

# Tabletop Doughnut Fryer

## EN Installation and Operation Manual

### Product Version

- 2021 design with digital timer
- UK specifications
- 240 Vac (single-phase) or 415 Vac (three-phase)
- Optional 5-tray base

### Product Serial Number

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# Manual Revisions

Revision	Publication Date	Author	Description
A24	25-Aug-2024	CD	New spare parts exploded diagrams and parts list.
A25	29-May-2025	CD	New p/n and description for item 12 in electrical box spare parts.

# 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.

	<b>DANGER</b>	■ Indicates an immediate hazard with a high risk which, if not avoided, will result in death or serious physical injury.
	<b>WARNING</b>	■ Indicates a potential hazard with a medium risk which, if not avoided, could result in death or serious physical injury.
	<b>CAUTION</b>	■ Indicates a hazard with a low risk which, if not avoided, could result in minor or moderate physical injury.

# Electrical Safety

## 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 disconnector to connect to, which is easily accessible for switching off and safe isolation purposes. The switch disconnectors 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 machinery from the electrical supply completely. The isolator must be visible, labeled as an emergency shutdown device, and easily accessible.

# 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

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Dated 01/11/2022

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# 1. Introduction

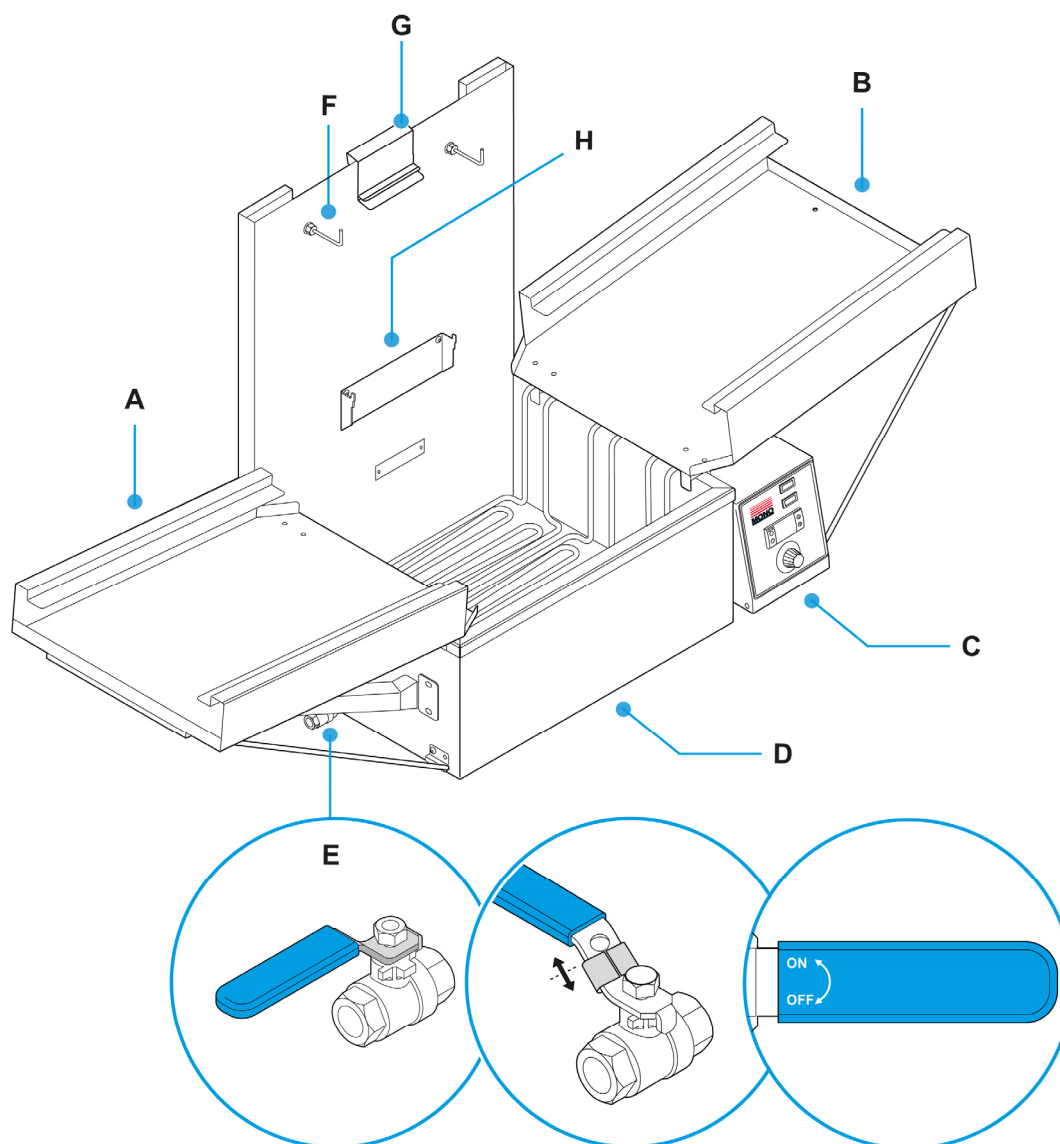
## 1.1. The MONO Tabletop Fryer

MONO Equipment's Tabletop Fryer provides the perfect solution for a small business with limited space but wants to produce high-quality, professionally baked doughnuts.

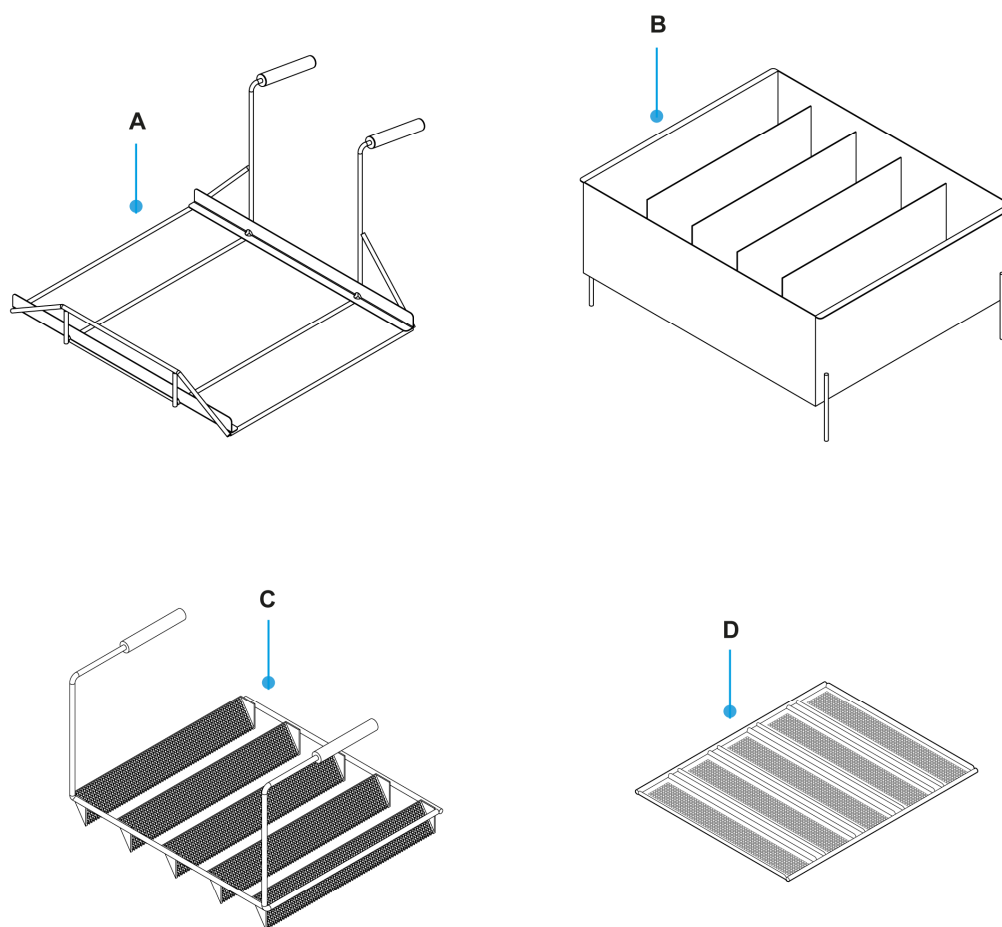
This table-top fryer incorporates the essential functions and features needed to produce finger, ball, and ring-shaped doughnuts in a compact machine.

### Features:

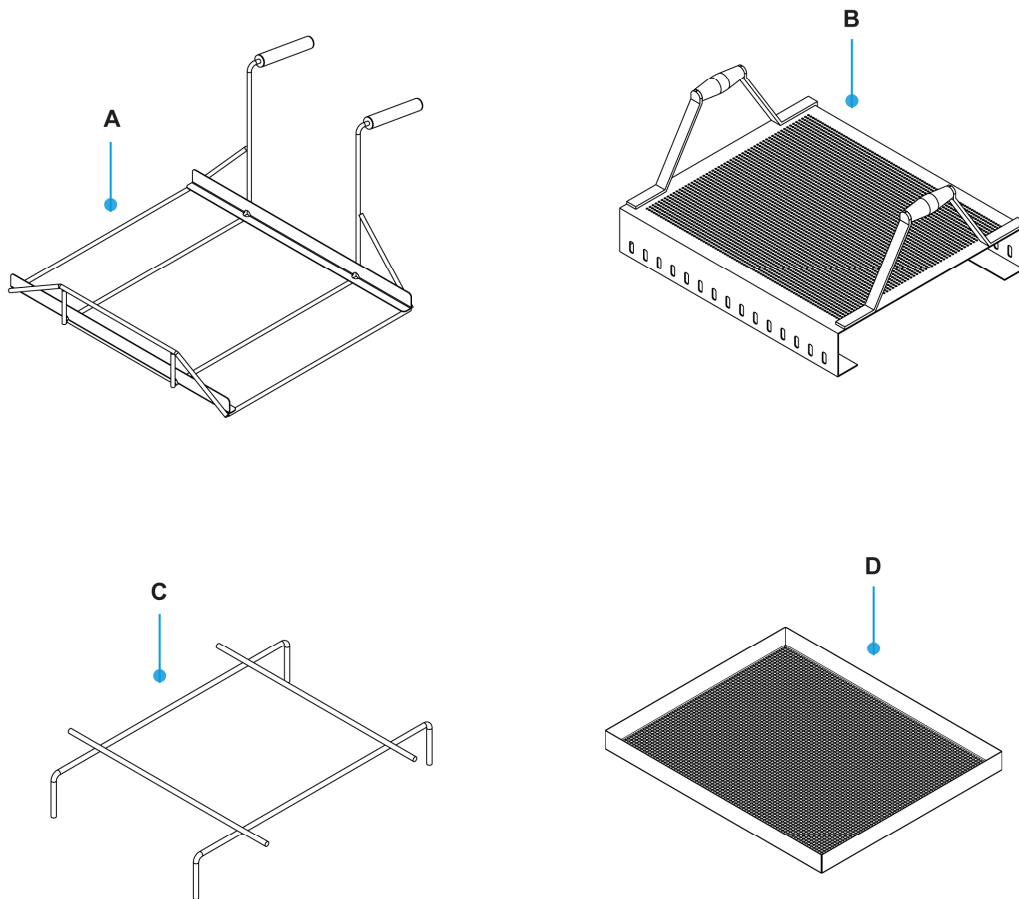
- Output up to 500 doughnuts per hour
- Available with turnover (lane), immersion, or float frying facilities
  - Easily lower and raise doughnuts into oil/fat
- Suitable for an 18-inch x 15-inch tray size
- Manufactured in hygienic stainless steel for quick and easy cleaning
- Easily removable control box with:
  - Adjustable thermostat to ensure the correct temperature
  - Automatic overheat protection (trips the power)
  - Digital timer with start/stop/pause buttons
  - Mains power and heat on/off indication lights
  - Manual reset button (in the hole on the side)
- Quick-drain mesh frying screens
- Drain tap
- Adjustable feet

**Figure 1.1: Features**

- A. Drainer
- B. Feeder
- C. Control box
- D. Oil/fat tank with heating elements
- E. Optional 5-tray base FG030/X02
- F. Drain tap
- G. Upper hooks
- H. Handles (4 off)
- I. Lower hooks
- J. Tray hook

**Figure 1.2:** Turnover frying accessories (5 lanes)

- 
- A. Tray-lift cradle
  - B. Separator (splitter) box
  - C. Turnover device
  - D. Segregated 5-lane tray
-

**Figure 1.3:** Immersion and float frying accessories (open tank)

- 
- A. Tray-lift cradle
  - B. Carrier
  - C. Element guard (spider)
  - D. Perforated tray
-

## 2. Safety

### 2.1. Safety notices

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

The Bakery Manager or Supervisor must carry out daily safety checks. Bakery staff must not, under any circumstances, remove panels or guards to access any part of the fryer.

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 commences.



#### WARNING

- Before using the fryer:
    - Check that all cover panels are fitted and secured with bolts or screws.
    - Check that all guards are fitted and secured with bolts or screws (unless protected by a safety switch).
  - If the fryer is damaged or malfunctioning:
    - Stop using the fryer.
    - Do not attempt any repairs to the fryer.
    - Contact the Service Department of MONO Equipment for advice.
  - Operate the fryer only as described in this manual.
  - Always switch off the power using the mains isolator when not using the fryer and before cleaning or maintenance.
- 



#### WARNING

- Electrical connections must comply with the statutory legislation of the country.
  - The supply to this machine must be protected by a 30mA-rated Type 'A' Residual Current Device (RCD) prior to installation and commissioning.
  - Fit a wall isolator to isolate the fryer completely. The isolator must be visible, labeled, and easily accessible by an operator.
  - Always ensure your hands are dry before touching any electrical appliance (including cable, switch, and plug).
-

**WARNING**

- Be aware of hot oil and surfaces. Take appropriate precautions to avoid burns.
  - Fully train operatives before using the fryer. Anyone undergoing training must be under direct supervision.
  - No one under the age of 16 may operate the fryer.
  - No loose clothing or jewellery are to be worn while operating the fryer.
  - Before emptying and cleaning the fryer, See [Appendix A](#).
  - No one under the age of 18 is permitted to clean this machine under any circumstances.
  - Do not store items on top of, or near, the fryer.
  - No unauthorised modifications to the fryer are permitted.
-

## 3. Installation

### 3.1. Installation notes

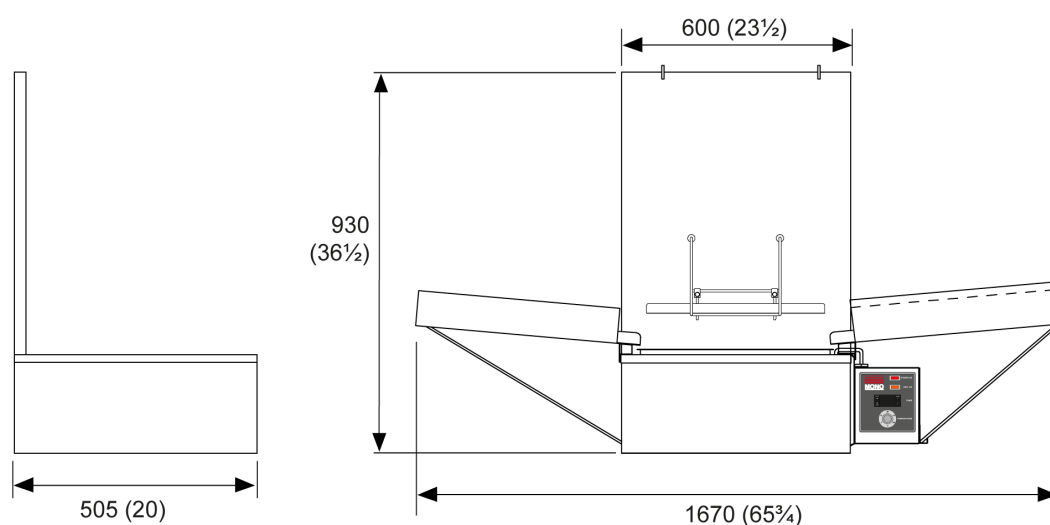
**WARNING**

- This equipment is too heavy for a single person to lift.
- Place the fryer on a table or bench strong enough to support a full load of oil and tolerate accidental knocks during frying operation.
- To ensure that the fryer is safe to use, any optional base unit supplied must be attached to the fryer by a MONO engineer.

1. Check that the mains power supply matches the ratings on the nameplate fixed to the control box.
2. Position the tabletop fryer away from any main thoroughfare and ensure the surrounding floor area has suitable non-slip surfacing.
3. Install good ventilation, such as an extraction canopy, to remove convected heat and cooking smells.
  - Choose a canopy fitted with a grease trap.
  - The canopy should also extend a minimum of 300 mm (12 inches) beyond each edge of the fryer and have its lowest point between 1980 mm (78 inches) and 2740 mm (108 inches) above the floor.

### 3.2. Dimensional drawing

**Figure 3.1:** Dimensions of tabletop fryer without base

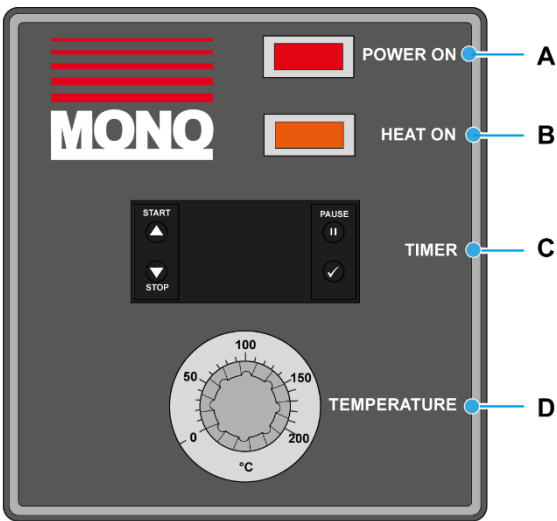


Dimensions are in mm (inches).

# 4. General Operations

## 4.1. Overview of the control box

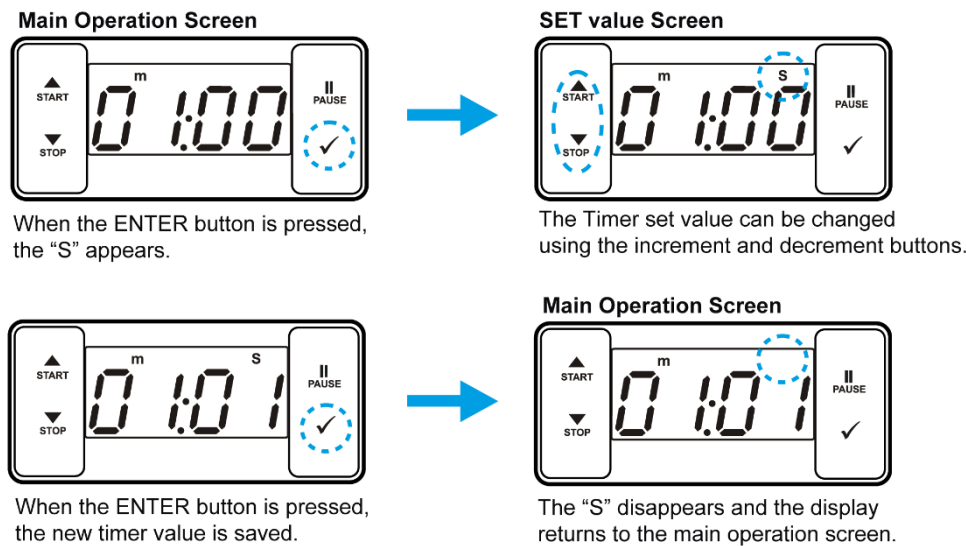
Figure 4.1: Control panel features



- A. Power on/off indicator light
- B. Heat on/off indicator light
- C. Digital timer with start/stop/pause/confirm controls
- D. Thermostatic control (temperature setting)

## 4.2. Operating the digital timer

Figure 4.2: Instructions for the timer





## 5. Turnover Frying Method

### 5.1. Preparation for turnover frying

See [Figure 1.2 on page 3](#) for illustrations of the turnover frying accessories.

1. Attach the drainer and feeder boards, control box, and separator (splitter) box.
2. Hang the turnover device on the upper hooks of the back sheeting.
3. Hang the tray-lift cradle on the lower hooks of the back sheeting.
4. Check that the drain tap is closed.
5. Fill the fryer with suitable cooking oil to 50 mm (2 inches) below the top of the tank.
  - This is the correct operational level of the oil but allow for the expansion of heated oil.
  - **WARNING: If using solid fat, break up the fat and melt gradually by turning the heating elements on and off for 15-second periods until the elements are submerged. This routine stops any damage to the elements.**
6. Prove doughnuts on the frying screens to the required size and then place them in the fryer without being touched. If moved onto the frying screens after proving, they collapse and an inferior product results.

### 5.2. Turnover frying

1. Turn the thermostatic control to required frying temperature and observe indicator lamps light up.
2. Wait for all of the oil/fat to be uniformly heated.
  - The Heat On light goes out after a few minutes, but wait 45 to 60 minutes for best results.
3. Slide a segregated 5-lane tray of doughnuts onto the tray-lift cradle.
4. Set the timer to the frying time required.
5. Unhook the tray-lift cradle and gently lower into the oil.
6. Press the start button on the timer.
7. When the timer sounds and the doughnuts are cooked on one side:
  - a. Lower the turnover device into the tank.
  - b. Hold the turnover device against the baffles of the separator unit to make the doughnuts turnover.
  - c. Leave the turnover device in the oil.
8. Press the start button on the timer.
9. When the timer sounds and the doughnuts are cooked on one side:
  - a. Lift the turnover device out of the tank.
  - b. Hang the turnover device on the hooks of the back sheet.
10. Remove the tray-lift cradle and hang it back on the lower rear hooks to allow the doughnuts to drain.
11. Slide the segregated 5-lane tray onto the drainer to drain for more time.
12. Slide a fresh tray onto the tray-cradle and repeat the frying procedure.

## 6. Float Frying Method

### 6.1. Preparation for float frying

See [Figure 1.3 on page 4](#) for illustrations of the float frying accessories.

1. Attach the drainer and feeder boards and control box, but not the separator (splitter) box.
2. Place the element guard (spider) in the bottom of the tank.
3. Hang the tray-lift cradle on the lower hooks of the back sheeting.
4. Check that the drain tap is closed.
5. Fill the fryer with suitable cooking oil to 50 mm (2 inches) below the top of the tank.
  - This is the correct operational level of the oil but allow for the expansion of heated oil.
  - **WARNING: If solid fat is to be used, break up the fat and melt gradually by turning the heating elements on and off for 15-second periods until the elements are submerged. This routine stops any damage to the elements.**
6. Prove the doughnuts on the frying screens to the required size and then place them in the fryer without being touched. If moved onto the frying screens after proving, they collapse and an inferior product results.

### 6.2. Float frying

1. Turn the thermostatic control to the required frying temperature and observe that both indicator lights are illuminated.
2. Wait for all of the oil/fat to be uniformly heated.
  - The Heat On light goes out after a few minutes but wait 45 to 60 minutes for best results.
3. Slide a perforated tray of doughnuts onto the tray-lift cradle.
4. Set the timer to the required frying time.
5. Unhook the tray-lift cradle and gently lower it into the oil or molten fat
6. Press the start button on the timer.
7. When the timer sounds and the doughnuts are cooked on one side:
  - a. Lift the tray-lift cradle out of the tank.
  - b. Hang the tray-lift cradle on the lower rear hooks to allow the doughnuts to drain.
8. Slide the tray carefully onto the drainer using the handles, and drain for more time.
9. Slide a fresh tray onto the cradle and repeat the frying procedure.

## 7. Immersion Frying Method

### 7.1. Preparation for immersion frying

See [Figure 1.3 on page 4](#) for illustrations of the immersion frying accessories.


1. Attach the drainer and feeder boards and control box, but not the separator (splitter) box.
2. Place the element guard (spider) in the bottom of the tank.
3. Get the perforated tray and the carrier device ready.
4. Check that the drain tap is closed.
5. Fill the fryer with suitable cooking oil to 50 mm (2 inches) below the top of the tank.
  - This is the correct operational level of the oil but allow for the expansion of heated oil.
  - **WARNING: If solid fat is to be used, break up the fat and melt gradually by turning the heating elements on and off for 15-second periods until the elements are submerged. This routine stops any damage to the elements.**
6. Prove the doughnuts on the frying screens to the required size and then place them in the fryer without being touched. If moved onto the frying screens after proving, they collapse and an inferior product results.

### 7.2. Immersion frying

1. Turn the thermostatic control to the required frying temperature and ensure that both indicator lights are on.
2. Wait for all of the oil/fat to be uniformly heated.
  - The Heat On light goes out after a few minutes but wait 45 to 60 minutes for the best results.
3. Set the timer to the required frying time.
4. Slide the perforated tray of product into the carrier device.
5. Lower the carrier device into the tank.
6. Press the start button on the timer.
7. When the timer sounds:
  - a. Carefully lift the carrier device out of the tank.
  - b. Allow the oil to drip into the tank for a short time.
8. Slide the tray from the carrier device onto the drainer board to drain for more time.
9. Slide a fresh tray into the carrier device and repeat the frying procedure.

# 8. Specifications


## 8.1. Electrical specifications

Power supply	240 Vac, single phase
	7.0 kW, fused at 32 Amps
	415 Vac, three phase + neutral
	7.0 kW, fused at 16 Amps per phase
	The supply to this machine must be protected by a 30mA rated Type A Residual Current Device (RCD) prior to installation and commissioning.

## 8.2. Functional specifications

Safety thermostat	A single temperature device cuts power at 221 °C (430 °F). See Resetting the safety thermostat for reset instructions.
Production capacity	Up to 500 doughnuts per hour.
Fat/oil tank capacity	Approximately 40 litres to 50 mm (2 inches) below the lip of the tank. (Allow for expansion when heating up from cold).

## 8.3. Mechanical specifications

Weight	Approximately 94 kg (207 lb)
	The table or bench must be strong enough to support a full load of oil and tolerate accidental knocks during frying operation.
Materials	Hygienic stainless steel cladding for quick and easy cleaning. Optional stainless steel table

## 8.4. Environmental specifications

Noise level	Less than 85 Db
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# 9. Maintenance

## 9.1. Safety messages

Read the safety messages before starting any work on machinery.



**WARNING**

- Always disconnect or isolate the power supply before starting any maintenance or cleaning work on the fryer.



**WARNING**

- The MONO Tabletop Doughnut Fryer 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 and experienced persons (SQEP).
- You must immediately report any damage or defect arising with the appliance.
- Unsafe equipment is dangerous. Do not use the appliance. Isolate the electrical supply and contact MONO Equipment or your appointed service agent.

## 9.2. General cleaning

Failure to adhere to the cleaning instructions could affect the warranty.

1. Wipe down exterior metalwork with a damp cloth.
2. To help cleaning, it is possible to lift the heating unit out of the oil tank while the fat is still in liquid form (but it must not be hot).

## 9.3. Draining cooking oil and molten fat

Before proceeding, read the information in [Appendix A](#).

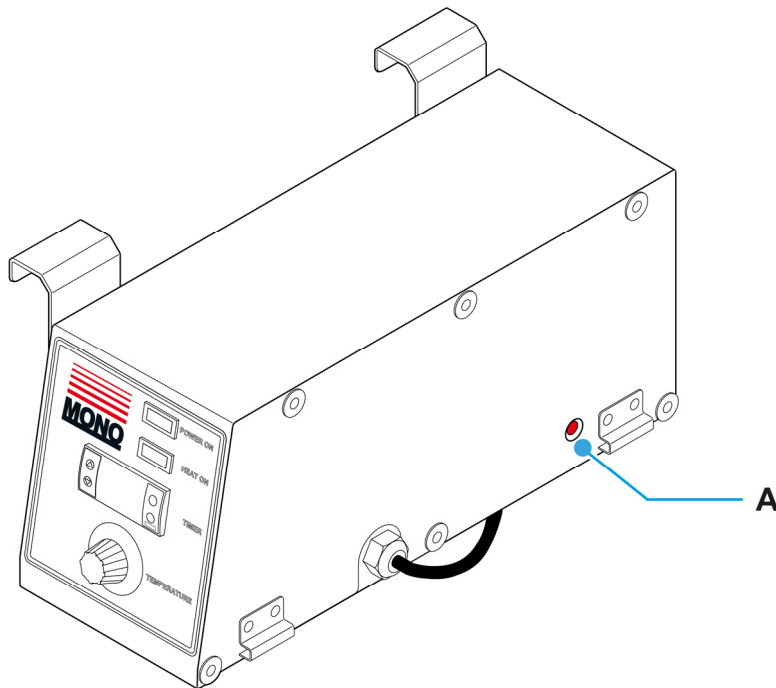
1. Allow the oil to cool for 6 to 7 hours.
  2. Place a container under the drain tap.
  3. Drain out the contents of the oil tank into the container.
    - a. Open the drain valve by turning the tap to on.
    - b. Do not leave the tank draining and walk away.
- **WARNING: The tank holds more than the container (approximately 40 ltrs), which needs replacing at regular intervals.**

- c. Turn the tap off when the container is full.
  - d. Replace the full container.
  - Never pour used oil down drains and sinks.
  - e. Repeat steps **a** to **d** until the oil tank is empty.
4. Ensure the drain tap is off before removing the final container.

## 9.4. Resetting the safety thermostat

A safety device cuts the power to the fryer when the oil/fat temperature exceeds safe limits. To restore the power after the temperature drops, a reset switch must be pressed.

1. Allow the oil to cool to below 221 °C (430 °F).
2. Press the reset button on the side of the control box.



A. Reset button

# 10. Service and Spares

## 10.1. 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.

### Contact information for customer services

**MONO Equipment Limited**

Queensway  
Swansea West Industrial Park  
Swansea  
SA5 4EB  
United Kingdom  
[www.monoequip.com](http://www.monoequip.com)

**Contacts**

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### Further information

Visit [MonoEquip.com](http://MonoEquip.com) for the latest versions of this user manual. Also find up-to-date information about all MONO's products.

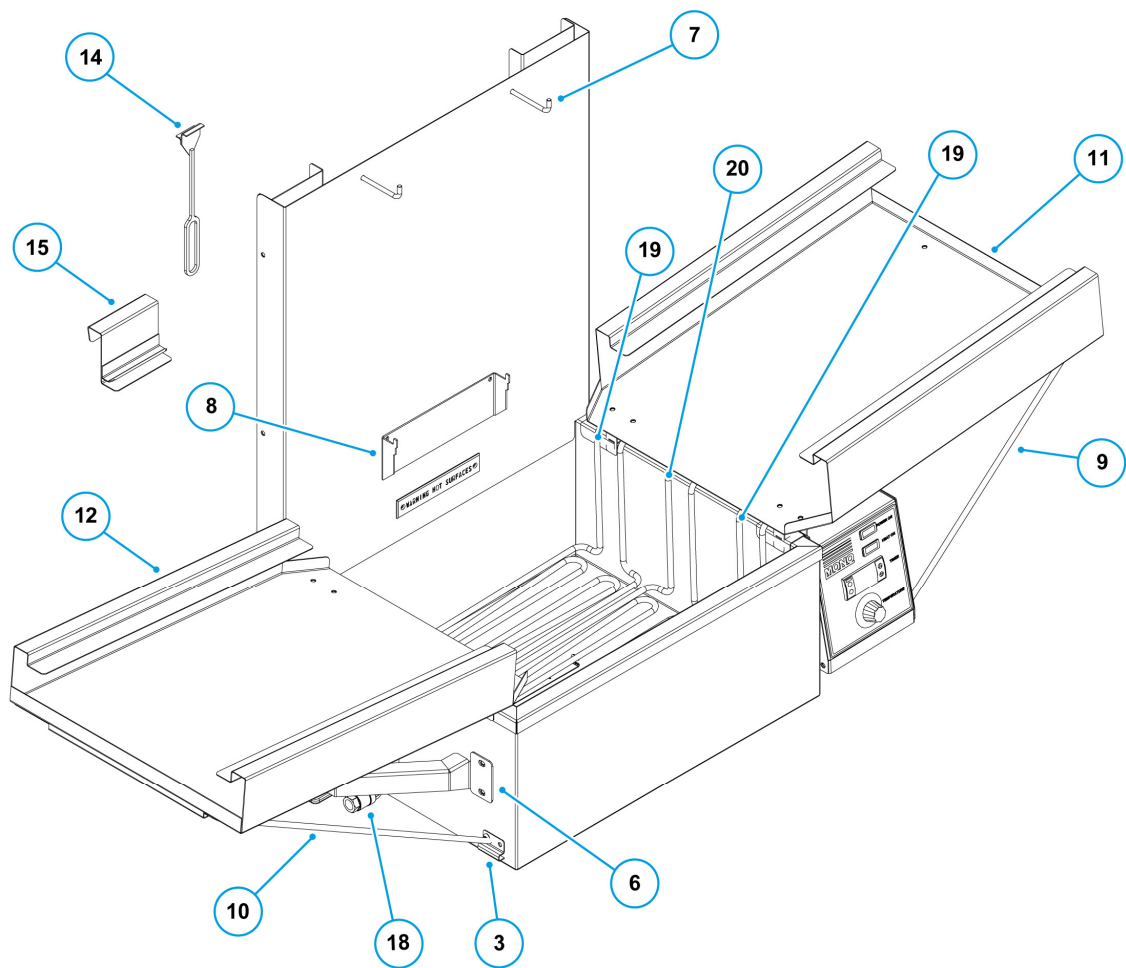
### Environmental disposal

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.

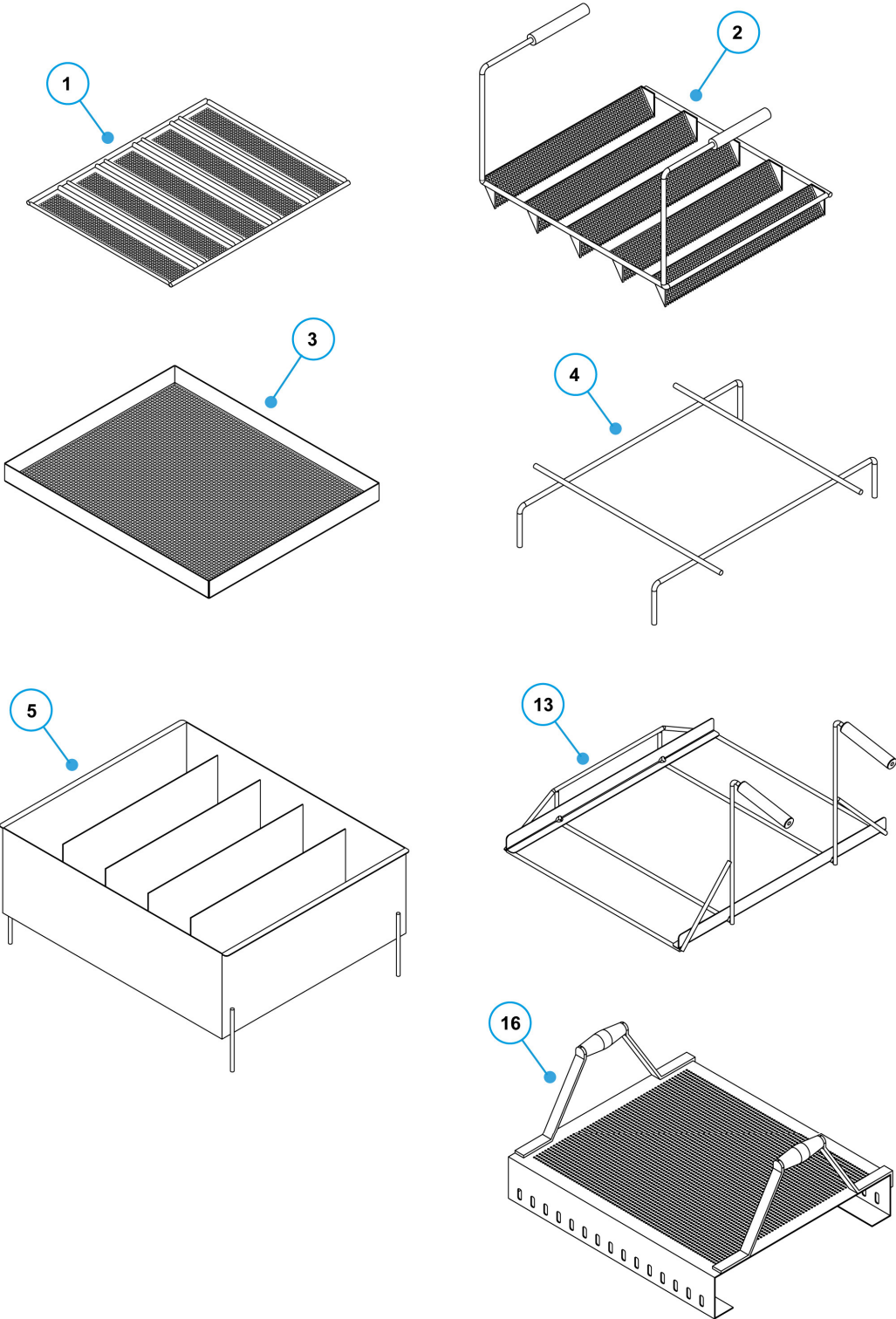
# 10.2. Spares

## MONO Tabletop Doughnut Fryer spares lists

Figure 10.1: Main assembly and accessories drawing







**Table 10.1:** Main assembly spare parts list (including accessory part numbers)

Item	Part number	Description
1	030-03-01600	Five segment tray
2	030-06-00000	Turnover device
3	FG205-091	Perforated tray
4	030-10-01000	Spider
5	030-05-01000	Splitter
6	030-01-01500	Pipe guard
7	030-02-01400	Hook
8	030-02-02200	Carrier hook
9	030-03-00800	Support bar
10	030-03-01500	Support bar
11	030-03-01900	Right-hand (RH) Feeder and Drainer
12	030-03-02400	Outfeed
13	030-07-00000	Tray cradle
14	030-05-00500	Fabricated hook
15	030-08-01100	Tray lifter assembly
16	030-10-00100	Carrier assembly
17	A900-04-127	M6 domed nut (not shown)
18	A900-34-443	Shut-off valve, 3/8-inch BSP thread
19	B847-04-028	Heating element, 2kW (240 Vac)
20	B847-04-029	Heating element, 3kW (240 Vac)

Figure 10.2: Electrical box assembly drawing

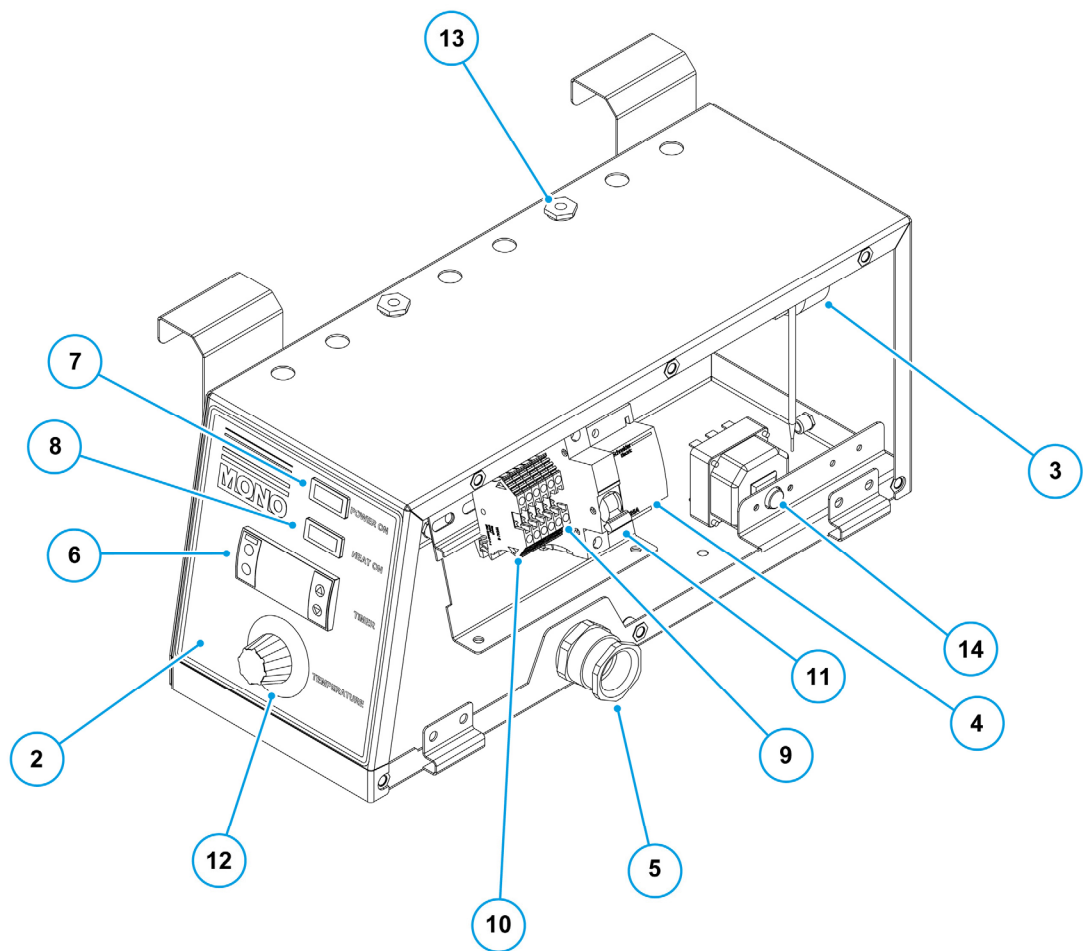


Table 10.2: Electrical box spare parts list (Sheet 1 of 2)

Item	Part number	Description
1	030-04-02300	Electrical box cover (not shown)
2	030-90-00200	Tabletop fryer overlay
3	B705-92-001	Buzzer, 240 Vac (50 Hz) (not shown)
4	B801-08-010	Contactor type GC25-30M5
5	B804-17-004	Cable gland
6	B842-34-012	Timer EMZ3735
7	B842-43-005	Red indicator light
8	B842-43-006	Orange indicator light
9	B852-50-016	Terminal block (grey) type WDU-6
10	B852-50-023	Terminal block (blue) type WDU-6

**Table 10.2:** Electrical box spare parts list (Continued) (Sheet 2 of 2)

Item	Part number	Description
11	B872-22-001	Circuit breaker type A9F53101
12	B873-30-013	Control thermostat (complete with skirted knob and dial fittings)
13	B888-17-007	Split compression gland
14	B888-30-002	Overheat thermostat, manual reset

# A. Safe Emptying and Cleaning of Fryers

**NOTE**

■ This content is taken from the [Catering Information Sheet No 17](#) on the UK government website.

## A.1 Introduction

This information 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 in the United Kingdom.

It 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 semi-automated systems require an oil temperature of at least 100 °C (212 °F) 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 (104 °F) or below.**

## A.2 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.

## A.3 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 e.g., eye protection, heat-resistant gloves, and aprons.

## A.4 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.

## A.5 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 semi-automated portable filtering unit that removes the hot oil directly from the fryer, filters the oil and holds it safely.

## A.6 Automated and semi-automated filtering

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) 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.

## A.7 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 (104 °F).
- Follow the manufacturer's instructions and use the correct equipment (e.g., 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 spillage 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.
- Clean up any spillages immediately.
- Make sure floor areas around equipment are completely clean and dry to avoid slip risks (see also the [HSE page for Catering Information Sheet No 6](#)).

#### 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.

## A.8 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.

## A.9 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, i.e. 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.

## A.10 Further reading

Preventing slips and trips in kitchens and food service (HSE website page)

[HSE page for Catering Information Sheet No 6](#)

Safe use of cleaning substances in the hospitality industry (HSE website page)

[HSE page for Catering Information Sheet No 22](#)

HSE has produced a suite of Catering Information Sheets and other guidance for the catering and hospitality industry. These are available on the [HSE page for Catering and Hospitality](#).

There is also helpful advice on the [HSE page for Health and Safety Made Simple](#).



## B. Electrical Drawings

**Figure B.1: Power Circuit Diagram 030E25-00000 (Sheet 4)**

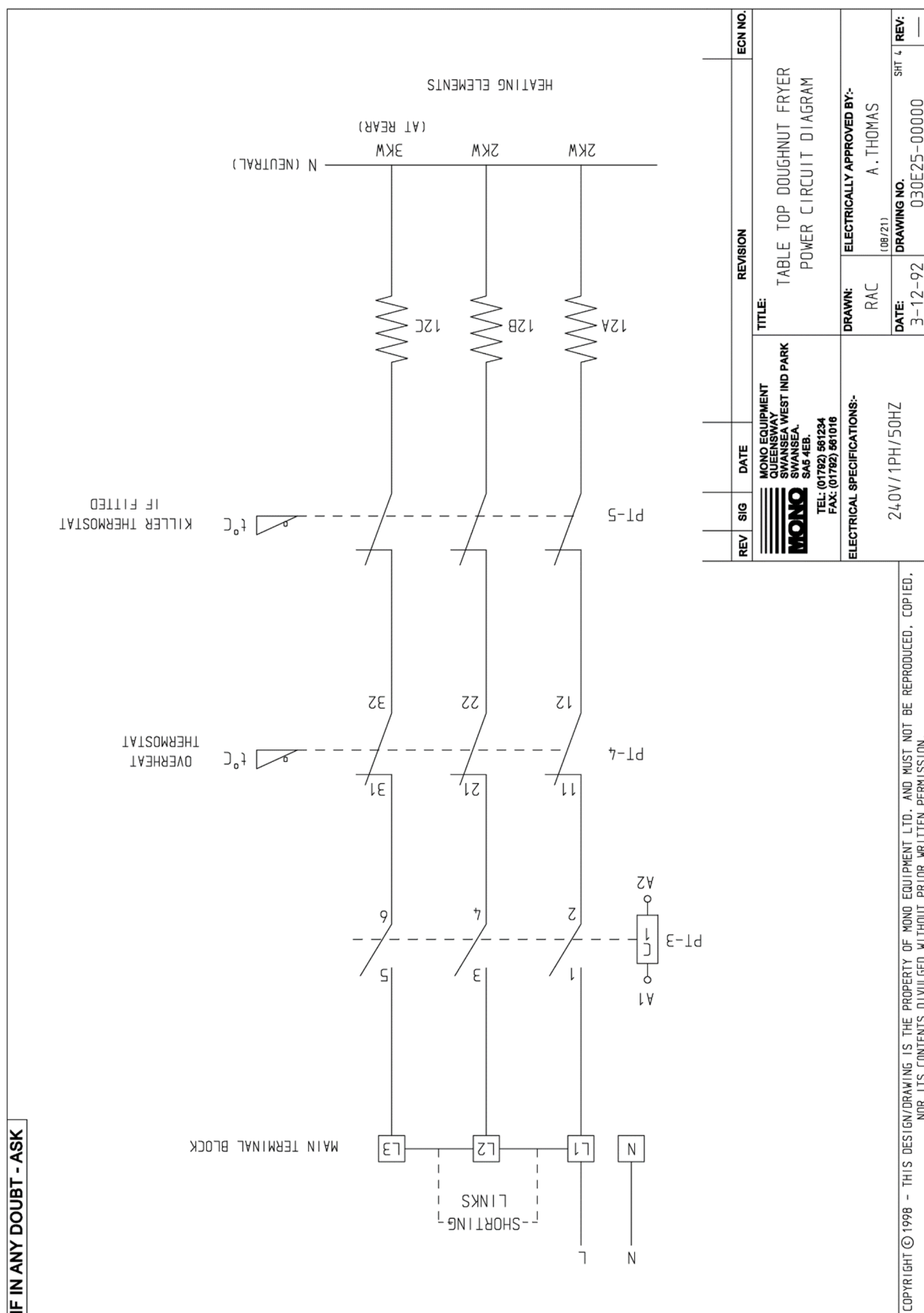


Figure B.2: Power Circuit Diagram 030E25-00000 (Sheet 7)

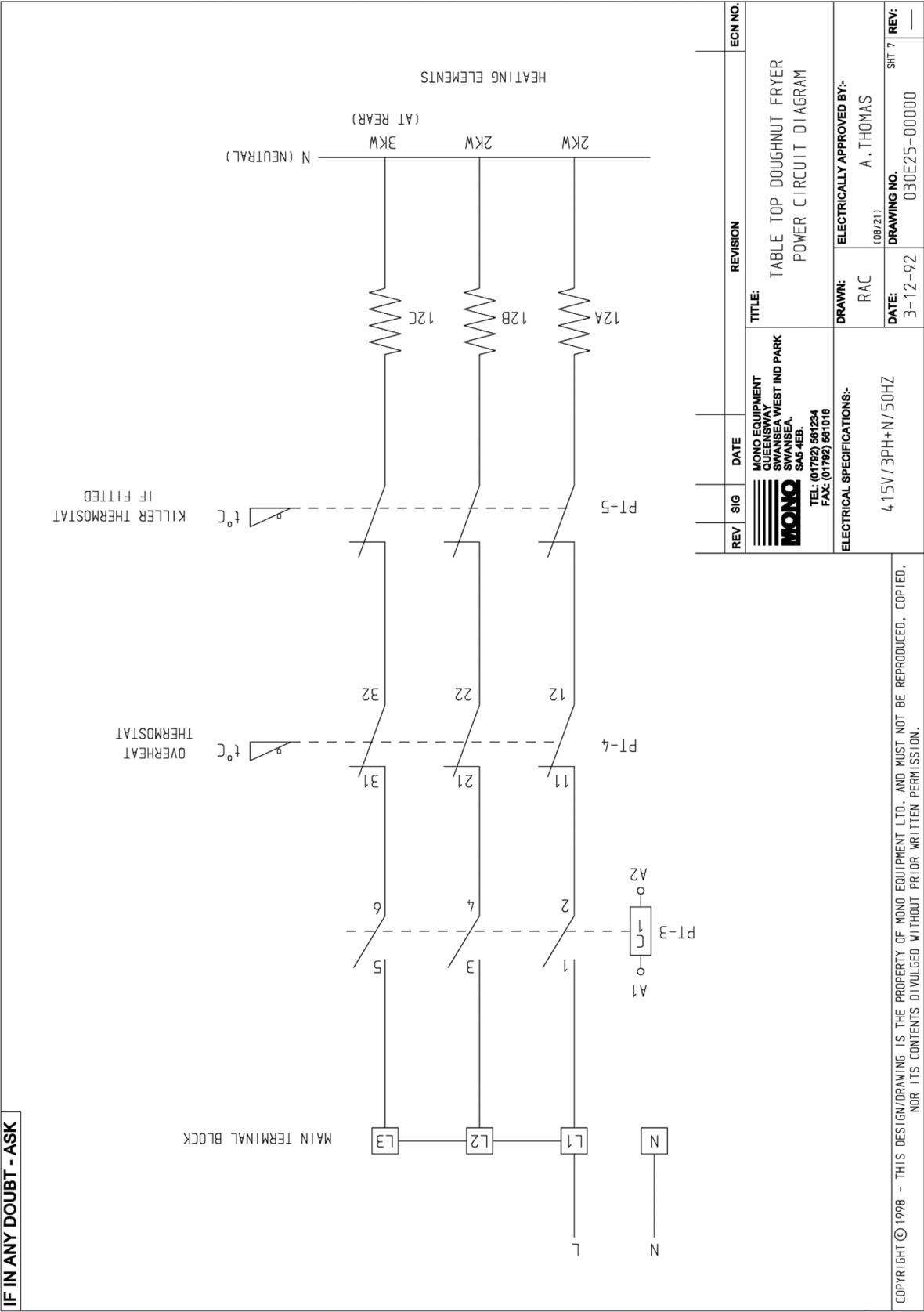


Figure B.3: New Timer Version Component Layout 030E25-20001

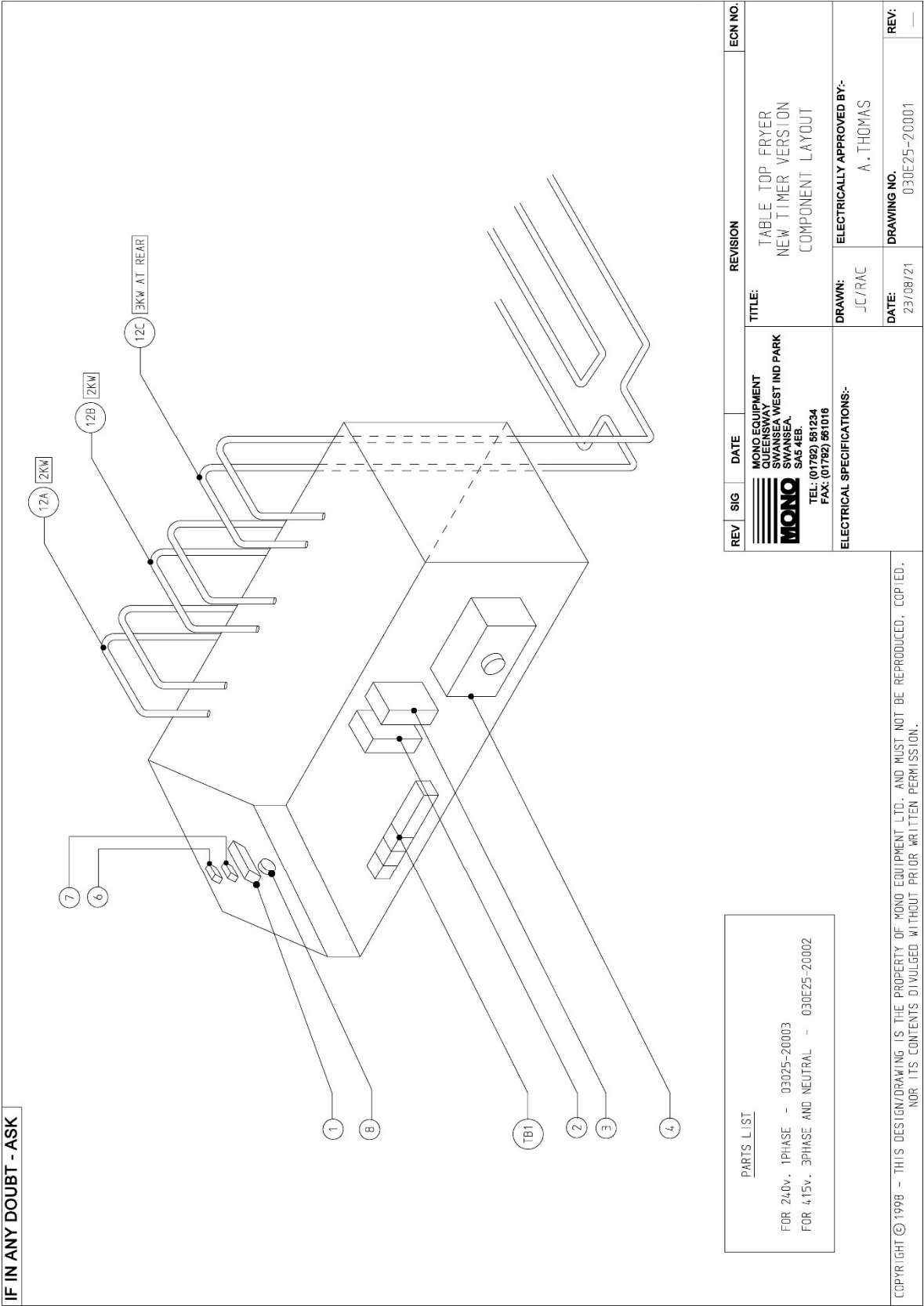


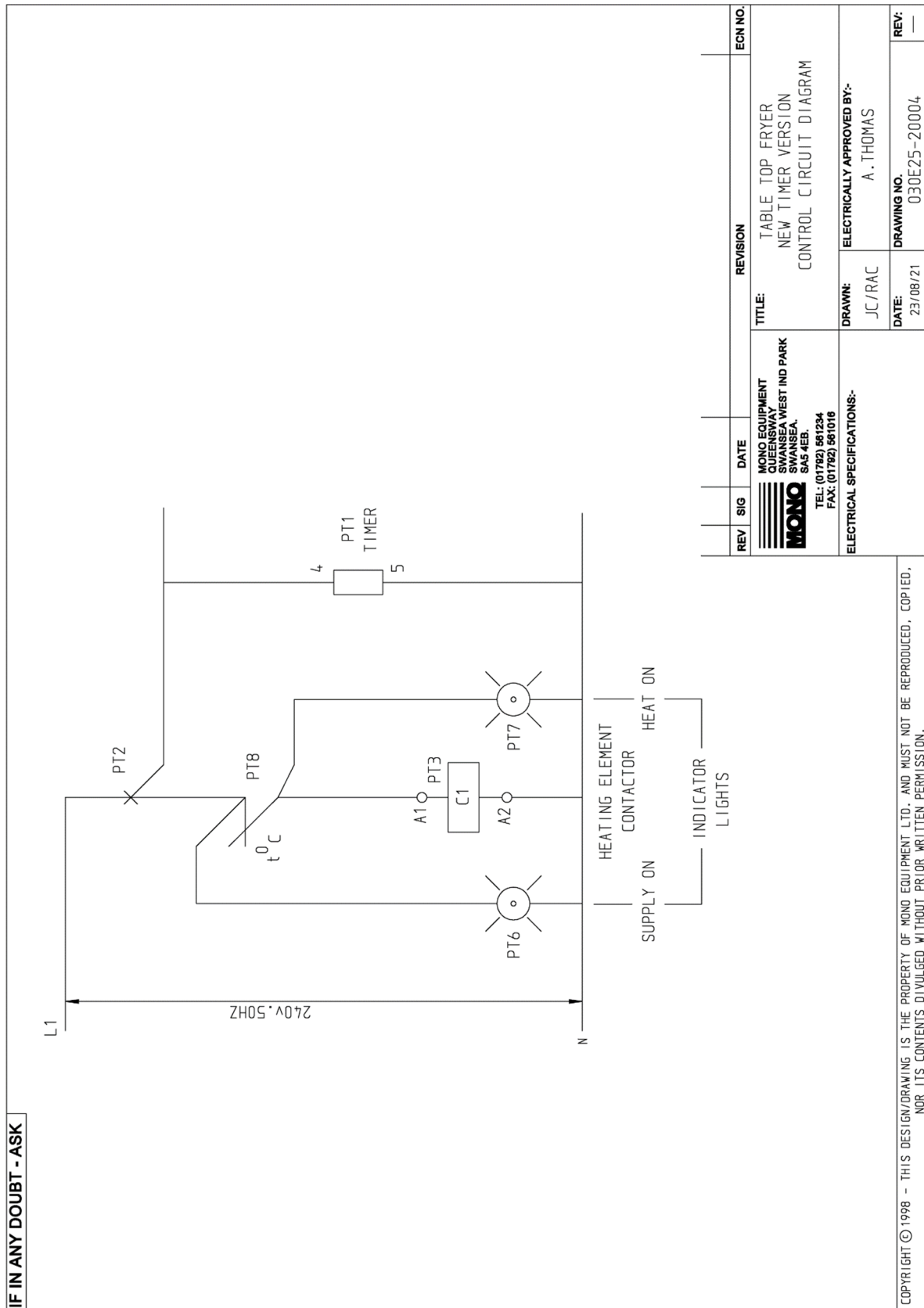
Figure B.4: New Timer Version Parts List 030E25-20002 (3-Phase)

IF IN ANY DOUBT - ASK			
DRAWING PART No.	DESCRIPTION	PART No.	QTY
1	MAIN TIMER	B842-34-012	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 (IF FITTED)	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
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
	SLEEVEING - 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
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		MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA, SA5 4EB. TEL: (01782) 561234 FAX: (01782) 561016	TITLE: TABLE TOP FRYER NEW TIMER VERSION PARTS LIST
		ELECTRICAL SPECIFICATIONS:- 415V/3PH+N/50HZ	DRAWN: JC/RAC ELECTRICALLY APPROVED BY:- A. THOMAS
		DATE: 23/08/2021	DRAWING NO. 030E25-20002
			REV: —

Figure B.5: New Timer Version Parts List 030E25-20003 (1-Phase)

IF IN ANY DOUBT - ASK				
DRAWING PART No.	DESCRIPTION	PART No.	QTY	
1	MAIN TIMER	B842-34-012	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 (IF FITTED)	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	
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	
	SLEEAVING - 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	
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		TITLE: TABLE TOP FRYER NEW TIMER VERSION PARTS LIST		REVISION
		DRAWN: JC/RAC		ELECTRICALLY APPROVED BY:- A. THOMAS
		DATE: 23/08/2021		DRAWING NO. 030E25-20003
		ELECTRICAL SPECIFICATIONS:- 240V/1PH/50HZ		REV: —

**Figure B.6: New Timer Version Control Circuit Diagram 030E25-20004**

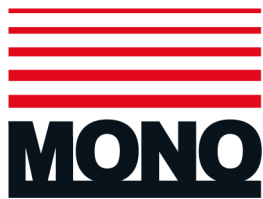




MONO Equipment is the leading designer and manufacturer of bakery equipment in the United Kingdom. This proud heritage of British craftsmanship, combined with a reputation for creating high-quality, innovative products, can be traced back to its origins in 1947.

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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