clean and dry to avoid slip risks.

Training

This section applies to all types of fryers.

■■ Make sure only staff trained in the safe use of the cleaning chemicals and cleaning procedures for the fryer do this task.

■■ Train staff in reporting procedures if they find the equipment is faulty or if they have experienced any practical difficulties with cleaning the fryer in their specific work environment.

■■ Make staff aware of the reason for using suitable protective equipment, ie gloves, eye protection.

■■ Complete risk assessments for hazardous chemicals and make staff aware of the correct procedures for using cleaning chemicals.

■■ Make safety data sheets available to staff.

■■ A short, written procedure can act as a reminder to staff for both draining and cleaning operations.

Further reading

Preventing slips and trips in kitchens and food service
Catering Information Sheet CASI6(rev2) HSE 2012
www.hse.gov.uk/pubns/cais6.htm

Safe use of cleaning substances in the hospitality industry Catering Information Sheet CAIS22(rev2)
www.hse.gov.uk/pubns/cais22.htm

HSE has produced a suite of Catering Information Sheets and other guidance for the catering and hospitality industry. These are available on the HSE website at www.hse.gov.uk/catering/index.htm

There is also helpful advice in Health and safety made simple: The basics for your business
www.hse.gov.uk/simple-health-safety

IMPORTANT NOTES

THIS EQUIPMENT IS HEAVY AND SHOULD NOT BE LIFTED BY ONE PERSON

DO NOT POUR USED OIL
DOWN DRAINS OR SINKS.

Failure to adhere to the cleaning and maintenance instructions detailed in this booklet could affect the warranty of this machine.

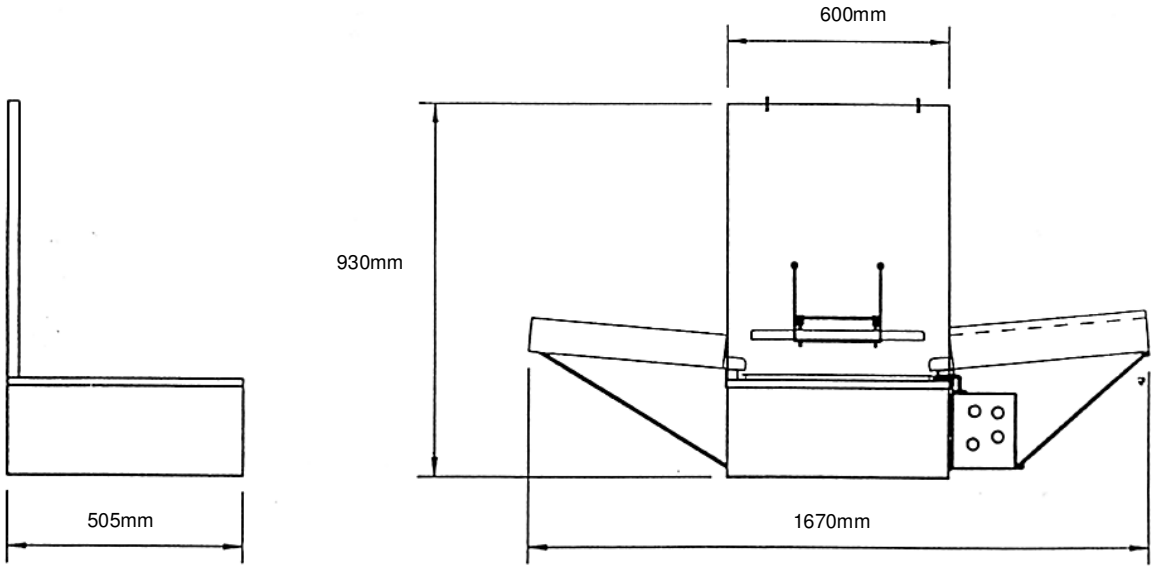
CONTENTS

1.0 INTRODUCTION

The table Top Fryer is designed for frying ball, ring and finger doughnuts.
Features include:

- Thermostat controlled fat/oil temperature and a safety override thermostat.
- Quick drain mesh frying screens
- Easy lowering/raising of doughnuts into fat
- Drain tap
- Adjustable feet
- Special doughnut turning device for use when float frying
- The easily removed control box located on the side of the fryer has
  "Mains On" and "Heat on/off "indicator lights
  and a manually reset, thermostatically controlled, safety cut-out.

2.0 DIMENSIONS



3.0 SPECIFICATIONS

Power:

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

240v. **Single phase.**
7.0kW fused at 32amp

415v. **3 phase + neutral**
7.0kW fused at 16amp per phase

Safety Thermostat: 221 degrees C (430F)
Trip switch reset manually after temperature drop.

Output: up to 500 doughnuts per hour.

Fat/oil level: 50mm (2") below lip of frying tank.
(allow for expansion when heating up from cold)

Weight: 94kg (207lb).

Noise level: Less than 85dB.

This machine is clad entirely in stainless steel.

4.0 SAFETY

In the interests of safety and efficient operation of this fryer, it is essential that this manual should be made available to all personnel who may be required to operate it, before work is commenced.

The following points should be closely observed and rigorously pursued at all times

1 Never use the fryer in a faulty condition and always report any damage.

2 No-one under the age of 16 may operate this machine.

3 No-one under the age of 18 may clean this machine under any circumstances.

4 Only trained personnel may remove any part from this fryer that requires a tool to do so.

5 Always ensure hands are dry before touching any electrical appliance (including cable, switch and plug).

6 All operatives must be fully trained.

7 People undergoing training on the machine must be under direct supervision.

8 Do not operate the machine with any panels removed.

9 All guards must be fixed in place with bolts or screws unless protected by a safety switch.

10 No loose clothing or jewellery to be worn while operating the fryer.

11 Switch off power at the mains isolator when fryer is not in use and before carrying out any cleaning or maintenance.

ALL CLEANING AND MAINTENANCE OPERATIONS MUST BE MADE WITH FRYER DISCONNECTED FROM THE POWER SUPPLY

12 The Bakery Manager or the Bakery Supervisor must carry out daily safety checks on the fryer.

WARNING
THIS EQUIPMENT IS HEAVY AND SHOULD NOT BE LIFTED BY ONE PERSON

5.0 INSTALLATION

WARNING
THIS EQUIPMENT IS HEAVY AND SHOULD NOT BE LIFTED BY ONE PERSON

1 It is recommended that the Doughnut Fryer should be sited away from any main thoroughfare and that the surrounding floor area should be covered with a proprietary brand of non-slip surfacing.

2 Ventilation should be provided with an extraction canopy to ensure that convected heat and cooking smells are removed from the building. The canopy should extend a minimum of 300mm (12") beyond each edge of the fryer and have its lowest point between 1980mm (78") and 2740mm (108") above the floor. The extraction canopy should be fitted with a grease trap.

3 The table or bench the fryer is to be used on should be strong enough to give support when full of oil and capable of taking an accidental blow during operation.

4. Check that the power supply matches the rating plate fixed to the control box.

5. To ensure that the machine is safe to use, If a base unit is supplied with the fryer it must be attached to the fryer by a "MONO" engineer.

6.0 ISOLATION

To stop the Doughnut Fryer in an emergency switch off at the mains wall isolator.

7.0 CLEANING INSTRUCTIONS

WARNING:
HOT OIL IS DANGEROUS. ALLOW OIL TO COOL BEFORE ATTEMPTING TO DRAIN OR CLEAN ANY PART OF FRYER.

ISOLATE FRYER FROM MAINS SUPPLY BEFORE CLEANING

❑ GENERAL CLEANING

1 Wipe down exterior brightwork with a damp cloth.

2 To help cleaning, While fat is still liquid (NOT HOT), heating unit may be lifted out of oil tank.

❑ DRAINING COOKING OIL / MOLTEN FAT

1 Allow oil to cool and place container under drain spout and open valve.
Drain out contents of frying tank.

Do not leave the tank draining and walk away, the tank will hold more than the container, which will need to be changed at regular intervals. Use the tap to turn off the oil flow between each container change.

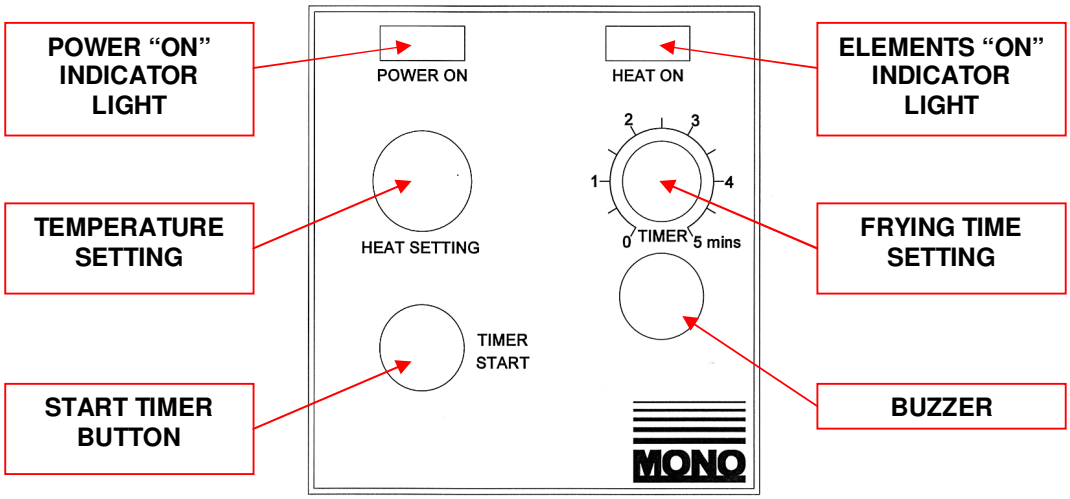
2 Close drain valve before removing container

8.0 OPERATING INSTRUCTIONS

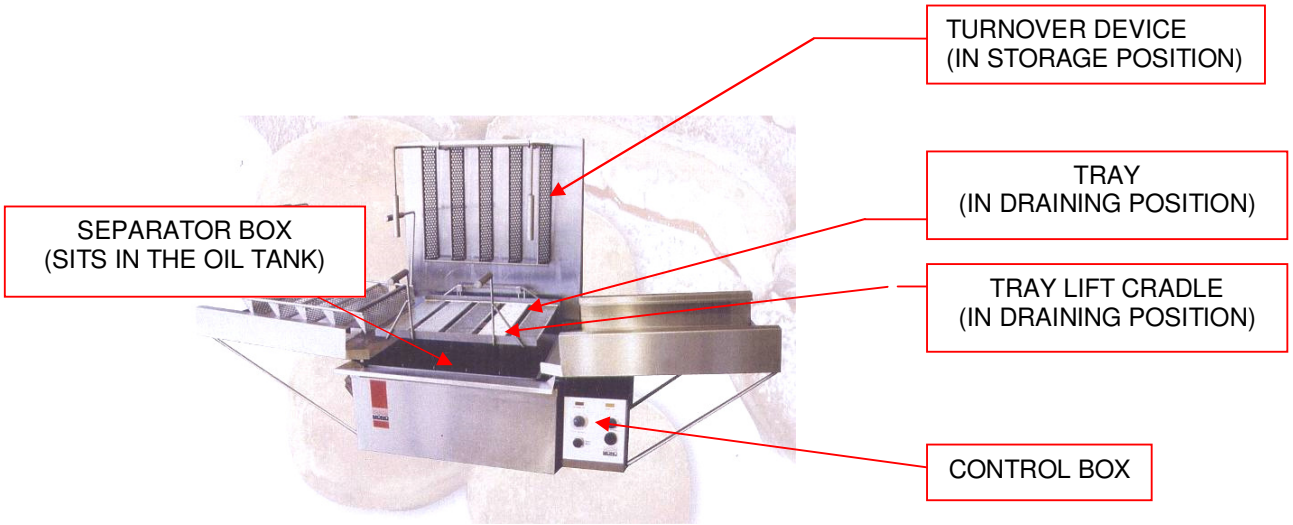
NOTE
SHOULD THE OIL TEMPERATURE EXCEED SAFE LIMITS
(LOW OIL LEVEL ETC), THE SAFETY THERMOSTAT WILL OPERATE.

TO RESET, ALLOW OIL TO COOL (TEMPERATURE MUST DROP) AND PRESS RED BUTTON SET INSIDE A SMALL HOLE IN THE CONTROL BOX SIDE SHEET.

Doughnuts should be proofed on the frying screens to the required size and placed in the fryer without being touched. If moved on to the frying screens after proofing they will collapse and an inferior product will be the result.



CONTROL PANEL



FLOAT FRY OPERATION

- **BEFORE USE**

1 Attach draining boards, control box and separator box. Hang turnover device on hooks at top of back sheeting and tray cradle on lower hooks.

2 Check that drain tap is closed.

3 Fill the fryer with suitable cooking oil to just below 2" (50mm) from the top. (Correct operational level of the oil is 2" from the top, but allowance should be made for expansion of the oil when heated.)

IF SOLID FAT IS TO BE USED – break up fat and melt gradually by turning the elements on and off for 15 second periods until the elements are totally submerged. This will stop any damage to the elements.

- **OPERATION**

1 Set frying temperature required on thermostat and ensure that both indicator lights are on.

2 When the heat on light goes out, the oil is at the correct temperature for cooking.

3 Slide a tray of doughnuts on to the cradle.

4 Set timer to fry time required.

5 Unhook cradle and gently lower into the oil.

6 Press the timer button.

7 When timer sounds and the doughnuts are cooked on one side, the turnover device should be lowered into the tank ensuring that the device is held against the baffles of the separator unit making the doughnuts turnover.(Leave the device in the oil).

8 Press the timer button again.

9 When the timer sounds, remove the turnover device and hang it back on the back sheet top hooks.

10 Remove the cradle and hang back on the lower rear hooks to allow the doughnuts to drain.

11 Slide tray on to drainer to drain for more time and slide a fresh tray on to cradle and repeat the procedure.

IMMERSION FRY OPERATION (PARTS OPTIONAL)

- **BEFORE USE**

1 Attach draining boards, control box but not separator box. Place element guard (spider) in the bottom of the tank. Hang immersion cradle on lower hooks.

2 Check that drain tap is closed.

3 Fill the fryer with suitable cooking oil to just below 2" (50mm) from the top. (Correct operational level of the oil is 2" from the top, but allowance should be made for expansion of the oil when heated.)

IF SOLID FAT IS TO BE USED – break up fat and melt gradually by turning the elements on and off for 15 second periods until the elements are totally submerged. This will stop any damage to the elements.

- **OPERATION**

1 Set frying temperature required on thermostat and ensure that both indicator lights are on.

2 When the heat on light goes out the oil is at the correct temperature for cooking.

3 Slide a tray of doughnuts into the cradle.

4 Set timer to fry time required.

5 Unhook cradle and gently lower into the oil.

6 Press the timer button.

7 When timer sounds and the doughnuts are cooked, remove the cradle and hang back on the lower rear hooks to allow the doughnuts to drain.

8 Slide tray on to drainer to drain for more time and slide a fresh tray on to cradle and repeat the procedure.

9.0 SERVICE AND SPARES

NOTE
SHOULD THE OIL TEMPERATURE EXCEED SAFE LIMITS
(LOW OIL LEVEL ETC), THE SAFETY THERMOSTAT WILL OPERATE.

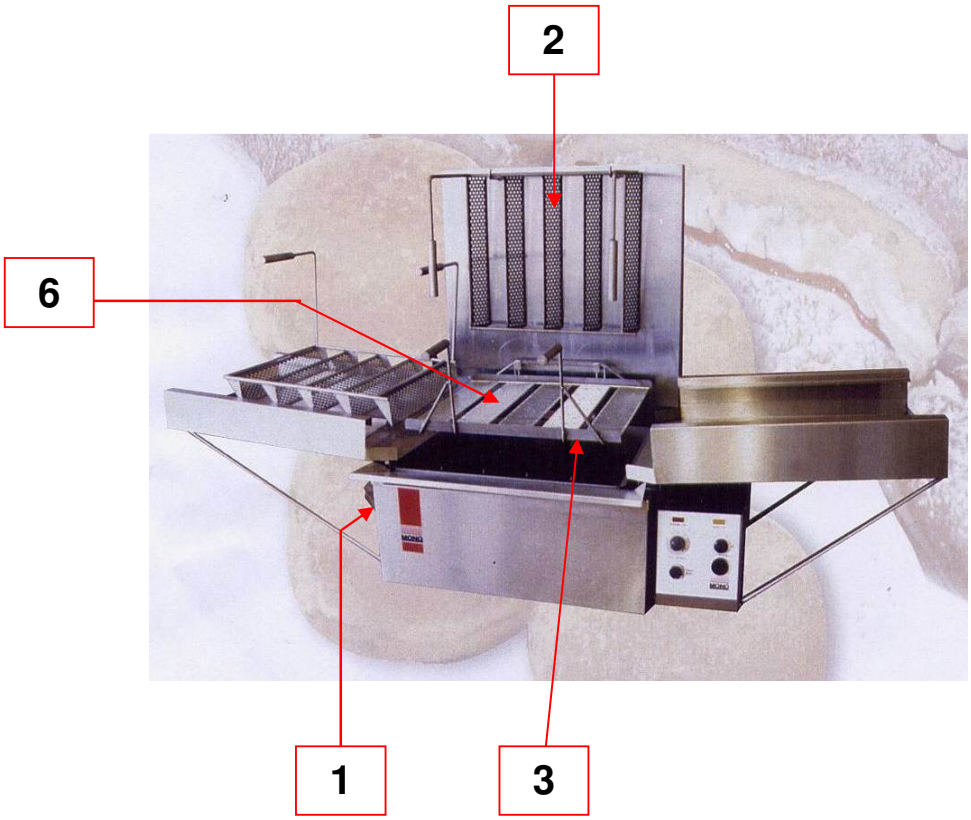
TO RESET, ALLOW OIL TO COOL (TEMPERATURE MUST DROP) AND PRESS RED BUTTON SET INSIDE A SMALL HOLE IN THE CONTROL BOX SIDE SHEET.

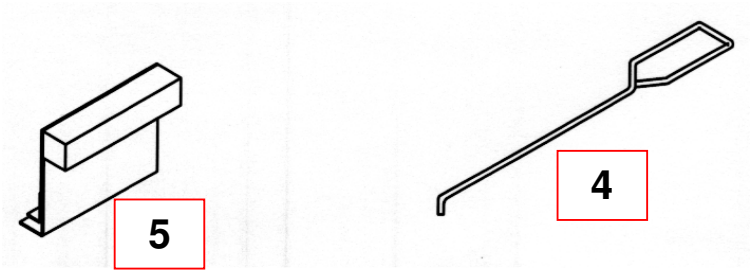
If a fault arises, please do not hesitate to contact Customer Service Department.

Tel. +44(0)1792 561234

email:spares@monoequip.com

Spares Tel.+44(0)1792 564039
Fax. 01792 561016



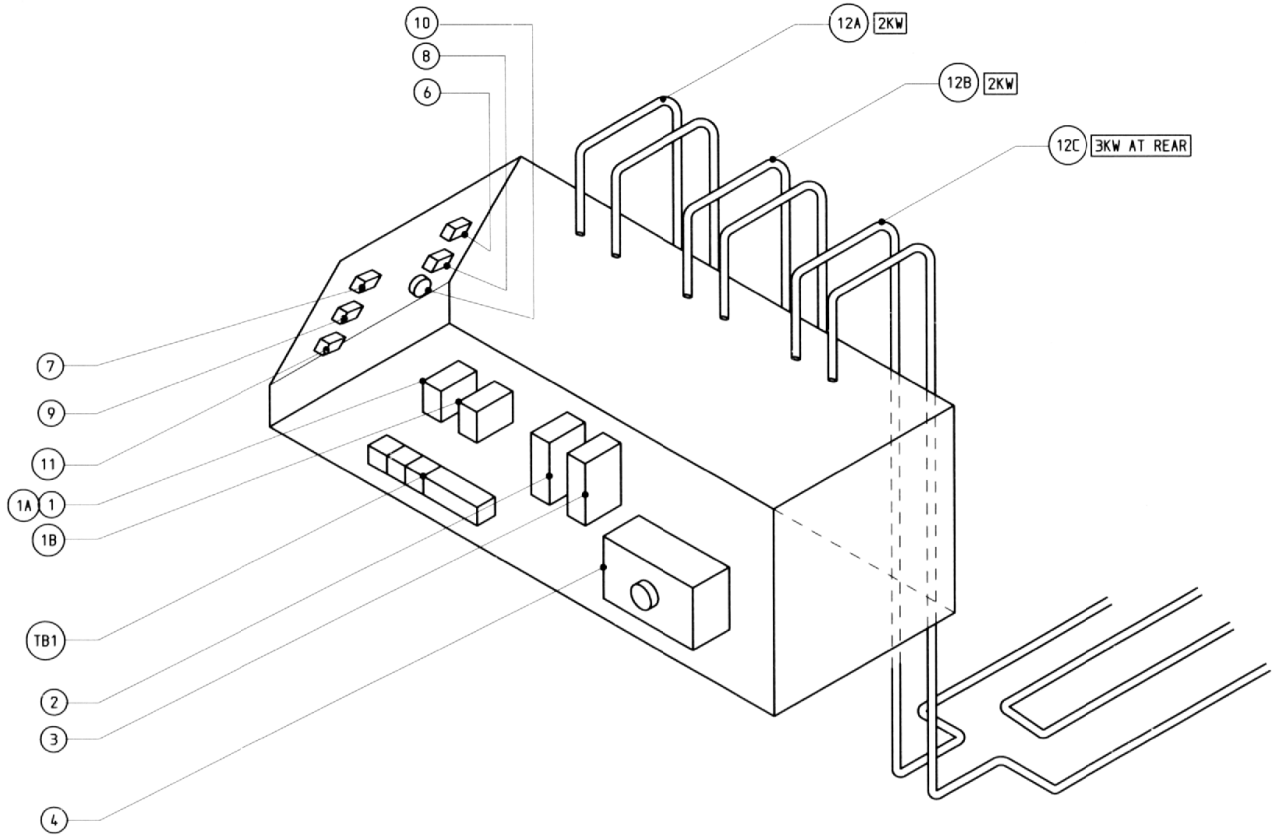


ITEM	DESCRIPTION	PART No.
1	TAP	A900-34-071
2	TURNOVER DEVICE	030-06-00000
3	TRAY LIFT CRADLE	030-07-00000
4	HOOK	030-08-00500
5	HANDLE	030-08-00600
6	SCREENS	030-08-00100

FOR ELECTRICAL SPARES SEE ELECTRICAL SECTION

10.0 ELECTRICS

IF IN ANY DOUBT - ASK



PARTS LIST

FOR 240v. 1PHASE - SEE SHEET 3

FOR 415v. 3PHASE AND NEUTRAL - SEE SHEET 6

REV	SIG	DATE	REVISION	ECN NO.
A	RAC	11-6-07	TIMER NOT AVAILABLE. PARTS REPLACED	3004

MONO EQUIPMENT
QUEENSWAY
SWANSEA WEST IND PARK
SWANSEA.
SA5 4EB.
TEL: (01792) 561234
FAX: (01792) 561016

TITLE: COMPONENT LAYOUT

ELECTRICAL SPECIFICATIONS:-

DRAWN: RAC

ELECTRICALLY APPROVED BY:-

DATE: 5-12-92, 11-6-07

DRAWING NO. M030-25-00000 SHEET 2

REV: A

IF IN ANY DOUBT - ASK

DRAWING PART No.	DESCRIPTION	PART No.	QTY
1	MAIN TIMER	B819-34-004	1
1A	11 PIN BASE	B822-36-002	1
1B	SOUNDER ON TIMER	B842-34-003	1
2	CONTROL MCB	B872-22-001	1
3	HEATER CONTACTOR	B801-08-007	1
4	OVERHEAT THERMOSTAT	B888-30-002	1
5	KILLER THERMOSTAT	B873-30-005	1
6	SUPPLY "ON" LIGHT	B842-43-005	1
7	HEAT "ON" LIGHT	B842-43-006	1
8	CONTROL THERMOSTAT	B873-30-013	1
9A	TIME SETTING POTENTIOMETER	B842-59-007	1
9B	TIME SETTING KNOB	B842-47-006	1
10A	START TIMER - PUSH BUTTON	B801-12-021	1
10B	START TIMER - CONTACT BLOCK	B801-14-002	1
11	AUDIBLE WARNING DEVICE	B704-92-001	1
12A	HEATING ELEMENT - 2KW	B847-04-028	1
12B	HEATING ELEMENT - 2KW	B847-04-028	1
12C	HEATING ELEMENT - 3KW	B847-04-029	1
	DIN RAIL C 100mm LONG	B852-26-009	0.055M
	TERMINAL BLOCKS	B852-50-022	4
	END PLATE	B852-40-016	1
	SHORTING LINKS	B852-13-019	2
	TERMINAL MARKER	B852-88-011	1
	TERMINAL MARKER	B852-88-012	1
	TERMINAL MARKER	B852-88-013	1
	TERMINAL MARKER	B852-88-014	1
	CABEL GLAND	B839-17-004	1
	MAINS CABLE	B884-72-001	3M
	LOCKNUT	B886-28-002	1
	SLEEVING - EXPANDIBLE	B842-87-003	1M
	CABLE - RED 1.5mm	B843-52-029	1.5M
	CABLE - BLUE 1.5mm	B843-52-025	1.5M
	CABLE - GREEN/YELLOW 1.5mm	B843-52-026	1M
	CABLE - RED 1.0mm	B843-52-001	1.5M
	CABLE - WHITE 1.0mm	B843-52-005	1.5M
	CABLE - BLUE 1.0mm	B843-52-002	1.5M

REV	SIG	DATE	REVISION	ECN NO.
A	RAC	12/6/07	TIMER NOT AVAILABLE. PARTS REPLACED	3004

MONO EQUIPMENT
QUEENSWAY
SWANSEA WEST IND PARK
SWANSEA.
SA5 4EB.
TEL: (01792) 561234
FAX: (01792) 561016

TITLE: PARTS LIST

ELECTRICAL SPECIFICATIONS:- 240v. 50HZ 1 PHASE

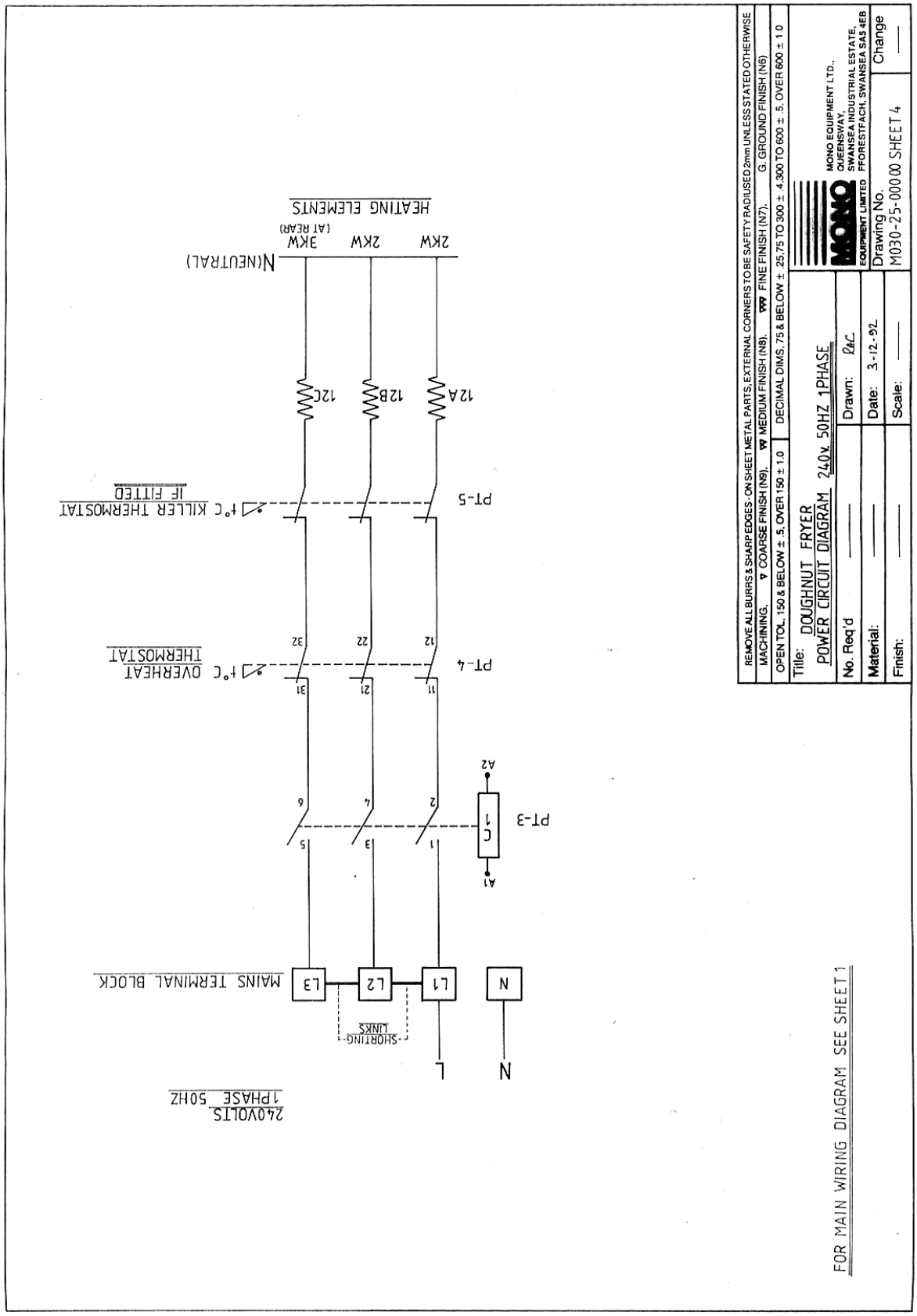
DRAWN: RAC

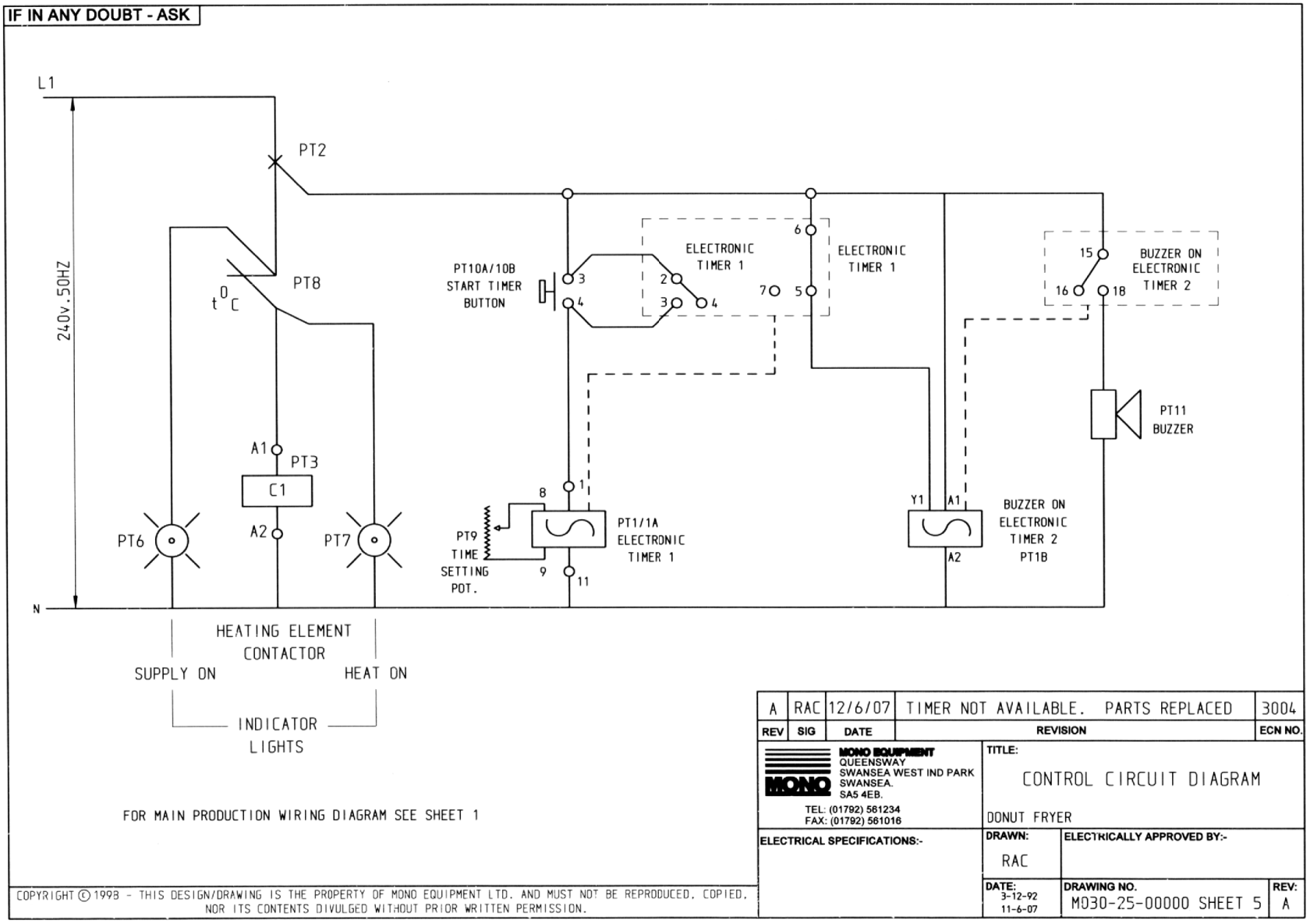
ELECTRICALLY APPROVED BY:-

DATE: 5/12/92 12/6/07

DRAWING NO. M030-25-00000 SHEET 3

REV: A


HEATING ELEMENTS
2KW
2KW
3KW
(AT REAR)
N(NEUTRAL)
12A
12B
12C
PT-5
1°C KILLER THERMOSTAT
IF FITTED
PT-4
1°C OVERHEAT
THERMOSTAT
PT-3
A2
A1
MAINS TERMINAL BLOCK
L1
L2
L3
N
SHORTING
LINKS
L
N
240VOLTS
1PHASE 50HZ
FOR MAIN WIRING DIAGRAM SEE SHEET 1
REMOVE ALL BURRS & SHARP EDGES - ON SHEET METAL PARTS. EXTERNAL CORNERS TO BE SAFETY RADIUSED 2mm UNLESS STATED OTHERWISE
MACHINING. ▽ COARSE FINISH (N9). ▽▽ MEDIUM FINISH (N8). ▽▽▽ FINE FINISH (N7). G. GROUND FINISH (N6)
OPEN TOL. 150 & BELOW ± .5, OVER 150 ± 1.0 DECIMAL DIMS. 75 & BELOW ± .25, 75 TO 300 ± .4, 300 TO 600 ± .5, OVER 600 ± 1.0
Title: DOUGHNUT FRYER
POWER CIRCUIT DIAGRAM 240v 50HZ 1PHASE
No. Req'd
Drawn: R&C
Material:
Date: 3-12-92
Finish:
Scale:
MONO EQUIPMENT LTD.,
QUEENSWAY,
SWANSEA INDUSTRIAL ESTATE,
FFORESTFACH, SWANSEA SA5 4EB
Drawing No.
M030-25-00000 SHEET 4
Change


IF IN ANY DOUBT - ASK
L1
240v.50HZ
N
PT2
PT8
t°C
PT6
PT7
A1
PT3
C1
A2
HEATING ELEMENT CONTACTOR
SUPPLY ON
HEAT ON
INDICATOR LIGHTS
PT10A/10B START TIMER BUTTON
ELECTRONIC TIMER 1
ELECTRONIC TIMER 1
PT9 TIME SETTING POT.
PT1/1A ELECTRONIC TIMER 1
BUZZER ON ELECTRONIC TIMER 2
PT11 BUZZER
Y1
A1
A2
BUZZER ON ELECTRONIC TIMER 2 PT1B
FOR MAIN PRODUCTION WIRING DIAGRAM SEE SHEET 1
A | RAC | 12/6/07 | TIMER NOT AVAILABLE. PARTS REPLACED | 3004
REV | SIG | DATE | REVISION | ECN NO.
MONO EQUIPMENT
QUEENSWAY
SWANSEA WEST IND PARK
SWANSEA.
SA5 4EB.
TEL: (01792) 561234
FAX: (01792) 561016
TITLE:
CONTROL CIRCUIT DIAGRAM
DONUT FRYER
ELECTRICAL SPECIFICATIONS:-
DRAWN: RAC
ELECTRICALLY APPROVED BY:-
DATE: 3-12-92 11-6-07
DRAWING NO. M030-25-00000 SHEET 5
REV: A
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IF IN ANY DOUBT - ASK

DRAWING PART No.	DESCRIPTION	PART No.	QTY
1	MAIN TIMER	B819-34-004	1
1A	11 PIN BASE	B822-36-002	1
1B	SOUNDER ON TIMER	B842-34-003	1
2	CONTROL MCB	B872-22-001	1
3	HEATER CONTACTOR	B801-08-007	1
4	OVERHEAT THERMOSTAT	B888-30-002	1
5	KILLER THERMOSTAT	B873-30-005	1
6	SUPPLY "ON" LIGHT	B842-43-005	1
7	HEAT "ON" LIGHT	B842-43-006	1
8	CONTROL THERMOSTAT	B873-30-013	1
9A	TIME SETTING POTENTIOMETER	B842-59-007	1
9B	TIME SETTING KNOB	B842-47-006	1
10A	START TIMER - PUSH BUTTON	B801-12-021	1
10B	START TIMER - CONTACT BLOCK	B801-14-002	1
11	AUDIBLE WARNING DEVICE	B704-92-001	1
12A	HEATING ELEMENT - 2KW	B847-04-028	1
12B	HEATING ELEMENT - 2KW	B847-04-028	1
12C	HEATING ELEMENT - 3KW	B847-04-029	1
	DIN RAIL C 100mm LONG	B852-26-009	0.055M
	TERMINAL BLOCKS	B852-50-022	4
	END PLATE	B852-40-016	1
	TERMINAL MARKER	B852-88-011	1
	TERMINAL MARKER	B852-88-012	1
	TERMINAL MARKER	B852-88-013	1
	TERMINAL MARKER	B852-88-014	1
	CABEL GLAND	B839-17-001	1
	MAINS CABLE	B843-57-002	3M
	LOCKNUT	B886-28-002	1
	SLEEVING - EXPANDIBLE	B842-87-003	1M
	CABLE - RED 1.5mm	B843-52-029	1.5M
	CABLE - BLUE 1.5mm	B843-52-025	1.5M
	CABLE - GREEN/YELLOW 1.5mm	B843-52-026	1M
	CABLE - RED 1.0mm	B843-52-001	1.5M
	CABLE - WHITE 1.0mm	B843-52-005	1.5M
	CABLE - BLUE 1.0mm	B843-52-002	1.5M

REV	SIG	DATE	REVISION	ECN NO.
A	RAC	12/6/07	TIMER NOT AVAILABLE. PARTS REPLACED	3004

MONO EQUIPMENT
QUEENSWAY
SWANSEA WEST IND PARK
SWANSEA.
SA5 4EB.
TEL: (01792) 561234
FAX: (01792) 561016

TITLE: PARTS LIST

ELECTRICAL SPECIFICATIONS:-
415v.
50HZ
3 PHASE AND NEUTRAL

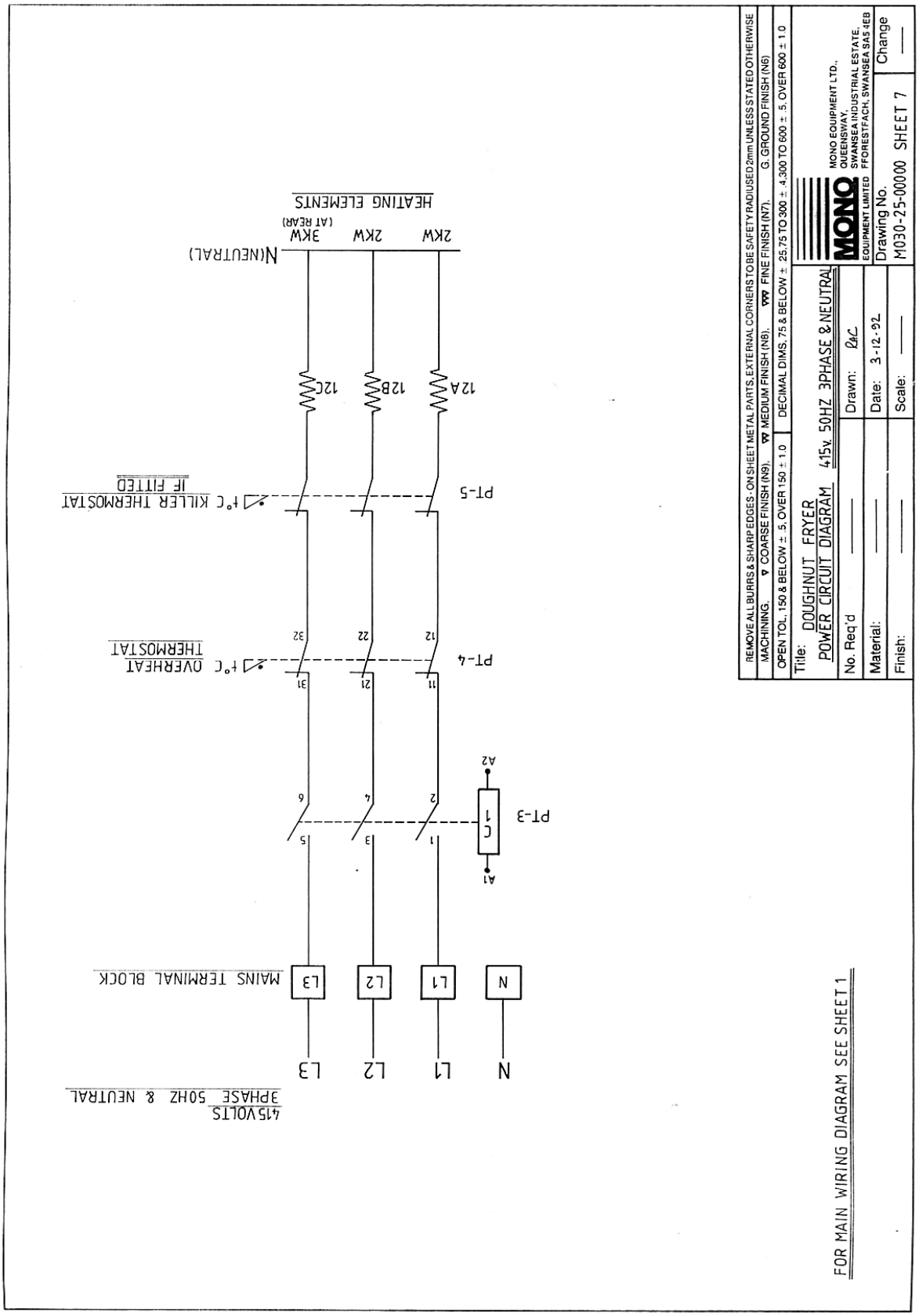
DRAWN: RAC

ELECTRICALLY APPROVED BY:-

DATE: 5/12/92 12/6/07

DRAWING NO. M030-25-00000 SHEET 6

REV: A


HEATING ELEMENTS
3KW (AT REAR)
2KW
2KW
N(NEUTRAL)
12C
12B
12A
PT-5
t°C KILLER THERMOSTAT IF FITTED
PT-4
t°C OVERHEAT THERMOSTAT
32
22
12
31
21
11
PT-3
A2
A1
C1
6
4
2
5
3
1
MAINS TERMINAL BLOCK
L3
L2
L1
N
415VOLTS 3PHASE 50HZ & NEUTRAL
L3
L2
L1
N
FOR MAIN WIRING DIAGRAM SEE SHEET 1
REMOVE ALL BURRS & SHARP EDGES - ON SHEET METAL PARTS, EXTERNAL CORNERS TO BE SAFETY RADIUSED 2mm UNLESS STATED OTHERWISE
MACHINING, COARSE FINISH (N9), MEDIUM FINISH (N8), FINE FINISH (N7), G. GROUND FINISH (N6)
OPEN TOL. 150 & BELOW ± 5. OVER 150 ± 1.0 DECIMAL DIMS. 75 & BELOW ± 25. 75 TO 300 ± 4. 300 TO 600 ± 5. OVER 600 ± 1.0
Title: DOUGHNUT FRYER POWER CIRCUIT DIAGRAM 415v 50HZ 3PHASE & NEUTRAL
No. Req'd
Material:
Finish:
Drawn: RAC
Date: 3-12-92
Scale:
MONO
MONO EQUIPMENT LTD., QUEENSWAY, SWANSEA INDUSTRIAL ESTATE, EQUIPMENT LIMITED FFORESTFACH, SWANSEA SA5 4EB
Drawing No.
M030-25-00000 SHEET 7
Change

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Email:mono@monoequip.com

www.monoequip.com

As it is our policy to improve our machines continuously, we reserve the right to change specifications without prior notice.

- **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 recycling or other means as the law permits at the time.