www.monoequip.com

Enter **Serial Nos.** here

DECK 1
DECK 2
DECK 3
DECK 4
DECK 5

FAN (IF FITTED)

In the event of an enquiry please quote these serial numbers.

OPERATION AND MAINTENANCE MANUAL

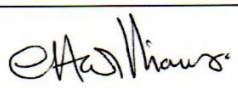
MODULAR DECK OVEN

Colour control version

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

TO REDUCE RISK OF FIRE OR ELECTRIC SHOCK
DO NOT REMOVE COVERS (OR BACK)
NO USER SERVICEABLE PARTS INSIDE
REPAIR SHOULD BE DONE BY AUTHORISED PERSONNEL ONLY

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

The oven should only be used for baking bread, pastries and cakes
(for other products please contact your oven supplier)

CONTENTS

1.0 INTRODUCTION

The electric modular Deck Oven is an easy to use practical, good-looking oven, giving an excellent heat recovery rate and an even bake across a wide range of bread and confectionery products.

- Good looking and totally reliable

Conceived with the no nonsense requirements of both the independent and in-store baker in mind, and designed to visually please as well as give reliable service for many years. This oven will more than satisfy the most discerning customer.

- Top quality specification

The external and internal contact surfaces are stainless steel.

Each modular deck is fitted with durable reinforced one-piece tiles, and an increase in high-grade insulation and high temperature ceramic sealant, makes the oven more efficient.

The oven comes with a patented integral steaming system, which reduces energy consumption and the overall size of the oven (no drain required). The system produces real steam with the advantages of spray steam. Pre-steam is also available to reduce the affects of long loading times.

No drainage is required.

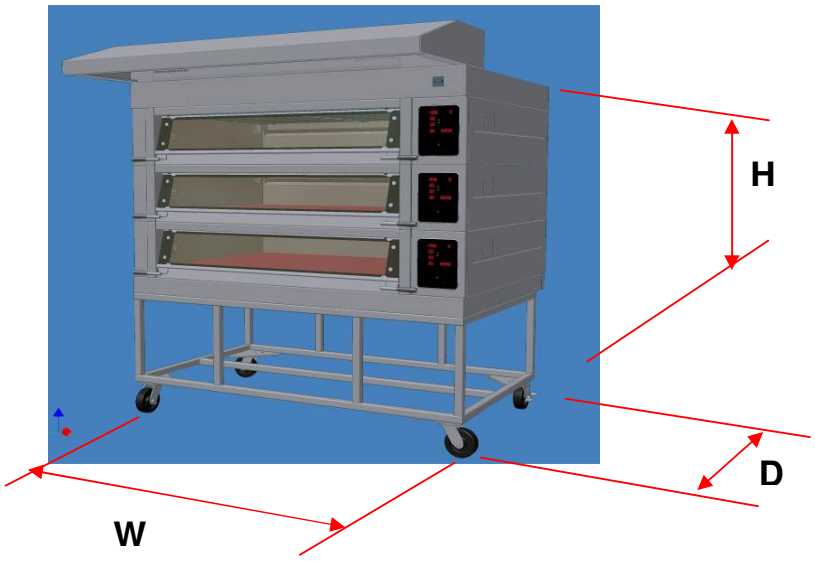
Supplied with an LCD screen. All programmable parameters have separate indicators for easy programming and extra bake time, if required.
An energy saving 7-day timer is also standard.
The simplified electrical circuits aid reliability with overheat protection (on controllers and oven) to ensure long life of controllers, all housed in splash-proof electrical enclosures.

The lights are low voltage, sealed from the chamber and easily accessed from outside the oven.

Fitted with a choice of hinged easy to clean glazed doors (using low energy-loss reflective glass for high visibility) or metal doors, means low energy consumption and the high kW rating gives good recovery.
(0-100% heating available both top and bottom)

2.0 OVERALL DIMENSIONS

ALL DIMENSIONS ARE APPROXIMATE



5 DECK oven ..... **H** = 2135mm

4 DECK oven ..... **H** = 2020mm

3 DECK oven ..... **H** = 2020mm

Ovens available with 1,2,3, 4, and 5 modules

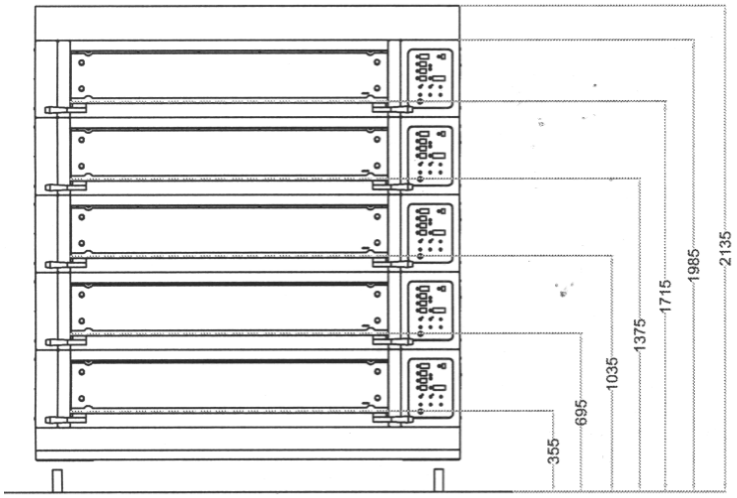
812mm deep modules ..... **D** = 1300mm

3 Tray wide oven ..... **W** = 1890mm

2 Tray wide oven ..... **W** = 1416mm

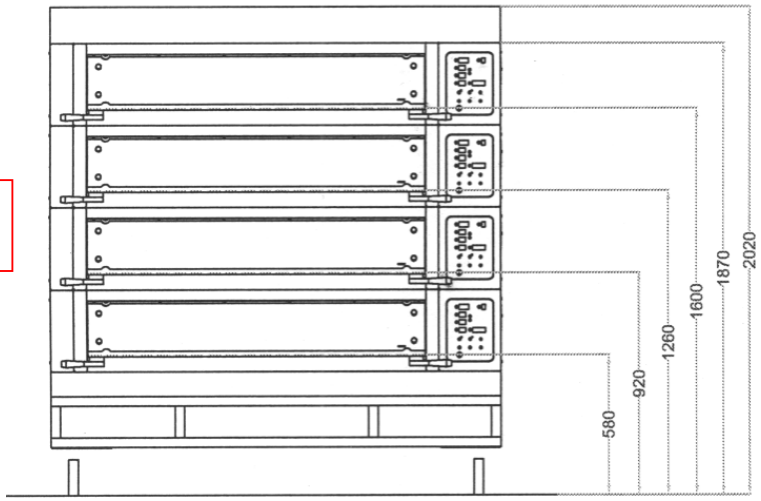
1 Tray wide oven ..... **W** = 940mm

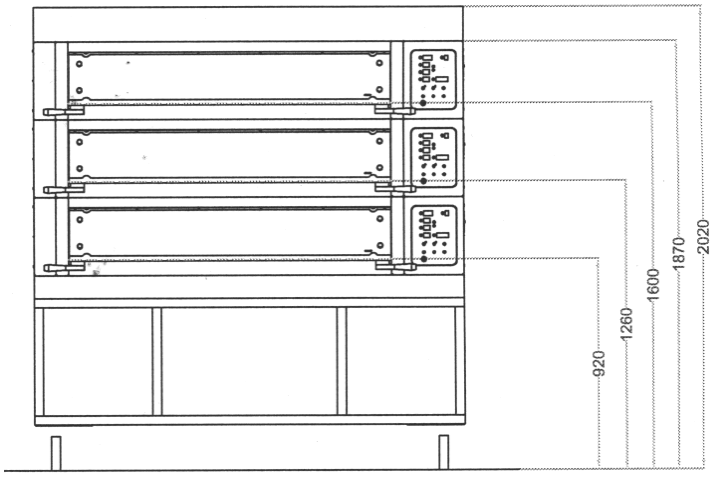
3.0 SPECIFICATIONS



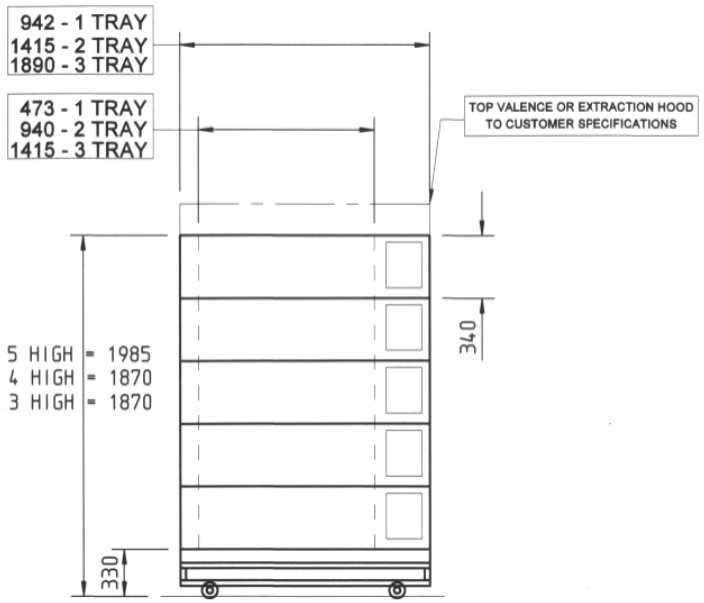
5 DECK OVEN
DECK PLATE HEIGHTS

4 DECK OVEN
DECK PLATE HEIGHTS

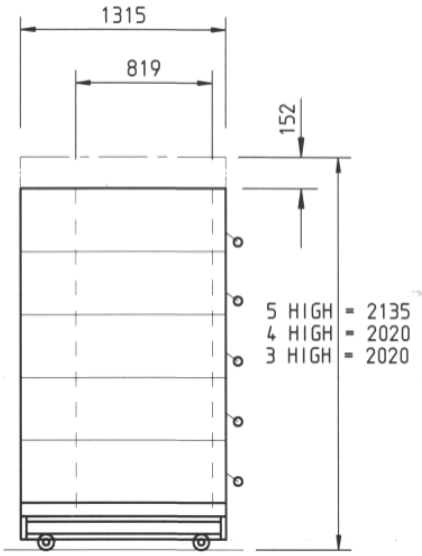




3 DECK OVEN
DECK PLATE HEIGHTS



FRONT VIEW



SIDE VIEW

DIMENSIONS IN MILLIMETRES
FOR WEIGHTS SEE SPECIFICATION NOTES

NOMINAL TRAY WIDTH	EXTERNAL AREA	INTERNAL SURFACE AREA	No. OF TRAYS (per deck) 609 x 813	609 x 406	457 x 762	457 x 660
3 tray	2.48Mtr^2	1.16Mtr^2	2	3	3	3
2 tray	1.85Mtr^2	0.77Mtr^2	1	2	2	2
1 tray	1.24Mtr^2	0.39Mtr^2	1	1	1	1

MONO MODULAR DECK OVEN

ELECTRICAL LOADINGS:

- **SUPPLY REQUIRED PER MODULAR DECK:**

	3 TRAY WIDE	2 TRAY WIDE	1 TRAY WIDE
3 Phase N + Earth, 400V. 50Hz	**9.0kW, 13Amp**	**6.0kW, 9Amp**	**3.0kW, 5Amp**

NOISE LEVEL: Less than 80 Db

4.0 SAFETY

All maintenance must be made with the oven disconnected from the power supply and then only by fully trained authorized persons.

- Check all cover panels, and any pipefittings are securely positioned.
- Check oven door handles are not damaged.
- **Do not operate a deck's steaming system with oven door open.**
- Always use oven gloves when loading or unloading the oven.
- When products are removed from the oven, ensure:
  (a) Tins are knocked out and stored directly onto a tin storage trolley or rack (Do not leave hot tins on the floor or on tables).
  (b)Trays are put into a rack and the rack is wheeled to a safe cooling area.
- Do not store items on top of the oven.
- Do not store items behind the oven.
- Beware of hot surfaces. Do not touch oven front or door with bare skin.
- All operatives must be fully trained
- People undergoing training must be under direct supervision
- The oven should only be used for baking bread, pastries and cakes (for other products please contact your oven supplier)
- No unauthorized modifications should be made to the oven.
- **Do not walk on the roof of the oven**
- **DISPOSAL**
  Care should be taken when the oven 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.

NOTE: BAKERY STAFF **MUST NOT** UNDER ANY CIRCUMSTANCES REMOVE PANELS TO ACCESS ANY PART OF THE DECK OVEN.

Panels should only be removed by a Mono maintenance engineer (or other fully trained maintenance contractor) for repairs or maintenance, **after isolating oven from power supply.**

The Bakery Manager or the Bakery Supervisor must carry out the above daily safety checks

5.0 INSTALLATION

GENERAL

- A hard smooth level floor is recommended on which to position the oven and access for maintenance should be considered.
  The oven is not designed to be " built in" so sufficient clearance must be left in front of the access panels (right hand side) to allow for servicing.

- If not chosen as an oven option, it is recommended that an extraction hood be placed above the oven to disperse excess steam and heat, which could have an adverse effect on the bakery ceiling and ambient temperature.

- A wall isolator **must** be available in order to completely isolate the oven.

THIS ISOLATOR MUST BE CLEARLY ACCESSIBLE TO THE OVEN OPERATOR

- A chain retainer should be fitted, that is shorter than the power cables, to protect them from strain if the oven is moved. (Fit to the wall or floor and the base, using hole provided in castor fixing corner plates).

- Installation must be made by a trained authorized engineer and all utilities must conform to all local regulations.

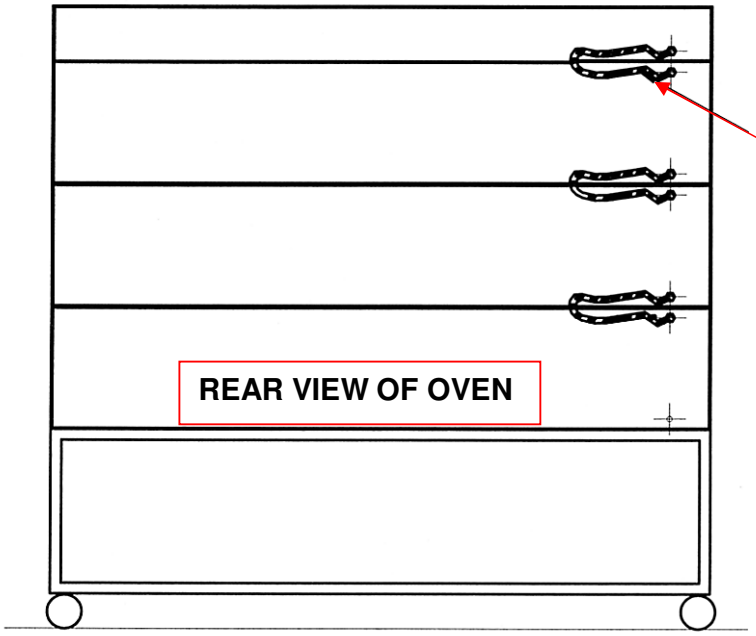
- **The oven must be "run in" as stated in the initial start up instructions.**

ELECTRICAL CONNECTIONS

- **SUPPLY REQUIRED PER MODULAR DECK:**
  (One main connection point for all deck supplies at top of oven)

	3 TRAY WIDE	2 TRAY WIDE	1 TRAY WIDE
3 Phase N + Earth, 400V. 50Hz	**9.0kW, 13Amp**	**6.0kW, 9Amp**	**3.0kW, 5Amp**

IMPORTANT OPERATION



EARTH (GROUND) STRAPS **MUST** BE CONNECTED BETWEEN EACH SECTION.

PART NUMBER M158-25-11200 SUPPLIED

WATER SUPPLY REQUIREMENTS

The set up procedure on the next page must be followed to allow the steaming system to function correctly

- All ovens with steam require a ¾" BSP hot or cold water supply at a pressure of 2 - 3 bar (29 – 44 psi).

- Only one water supply is required per oven. This should comply with local water regulations.
- A manifold supplies all decks from one connection point.

- For proper operation of the steam system it is recommended that the water supply follows the following specifications:

  Hardness 0-4 grains per gallon

  PH range 7.0 to 8.5

  Chloride concentration 0 –20 ppm

  Consult Mono for proper water filtration system information.

- No drain is required for this oven.

- **A non-return check-valve is supplied fitted to the water inlet manifold.**

WATER SYSTEM SETUP PROCEDURE

It is imperative that the water delivery to the deck oven is checked for the steam system to operate correctly

1. Flush out the main feed pipe to be used, until water runs clear and free from debris.

2. Connect main feed to oven.

3. Connect flexible hoses to each deck.

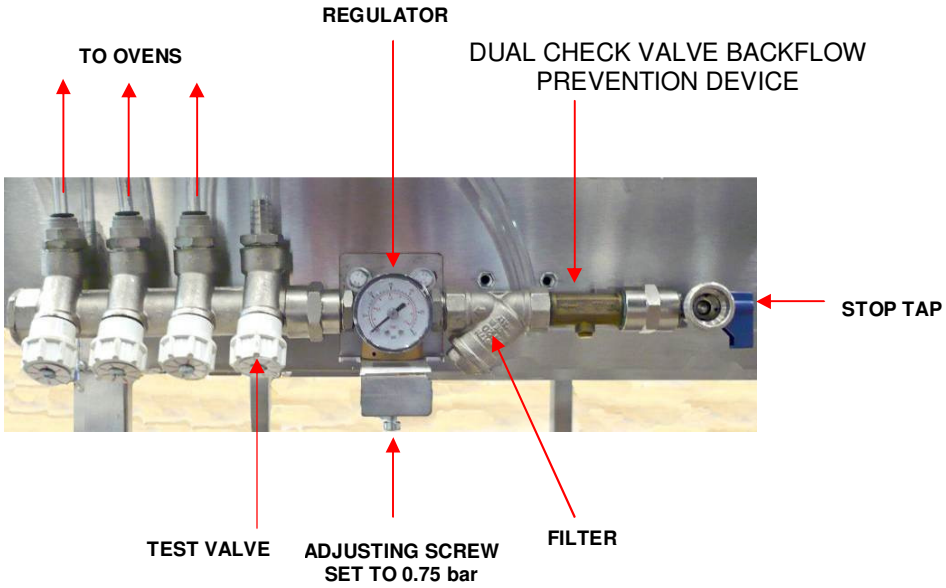
4. Place a container under the test valve.

5. Slowly open test valve fully and with the water flowing check the regulator is set to 0.75 bar. If not adjust using the screw above the valve.
- **Never use the oven above this setting**

6. When the pressure has stabilised shut the test valve.

REPEAT 4,5 AND 6 AT THE END OF INSTALLATION.

NOTE. DYNAMIC PRESSURE, NOT STATIC, IS BEING MEASURED.

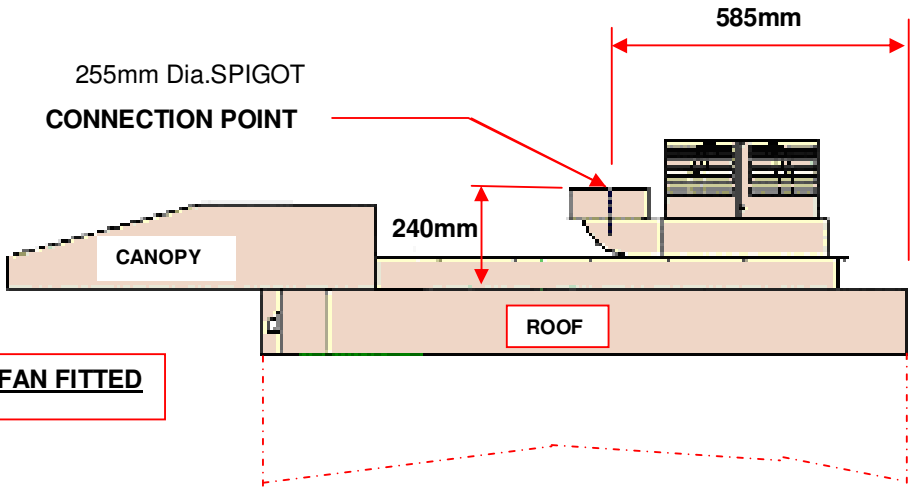


WATER REGULATOR SET UP

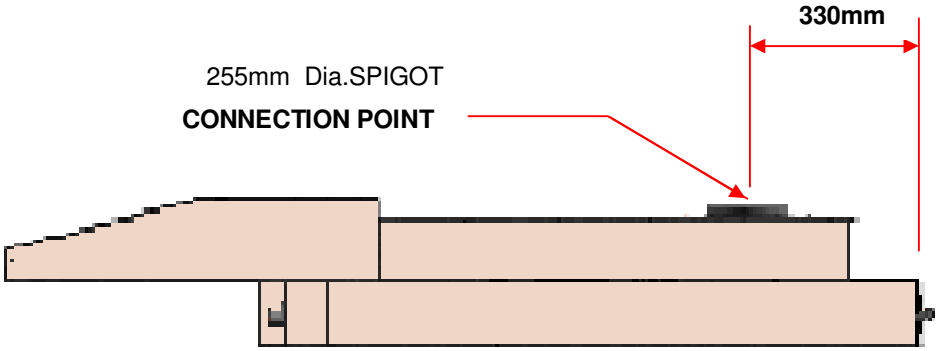
LOCATED ON REAR OF OVEN

Exhaust Connections (IF CANOPY FITTED)

- Ideally an exhaust duct should rise 2 metres above the bakery roof protected from wind and birds by a duct protector.
- It should be of a suitable material to take the high temperatures and humidity expected.
- It should be flexible and easily removable at the oven connection point.
  This allows the oven to be moved for cleaning when required.



WITH EXTRACTION FAN FITTED



WITHOUT EXTRACTION FAN FITTED

INITIAL START UP

THIS PROCEDURE MUST BE ADHERED TO FOR THE OVEN WARRANTY TO BE VALID.

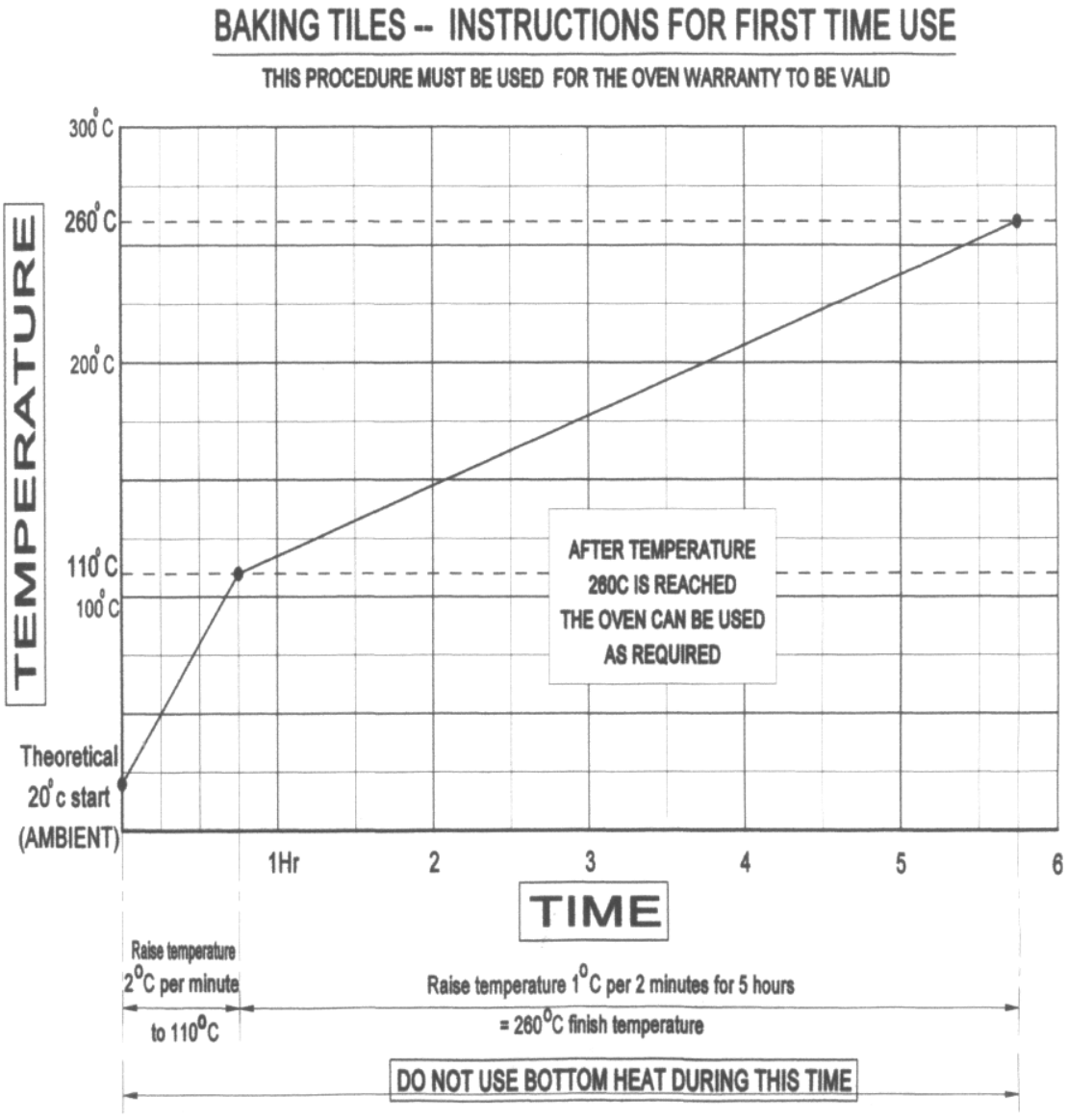
In order for the oven to give good reliable service the deck tiles must be initially brought up to temperature as stated below.
After this running in period the oven can be used as required.

Running in procedure

1. Turn the oven on and note the temperature shown.
   (This will be the temperature inside the cooking chamber)

2. The temperature needs to rise to 110deg C, at no more than 2deg a minute.
   DO NOT USE BOTTOM HEAT AT ANY TIME.

3. Take the temperature up to 260deg C, at no more than 1deg in 2 minutes.
   THIS WILL TAKE 5 HOURS.



6.0 ISOLATION

WARNING

THE "POWER OFF" BUTTON ON THE FRONT OF THE OVEN DOES NOT ISOLATE THE POWER SUPPLY.

A WALL ISOLATOR MUST BE AVAILABLE IN ORDER TO COMPLETELY ISOLATE THE OVEN.

THIS ISOLATOR MUST BE CLEARLY ACCESSIBLE AND KNOWN TO THE OVEN OPERATOR

TO STOP THE OVEN IN AN EMERGENCY SWITCH OFF AT THE MAIN WALL ISOLATOR

7.0 CLEANING

DAILY CLEANING INSTRUCTIONS

ISOLATE OVEN FROM MAINS SUPPLY BEFORE CLEANING.

- After the oven has been allowed to cool, (this could take several hours), sweep any debris out.
  Use a vacuum cleaner with metal attachments (able to take heat) if available.
- Brush down and wipe oven front, back and sides with a damp cloth.
- Spot clean with a damp cloth, which has been soaked in a solution of mild detergent, and hot water, paying particular attention to ensure excess water is not applied around the area of the electrical panels.

NOTE: TAKE CARE WATER DOES NOT ENTER CONTROL PANEL MOUNTING OR ROOF MOUNTED FAN.

WEEKLY CLEANING INSTRUCTIONS

ISOLATE OVEN FROM MAINS SUPPLY BEFORE CLEANING.

- Complete daily cleaning as above.
- Scrub oven wheels with a mild detergent and hot water using nylon cleaning brush (excess water will rust metal).
- Ensure the oven roof area is clear of debris and dust build up.
  (DO NOT STAND ON THE OVEN ROOF)

8.0 OPERATING CONDITIONS

- It is recommended that a space of at least 6 feet be left in front of the oven for ease of operation and safety.
- Bakery utensils must not be used to operate the control panel buttons.

9.0 PRINCIPLE OF OPERATION

NOTE: *REFER TO YOUR OWN COMPANY'S RECIPE MANUAL FOR OVEN TEMPERATURE SETTINGS.*

PLEASE ALSO REFER TO THE BAKING ADVICE ON THE NEXT PAGE

Products are baked in an insulated heated chamber.
The **temperature** is regulated by a thermocouple having an LCD read-out on the front control panel.
Baking heat is radiant with top and bottom heat being adjusted by means of separate controls. This enables heat to be "balanced" according to product requirement.

STEAM is provided from an integral steam unit, and is introduced into the chamber on demand. This is automatically controlled by the programmed parameters.

Once steamed the oven will not steam again until the steam unit has recovered heat, typically 3-8 minutes depending on the amount of steam selected.

All ovens are fitted with a **steam damper** that evacuates steam humidity into a vent at the side of the oven.

Baking Advice
For the best results from deck Ovens

Loading

1. **Do not place the products too close together**. *If the loaves are close to each other after oven spring (expansion), the loaves sides will be soft and may collapse on cooling.*

2. **Place the product evenly within the oven**. *Product bunched together will be paler than those widely spaced.*

3. **Product should not be placed too close to the edge of the tile**. *As it expands towards the front one side of the loaf may enter the cooler air by the door.*

4. **Door opening should be kept to a minimum** *because cold air enters the oven cooling the sidewalls and roof causing the finished product to be lighter locally at the front and wasting heat. If loading times are consistently long you can alter the front top heat to put more heat at the front.*

5. **If the loading takes a long time product can form a skin**, *which causes an imbalance and a less attractive finish. By using the pre-steam function before loading this can be minimised. This function turns the elements off and injects steam to increase the humidity.*

Bake settings

1. A good starting point for baking breads in Mono deck ovens is **225C** (437F)
   Top heat 60-65 bottom heat 40.

2. For cookies etc, the heat in the oven can be turned almost off, however it may still be necessary to place the trays with cookies etc onto upturned trays on the oven sole.

3. **Steam** should be kept to a minimum, for energy efficiency, depending on the product and finish. **Times between 9 and 12 seconds should be adequate**.

4. It is a good idea not to focus on the temperature recovery this can vary from oven to oven.

Is the product baked in the time and to the quality you require?

Below are some tips for modifying the bake so you get the product that you require.

- If your product is **light on top**.

  Either decrease the bottom heat and extend bake time or increase the top heat.

- If the product **sides are pale** and the **top dark**.

  When the products are spaced well apart drop the top heat and extend the bake.

- **If the bake time is too long.**

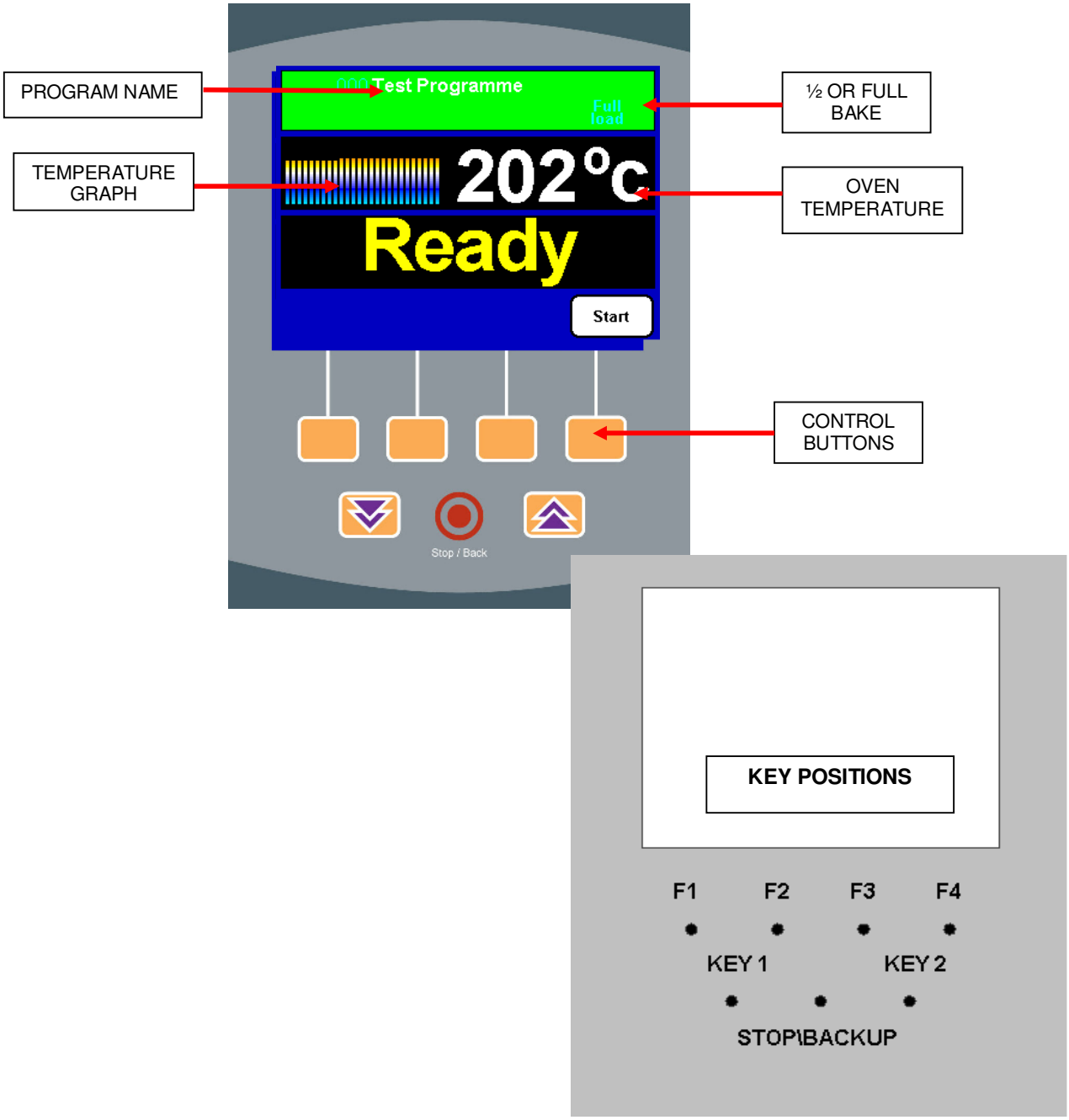
  First increase the top heat to speed recovery.
  If this does not give sufficient savings increase the bake temperature.

- **To thicken the crust**

Set the damper to open longer. Different ovens will require different lengths of time.

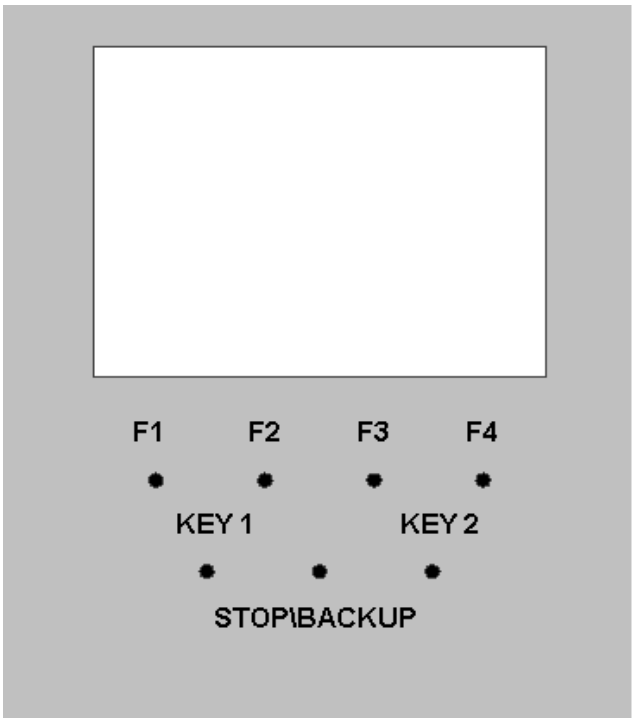
10.0 OPERATING INSTRUCTIONS

RECALLING SET PROGRAMS
NEW PRODUCT PROGRAM ENTRY
SEVEN-DAY TIMER



Control Panel

(TO BE USED IN CONJUNCTION WITH THE FOLLOWING PAGES)



GENERAL LAYOUT OF CONTROLLER BUTTONS

- Above shows the general layout of the controller keyboard.

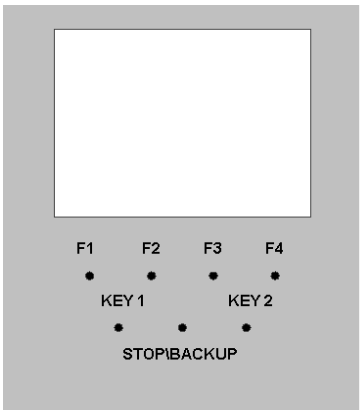
- The top row of buttons labelled F1, F2, F3 & F4 can have a number of uses.

- The function of the buttons will depend on the screen the operator chooses, but not all of the function buttons are active in every screen.
  If a button is active it will have a symbol displayed above it on screen. For ease of use, the symbols will indicate the operation they represent.

- The buttons marked KEY1 & KEY2 are used to alter set values.

- The final button is the stop or backup button. It can be used, for example, to stop a bake if needed or go back through screens. All these operations will be explained further in the section.

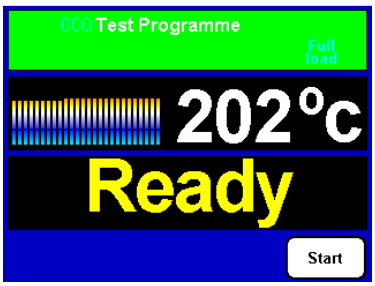
- **RECALLING SET PROGRAMS**



- Turn on power at main isolator.
- Initially the oven will be in the off state with "select product" above F4..
- To display the available programs press button **F4**.
- Use F2 or F3 to scroll up or down the list and position the cursor over the desired product program, then press either the half or full load buttons, (buttons F1 & F4 respectively)

TIP: To speed up the selection process use the quick scroll buttons key1 & key2., this moves the programs up or down 10 positions at a time.

- The screen will display the current oven temperature, the selected program number and the word "**HEATING**" displayed in large letters, along with notification of either half or full bake depending on previous choice.
- When the oven has reached the temperature specified in the product program the screen will display, in large letters, the word "**READY**"



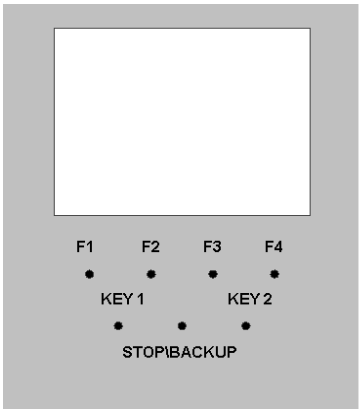
- Place the product in the baking chamber, close door and press the start button (**F4**).
  - At the end of bake time, the buzzer will sound.
    Press stop (o) and remove the product. **Shut the door to conserve heat.**

OR

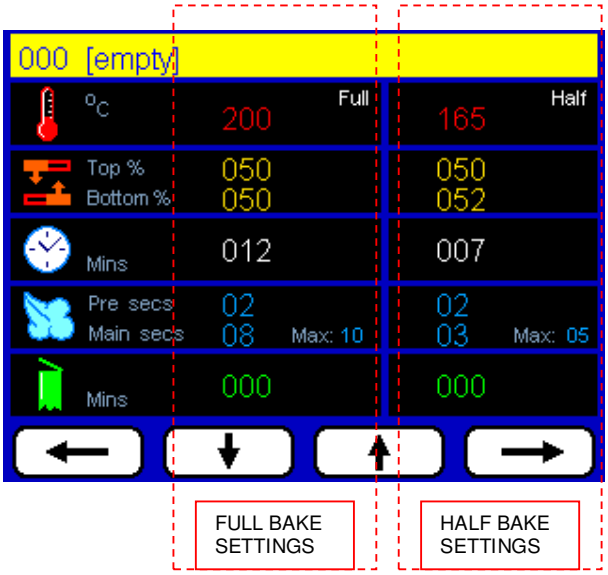
press key F4 to increase bake by 2 minutes (press stop at any time to stop bake)

TIP: If you wish to cancel the bake, press the stop\backup button.

NEW PRODUCT PROGRAM ENTRY



- Turn on power at main isolator.
- Press the edit program button **F2.**
- Enter the password (default 111111)
- Select an empty position by scrolling with the up\down arrows KEYS **F2 & F3**.
- Press the edit product button **F1** again



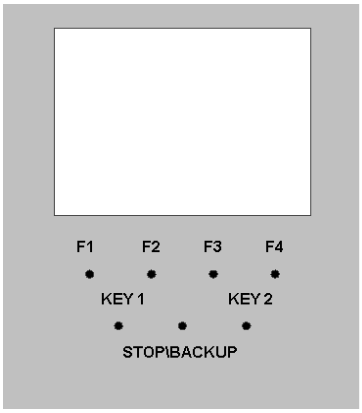
- Use the **direction** arrow buttons KEYS F1 to F4 to select a field.
  Adjust the values in singular units up or down (buttons **Key 1 & Key 2** respectively)

NOTE: The left hand column contains values relating to a full bake, while the right hand column relates to half bake.

- Next a name needs to be entered for the program;
  Press F4 until the title area is highlighted. This will enable the title screen for editing.
  Use the up\down buttons K1 and K2 to select the required character.
  Once selected scroll across using button **F4** to the next empty character field. Repeat process for extra characters.
  *If amendments are required, scroll in the opposite direction-using button **F1** and correct by using the **up\down** arrows.*

- Once completed press the **stop\backup** button twice to return to the home screen

SEVEN-DAY TIMER



The controller can be programmed to switch the oven deck on and off at preset times, automatically any day of the week.

SETTING THE SEVEN DAY TIMER

- With the main supply on, press the button **F3.**
- To adjust the day pressing back (F1) until the day changes to the one required.
  Press next to highlight the “on” hour to be set and use the key1 or key2 to adjust .
  Press next and highlight the “on” minutes to be set and use key1 and key2 to adjust
- If necessary, a finish time can be entered by scrolling to the required day, again using up\down arrow buttons and adjusting the time as mentioned previously.
- Once the required times have been set press the stop\backup button. This will then return you to the home screen. This is the state the screen should be left in to allow the seven-day timer to operate. *(Oven power on, nothing selected)*

The timer can be disabled by entering 00:00 in the time field.

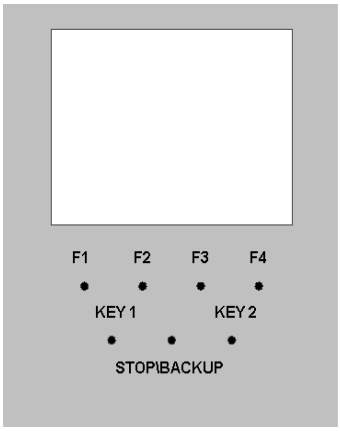
NOTE: The seven-day timer will not work properly unless the correct time and date have been entered previously. (Engineers set-up).

ENGINEERS USE ONLY

DO NOT ATTEMPT TO MAKE ADJUSTMENTS UNLESS YOU ARE FULLY AWARE OF THE RESULTS

11.0 SET-UP & DIAGNOSTIC MENU

11.0 SET-UP & DIAGNOSTIC MENU



- Turn on power at main isolator.
  Initially the oven will be in the off state with “select product” above F4

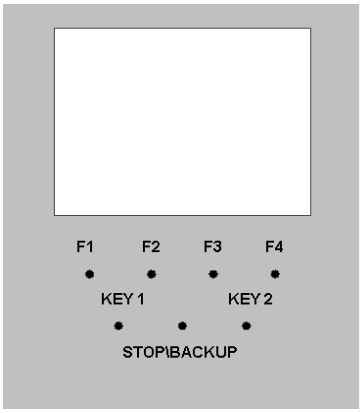
- Press the button **F1**.

- Enter the six digit engineers password (default **222222)**

Push F3 to go down to the item that requires changing. *(F3 to go back up list)*

Use key1 or key2 to adjust the setting.

Press ok (F1) to go out of the setting screen or next (F4) to go to the next screen.



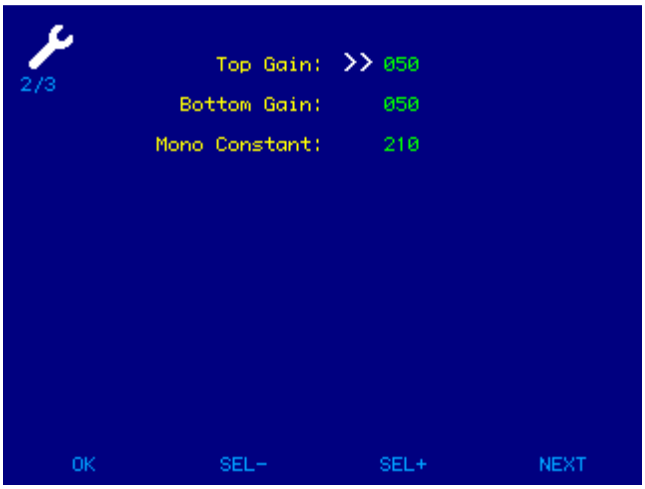
GAINS MENU

- **These are factory set gains**, any values other than that shown below will seriously affect the performance of the oven.

Top Gain- 50

Low Gain- 50

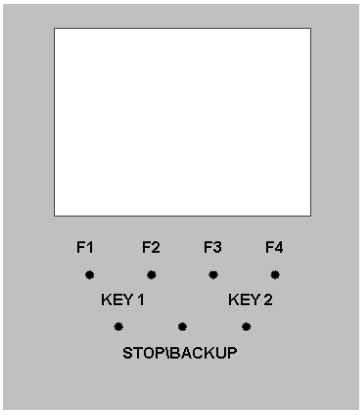
Mono Constant- 210

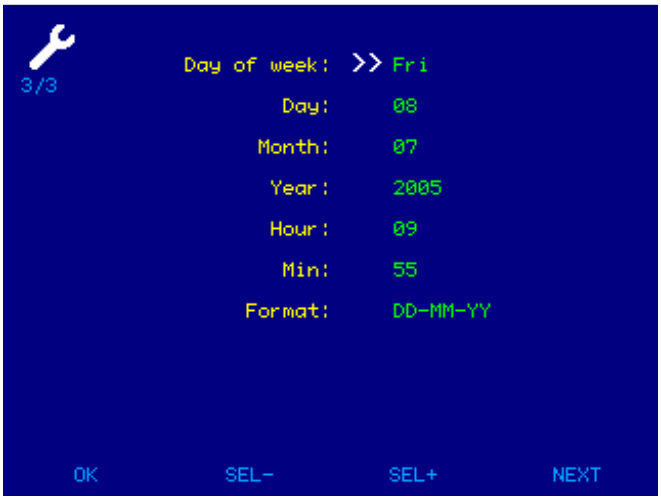


DO NOT CHANGE THESE SETTINGS UNLESS INSTRUCTED TO DO SO BY "MONO"

Press next (F4) or ok (F1) to exit.

SETTING CURRENT TIME AND DATE





- Use the up\down arrow buttons **F2 & F3** to scroll through the fields.

- With the desired field highlighted use the buttons represented by the arrow symbols **KEY1 & KEY2** to alter the value.

When the time and date are correct, press ok (F1) or next (F4) to go to the next screen.

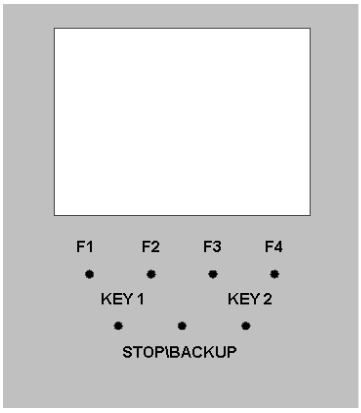
PASSWORDS

EDITING DEFAULT 111111 SET-UP DEFAULT 222222

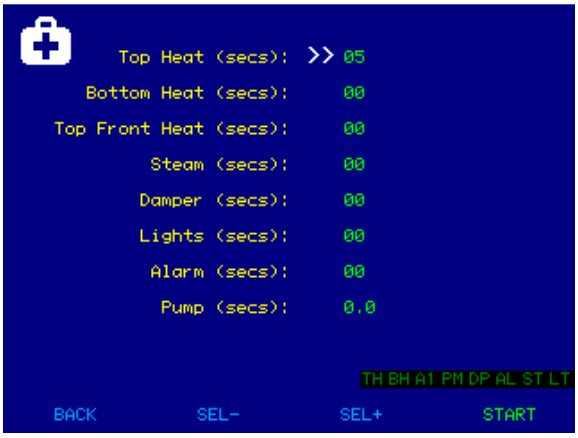
The passwords can be changed by highlighting the digit to change and changing it with the arrow keys 1 & 2.

press DIAGS (F4) to go on to the next screen.

DIAGNOSTICS



- Here items can be tested for correct operation.



Use F2 or F3 to highlight the item to be tested.

Use Key 1 or key2 to enter the length of test in seconds.

When ready to test, press start (F4) and test will commence.

Press Stop when tests are completed and oven will revert back to start screen.

SERIAL COMMUNICATIONS

Although the oven is capable of upload and download of information, this has not yet been implemented

12.0 TROUBLESHOOTING

▪ NONE OF THE DECKS SWITCHED ON.

- Is main oven power on?
- Check if bakery main power supply time clock is working (if fitted).
- Is 7-day timer clock set correctly to bring oven on at required time?

▪ ONE DECK HAS NOT SWITCHED ON.

- Check if individual deck timer is set to bring it on at required time.

▪ UNEVEN OR PATCHY BAKE

- Door is being opened too often or too long whilst loading. (front pale, back burnt).
- Faulty element.
- All top or bottom deck elements not functioning.
- Uneven loading.
- No supply voltage across a phase.

▪ TEMPERATURE GOING WELL OVER SET TEMPERATURE

When empty the temperature of a deck oven can exceed the set baking temperature. This overheat is marginal when the deck is full of product. If the elements are continuing to work after the set temperature has been reached call Mono service. (Please allow up to 15deg.C difference before diagnosing a fault condition),

▪ POOR RECOVERY OF SET TEMPERATURE WHEN LOADED

- The doors may have been left open too long during loading, allowing heat to escape.
- The damper may have been left open during loading or baking allowing heat to escape.
- Top and/or bottom heat may not be working or set at a low value.
- No supply voltage across a phase.

▪ STEAM SYSTEM NOT OPERATING CORRECTLY

Check that the water supply is connected and the tap to each deck is in the on position. If there is still a problem, Contact Mono.

13.0 SERVICE

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

MONO
Queensway
Swansea West Industrial Estate
Swansea. SA5 4EB UK

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

Web site:www.monoequip.com
Main Tel. +44(0)1792 561234

Fax. 01792 561016

.

LIGHT REPLACEMENT

DISCONNECT FROM POWER SUPPLY BEFORE REPLACING LIGHT BULBS

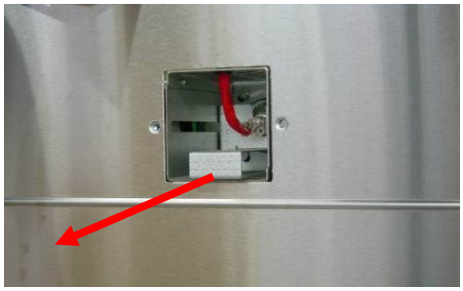
24v 20w LAMP PART NUMBER … B855-94-008

1

HEX HEAD SOCKET SCREWS

UNSCREW PLATE NEXT TO LIGHT TO BE REPLACED

2

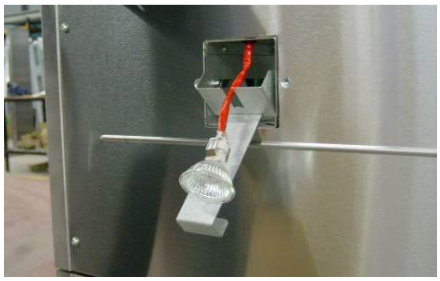


SLIDE FITTING OUT

3

REMOVE LIGHT FROM HOLDING SLOT AND UNCLIP FROM CABLE

4



REPLACE LIGHT AND REFIT ALL PARTS

RECONNECT POWER SUPPLY AND TEST

14.0 SPARES INFORMATION

OVEN SPARES

FROSTED GLASS	M257-02-00027
PLAIN GLASS	M257-02-00028
DOOR BUMPER STOP	M257-03-00027
BAKING TILE 3 ACROSS	M257-02-00046
2 ACROSS	M257-02-00047
1 ACROSS	M257-02-00048
HINGE PIN RHS	M257-03-00005
HINGE PIN LHS	M257-03-00009
BLACK DOOR HANDLE	A900-27-192
DOOR SPRING	M257-03-00017
WIRE ROPE	M257-03-00024
SPRING RETAINING PIN	M257-03-00025
PULLEY	M257-03-00015
PULLEY SPINDLE	M257-03-00013
DAMPER DRIVE COUPLING	M257-07-00007
ELEMENT GASKET	M245-02-01300
24 v 20w DICHROIC LAMP	B855-94-008

ELEMENT SPARES

3 ACROSS

TOP HEAT ELEMENT 1.0kW	B854-04-093
TOP HEAT ELEMENT 0.6kW	B854-04-091
BOTTOM HEAT ELEMENT 0.75kW	B854-04-092

2 ACROSS

TOP HEAT ELEMENT 0.65kW	B854-04-102
TOP HEAT ELEMENT 0.4kW	B854-04-100
BOTTOM HEAT ELEMENT 0.5kW	B854-04-101

1 ACROSS

TOP HEAT ELEMENT 0.325kW	B854-04-111
TOP HEAT ELEMENT 0.2kW	B854-04-109
BOTTOM HEAT ELEMENT 0.25kW	B854-04-110

15.0 ELECTRICS

PARTS LIST FOR DRAWINGS FOLLOWING – 3 TRAY WIDE

F1	HEATERS MCB	B872-22-007	Single phase only
F2	HEATERS MCB	B872-22-007	
F3	HEATERS MCB	B872-22-007	
F4	CONTROL POWER SUPPLY MCB	B872-22-062	
F5	OVERHEAT THERMOSTAT	B888-30-014	
T1	CONTROL CIRCUIT POWER SUPPLY	B801-93-005	
K1	TOP HEAT CONTACTOR	B801-08-021	
K2	BOTTOM HEAT CONTACTOR	B801-08-021	
Y1	WATER SOLENOID (10mm pipe)	A900-34-349(up to May 2007)	
	WATER SOLENOID (8mm pipe)	A900-34-365 (after May 2007)	
H1	INTERIOR LIGHT	B855-94-008	
B1	OVEN THERMOCOUPLE	B873-95-003	
U1	MAIN LED PRINTED CIRCUIT BOARD	M257-25-00040	
D1	DAMPER SOLENOID	B749-83-004	
R1	TOP HEAT ELEMENT 1.0kW	B854-04-093	
R2	TOP HEAT ELEMENT 0.6kW	B854-04-091	
R3	TOP HEAT ELEMENT 0.6kW	B854-04-091	
R4	TOP HEAT ELEMENT 0.6kW	B854-04-091	
R5	TOP HEAT ELEMENT 0.6kW	B854-04-091	
R6	TOP HEAT ELEMENT 0.6kW	B854-04-091	
R7	TOP HEAT ELEMENT 0.6kW	B854-04-091	
R8	BOTTOM HEAT ELEMENT 0.75kW	B854-04-092	
R9	BOTTOM HEAT ELEMENT 0.6kW	B854-04-091	
R10	BOTTOM HEAT ELEMENT 0.6kW	B854-04-091	
R11	BOTTOM HEAT ELEMENT 0.6kW	B854-04-091	
R12	BOTTOM HEAT ELEMENT 0.6kW	B854-04-091	
R13	BOTTOM HEAT ELEMENT 0.6kW	B854-04-091	
R14	BOTTOM HEAT ELEMENT 0.6kW	B854-04-091	
S1	SOUNDER	B723-92-002 (ONLY COLOUR OVENS)	

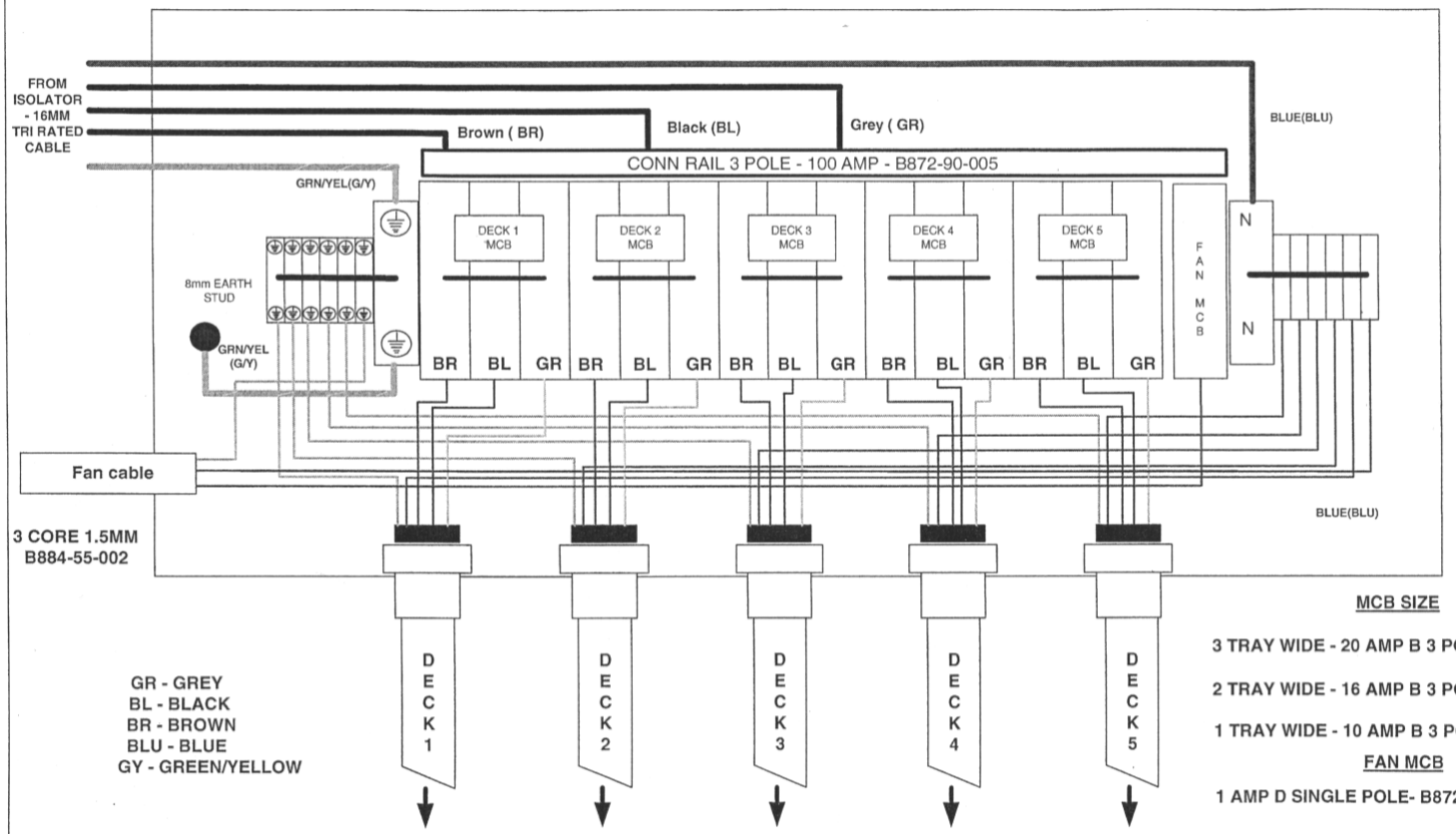
PARTS LIST FOR DRAWINGS FOLLOWING – 2 TRAY WIDE

F1	HEATERS MCB	B872-22-006	
F2	HEATERS MCB	B872-22-006	Single phase only
F3	HEATERS MCB	B872-22-006	
F4	CONTROL POWER SUPPLY MCB	B872-22-062	
F5	OVERHEAT THERMOSTAT	B888-30-014	
T1	CONTROL CIRCUIT POWER SUPPLY	B801-93-005	
K1	TOP HEAT CONTACTOR	B801-08-021	
K2	BOTTOM HEAT CONTACTOR	B801-08-021	
Y1	WATER SOLENOID (10mm pipe)	A900-34-349(up to May 2007)	
	WATER SOLENOID (8mm pipe)	A900-34-365 (after May 2007)	
H1	INTERIOR LIGHT	B855-94-008	
B1	OVEN THERMOCOUPLE	B873-95-003	
U1	MAIN LED PRINTED CIRCUIT BOARD	M257-25-00040	
D1	DAMPER SOLENOID	B749-83-004	
R1	TOP HEAT ELEMENT 0.65kW	B854-04-102	
R2	TOP HEAT ELEMENT 0.4kW	B854-04-100	
R3	TOP HEAT ELEMENT 0.4kW	B854-04-100	
R4	TOP HEAT ELEMENT 0.4kW	B854-04-100	
R5	TOP HEAT ELEMENT 0.4kW	B854-04-100	
R6	TOP HEAT ELEMENT 0.4kW	B854-04-100	
R7	TOP HEAT ELEMENT 0.4kW	B854-04-100	
R8	BOTTOM HEAT ELEMENT 0.5kW	B854-04-101	
R9	BOTTOM HEAT ELEMENT 0.4kW	B854-04-100	
R10	BOTTOM HEAT ELEMENT 0.4kW	B854-04-100	
R11	BOTTOM HEAT ELEMENT 0.4kW	B854-04-100	
R12	BOTTOM HEAT ELEMENT 0.4kW	B854-04-100	
R13	BOTTOM HEAT ELEMENT 0.4kW	B854-04-100	
R14	BOTTOM HEAT ELEMENT 0.4kW	B854-04-100	
S1	SOUNDER	B723-92-002 (ONLY COLOUR OVENS)	

PARTS LIST FOR DRAWINGS FOLLOWING – 1 TRAY WIDE

F1	HEATERS MCB	B872-22-005	
F2	HEATERS MCB	B872-22-005	Single phase only
F3	HEATERS MCB	B872-22-005	
F4	CONTROL POWER SUPPLY MCB	B872-22-062	
F5	OVERHEAT THERMOSTAT	B888-30-014	
T1	CONTROL CIRCUIT POWER SUPPLY	B801-93-005	
K1	TOP HEAT CONTACTOR	B801-08-021	
K2	BOTTOM HEAT CONTACTOR	B801-08-021	
Y1	WATER SOLENOID (10mm pipe)	A900-34-349(up to May 2007)	
	WATER SOLENOID (8mm pipe)	A900-34-365 (after May 2007)	
H1	INTERIOR LIGHT	B855-94-008	
B1	OVEN THERMOCOUPLE	B873-95-003	
U1	MAIN LED PRINTED CIRCUIT BOARD	M257-25-00040	
D1	DAMPER SOLENOID	B749-83-004	
R1	TOP HEAT ELEMENT 0.35kW	B854-04-111	
R2	TOP HEAT ELEMENT 0.2kW	B854-04-109	
R3	TOP HEAT ELEMENT 0.2kW	B854-04-109	
R4	TOP HEAT ELEMENT 0.2kW	B854-04-109	
R5	TOP HEAT ELEMENT 0.2kW	B854-04-109	
R6	TOP HEAT ELEMENT 0.2kW	B854-04-109	
R7	TOP HEAT ELEMENT 0.2kW	B854-04-109	
R8	BOTTOM HEAT ELEMENT 0.25kW	B854-04-110	
R9	BOTTOM HEAT ELEMENT 0.2kW	B854-04-109	
R10	BOTTOM HEAT ELEMENT 0.2kW	B854-04-109	
R11	BOTTOM HEAT ELEMENT 0.2kW	B854-04-109	
R12	BOTTOM HEAT ELEMENT 0.2kW	B854-04-109	
R13	BOTTOM HEAT ELEMENT 0.2kW	B854-04-109	
R14	BOTTOM HEAT ELEMENT 0.2kW	B854-04-109	
S1	SOUNDER	B723-92-002 (ONLY COLOUR OVENS)	

TOP CANOPY MK 2 DECK OVEN MCB WIRING



MCB SIZE

3 TRAY WIDE - 20 AMP B 3 POLE- B872-22-027

2 TRAY WIDE - 16 AMP B 3 POLE- B872-22-026

1 TRAY WIDE - 10 AMP B 3 POLE- B872-22-025

FAN MCB

1 AMP D SINGLE POLE- B872-22-060

MONO EQUIPMENT
QUEENSWAY
SWANSEA WEST IND PARK
SWANSEA SA5 4EB
TEL: (01792) 561234
FAX: (01792) 561016
Email: engineering@monoequip.com

TITLE: UK/EUROPE TOP SECTION MCB WIRING DISTRIBUTION UNIT

ELECTRICAL SPECIFICATIONS : 400V 50/60 HZ 3 PHASE + N+E

DRAWN: ADT

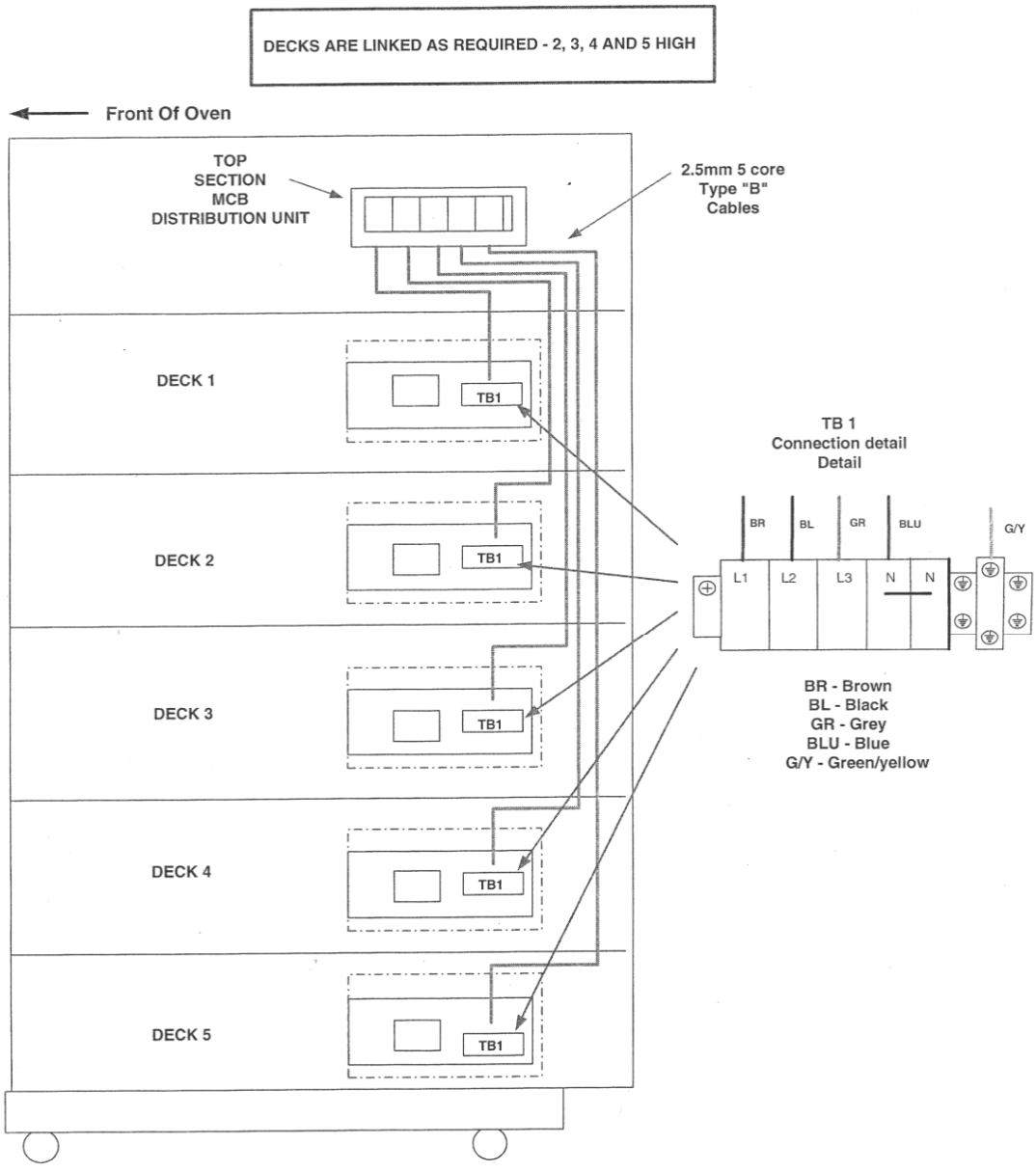
ELECTRICALLY APPROVED BY : ADT

DATE: 19-2-07

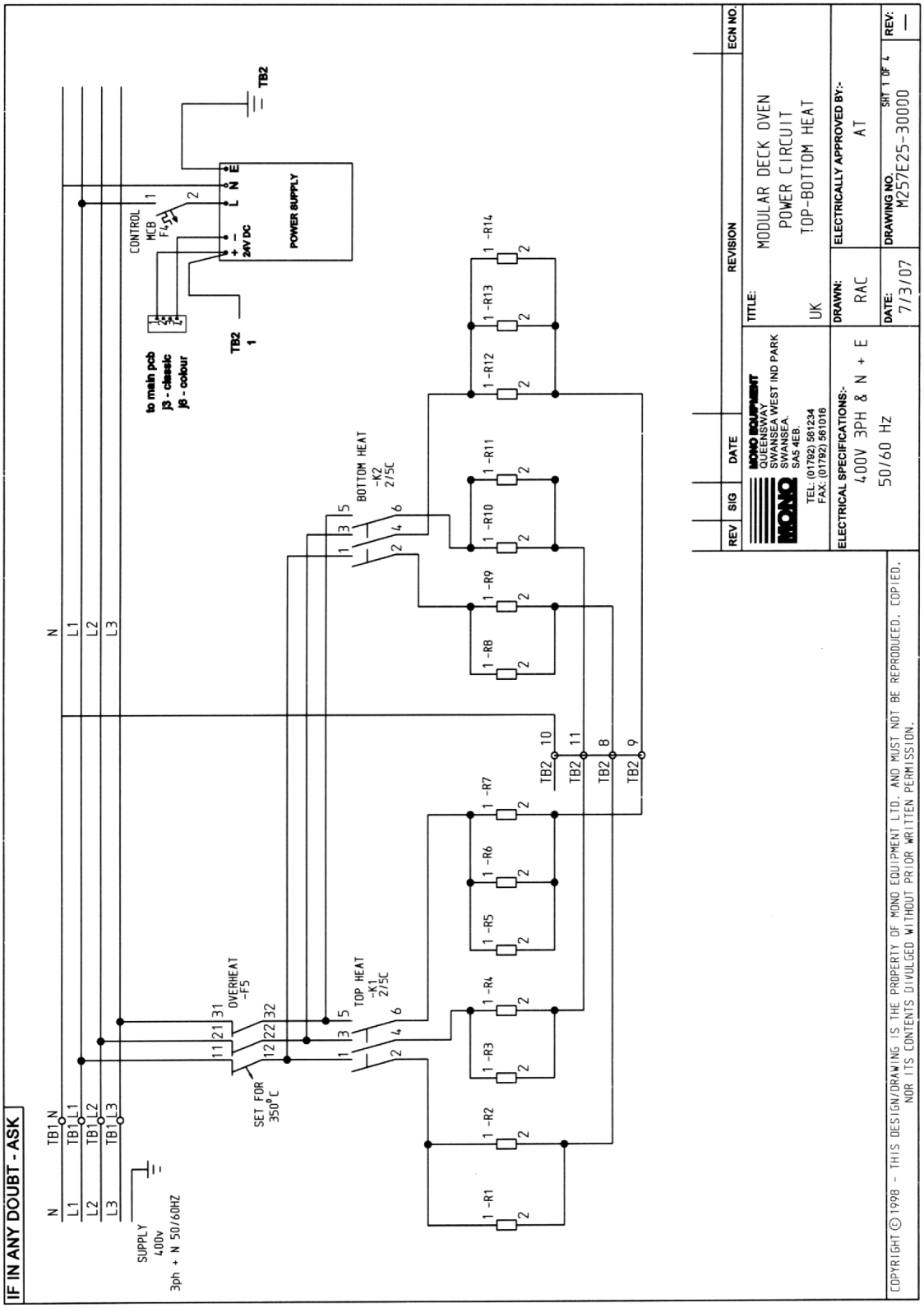
DRAWING NO. M257E25-52300

REV: —

DX UK Modular MK2 Deck Oven Interlink Detail



MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA SA5 4EB TEL: (01792) 561234 FAX: (01792) 561016 Email: engineering@monoequip.com	TITLE: UK/EUROPE MODULAR MK 2 DECK OVEN INTERLINK DETAIL
ELECTRICAL SPECIFICATIONS: 400V 50/60 HZ 3 PHASE + N+E	DRAWN: ADT; ELECTRICALLY APPROVED BY: ADT; DATE: 19-2-07; DRAWING NO.: M257E25-52500; REV: -


IF IN ANY DOUBT - ASK
SUPPLY 400v 3ph + N 50/60HZ
TB1 N
TB1 L1
TB1 L2
TB1 L3
SET FOR 350°C
OVERHEAT -F5
TOP HEAT -K1 27SC
BOTTOM HEAT -K2 27SC
CONTROL MCB F4
24V DC
POWER SUPPLY
TB2
TB2 1
to main pcb
j3 - classic
j8 - colour
1 -R1
1 -R2
1 -R3
1 -R4
1 -R5
1 -R6
1 -R7
1 -R8
1 -R9
1 -R10
1 -R11
1 -R12
1 -R13
1 -R14
TB2 10
TB2 11
TB2 8
TB2 9
REV
SIG
DATE
REVISION
ECN NO.
MONO EQUIPMENT
QUEENSWAY
SWANSEA WEST IND PARK
SWANSEA.
SA5 4EB.
TEL: (01792) 561234
FAX: (01792) 561016
TITLE:
MODULAR DECK OVEN
POWER CIRCUIT
TOP-BOTTOM HEAT
UK
ELECTRICAL SPECIFICATIONS:-
400V 3PH & N + E
50/60 Hz
DRAWN:
RAC
DATE:
7/3/07
ELECTRICALLY APPROVED BY:-
AT
DRAWING NO.
M257E25-30000
SHT 1 OF 1
REV:
—
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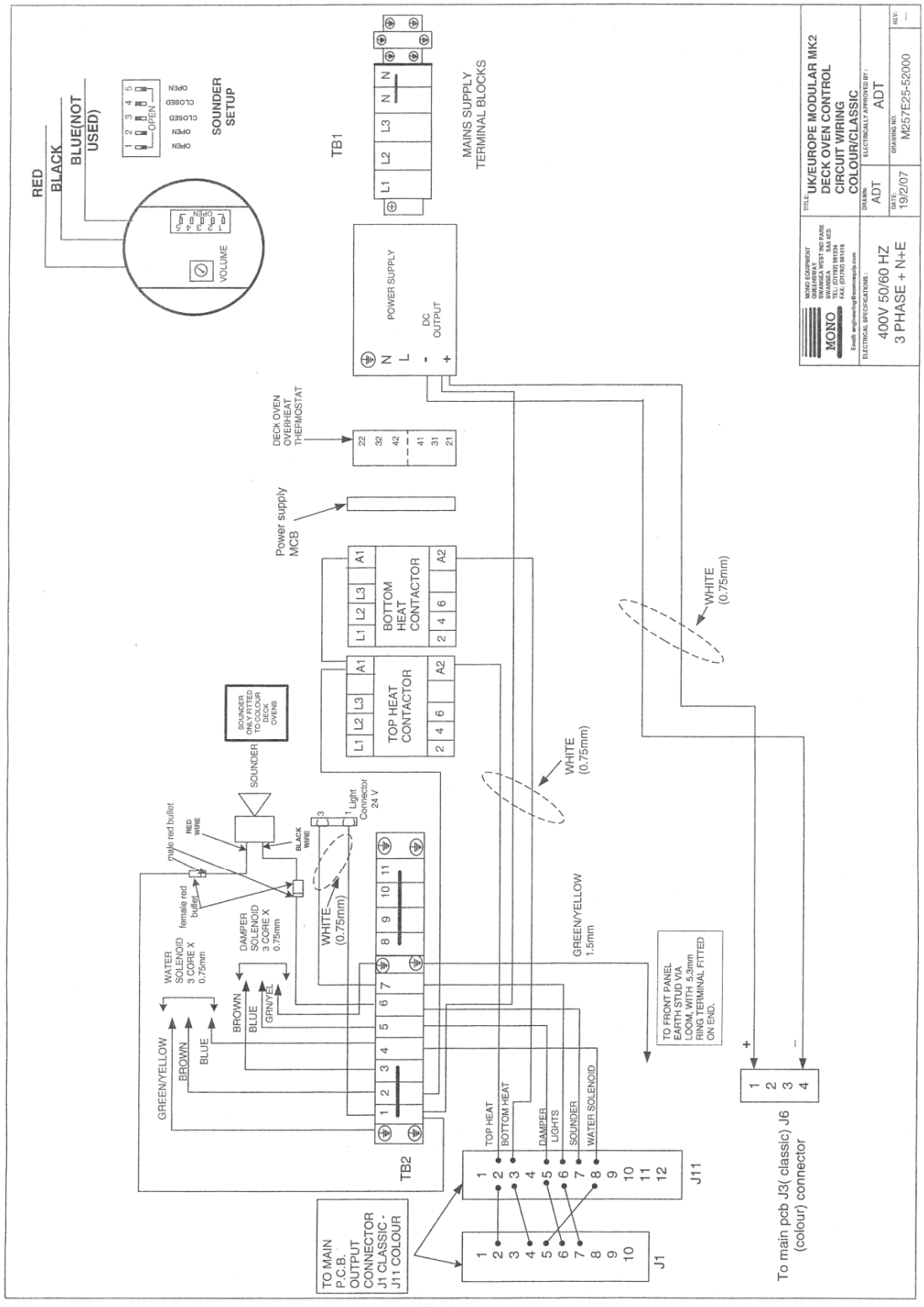
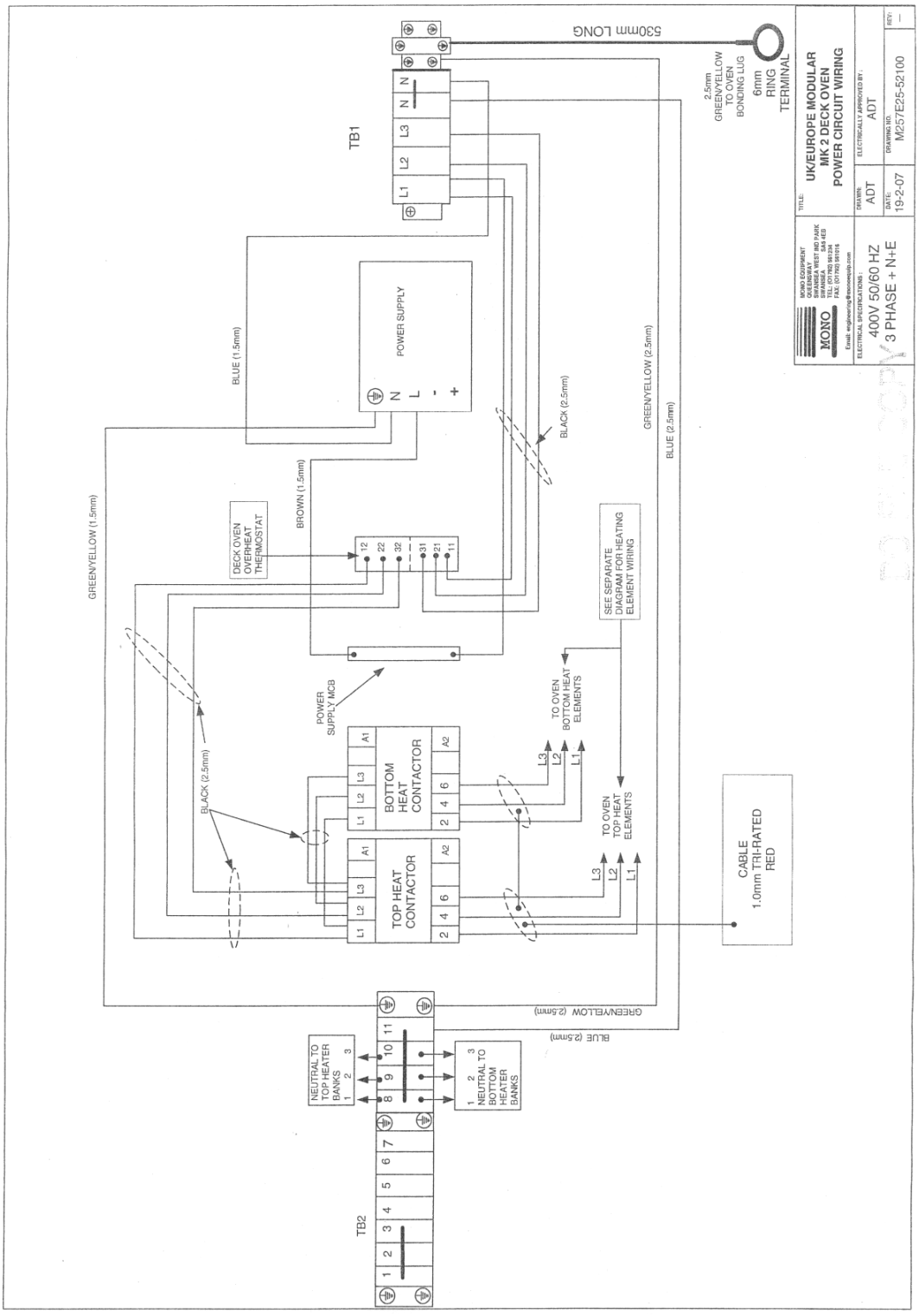
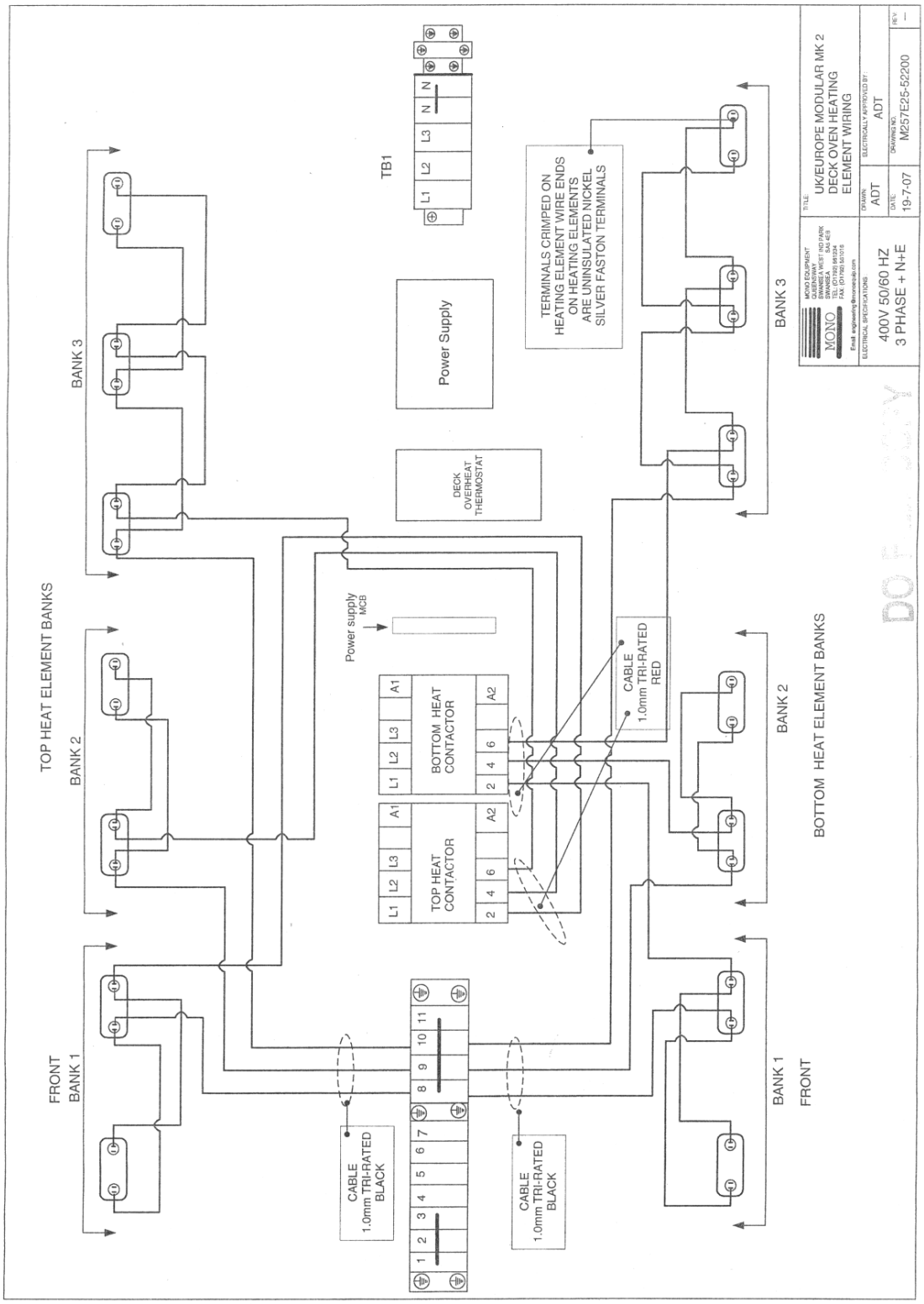
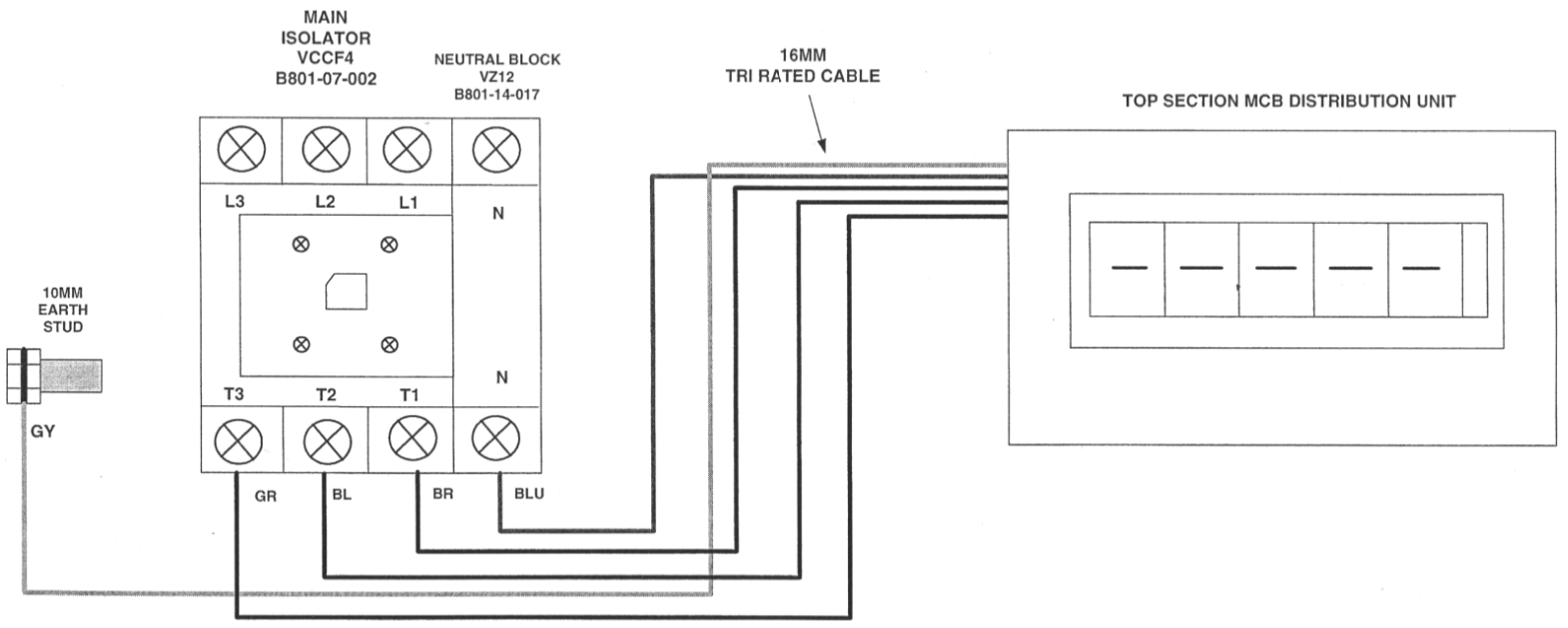

RED
BLACK
BLUE(NOT USED)
SOUNDER SETUP
VOLUME
TB1
MAINS SUPPLY TERMINAL BLOCKS
POWER SUPPLY
DC OUTPUT
DECK OVEN OVERHEAT THERMOSTAT
Power supply MCB
TOP HEAT CONTACTOR
BOTTOM HEAT CONTACTOR
WHITE (0.75mm)
SOUNDER
Light Connector 24 V
WATER SOLENOID 3 CORE X 0.75mm
DAMPER SOLENOID 3 CORE X 0.75mm
GREEN/YELLOW 1.5mm
TO FRONT PANEL EARTH STUD VIA LOOM, WITH 5.3mm RING TERMINAL FITTED ON END.
TB2
J11
J1
TOP HEAT
BOTTOM HEAT
DAMPER
LIGHTS
SOUNDER
WATER SOLENOID
TO MAIN P.C.B. OUTPUT CONNECTOR J1 CLASSIC - J11 COLOUR
To main pcb J3(classic) J6 (colour) connector
UK/EUROPE MODULAR MK2
DECK OVEN CONTROL
CIRCUIT WIRING
COLOUR/CLASSIC
400V 50/60 HZ
3 PHASE + N+E
ADT
19/2/07
M257E25-52000


530mm LONG
2.5mm GREEN/YELLOW TO OVEN BONDING LUG
6mm RING TERMINAL
TB1
L1 L2 L3 N N
POWER SUPPLY
N L - +
BLUE (1.5mm)
BROWN (1.5mm)
BLACK (2.5mm)
GREEN/YELLOW (1.5mm)
GREEN/YELLOW (2.5mm)
BLUE (2.5mm)
DECK OVEN OVERHEAT THERMOSTAT
12 22 32 31 21 11
SEE SEPARATE DIAGRAM FOR HEATING ELEMENT WIRING
POWER SUPPLY MCB
BOTTOM HEAT CONTACTOR
TOP HEAT CONTACTOR
A1 L1 L2 L3 2 4 6 A2
TO OVEN BOTTOM HEAT ELEMENTS
TO OVEN TOP HEAT ELEMENTS
L3 L2 L1
CABLE 1.0mm TRI-RATED RED
NEUTRAL TO TOP HEATER BANKS 1 2 3
1 2 3 NEUTRAL TO BOTTOM HEATER BANKS
8 9 10 11
TB2
1 2 3 4 5 6 7
MONO EQUIPMENT SWANSEA WEST IND PARK SWANSEA SA5 4EB TEL: (01792) 561234 FAX: (01792) 561115 Email: mail@mono.co.uk
ELECTRICAL SPECIFICATIONS
400V 50/60 HZ 3 PHASE + N+E
TITLE: UK/EUROPE MODULAR MK 2 DECK OVEN POWER CIRCUIT WIRING
DRAWN: ADT
DATE: 19-2-07
ELECTRICALLY APPROVED BY: ADT
DRAWING NO. M257E25-52100
REV: —


TOP HEAT ELEMENT BANKS
BANK 3
BANK 2
FRONT
BANK 1
TB1
L1 L2 L3 N N
Power Supply
DECK OVERHEAT THERMOSTAT
TERMINALS CRIMPED ON HEATING ELEMENT WIRE ENDS ON HEATING ELEMENTS ARE UNINSULATED NICKEL SILVER FASTON TERMINALS
Power supply MCB
BOTTOM HEAT CONTACTOR
TOP HEAT CONTACTOR
CABLE 1.0mm TRI-RATED RED
CABLE 1.0mm TRI-RATED BLACK
CABLE 1.0mm TRI-RATED BLACK
BOTTOM HEAT ELEMENT BANKS
BANK 3
BANK 2
BANK 1
FRONT
MONO EQUIPMENT
QUEENSWAY
SWANSEA
TEL: (01792) 561234
FAX: (01792) 561018
Email: engineering@monoequip.com
TITLE:
UK/EUROPE MODULAR MK 2
DECK OVEN HEATING
ELEMENT WIRING
DRAWN
ADT
ELECTRICALLY APPROVED BY
ADT
ELECTRICAL SPECIFICATIONS
400V 50/60 HZ
3 PHASE + N+E
DATE
19-7-07
DRAWING NO
M257E25-52200
REV
–

MODULAR DECK MK 2 MAIN ISOLATOR WIRING



GR - GREY
BL - BLACK
BR - BROWN
BLU - BLUE
GY - GREEN/YELLOW

MONO EQUIPMENT
QUEENSWAY
SWANSEA WEST IND PARK
SWANSEA SA5 4EB
TEL: (01792) 561234
FAX: (01792) 561016
Email: engineering@monoequip.com

TITLE: UK/EUROPE MODULAR MK 2 DECK OVEN ISOLATOR WIRING

ELECTRICAL SPECIFICATIONS: 400V 50/60 HZ 3 PHASE + N+E

DRAWN: ADT

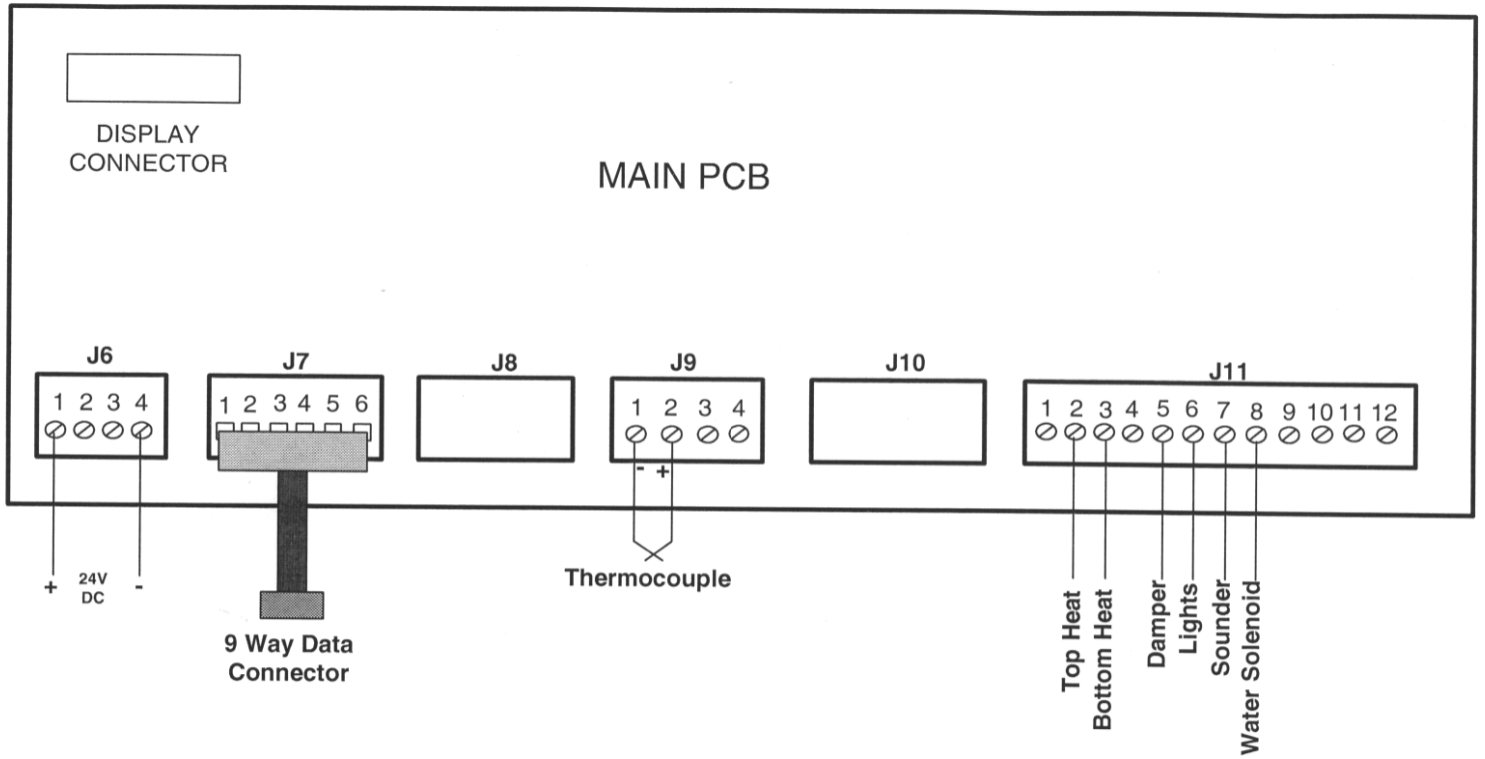
ELECTRICALLY APPROVED BY: ADT

DATE: 19-2-07

DRAWING NO.: M257E25-52400

REV: —

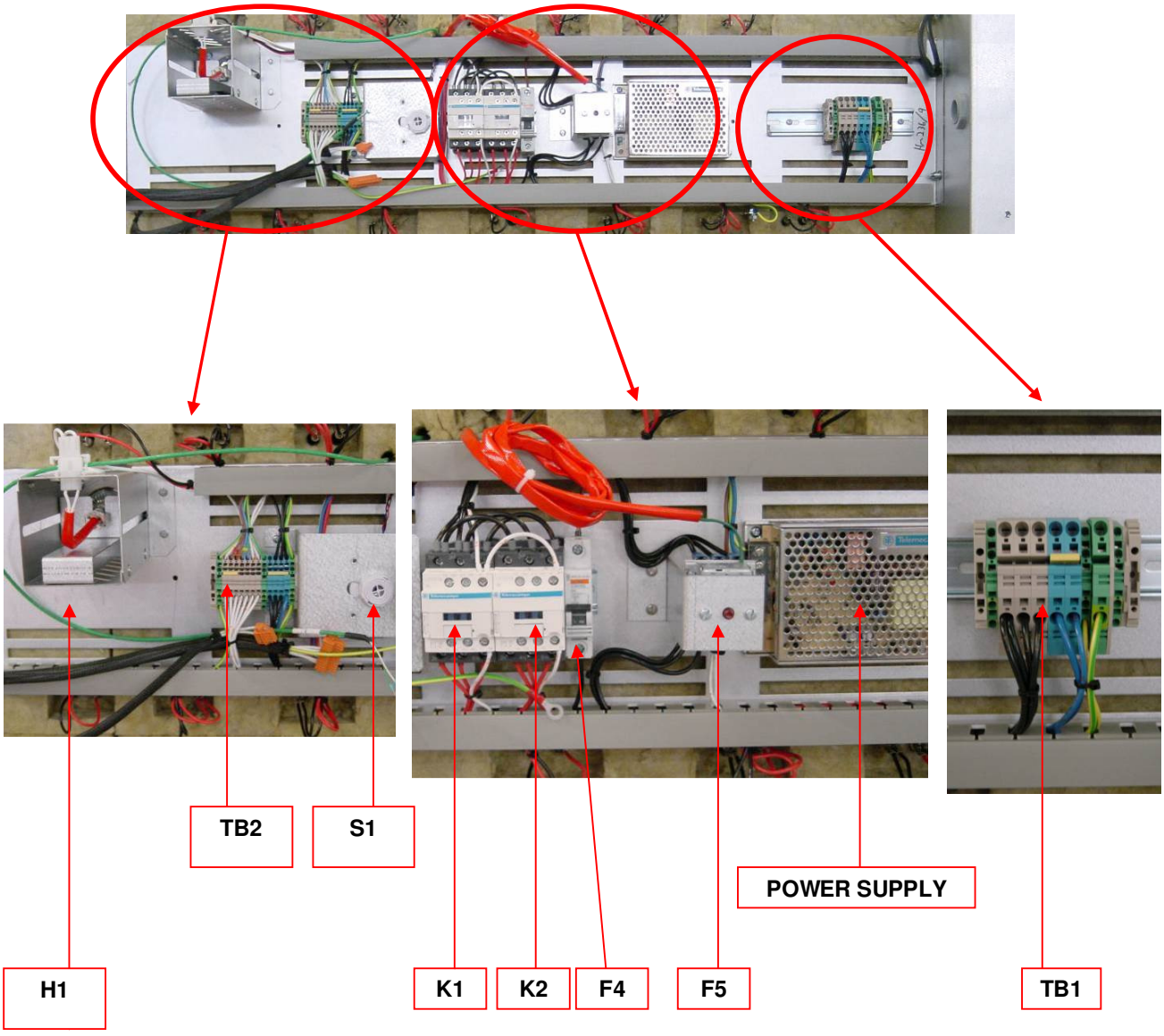
DX UK/Europe Modular MK2 Colour Smart Controller Connections Layout



MONO EQUIPMENT
QUEENSWAY
SWANSEA WEST IND PARK
SWANSEA SA5 4EB
TEL: (01792) 561234
FAX: (01792) 561016
Email: engineering@monoequip.com

TITLE:	UK/EUROPE MODULAR MK 2 DECK OVEN COLOUR CONTROLLER CONNECTION LAYOUT
ELECTRICAL SPECIFICATIONS : 400V 50/60 HZ 3 PHASE + N+E	DRAWN: ADT
	ELECTRICALLY APPROVED BY : ADT
	DATE: 19-2-07
	DRAWING NO. M257E25-52600
	REV: —

ELECTRICAL PANEL MAIN COMPONENTS
(UK Colour)

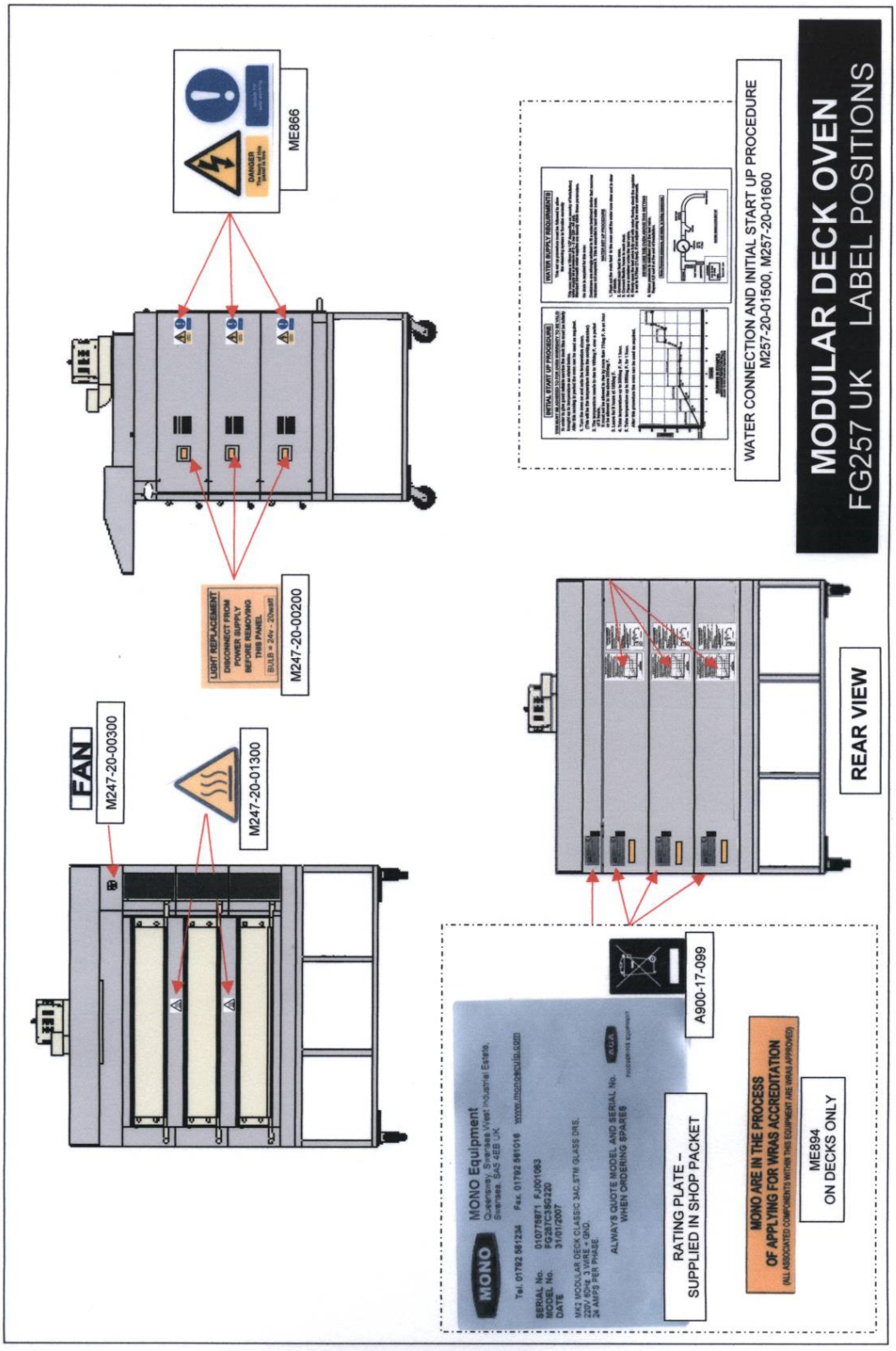


OVEN CANOPY LAYOUT PARTS LIST

C1	CANOPY FAN CAPACITOR	B869-23-005
Q1	CANOPY FAN ON/OFF SWITCH	B895-07-005
M1	CANOPY FAN MOTOR	B869-75-026

CAPACITOR – 4-6uf – 400VDB – METAL	B869-23-005
FAN TYPE R2E225-AG01-21 (230V, 0.88AMP, 200W)	B869-75-026

16.0 WARNING AND INFORMATION LABELS



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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.