E35 CONVECTION OVEN

SERVICE MANUAL

turbofan®

⚠ WARNING: ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.

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This manual is designed to take a more in depth look at the E35 convection oven for the purpose of making the unit more understandable to service people.

There are settings explained in this manual that should never require to be adjusted, but for completeness and those special cases where these settings are required to change, this manual gives a full explanation as to how, and what effects will result.

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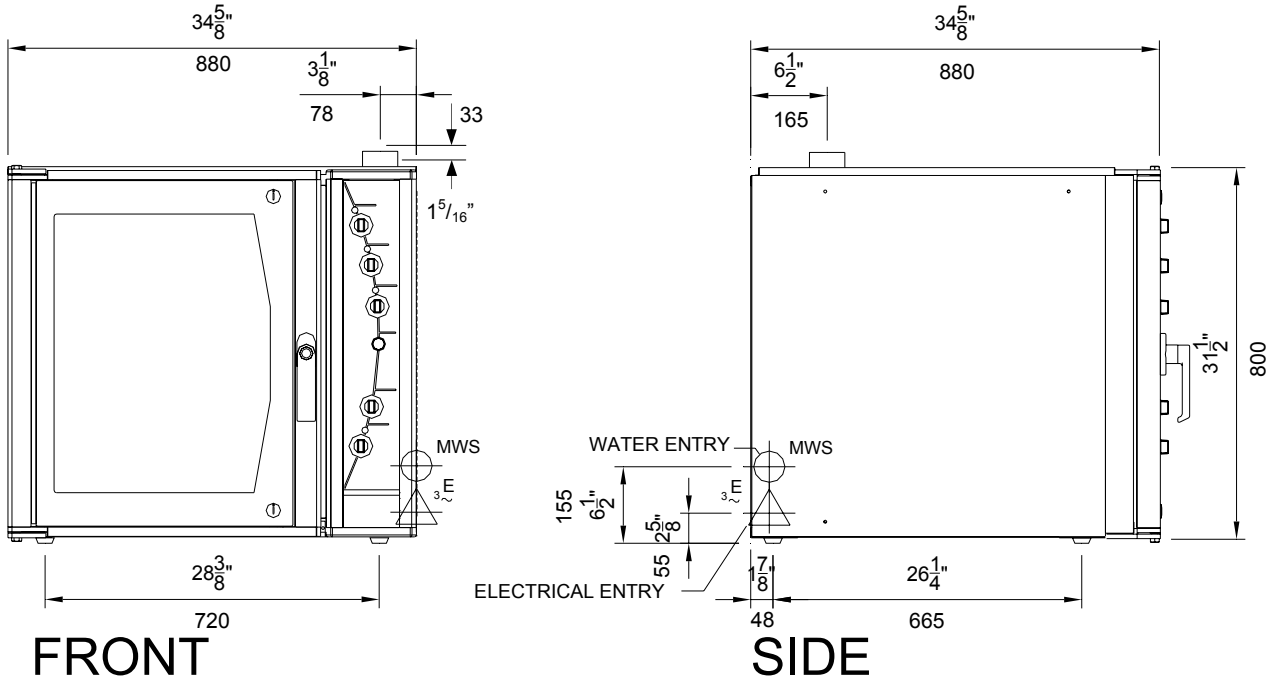
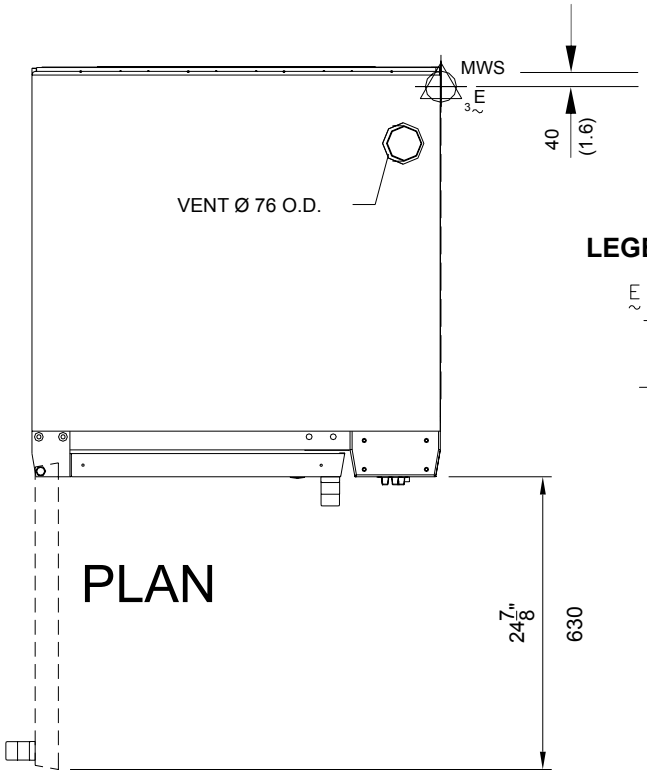
1. SPECIFICATIONS

MODEL: E35-26





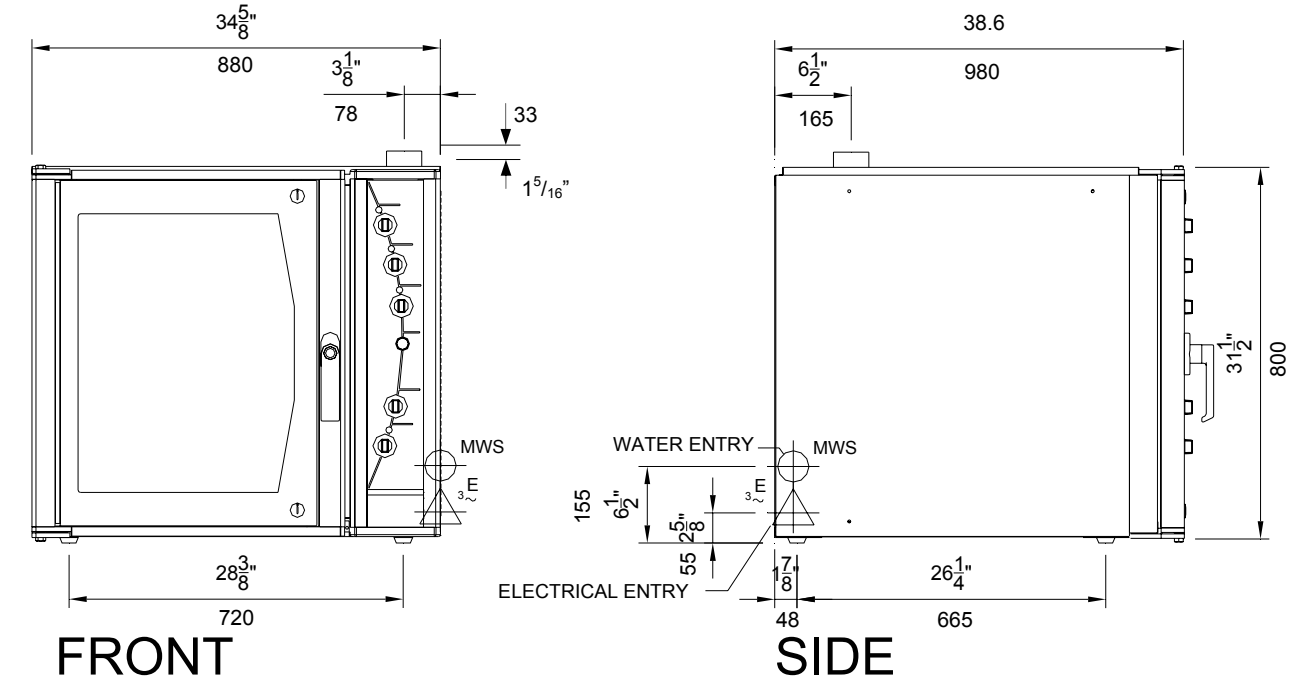
LEGEND

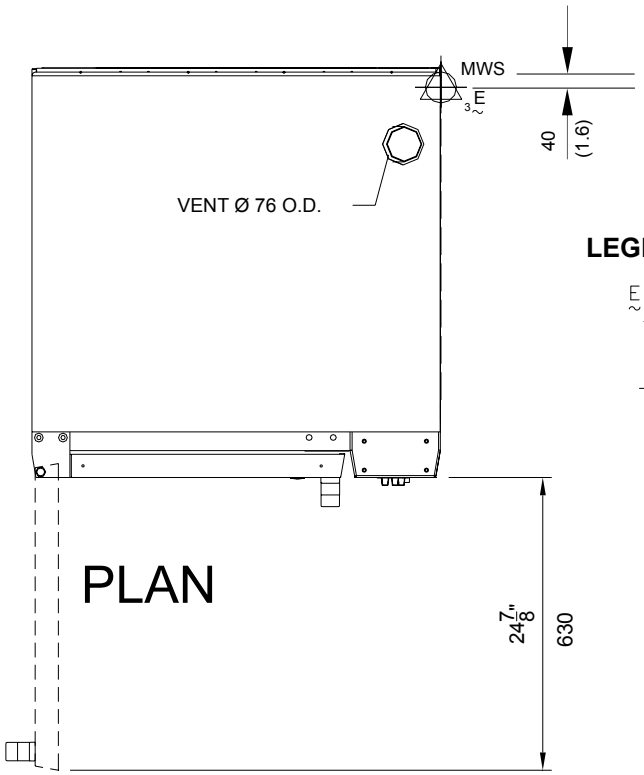
E - Electrical connection entry point

MWS - Water entry - 3/4” BSP hose connection

Dimensions shown in millimetres and inches

MODEL: E35-30





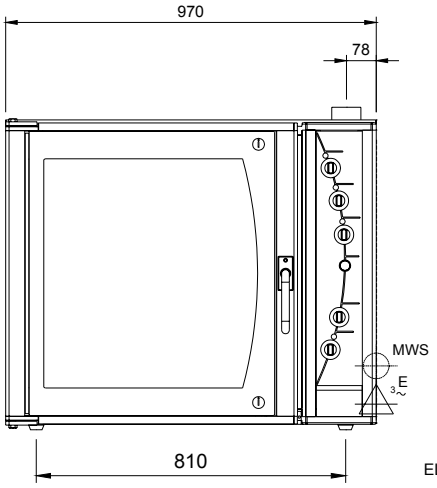
LEGEND

E - Electrical connection entry point

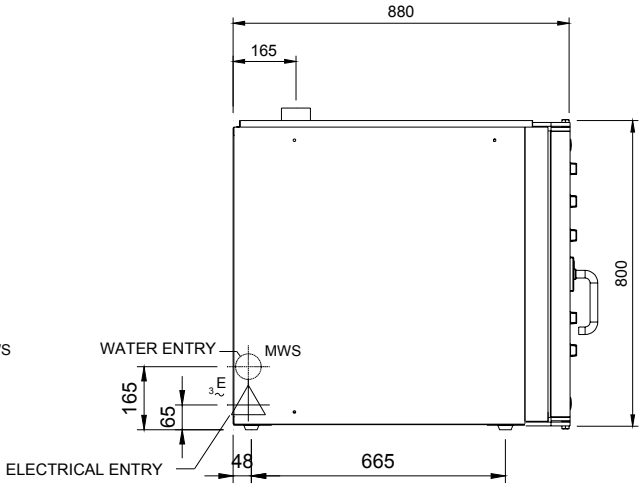
MWS - Water entry - 3/4" BSP hose connection

Dimensions shown in millimetres and inches

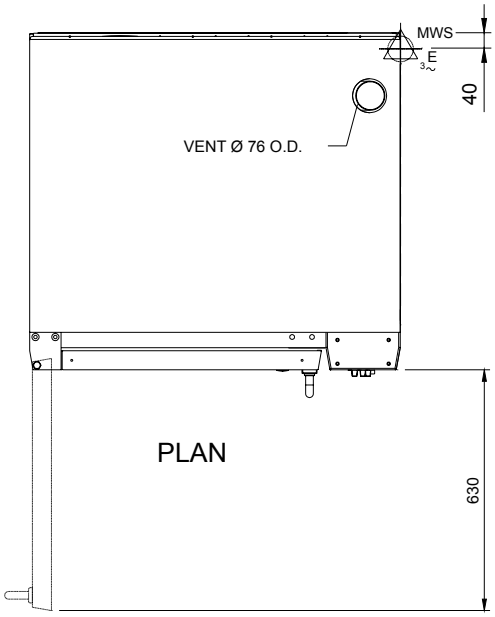
MODEL: E35GN-26



FRONT

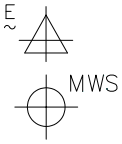


SIDE



PLAN

LEGEND

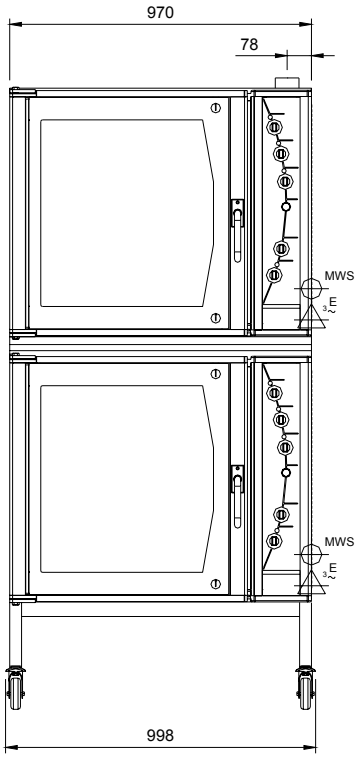


- Electrical connection entry point

- Water entry - 3/4” BSP hose connection

Dimensions shown in millimetres.
Dimensions in inches shown in brackets.

MODEL: E35GN-26 DOUBLE STACK



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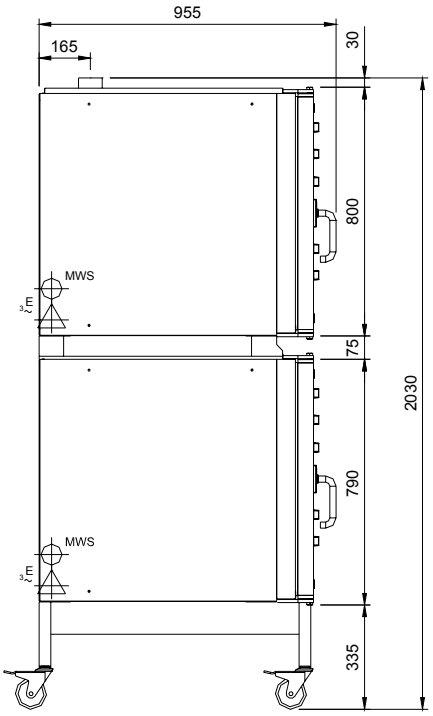

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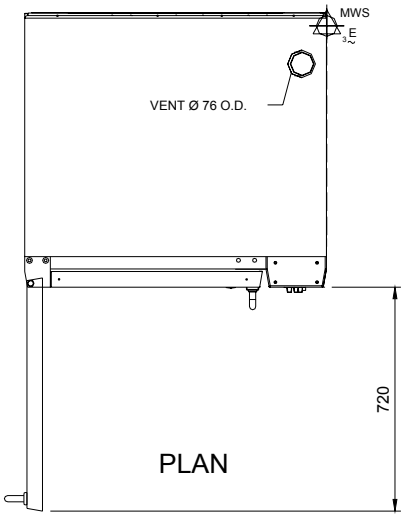
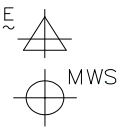


PLAN

LEGEND



- Electrical connection entry point

- Water entry - 3/4” BSP hose connection

Dimensions shown in millimetres.
Dimensions in inches shown in brackets.

LOCATION
To ensure correct ventilation for the motor and controls the following minimum installation clearances are to be adhered to:

Rear	0mm / 0“.
Left-hand side	0mm / 0”.
Right-hand side	75mm / 3.0”.

OVEN INTERNAL DIMENSIONS
E35-26

Width	465mm / $18^{1}/_{4}$”.
Height	685mm / 27”.
Depth	760mm / 30”.
Oven Volume	0.24m³ / 8.5ft³.

E35-30

Width	465mm / $18^{1}/_{4}$”.
Height	685mm / 27”.
Depth	860mm / 34”.
Oven Volume	0.27m³ / 9.7ft³.

E35GN-26

Width	555mm / $21^{4}/_{5}$”
Height	685mm / 27”
Depth	760mm / 30”
Oven Volume	0.29m³ / 10.2ft³

OVEN RACK SIZE
E35-26
Width 460mm / 18” or 405mm / 16”
(Adjustable shelf width)
Depth 660mm / 26”

E35-30
Width 460mm / 18” or 405mm / 16”
(Adjustable shelf width)
Depth 760mm / 30”

E35GN-26
Width 530mm
Depth 660mm
Standard 2/1 GN Pan or 2 x 1/1 GN Pan

OVEN RACK SPACING

6 Tray (standard)	105 mm / $4^{1}/_{8}$”
8 Tray (option)	78 mm / 3“

ELECTRICAL SUPPLY SPECIFICATION OPTIONS
208V, 60Hz, 1P+N+E, 53.7A, 11.2 kW.
220V, 50Hz, 1P+N+E, 56.8A, 12.5 kW.
220-240V, 60Hz, 1P+N+E, 52.0A, 12.5 kW.
230-240V, 50Hz, 1P+N+E, 52.0A, 12.5 kW.
208V, 60Hz, 3P+E, 31A/Ph, 11.2 kW.
220V, 50Hz, 3P+E, 33A/Ph, 12.5 kW.
220-240V, 60Hz, 3P+E, 50.7A/Ph, 12.5 kW.
220V, 60Hz, 3P+E, 32.8A/Ph, 12.5kW.
380V, 60Hz, 3P+N+E, 18.9A/Ph, 12.5kW.
380V, 50Hz, 3P+N+E, 18.9A/Ph, 12.5 kW.
400-415V, 50Hz, 3P+N+E, 17.4A/Ph, 12.5 kW.
400-415V, 50Hz, 3P+N+E, 11A/Ph, 8kW.

ELECTRICAL CONNECTION WIRE CONDUCTOR SIZES

1P+N+E/Gnd	6AWG/10mm² Copper T75 min.
3P+E/Gnd	10AWG/6mm² Copper T75 min.
3P+N+E/Gnd	12AWG/4mm² Copper T75 min.

WATER SUPPLY CONNECTION

Max Pressure	550 kPa / 5.5 bar / 80 psi.
Min Pressure	100 kPa / 1.0 bar / 15 psi.

2. INSTALLATION

WARNING: THIS APPLIANCE MUST BE GROUNDED.

WARNING: ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.

It is most important that the oven is installed correctly and that the operation is correct before use. Installation shall comply with local electrical, health and safety requirements.

BEFORE CONNECTION TO POWER SUPPLY

Unpack and check unit for damage and report any damage to the carrier and dealer. Report any deficiencies to your dealer. Fit the feet which are packed inside the oven. Check that the available power supply is correct to that shown on the rating plate located on the right-hand side panel.

208V, 60Hz, 1P+N+E, 53.7A, 11.2 kW
220V, 50Hz, 1P+N+E, 56.8A, 12.5 kW
220-240V, 60Hz, 1P+N+E, 52.0A, 12.5 kW
230-240V, 50Hz, 1P+N+E, 52.0A, 12.5 kW
208V, 60Hz, 3P+E, 31A/Ph, 11.2 kW
220V, 50Hz, 3P+E, 33A/Ph, 12.5 kW
220-240V, 60Hz, 3P+E, 50.7A/Ph, 12.5 kW
220V, 60HZ, 3P+E, 32.8A/Ph, 12.5kW
380V, 60Hz, 3P+N+E, 18.9A/Ph, 12.5kW
380V, 50Hz, 3P+N+E, 18.9A/Ph, 12.5 kW
400-415V, 50Hz, 3P+N+E, 17.4A/Ph, 12.5 kW
400-415V, 50Hz, 3P+N+E, 11A/Ph, 8kW

LOCATION

To ensure correct ventilation for the motor and controls the following minimum installation clearances are to be adhered to:

Rear	0mm / 0“
Left-hand side	0mm / 0”
Right-hand side	75mm / 3.0”

Position the oven in its allocated working position. Use a spirit level to ensure the oven is level from side to side and front to back. (If this is not carried out, uneven cooking could occur). The feet/legs used with bench or floor mounting or provided with stands are adjustable and will require adjusting in levelling the unit. It should be positioned so the operating panel and oven shelves are easily reachable for loading and unloading.

IMPORTANT: THE OVEN VENT LOCATED ON THE CABINET TOP MUST NEVER BE OBSTRUCTED.

Bench Mounting

For bench mounted applications the oven must be fitted with 100mm / 4 inch feet.

Floor Mounting

For floor mounted applications the oven must be fitted with 150mm / 6 inch legs.

Note: Four 100mm/4 inch or 150mm / 6 inch adjustable legs are available separately from your E35 dealer as an optional extra.

Stand Mounting

Ovens that are to be mounted on stands do not require feet or legs. Refer to Appendix B for stand mounting instructions.

Avoid having heat producing equipment such as fryers or steamers adjacent to the right-hand side of oven.

BEFORE USE

Operate the oven for about 1 hour at 200°C (400°F) to remove any fumes or odours which may be present.

ELECTRICAL CONNECTION

Remove side cover panel to allow access to the terminal block and strain relief cable clamp. The cable can be fitted through the entry grommet and secured from strain by tightening the fitted strain relief bushing. Connect cable to the terminals as marked. Refit cover panel.

IMPORTANT: FIXED WIRING INSTALLATIONS MUST INCLUDE AN ALL-POLE DISCONNECTION SWITCH.

Refer to specifications section for wire connections required, and supply connection conductor sizes.

WATER CONNECTION

A cold water supply should be fitted to the water inlet ($^3/_4$" BSP hose connection) which is located on the rear of the right hand side of the unit.

Alternately, a connection elbow and sealing washer is supplied with this unit for direct connection of a $^1/_2$" ID hose, which is recommended for easy installation and service.

Connect water supply - Max inlet pressure 80psi / 550kPa.

Turn on water supply to check for leaks.

> **IMPORTANT:** MAXIMUM INLET WATER PRESSURE IS 550 kPa / 80 psi.

DOUBLE STACKING UNITS

When it is desired to mount an E35 Turbofan oven on an E85 prover, a double stacking kit must be used. Available from your dealer or Turbofan distributor. (see Spare Parts).

When mounting one oven on top of another, a double stacking kit is also required.

For stacking kit assembly instructions, refer to Appendix A.

RACK WIDTH POSITIONS

The E35 models have an adjustable rack width setting. This allows for the racking to be configured for 405mm / 16" or 460mm / 18" wide baking sheets / pans or racks.

Position the side racks in their innermost position for 16" trays and in their outermost position for 18" trays.

Removal of Side Racks (as illustrated)

1) Lift the side rack off the bottom locating pins.
2) Move bottom of rack toward centre of oven.
3) Lower rack to clear top locating pins, and remove.

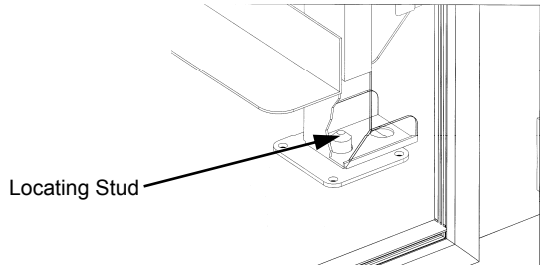


Figure 2.2

Replacement of Side Racks

1) Insert rack into the oven, placing the appropriate holes over the top locating pins.
2) Lift the side rack over the bottom locating pins.
3) Lower rack with appropriate holes over bottom locating pins.

RATING PLATE LOCATION

The rating plate for the E35 convection oven is located at the bottom left corner of the RH side panel. An internal rating plate is also located behind the RH side panel on the vertical dividing panel behind the electrical contactors. (Units manufactured from July 2002).

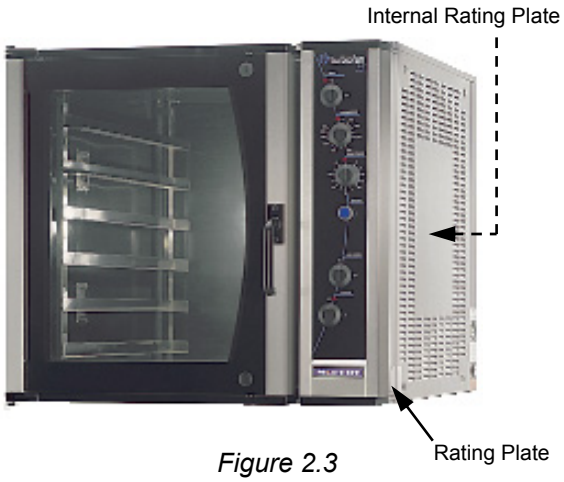
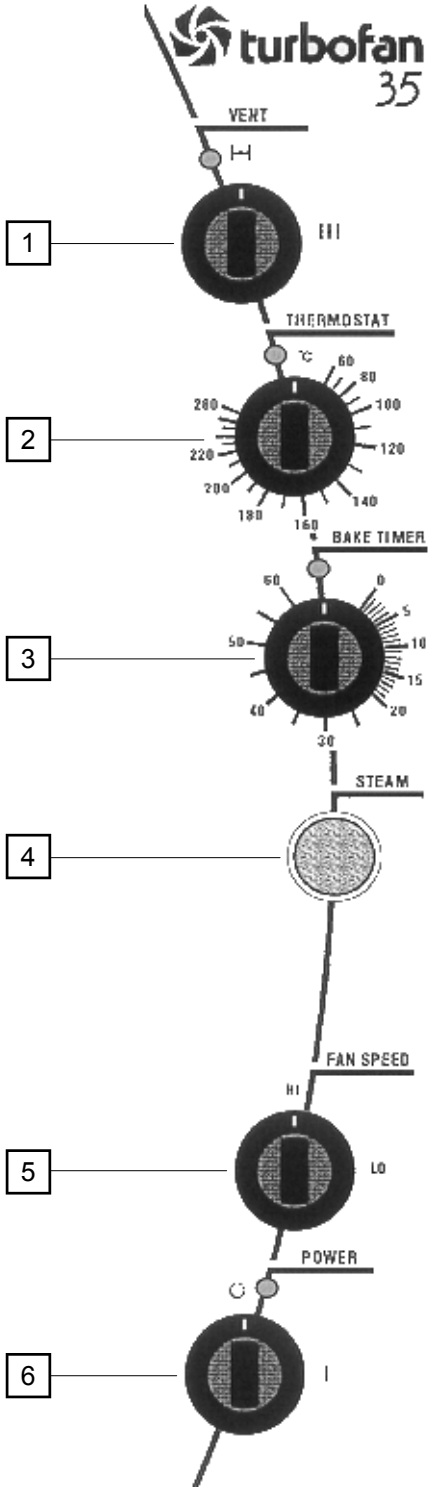


Figure 2.3

3. OPERATION

NOTE: A full user's operation manual is supplied with the product and can be used for further referencing of installation, operation and service.

3.1 DESCRIPTION OF CONTROLS (Up to Lot No. 0817999)



1. VENT

- Oven vent closed (incorporates over-pressure relief when closed).
- Oven vent open (light illuminates).

2. THERMOSTAT

Temperature range 60 - 280°C / 100 - 550°F.
(Light illuminates when elements are cycling ON to maintain set temperature).

3. TIMER

1 Hour bake timer.
(Light illuminates when "time up" (0) reached, and buzzer sounds).

4. STEAM BUTTON

Push button to activate automatic steam dose into oven chamber.
(Light illuminates when button activated for duration of steam cycle).

5. FAN SPEED

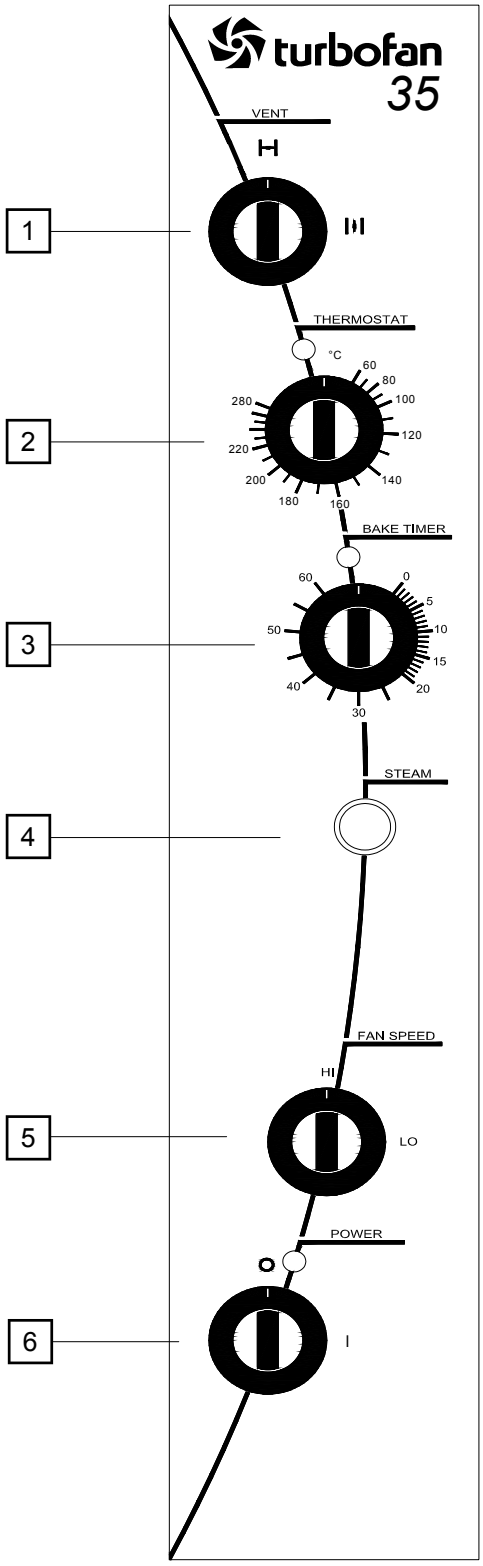
- **HI** Full fan speed (Star point connection on motor).
- **LO** Half fan speed (Delta point connection on motor).

6. POWER

- **O** UNIT IS OFF
- **I** UNIT IS ON (Light illuminates when switched to this position).
  Oven lights operate continuously.
  Fan starts after 10 seconds when door closed.

NOTE: **A full user's operation manual is supplied with the product and can be used for further referencing of installation, operation and service.**

3.2 DESCRIPTION OF CONTROLS (from Lot No. 0818001)



1. VENT

- Oven vent closed (incorporates over-pressure relief when closed).
- Oven vent open.

2. THERMOSTAT

Temperature range 60 - 280°C / 100 - 550°F.
(Light illuminates when elements are cycling ON to maintain set temperature).

3. TIMER

1 Hour bake timer.
(Light illuminates when "time up" (0) reached, and buzzer sounds).

4. STEAM BUTTON

Push button to activate steam dose into oven chamber.

NOTE: Press steam button for 10 seconds will give you 10 seconds of steam.

5. FAN SPEED

- **HI** Full fan speed (Star point connection on motor).
- **LO** Half fan speed (Delta point connection on motor).

6. POWER

- **O** UNIT IS OFF
- **I** UNIT IS ON (Light illuminates when switched to this position).
  Oven lights operate continuously.
  Fan starts after 10 seconds when door closed.

3.3 EXPLANATION OF CONTROL SYSTEM

The E35 Turbofan convection oven features multi-function operator controls, and a combined fan motor and steam control system.

A correct understanding of their operation is required before carrying out any service or fault repair work. The control device functions are explained as follows:

Circuit Protection

All models are fitted with a 3 pole circuit breaker, from which a control circuit is taken from L1 circuit breaker, and this control circuit is fitted with a 6A circuit breaker. The 3 pole main circuit breakers are rated 25A/pole for 3P+N+E/GND and 1P+N+E/GND supply models, and 40A/pole for 3P+E/GND (no neutral) models. These provide control circuit protection via the 6A circuit breaker, and load circuit protection via the 3 pole circuit breakers.

Additionally, the 3 pole circuit breaker is mechanically connected to a Shunt Trip breaker, which in the event of the oven fan motor overheating will trip the 3 pole circuit breakers to isolate power from the unit. The Shunt Trip is directly connected to thermal limit switches in the motor windings, and the supply Neutral (or L3 on 3 phase, no neutral models). A supply from the 6A control circuit breaker is connected to the motor thermal switches. Should any of the motor windings overheat, the thermal switches close and supply power to the Shunt Trip, which in turn trips (triggers) and mechanically trips the 3 pole circuit breaker.

Accordingly, causes of circuit breakers tripping can be ascertained with the above knowledge, and this is covered in more detail in the Fault Diagnosis section.

Power 'On' / 'Off'

A Power switch on the control panel isolates power to the operator controls of the oven. With the power switch OFF all functions of the oven are inoperable.

An integral cooling fan, behind the control panel used to keep the electrical controls of the oven cool, is on continuously whenever the power supply to the oven is on. Switching the oven control panel Power switch off will leave the cooling fan running.

With the Power switch ON (illuminated neon indicator), power is supplied to all operator controls.

Oven Lamps

Up to Lot No. 0817999.

The two oven lamps (12 volt halogen) are on whenever the Power switch is on. The oven lamps are supplied with 12 volts from an electronic lamp transformer fitted on the oven's control switchgear assembly.

From Lot No. 0818001.

The two oven lamps (208 / 240 volt halogen) are on whenever the Power switch is on. The oven lamps are supplied with mains voltage.

Bake Timer

The 60 minute bake timer is a mechanical timer and can therefore be operated with the oven's power ON or OFF. However only with the oven's power switch On and the oven door closed will the timer turn on the time-up buzzer and time-up indicator neon on the control panel. The buzzer and time-up indicator provide indication that the time setting has run down to zero and at this point will remain on continuously until the 60 minute timer has been manually set back to the Off (vertical) position. The 60 minute timer does not control any other part of the oven's operating system as the timer is independent of the temperature control, heating, fan, or steam system.

Oven Vent

Up to Lot No. 0817999.

The oven vent is a manual operation by way of the Vent knob on the control panel.

The vent knob directly rotates the vent shaft through 90 degrees to open and close the vent. The vent shaft passes through a rotary switch mounted behind the control panel and this switch is used to switch 'On' or 'Off' the vent indicating neon. In the vent 'Open' position, the indicator is illuminated. The oven vent restricts venting of the oven when in the closed position, however the vent flap is fitted with a spring loaded over-pressure flap which relieves excess pressure created during oven steaming. This avoids steam pressure escaping out of door seals etc, if the oven is steamed with the vent closed. The spring pressure on the over-pressure vent flap ensures that only excess steam is lost out of the vent.

From Lot No. 0818001.

The oven vent is a manual operation by way of the Vent knob on the control panel.

The vent shaft passes through the control panel and directly rotates the vent shaft to manually open and close the vent. The oven vent restricts venting of the oven when in the closed position,

however the vent flap is fitted with a spring loaded over-pressure flap which relieves excess pressure created during oven steaming. This avoids steam pressure escaping out of door seals etc, if the oven is steamed with the vent closed. The spring pressure on the over-pressure vent flap ensures that only excess steam is lost out of the vent.

Door Switch

The oven has a mechanical door, micro-switch located below the oven opening, which breaks the power supply to the oven fan and temperature control circuits when the door is opened. Additionally, opening the oven door will remove power from the Bake Timer buzzer and indicator. This allows only the oven lights to be operational if the oven door is opened.

Thermostat Control

Heating of the oven is controlled by an electronic thermostat control, comprising of a potentiometer dial and knob on the control panel, a temperature sensing probe (thermistor type) in the oven chamber, and the thermostat control board behind the control panel. Power to the electronic thermostat is supplied through an over-temperature/hi limit thermostat. Accordingly a failure of the electronic thermostat control causing a temperature over-run will result in the over-temperature thermostat switching and removing power from the heating control circuit. The over-temperature thermostat is able to be manually reset, however a serviceman is required to perform this function, as removal of the R/H service panel is required to access this safety protection device.

The electronic thermostat when set to a temperature will illuminate the heating neon indicator on the control panel whenever the oven heating elements are on. When the indicator neon goes out, the oven is up to the set temperature.

Heating / Elements

The electronic thermostat when requiring heating of the oven, switches power to the heating contactor (referred to as C1 contactor on models prior to Lot no 0817999, and C3 on models from Lot no 0818001).

The heating contactor closes to supply power through to the heating elements in the oven. In all ovens all 3 poles of the contactor are used to supply L1, L2, and L3 phase circuits to the 3 heating elements on each side of the oven fan motor.

On **3 Phase + Neutral supply models**, all 6 elements are looped to neutral, and the 3 Phase power to the elements is to each set of three elements in parallel connection. Hence each of the elements is supplied with the Phase to Neutral voltage.

On **3 Phase supply models (no neutral)**, the set of three elements each of the fan motor are connected in Delta configuration, which each element being supplied the Phase to Phase voltage.

On **1 Phase + Neutral supply models,** all 6 elements are looped to neutral, and the 1 Phase power to the elements is split into three poles at the main circuit breakers on the oven, then feed through the three poles of the heating contactor, from where each pole is connected to two of the six elements in parallel. Hence each of the elements is supplied with the Phase to Neutral voltage.

The heating elements are rated at 2000 Watts each, therefore providing a total of 12000 Watts or 12kW of heating.

In some cases special heating kilowatts may be supplied to special request, so always check rating plate information on the unit if in doubt.

The heating contactor cycles ON / OFF as controlled by the thermostat to maintain set oven temperature.

Fan / Motor

The E35 Turbofan ovens use a dual speed, bi-directional oven fan circulation system, in order to provide even heat distribution through the oven, and fan speed control to suit different product types.

To provide both dual fan speed and bi-direction, a motor of 4 pole / 8 pole configuration is used.

Fan / Motor Direction

The direction change is made by swapping two phases to the motor through the motor contactors. On models to Lot no 0817999 these are referred to as C2 and C3 contactors. On models from Lot no 0818001 these are referred to as C1 and C2 contactors.

In one direction L1, L2, and L3 are switched through the first motor direction contactor with the second motor direction contactor open. In the alternate direction, the second contactor closes and the first contactor opens. L1 and L2 are reversed on the second contactor connections. The motor contactors are mechanically inter-locked (interlock fitted to rear of contactors) to prevent any switching overlap.

Motor direction change is automatic, and the duration of the direction cycle is factory set. Additionally, a dwell period between at each change of direction occurs to allow the motor to restart in the opposite direction only after the motor rotation has slowed down. This is necessary to avoid motor overheating due to the high current load that would be required to change direction instantaneously.

Each direction cycle is 90 seconds long, at the beginning of which is a preset 10 second dwell / delay. As the dwell is at the beginning of the cycle, the fan always has a 10 second start delay when the oven is first turned on, or when the door is closed after opening.

Up to Lot No. 0817999.

The direction control timing is provided by three electronic timers mounted below the motor contactors on the electrical switchgear panel of the oven. Timer T1 controls the direction cycle time, timer T3 controls the dwell for one direction and timer T5 controls the dwell for the opposite direction.

When the door is closed and power is ON, cycle timer T1 will switch power to dwell timer T3 for 90 seconds. Timer T3 will then switch power through to motor direction contactor C2 after the preset 10 second delay. The motor will then run for the remainder of the 90 second cycle.

At the completion of the 90 second cycle, cycle timer T1 will switch the power from T3 dwell timer to T5 dwell timer. This dwell timer will then switch power through to contactor C3 after the preset 10 second delay, and the motor will run in the opposite direction for the remainder of that 90 second cycle. At the completion of that cycle the cycle timer T1 switches power back to the other dwell timer, and this continues until the oven door is opened, or the power is turned off.

From Lot No. 0818001.

The direction control timing is provided by a single Motor Direction Cam Timer mounted below the motor speed contactors C4, C5 and C6 on the electrical switchgear panel of the oven.

The circulation fan on the E35 oven reverses direction every 90 seconds for a 50Hz supply (every 75 seconds for 60Hz). Prior to a change of direction the fan motor is switched off for 10 seconds (8½ seconds for 60Hz) to allow the motor / fan to slow down. Cycling of the fan motor is controlled by a continuous cam timer with electric motor. The timer has two cams and switches which supply power alternately to one of two motor supply contactors, causing the motor to alternate direction. During the fan motor slow down periods, both cam switches are open and power is not supplied to either of the motor supply contactors. When the oven door is opened or the power is switched off the cams will stop. When the oven door is closed or the power switched back on the cam timer will resume its cycle from the point where it stopped.

Fan / Motor Speed

For HI speed operation the motor is run as a 4 pole motor. (1420 rpm 50Hz / 1750 rpm / 60Hz) For LO speed operation the motor is run as an 8 pole motor. (715 rpm 50Hz/850 rpm / 60Hz)

Selection of the pole configuration for run speed is made though the motor contactors C4, C5 and C6.

In HI speed setting the motor contactors C4 and C6 close, C4 switching power to the motor on the 4 pole connection leads, and C6 binding 4 of the 8 motor poles to allow motor to run as a 4 pole motor.

In LO speed setting the motor contactor C5 closes to switch power to the motor on the 8 pole connections leads, with contactors C4 and C6 remaining open.

Motor contactors C5 and C6 are mechanically interlocked (interlock fitted to rear of contactors) to prevent any switching overlap between LO and HI speed changes.

The motor speed control is by manual operation of the Fan Speed switch on the control panel. This rotary switch simply supplies power to either motor contactors C4 and C6 for HI speed, or C5 for LO speed. The contactors stay closed in the selected setting unless the oven door is opened. Closing the oven door allows the contactors to switch on again.

Fan / Motor - Single Phase Models

The operation of the fan motor on single phase E35 models is the same as other three phase models for two speed and bi-direction operation, except for the electrical circuit required.

On single phase models the same motor is used as on three phase models, but with capacitors in the motor circuit to create an artificial phase lag, that is normally part of the three phase supply on three phase models. Use of the three phase motor is required to retain the bi-direction operation.

On single phase models the L1 supply to the motor connects to the normal L1 connection of the motor, and the Neutral supply connects to the normal L2 (as connected on three phase models) connection of the motor. A capacitor is then connected to the normal L3 (as connected on the three phase models) connection of the motor, and

this capacitor is supplied power from the L1/ Phase supply. This capacitor is referred to as the Run capacitor as it is permanently in the circuit during motor operation. Each motor on single phase models has two run capacitors, one for the LO speed operation (lower capacitance) and one for the HI speed operation (higher capacitance). Each Run capacitor is only used when the motor is running at that speed setting.

Additionally a Start capacitor is also fitted on single phase models, and is used for starting the motor rotation at the beginning of each direction change when in HI speed setting only. This capacitor is switched on for approximately 7 seconds only at the beginning of each motor start up, with a contactor C7 switching the Start capacitor on and off, and with a timer T6 controlling the timing of the contactor C7.

Fan direction change in single phase models is still controlled by motor contactors C2 and C3. However unlike three phase models where C2 and C3 swap phases over to change motor start rotation / direction, single phase models use C2 and C3 to switch the run capacitor form the L1 supply to the Neutral supply for direction change.

Control of the motor cycle timing and dwell timing is the same as three phase models.

Motor Protection

Refer Circuit Protection at start of section.

Steam System

Up to Lot No. 0817999.

The E35 Turbofan ovens feature an automatically timed oven chamber steaming system, that allows operators to inject a 10 second period of steam into the oven at any stage. The steam is generated when a solenoid valve opens and supplies mains water to a calibrated wide spray angle nozzle in the oven that discharges the water as a fine spray into the oven fan. The fine spray at a wide angle is then immediately thrown by the fan circulation across the oven heating elements either side of the fan. The fine spray instantaneously turns to steam on the hot elements, which is supported by the hot air of the oven also turning the water droplets into steam.

The steam is initiated by depressing the Steam switch on the control panel. When depressed the steam switch provides power one of two Steam timers which are preset to 10 seconds steam cycle duration. These Steam timers are T2 and T4.

T2 is associated with fan dwell timer T3 and is used when steam is required during the fan direction cycle that uses the T3 dwell timer.

T4 is associated with fan dwell timer T5 and is used when steam is required during the fan direction cycle that uses the T5 dwell timer.

This ensures that steam can be used in either fan direction cycle, and additionally allows the fan to be turned on as soon as steam is activated, even if the fan was in a direction change dwell. Ensuring that the fan is running when steam is required is necessary to atomise the water droplets by the mechanical action of the fan, and by the fan throwing the water across the elements.

The Steam switch on the control panel only needs to be depressed momentarily as the duration of the steam injection is automatically timed by the steam timers. The Steam switch will illuminate for the duration of the steam injection to provide a visual confirmation of the steaming process. The light in the steam switch is independent of the switch contacts and is powered by the electrical circuit to the water solenoid valve. Therefore the switch is illuminated for as long as the water solenoid is open: 10 seconds.

Steam System

From Lot No. 0818001.

The E35 Turbofan ovens feature a manually operated oven chamber steaming system, that allows operators to inject a shot of steam into the oven at any stage. The steam is generated when a solenoid valve opens and supplies mains water to a calibrated wide spray angle nozzle in the oven that discharges the water as a fine spray into the oven fan. The fine spray at a wide angle is then immediately thrown by the fan circulation across the oven heating elements either side of the fan. The fine spray instantaneously turns to steam on the hot elements, which is supported by the hot air of the oven also turning the water droplets into steam.

The steam is initiated by depressing the Steam switch on the control panel. When depressed, the steam switch provides power to the water solenoid. Pressing the Steam switch for one second will provide one second of steam, pressing the steam switch for 5 seconds will provide 5 seconds of steam.

The Steam switch will not illuminate as with pre-Lot No. 0818001 Ovens.

Summary of Components

Up to Lot No. 0817999.

The electrical switchgear (not user controls) components are summarised as follows:

C1 Heating contactor
Switches elements ON / OFF.

C2 Motor direction contactor
Phases switched in line.

C3 Motor direction contactor
Phases L1 and L2 swapped on 3 phase models.

Run capacitor swapped from L1 to Neutral on 1 phase models.

C4 Motor speed contactor
HI speed.

C5 Motor speed contactor
LO speed.

C6 Motor speed contactor
HI speed (changes motor from 8 pole to 4 pole).

T1 Fan cycle timer
Direction cycle.

T2 Steam timer
For T3 dwell direction.

T3 Fan dwell timer
Alternate direction (always initial direction dwell).

T4 Steam timer
For T5 dwell direction.

T5 Fan dwell timer
Alternate direction (always 2nd direction dwell).

C7 Motor start capacitor contactor.
(Single phase models only).

T6 Motor start capacitor timer
(Single phase models only).

Motor contactor interlocks fitted to C2+C3 (mounted on rear on contactors).

Motor contactor interlocks fitted to C5+C6 (mounted on rear on contactors).

Summary of Components

From Lot No. 0818001.

The electrical switchgear (not user controls) components are summarised as follows:

C1 Motor direction contactor
Phases switched in line.

C2 Motor direction contactor
Phases L1 and L2 swapped on 3 phase models.

Run capacitor swapped from L1 to Neutral on 1 phase models.

C3 Heating contactor
Switches elements ON / OFF.

C4 Motor speed contactor
HI speed.

C5 Motor speed contactor
LO speed.

C6 Motor speed contactor
HI speed (changes motor from 8 pole to 4 pole).

C7 Motor start capacitor contactor.
(Single phase models only).

T1 Motor start capacitor timer
(Single phase models only).

Motor contactor interlocks fitted to C1+C2 (mounted on rear on contactors).

Motor contactor interlocks fitted to C5+C6 (mounted on rear on contactors).

4. MAINTENANCE

⚠ WARNING: ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.

4.1 CLEANING

⚠ WARNING: ALWAYS TURN THE POWER SUPPLY OFF BEFORE CLEANING.

! IMPORTANT: THIS UNIT IS NOT WATER PROOF.
DO NOT USE A WATER JET SPRAY TO CLEAN INTERIOR OR EXTERIOR OF THIS UNIT.

EXTERIOR

Clean with a good quality stainless steel cleaning compound. Harsh abrasive cleaners may damage the surface.

INTERIOR

Ensure that the oven chamber is cool. Do not use wire brushes, steel wool or other abrasive materials. Clean the oven regularly with a good quality oven cleaner. Take care not to damage the fan or the tube at the right side of the oven which controls the thermostat.

SIDE RACKS

To remove, follow instructions given in the installation section.

OVEN DOOR (HINGED GLASS)

Outer surfaces: Clean with conventional glass cleaners

Inner surfaces: To clean between the inner and outer door glasses, firstly ensure the door is locked shut. With a screwdriver, coin, or other suitable device, $^{1}/_{4}$ turn the outer glass locks to release the outer glass and allow it to be hinged open for cleaning access (refer to figure 4.1 for correct procedure).

! IMPORTANT: ALWAYS ENSURE THAT THE OUTER GLASS IS HINGED CLOSED AND LOCKED INTO POSITION BEFORE OPENING DOOR.

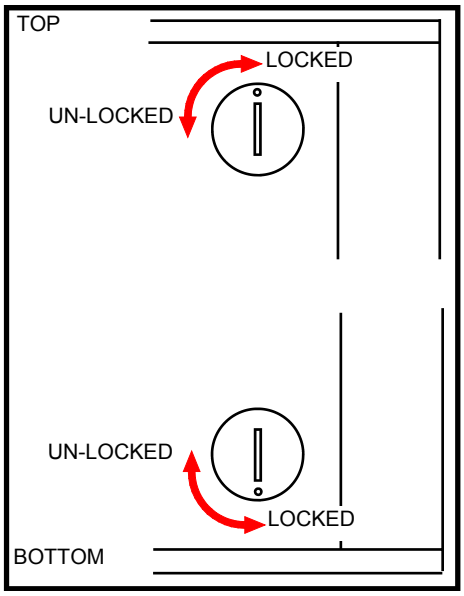


Figure 4.1

OVEN DOOR (HINGED GLASS)

Outer surfaces: Clean stainless steel with quality stainless steel cleaner.

Inner surfaces: Clean stainless steel with quality stainless steel cleaner.

Door glass: Clean with conventional glass cleaners.

OVEN SEALS

To remove, pull out the seal starting at each corner. The seal may be washed in the sink, but take care not to cut or damage it. To replace, fit the seal in at the corners first, then push in the rest of the seal.

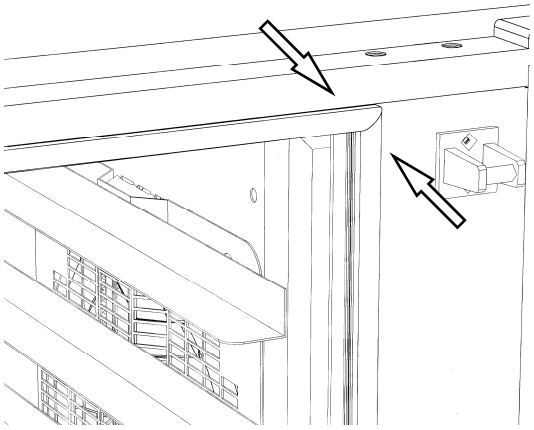


Figure 4.2

4.2 ROUTINE PROCEDURES

	PROCEDURE	INTERVAL
DOOR SEALS	Check for deterioration.	12 months
DOOR PIVOT BUSHES	Check for wear.	12 months
DOOR CATCH	Ensure that catch is adjusted such that the door closes properly.	12 months
ELEMENT	Check that element resistance is correct to it's rating (refer 6.3.12).	12 months
WATER NOZZLE	Check for lime build-up in water nozzle.	12 months

5. TROUBLE SHOOTING

⚠ **WARNING: ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.**

The following Troubleshooting Guide should be used to identify any incorrect oven operation. On correct identification of the operating fault the Troubleshooting guide will make reference to the corrective action required, or refer to the Fault Diagnosis section and / or Service section to assist in correction of the fault.

FAULT	POSSIBLE CAUSE	REMEDY
THE OVEN DOES NOT OPERATE / START	The mains isolating switch on the wall, circuit breaker or fuses are "off" at the power board.	Turn on.
	The power switch on the oven is off ('0').	Turn switch to 'I' position.
	Incorrect electrical supply.	Ensure electrical supply correct.
	Oven circuit breaker tripped.	Identify fault. Reset circuit breaker.
	Power switch on unit faulty.	Replace. **(Refer service section 6.3.1).**
FAN DOESN'T OPERATE	Door not closed. *(Fan only operates when the door is closed).*	Close door.
	Door microswitch out of adjustment.	Adjust. **(Refer service section 6.4.1).**
	Door microswitch faulty.	Replace. **(Refer service section 6.3.3).**
	Fan motor faulty.	Replace. **(Refer service section 6.3.21).**
	Fan timers / Contactors faulty.	Replace. **(Refer service section 6.3.10).**
STEAM LIGHT DOES NOT ILLUMINATE **Up to Lot No. 0817999 Only.**	Blown bulb.	Replace bulb.
NO STEAM *(continued next page)*	Water not turned on.	Turn water on at isolating valve.
	Blocked filter in water solenoid.	Clean filter.
	Nozzle blocked.	Remove, clean or replace. **(Refer service section 6.3.15).**
	Check valve blocked / corroded.	Remove check valve. **(Refer service section 6.3.15).**

FAULT	POSSIBLE CAUSE	REMEDY
NO STEAM *(continued)*	Steam tube blocked.	Remove, clean or replace.
	Faulty solenoid coil.	Replace. **(Refer service section 6.3.16).**
	Steam switch faulty.	Replace. **(Refer service section 6.3.13).**
	Timer faulty. **Up to Lot No. 0817999.**	Adjust / Replace. **(Refer service section 6.3.10).**
STEAMS ONLY SOMETIMES **Up to Lot No. 0817999.**	Steam timer faulty.	Replace. **(Refer service section 6.3.10).**
SLOW RECOVERY	Faulty contactor.	Replace. **(Refer service section 6.3.10).**
	Element(s) blown.	Replace. **(Refer service section 6.3.11).**
NO HEAT IN OVEN	Faulty door microswitch.	Adjust or replace. **(Refer service section 6.3.3).**
	Faulty heating contactor.	Replace. **(Refer service section 6.3.10).**
	Over-temperature control tripped.	Reset.
	Faulty thermostat controls.	Replace. **(Refer service section 6.3.7).**
OVER-TEMPERATURE CONTROL TRIPS / OVEN OVER-HEATS	Oven too hot, thermostat out of calibration.	Replace. **(Refer service section 6.3.8).**
	Over-temp out of calibration.	Replace. **(Refer service section 6.3.12).**
TIMER WILL NOT TIME DOWN	Faulty timer.	Replace. **(Refer service section 6.3.18).**
NO TIME UP ALARM INDICATION	Faulty timer.	Replace. **(Refer service section 6.3.18).**
	Faulty buzzer.	Replace. **(Refer service section 6.3.19).**
NO HIGH FAN SPEED	Fan selector switch faulty.	Replace. **(Refer service section 6.3.22).**
NO LOW FAN SPEED	Fan selector switch faulty.	Replace. **(Refer service section 6.3.22).**

FAULT	POSSIBLE CAUSE	REMEDY
OVEN LIGHTS NOT ILLUMINATING	Blown bulb(s). Faulty lighting transformer. (Up to Lot No. 0817999 Only). ***NOTE:*** *If both light bulbs have blown then there will be no output from the lighting transformer.*	Replace. **(Refer service section 6.3.4).** Replace. **(Refer service section 6.3.6).**
OVEN VENT INDICATOR NOT ILLUMINATING WHEN IN 'OPEN' POSITION. **Up to Lot No. 0817999.**	Indicator faulty. Switch faulty.	Replace. **(Refer service section 6.3.2).** Replace. **(Refer service section 6.3.23).**
OVER-PRESSURE VENT NOT OPERATING DURING STEAM CYCLE	Vent blocked. Over-pressure vent mechanism restricted.	Remove and clean blockage. Remove and clean. **(Refer service section 6.3.24).**
DOOR DOES NOT CLOSE	Tray in way of door. Door seal obstruction. Door handle in wrong position. **Up to Lot No. 0817999.** Door setting incorrect.	Correctly position tray in rack. Correctly install door seal. **(Refer maintenance section).** Reposition door handle. **(Refer service section 6.3.28a / 6.3.29).** Adjust. **(Refer service sections 6.4.3 / 6.4.4 / 6.4.5).**
DOOR SEAL LEAKS	Door seal damaged. Door seal incorrectly fitted.	Replace. **(Refer Section 4, Maintenance).** Correctly install door seal. **(Refer Section 4, Maintenance).**
RACKS DO NOT FIT	Incorrect pin location.	Relocate on correct pin.

6. SERVICE PROCEDURES

WARNING: ENSURE POWER SUPPLY IS SWITCHED OFF BEFORE SERVICING.

WARNING: ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.

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6.2 ACCESS

6.2.1 CONTROL PANEL

1) Remove vent knob by pulling straight off.
2) Remove screw above vent shaft.

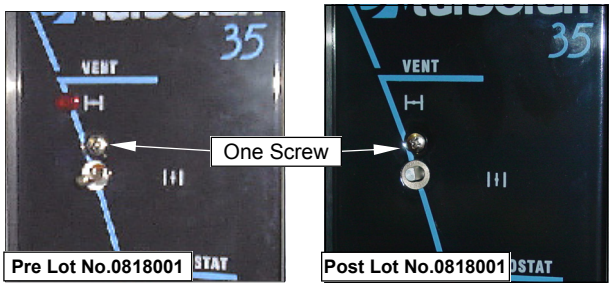


Figure 6.2.1

3) Panel is now free to hinge at bottom, take care not to drop panel or pull wires out. (support panel while working with panel open).

6.2.2 SERVICE (RH SIDE) PANEL

1) Undo the 4 screws holding panel.

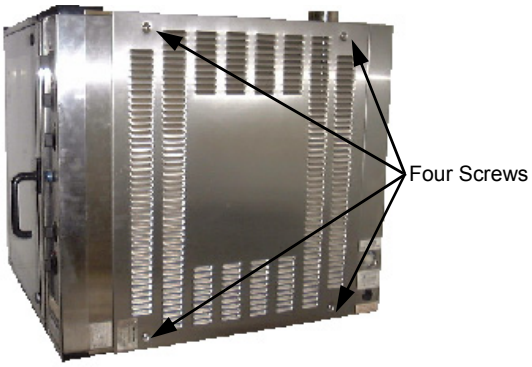


Figure 6.2.2

2) Remove panel.

6.2.3 BAFFLE

1) Remove racks, trays and RH side rack.
2) Undo the 4 nuts holding the baffle.
3) Pull panel off studs, pull bottom into middle of oven and remove panel.

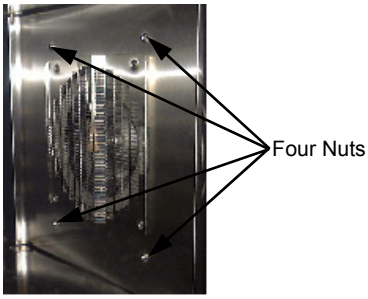


Figure 6.2.3

6.2.4 SIDE PANEL (LH SIDE)

1) Undo the 4 screws holding panel.
2) Remove panel.

6.2.5a CONTROL PANEL—REAR (Up to Lot No.0817099)

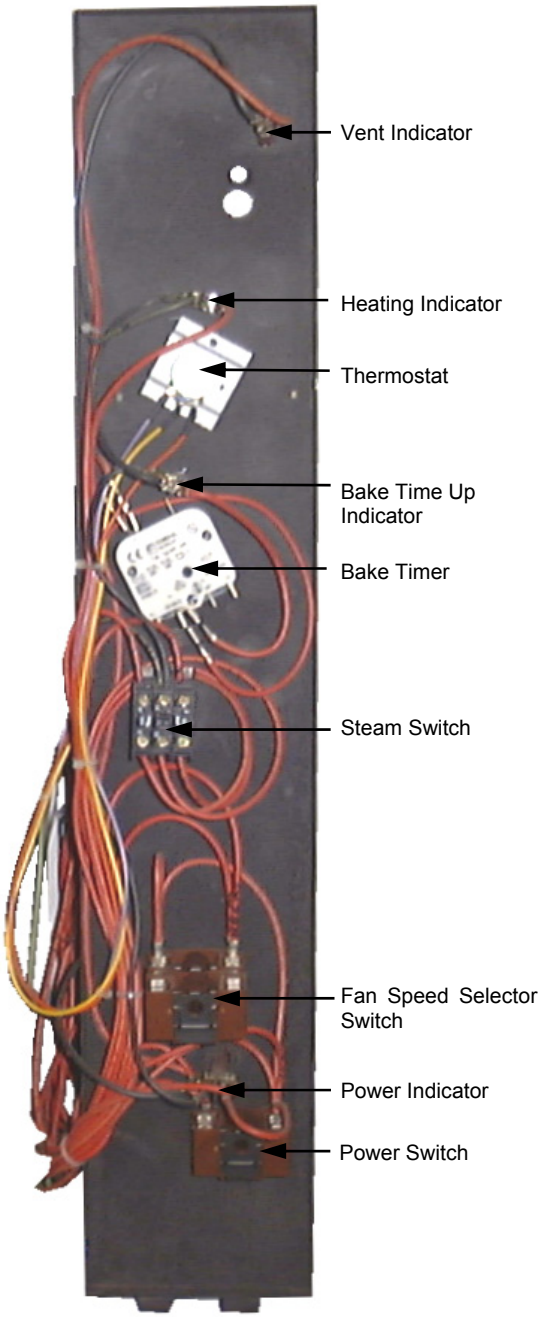


Figure 6.2.5a

6.2.5b CONTROL PANEL—REAR (From Lot No.0818001)

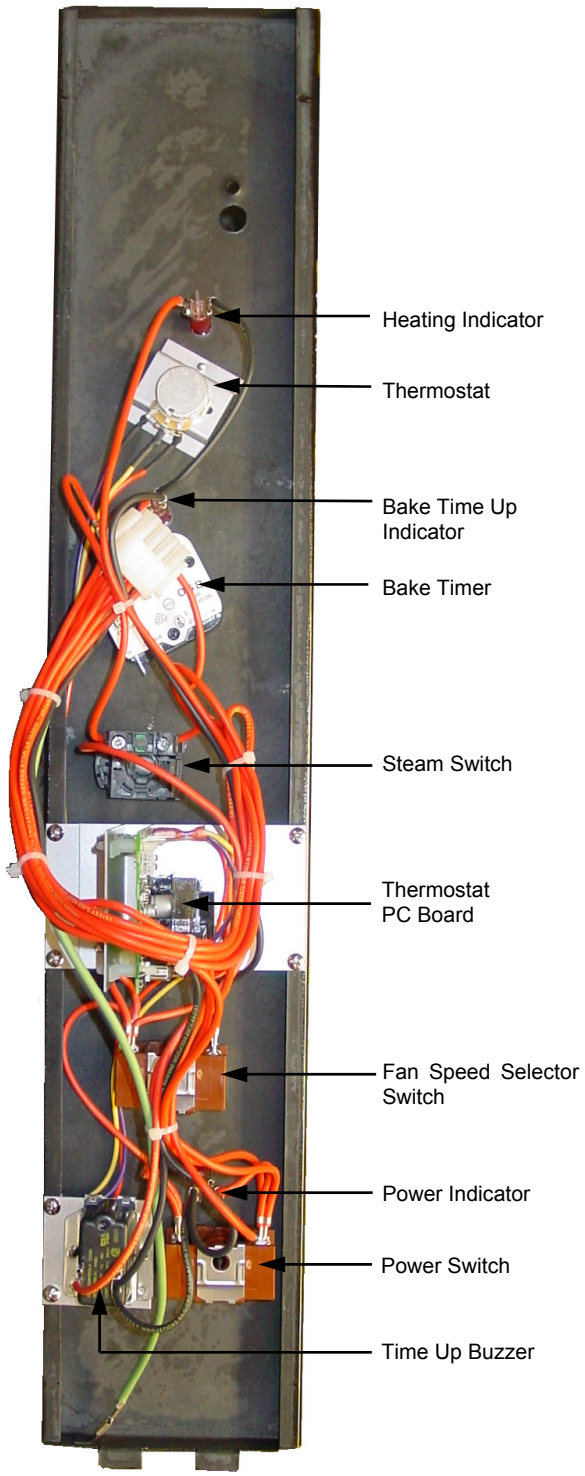


Figure 6.2.5b

6.3 REPLACEMENT

6.3.1 POWER SWITCH

1) Pull knob off front of switch.
2) Open control panel (refer 6.2.1) and undo 2 screws securing switch.

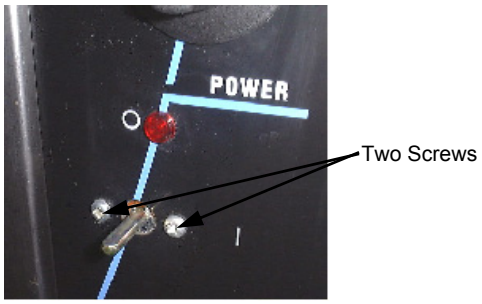


Figure 6.3.1

3) Transfer wires to new switch.
4) Withdraw old switch and insert new switch, securing with screws.

6.3.2 INDICATOR LIGHTS

1) With control panel open (refer 6.2.1) remove wires from the back of the indicator light.

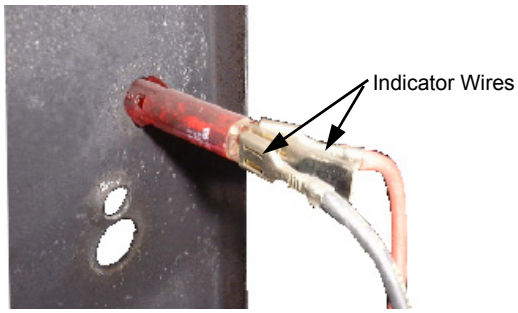


Figure 6.3.2

2) From back push indicator through front of panel rotating clockwise.
3) Push new indicator in from front of panel, and re-connect wires.

6.3.3 DOOR MICROSWITCH

1) Open oven door.
2) Remove nut on front of micro-switch.

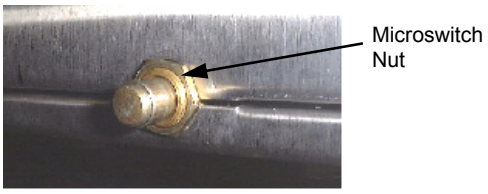


Figure 6.3.3a

3) Remove 3 screws holding microswitch cover panel and drop panel down.

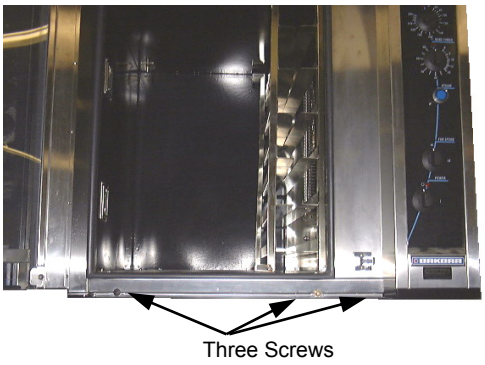


Figure 6.3.3b

4) Remove 2nd nut on front of micro-switch, to free micro-switch. (Loosen / remove 2 bolts holding micro-switch bracket as required).

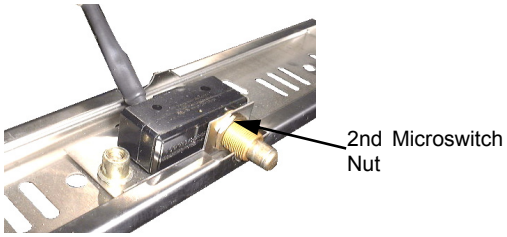


Figure 6.3.3c

5) Transfer wires to new the new switch and re-assemble.

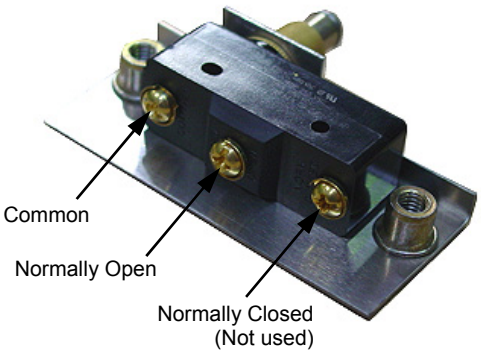


Figure 6.3.3d

6) Adjust micro-switch (refer 6.4.1).

6.3.4 LIGHT BULB / GLASS

1) Remove LH side rack from oven.
2) Undo the four screws holding light face surround on and remove the glass and surround. Check the seal and replace if necessary.

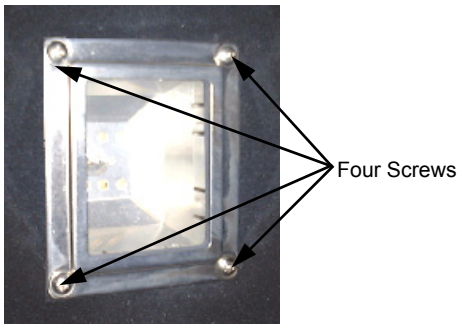


Figure 6.3.4

3) Pull bulb straight out of fitting, towards back of oven (taking care not to break glass). Replace bulb.

NOTE:

The bulb is a halogen lamp, so do not touch the glass of the bulb while pushing straight into light fitting (use an oil free cloth or paper towel).

4) Replace seal, glass and surround, securing with the screws (do not over tighten).

6.3.5 LIGHT FITTING

1) Remove glass and surround (refer 6.3.4).
2) Remove LH side panel (refer 6.2.).
2) Disconnect wires at connector block (inside LH side panel).

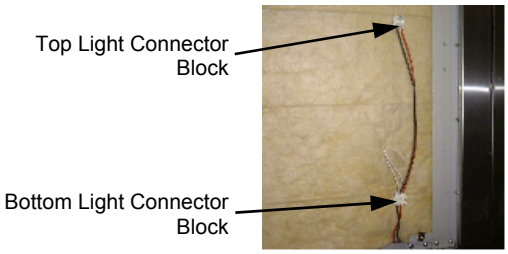


Figure 6.3.5

3) Open fibreglass to expose lamp fitting.
4) Push in tabs at back of light fitting from outside oven, pivot into oven and remove.
5) Re-assemble in reverse order.

6.3.6 LIGHTING TRANSFORMER (Up to Lot No.0817099)

1) With R/H service panel removed (refer 6.2.2) transfer wires to new transformer with the aid of a screw-driver.
2) Remove one screw and loosen the second screw securing the transformer.

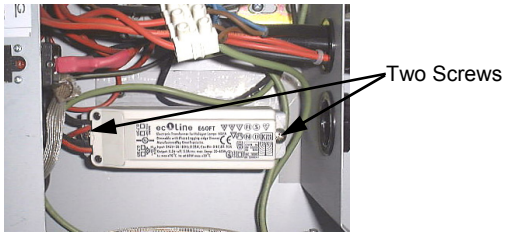


Figure 6.3.6

3) Remove the old transformer and secure the new transformer with the screws.

6.3.7 THERMOSTAT DIAL

1) Pull knob off front of thermostat.
2) Open control panel (refer 6.2.1) and undo two screws securing thermostat bracket.

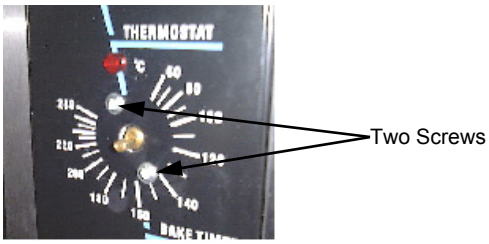


Figure 6.3.7a

3) Transfer wires to new thermostat.
4) Undo nut holding thermostat to bracket

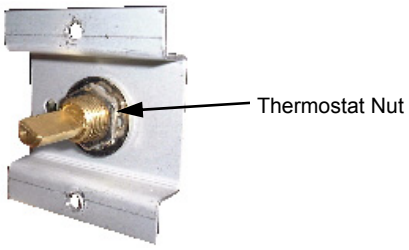


Figure 6.3.7b

5) Withdraw old thermostat and insert new thermostat, securing with nut.
6) Re-assemble in reverse order.

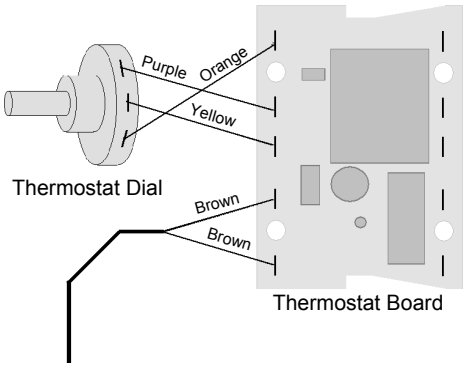


Figure 6.3.7c

Thermostat Dial Resistances

NOTE:

Dial must be dis-connected from board for testing.

O is orange wire, P is purple wire, Y is yellow wire.

Dial Position	Resistance Between O-P	P-Y	O-Y
Off	900 Ω	900 Ω	0 Ω
Halfway	900 Ω	450 Ω	450 Ω
Maximum	900 Ω	0 Ω	900 Ω

6.3.8 THERMOSTAT BOARD

1) With control panel open (refer 6.2.1) transfer wires to new board.
2) Squeeze legs together on plastic clips holding board and extract.
3) Push new board onto clips.

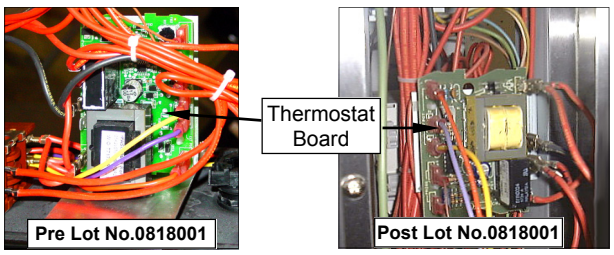


Figure 6.3.8

6.3.9 THERMOSTAT PROBE

1) Remove R/H service panel (refer 6.2.1) and oven fan baffle (refer 6.2.3).
2) Remove bracket on steam line inside oven cavity by undoing the two screws.

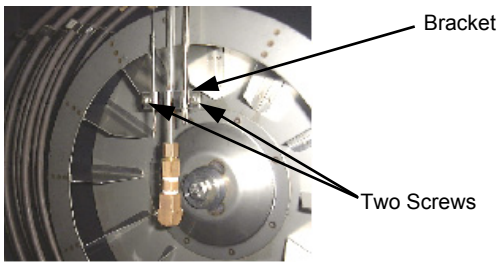


Figure 6.3.9

3) Undo the 2 bolts on the flange where the probe enters the oven (inside oven).

NOTE:

Removal of probe and its mounting plate will require breaking of the silicone sealant.

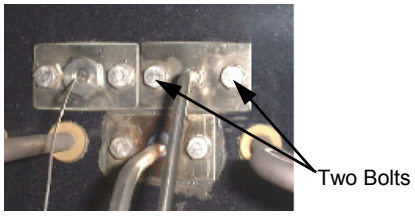


Figure 6.3.10

4) With control panel open (6.2.1) remove wires from thermostat board (2 fine brown wires at bottom left of board - refer figure 6.3.8).
5) Remove probe by drawing wires into oven.
6) Install the new probe in the reverse order.

NOTE:

Ensure probe mounting plate has RTV silicone sealant applied to sealing face to ensure a leak proof assembly. Remove excess sealant after tightening securing screws.

Thermostat Probe Resistances

NOTE:

Probe must be disconnected from board for testing.

Temperature	Resistance (kΩ)
0°C (32°F)	288
37°C (99°F)	56
100°C (212°F)	6.1

6.3.10 CONTACTORS / TIMERS Etc

1) With R/H service panel removed (refer 6.2.2), remove the din rail mounted component.
2) Install the new component onto the din rail.
3) Transfer the wires from old component to new one.
4) On contactors C2-C3, and C5-C6, ensure that mechanical interlock (Part Number 020769) is fitted as illustrated below.

Allen Bradley Contactors Pre Lot No.0818001

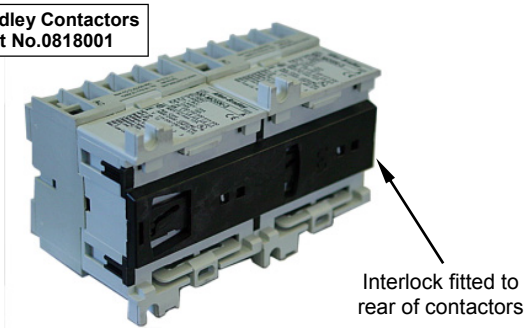


Figure 6.3.10a

Lovato Contactors Post Lot No.0818001

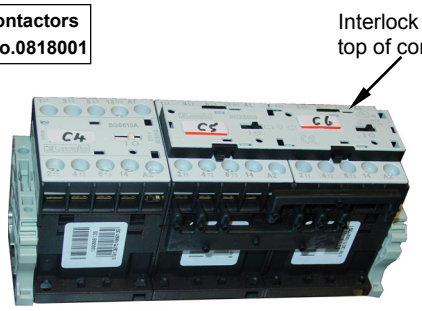


Figure 6.3.10b

6.3.11 ELEMENTS

1) With service panel and baffle removed (refer 6.2.2 & 6.2.3) remove the wires from the element.
2) With the use of an $^{11}/_{16}$" tube spanner, undo the nuts on the outside at the element ends.
3) Pull element into oven and remove.

NOTE:

When replacing or refitting elements ensure that the fibre sealing washers are used.

Element Resistances

NOTE:

Element must be disconnected for testing. Resistances are given at room temperature.

208-220V	24.2 Ω
230-240V	28.8 Ω

6.3.12 OVER-TEMP THERMOSTAT

1) Remove service panel (refer 6.2.2) and baffle (refer 6.2.3).
2) Remove bracket on steam line inside oven cavity by undoing the 2 screws (Figure 6.3.9).
3) Undo the 2 bolts on the flange where the probe enters the oven (inside oven).

NOTE:

Removal of the probe and mounting plate will require breaking of the silicone sealant.

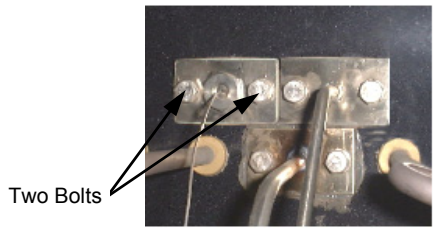


Figure 6.3.12a

4) Undo gland nut on bracket and extract the probe from the bracket.

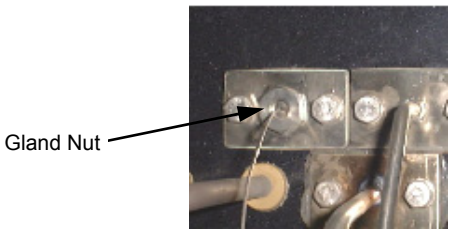


Figure 6.3.12b

5) Undo the 2 screws holding the over-temp and remove over-temp.

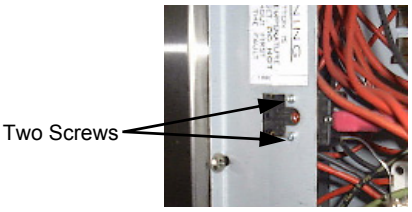


Figure 6.3.12c

6) Transfer wires from old over-temp thermostat to the new one.
7) Install the new over-temp and probe in the reverse order of above.

NOTE:

Ensure probe mounting plate has RTV silicone sealant applied to sealing face to ensure a leak proof assembly. Remove excess sealant after tightening securing screws.

6.3.13a STEAM SWITCH (Up to Lot No.0817099)

1) Open control panel (refer 6.2.1).
2) Prise out or rotate the switch locking tab with a small screwdriver, and withdraw the steam switch assembly.

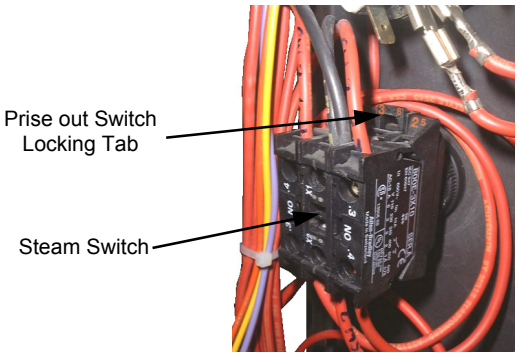


Figure 6.3.13a

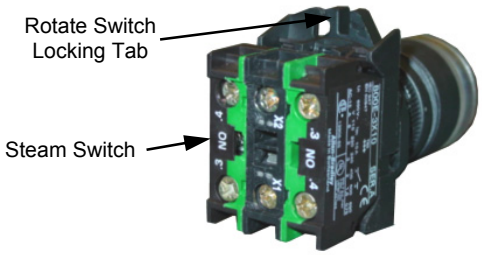


Figure 6.3.13b

3) Transfer wires to new steam switch, and re-assemble in reverse order.

6.3.13b STEAM SWITCH (From Lot No.0818001)

1) Open the control panel (refer 6.2.1).
2) Push the locking tab in the direction of the arrow shown on the plug.
3) Lift off the rear of the plug.

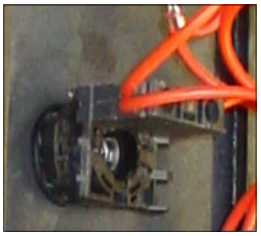


Figure 6.3.13c

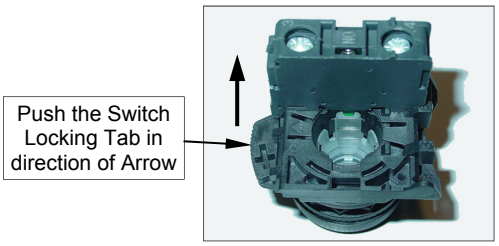


Figure 6.3.13d

4) Transfer wires to new steam switch.
5) To remove the push switch from the control panel, unscrew the locking ring on rear of push switch and remove from the control panel.

Note the locating tab on the side of the push switch locates into notch in the control panel.

6) To re-assemble, when re-fitting the switch body to the push switch in the control panel, align the locking tab body arrow on the switch with the arrow on the side of the push switch body.

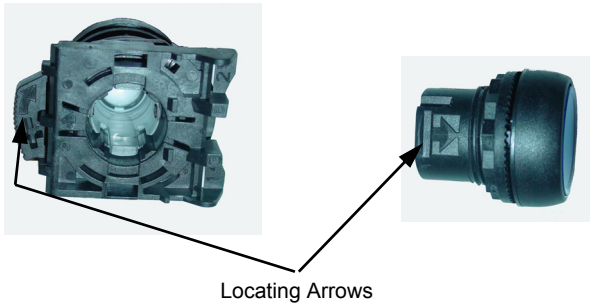


Figure 6.3.13e

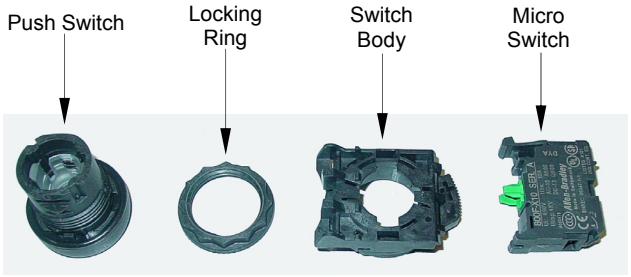


Figure 6.3.13f

6.3.14 SPRAY NOZZLE

1) Remove the fan baffle (refer 6.2.3).
2) Unscrew the spray nozzle with $^{9}/_{16}$" and $^{5}/_{8}$" spanners.
3) Clean or replace as required, ensuring debris free on re-assembly.

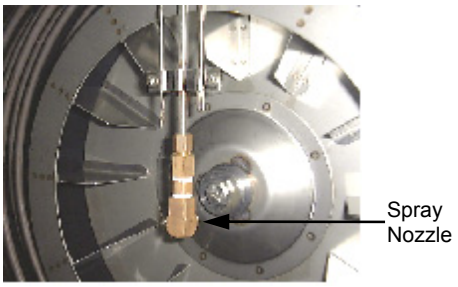


Figure 6.3.14

6.3.15 CHECK VALVE - Up To Ser. No.261984

NOTE: If the check valve becomes blocked or corroded, the recommended course of action is to remove the internal parts of the valve, as it is not required for operation of the oven. The procedure for this is given below.

1) Remove the spray nozzle (refer 6.3.14).
2) Remove the check valve with $^{1}/_{2}$" and $^{5}/_{8}$" spanners.

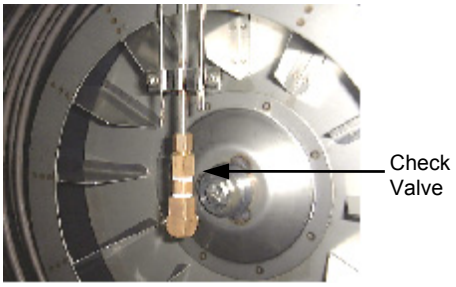


Figure 6.3.15a

3) Dismantle the valve as illustrated, and discard the ball and spring from the valve.
4) Re-assemble the valve (without the ball and spring) and refit to the unit.

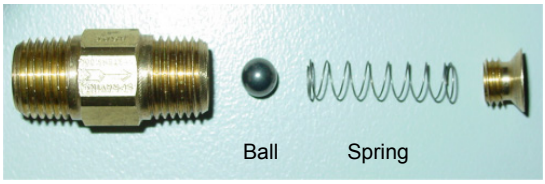


Figure 6.3.15b

6.3.16 WATER SOLENOID

1) Ensure water supply is turned off.
2) With the R/H service panel removed (refer 6.2.2) remove the wires from the solenoid.
3) Undo the compression fitting on the output side of the solenoid ($^{1}/_{2}$" spanner).
4) Remove the hose fitting, inlet side, and adapter ($^{13}/_{16}$"), outlet side.
5) Remove two screws (up under bracket) and extract.

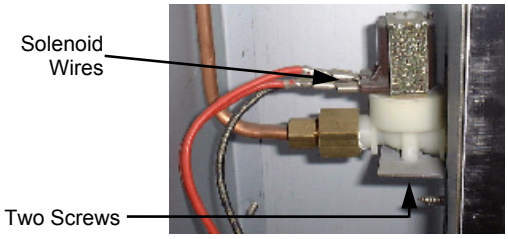


Figure 6.3.16

6) Secure new solenoid with screws, and re-assemble.

6.3.17 COOLING FAN

1) Remove R/H service panel (refer 6.2.2).
2) Remove the fan wires from the contactors.

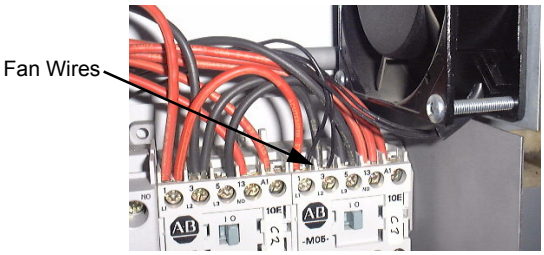


Figure 6.3.17a

2) Remove the 4 screws securing the fan to it's mounting bracket and remove fan.

NOTE: There is a nut on each screw, hold the nut while undoing the screw.

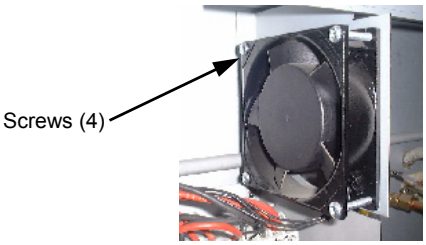


Figure 6.3.17b

3) Replace and re-assemble in reverse order.
4) Ensure fan and flow direction is correct - sucks air out of controls and into motor cavity.

Figure 6.3.17c

6.3.18 BAKE TIMER

1) Remove bake timer knob by pulling it firmly away from control panel.
2) Open control panel (refer 6.2.1) and undo two screws securing timer.
3) Transfer wires to new timer.
4) Withdraw old timer and insert new timer, securing with screws.
5) Replace knob.
6) Check timer switches off at '0' mark. If slight adjustment required, loosen the mounting screws and rotate timer in direction required.

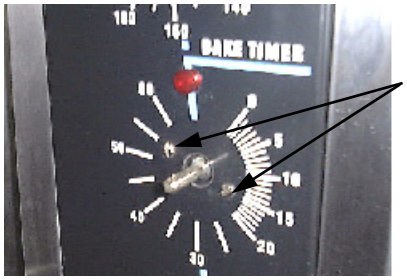


Figure 6.3.18

6.3.19a BUZZER (Up to Lot No.0817099)

1) Remove R/H service panel (refer 6.2.2).
2) Remove two screws holding buzzer bracket to panel.

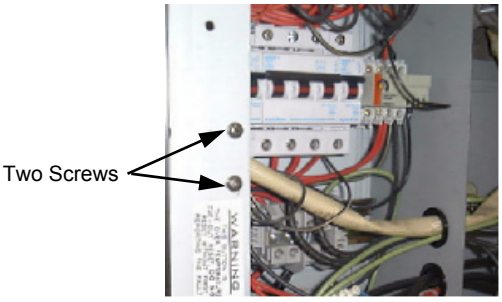


Figure 6.3.19a

3) Withdraw and transfer wires to new buzzer.
4) Remove old buzzer from bracket, and secure new buzzer.
5) Reassemble in reverse order.

6.3.19b BUZZER (From Lot No.0818001)

1) Remove R/H service panel (refer 6.2.2).
2) Remove two screws holding buzzer bracket to the rear of the control panel.

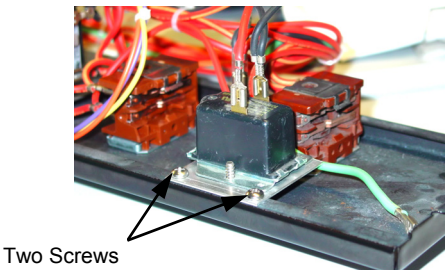


Figure 6.3.19a

3) Withdraw wires from old buzzer and transfer connections to new buzzer.

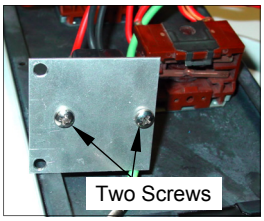


Figure 6.3.19b

4) Remove old buzzer from bracket, and secure new buzzer to bracket.
5) Secure bracket to rear of control panel.
6) Re-assemble in reverse order.

6.3.20 OVEN FAN

1) With service panel and oven fan baffle removed (refer 6.2.2 & 6.2.3) undo the 6 bolts holding the probes and steam line.

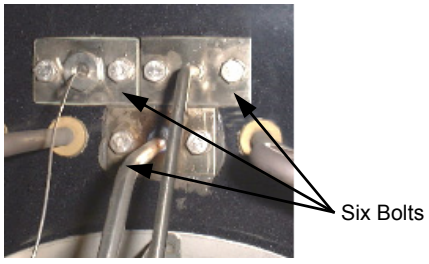


Figure 6.3.20a

2) Undo the steam line compression fitting on the outside of the oven nearest the oven.

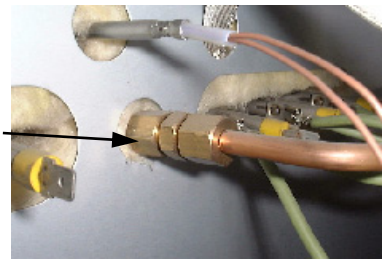


Figure 6.3.20b

3) Pull assembly (steam nozzle etc) into the oven (without damaging probe lines) and support clear of the fan.

NOTE:

Removal of the probe and mounting plate will require breaking of the silicone sealant.

4) Undo the bolt in the centre of the fan (use fan blades and heat deflector to steady).
5) Use a gear puller if necessary to remove the fan from the tapered shaft.
6) Replace and re-assemble in reverse order.

NOTE:

Ensure probe mounting plate has RTV silicone sealant applied to sealing face to ensure a leak proof assembly. Remove excess sealant after tightening securing screws.

6.3.21 FAN MOTOR

1) Remove R/H service panel (refer 6.2.2).
2) Remove the fan baffle (refer 6.2.3).
3) Remove the probes and steam line from inside the oven (refer 6.3.20).
4) Undo the steam line compression fitting (refer 6.3.20).
5) Pull the assembly (steam nozzle etc) into the oven (without damaging the probe lines) (refer 6.3.20).
6) Remove the fan from the tapered shaft. (refer 6.3.20).

For Ovens up to Ser No. 415019.

7) Disconnect the wiring loom from the motor to the contactors.

IMPORTANT: Note wire colour and terminal connections.

8) Remove the motor from the oven.
9) Pass the contactor to heat baffle panel loom, through the grommet in the heat baffle plate before wiring loom up to the contactor terminals.

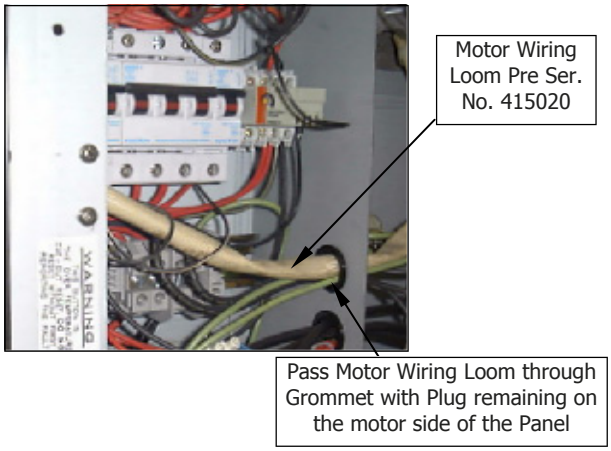


Figure 6.3.21a

10) Ensure the connector is on the motor side of the heat baffle plate.
11) Connect up the motor wiring loom to the contactor terminals. (Refer to wiring diagram below for correct wiring connections to the contactor).

Wiring Loom Connections from Contactors to Heat Baffle Panel (Viewed from the rear of the Connector)

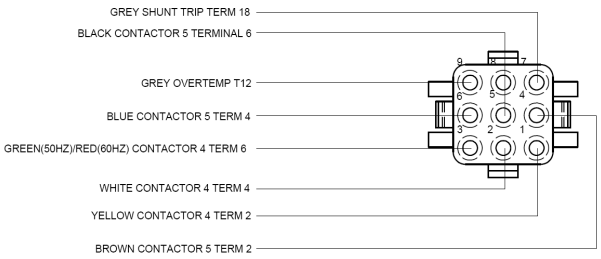


Figure 6.3.21b

12) Fit the replacement motor and connect the lead from the motor to the connection from the contactors. Tie wrap up any loose cable.

For Ovens from Ser No. 415020 Onwards.

13. Unplug the wiring loom from the motor to the connector attached to the heat baffle plate.
14. Remove the motor from the oven.
15. Fit the replacement motor and connect the lead from the motor to the connection from the contactors. Tie wrap up any loose cable.

NOTE:
For Ovens after Serial No. 415019, the wiring loom from the heat baffle plate to the contactors will not be required and can be discarded.

6.3.22 FAN SPEED SELECTOR SWITCH

1) Pull knob off front of switch.
2) Open control panel (refer 6.2.1) and undo 2 screws securing switch.

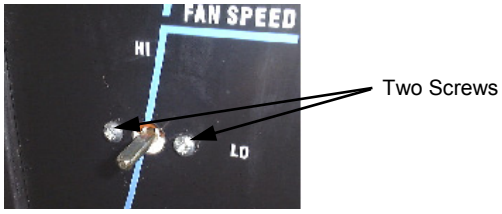


Figure 6.3.22

3) Transfer wires to new switch. Pull 2nd switch off and transfer to new switch.
4) Withdraw old switch and insert new switch, securing with screws.

6.3.23 VENT SWITCH (Up to Lot No.0817099)

1) With the control panel removed (refer 6.2.1) remove the four screws securing bracket and two screws securing switch.

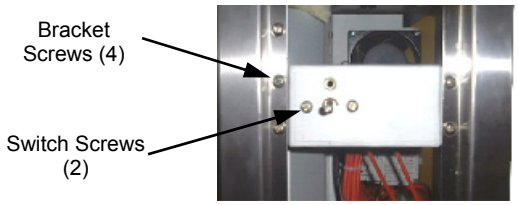


Figure 6.3.23

2) Remove bracket (twist to clear frame and pull forward), and switch (pull forward).
3) Transfer wires to the new switch and re-assemble in reverse order.

6.3.24a VENT / 'OVER-PRESSURE' VENT (Up to Lot No.0817099)

1) Remove Vent Switch (refer 6.3.23) and Baffle (refer 6.2.3).
2) Rotate vent shaft 180° such that the conical spring is facing into the oven.
3) With 3mm Allen key remove Allen screw holding spring and vent assembly (inside top back RHS of oven).
4) Internal vent pressure relief and vent shaft can now be removed and replaced.

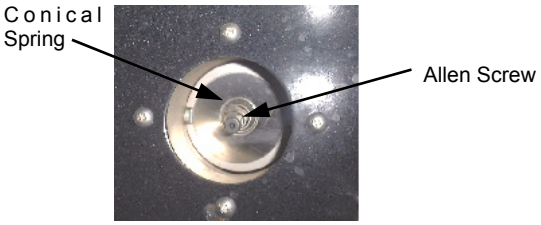


Figure 6.3.24a

6.3.24b VENT / 'OVER-PRESSURE' VENT (From Lot No.0818001)

1) Remove the control panel (refer 6.2.1).
2) Remove racks, trays, R/H side rack and the fan baffle (refer 6.2.3).
3) Remove the bush from the centre of the vent shaft bracket.
4) Remove the 4 screws securing the bracket to the oven frame.
5) Remove the bracket (twist to clear frame and pull forward).

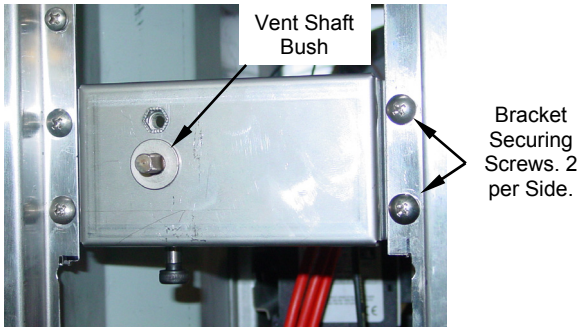


Figure 6.3.24b

6) Rotate the vent shaft 180º to access the vent flap from inside the oven. The conical spring and allen screw should be facing into the oven.

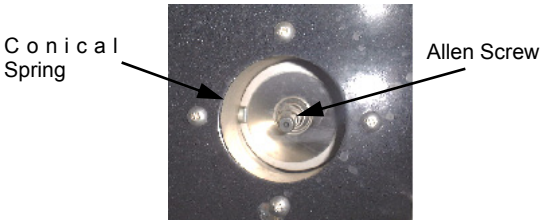


Figure 6.3.24c

7) Using a 3mm Allen key, remove allen screw holding spring and vent assembly (inside top rear R/H side of oven).
8) Internal vent pressure relief flap and vent shaft can now be removed and replaced.
9) When re-fitting the vent bracket to the oven fascia, ensure that the stop screw is positioned as shown in the figure below to ensure correct location behind the vent bracket.

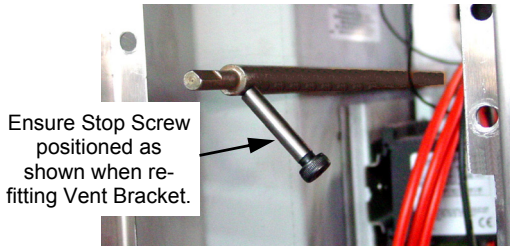


Figure 6.3.24d

10) Refit the vent bracket to the oven and secure to the oven frame with the 4 screws.

NOTE:
Ensure that the stop pin is correctly located beneath and not above the vent bracket.

11) Refit the vent shaft bush over the vent shaft and into the centre of the vent shaft bracket. (see Figure 6.3.24b).

12) Refit and secure the control panel.

13) Refit the vent shaft control knob to the vent shaft.

6.3.25 DOOR OUTER GLASS

1) Ensure the door is locked shut

2) With a screwdriver, coin, or other suitable device, ¼ turn the outer glass locks to release the outer glass and allow it to be hinged open.

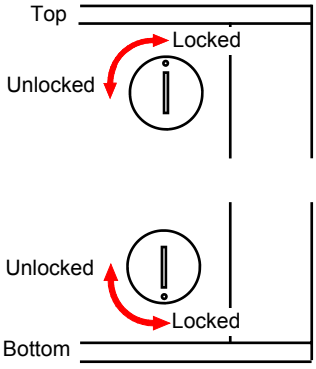


Figure 6.3.25a

3) Undo the two hinges (two screws per hinge) and remove outer glass assembly.

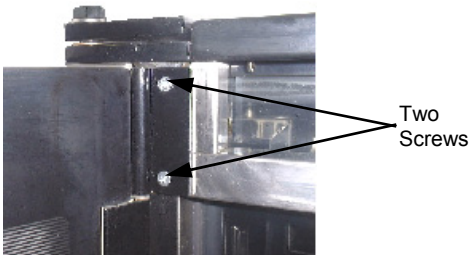


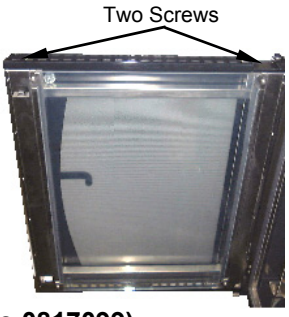
Figure 6.3.25b

4) Replace and re-assemble in reverse order.

6.3.26 DOOR INNER GLASS

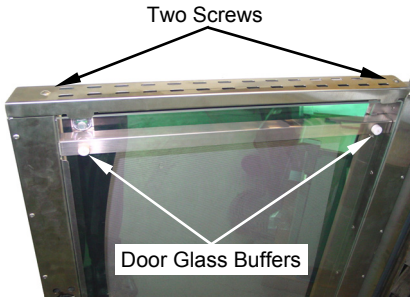
1) Open the oven door.

2) Remove the top door trim (two screws, one each end of trim). Take care not to drop the glass.



(Up to Lot No.0817099)

Figure 6.3.26a



(From Lot No.0818001)

Figure 6.3.26b

3) Lift and remove glass assembly.

4) Should the door glass buffers (Qty 4) require replacement, these are an interference fit into the door frame.

5) Replace and re-assemble in reverse order.

6.3.27a DOOR CATCHES (Up to Lot No.0817099)

1) Open the oven door.

2) Undo two screws and pull catch straight out.

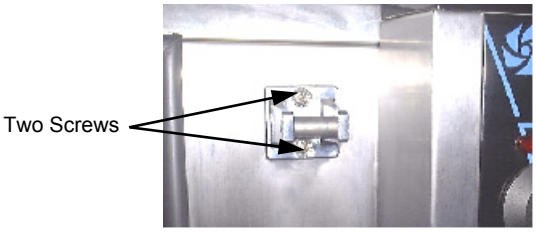


Figure 6.3.27a

3) Replace and re-assemble in reverse order.

6.3.27b DOOR CATCHES (From Lot No.0818001)

1) Open the oven door to reveal the locking dog.

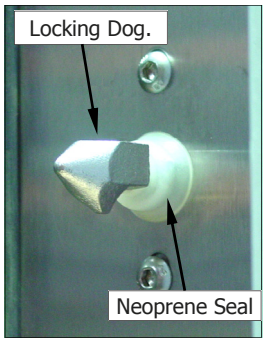


Figure 6.3.27b

2) Pull back the neoprene seal to reveal the locking screw.

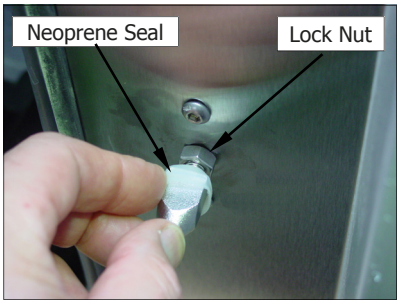


Figure 6.3.27c

3) Slacken the locking screw.
4) Unscrew the locking dog and replace.
5) Refit the replacement locking dog and neoprene seal and adjust the door locking dog as shown in Section 6.4. 'Adjustment / Calibration'.

6.3.28a DOOR HANDLE (Up to Lot No.0817099)

1) Open the oven door.
2) Remove the two screw caps covering the screws on the door handle.
3) Undo two screws securing handle, and pull straight out.
4) Replace and re-assemble in reverse order.1)

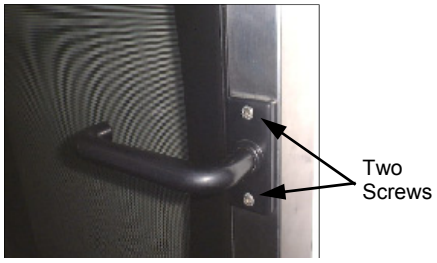


Figure 6.3.28a

6.3.28b DOOR HANDLE (From Lot No.0818001)

1) Open the oven door.
2) Remove the three screw blanking caps covering the screw locations on the inside of the door.

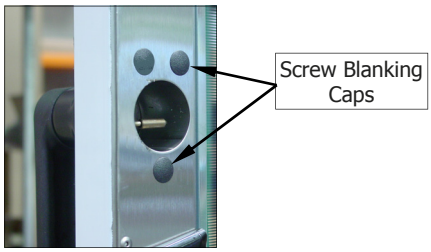


Figure 6.3.28b

3) Undo the three screws and washers securing handle, and carefully remove from the door.
4) Fit the replacement door handle and re-assemble in reverse order.

NOTE:

This door handle can be fitted onto a left handed door, carry out the following to change the orientation of the handle.

5) Remove the plastic cap from the top of the door handle using a small screwdriver.

Figure 6.3.28c

6) Whilst holding the handle, unscrew the hex head screw a few turns, using a 4mm allen key, until it is possible to rotate the handle through 180º.
7) Once the handle has been rotated, re-tighten the hex head screw and refit the screw blanking cap to the handle.

6.3.29 DOOR CATCH MECHANISM (Up to Lot No.0817099)

1) Remove the outer glass (refer 6.3.25) and door handle (refer 6.3.28a) leaving the door open.
2) Drill out the six rivets (refer figure 6.3.29, Item E below) on the inside of the RH Door Trim (A) using a 3.5mm drill.
3) Remove four screws (F) on outside of RH door trim (A).
4) Remove the door trim (rotate toward the inside of the door).
5) Remove the four screws (J) from RH inner door trim (B), and remove trim. (Loosen bottom trim screw (K) if required).
6) Remove two split-pins (G) from the connecting rod (H) on latch (C).
7) With handle in open position, push latch mechanism (C1) away from connecting rod (H) and remove the connecting rod.

To Remove the Latching Mechanism.

8) Remove two screws (I) securing latching mechanism (C), and remove the latching mechanism.

To Remove the Securing Handle Mechanism.

9) Remove two screws (L) securing handle mechanism (D), and remove the handle mechanism.
10) Replace and re-assemble in reverse order.

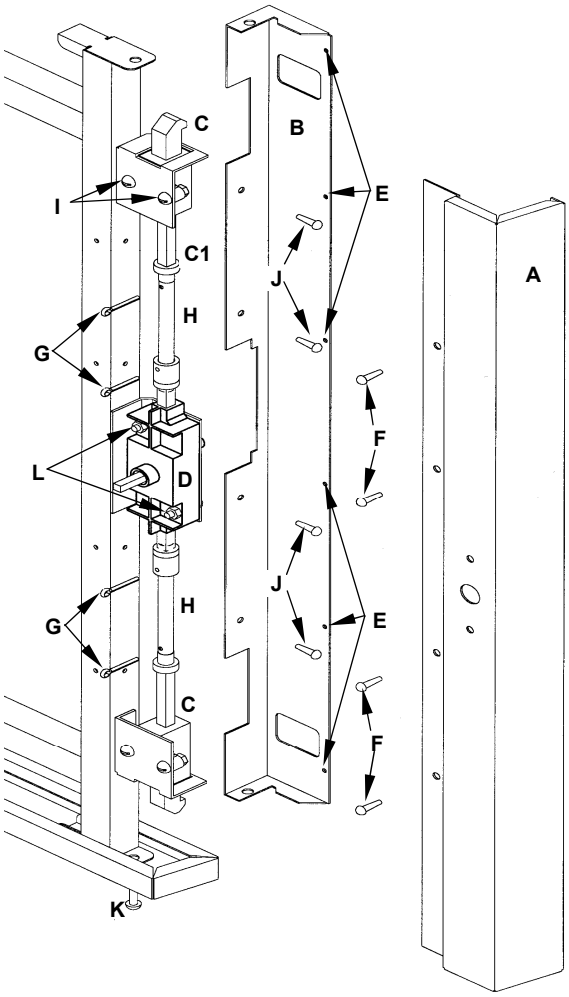


Figure 6.3.29

6.4 ADJUSTMENT / CALIBRATION

6.4.1 DOOR MICROSWITCH ADJUSTMENT

1) Open oven door.
2) Loosen nut on front of microswitch, located at bottom right of door frame.

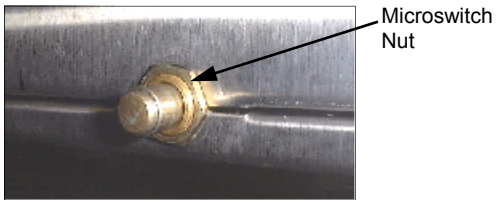


Figure 6.4.1

3) Loosen two bolts securing microswitch bracket from underside of oven.

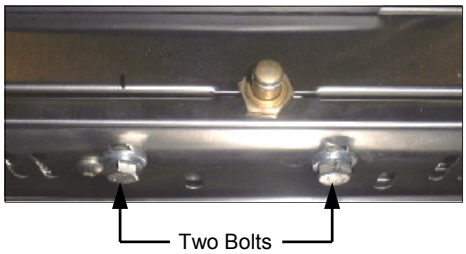


Figure 6.4.1

4) Adjust microswitch position and tighten bolts.

NOTE:

The switch should operate when door handle approximately $^{1}/_{2}$ engaged (45°).

5) Repeat steps 2-5 as required, then tighten the front nut.

6.4.2 60 MINUTE TIMER ZERO POSITION

1) Remove 60 minute timer knob by pulling it firmly away from control panel.
2) Open control panel (refer 6.2.1). Loosen two screws on control panel holding 60 minute timer.

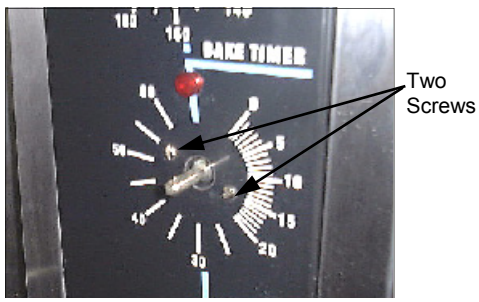


Figure 6.4.2

3) The timer can now be rotated as required to ensure that the buzzer sounds at the zero position.

6.4.3a DOOR SETTING ADJUSTMENT (Up to Lot No.0817099)

1) Open oven door.
2) Loosen the two bolts securing the top door hinge plate to the oven.

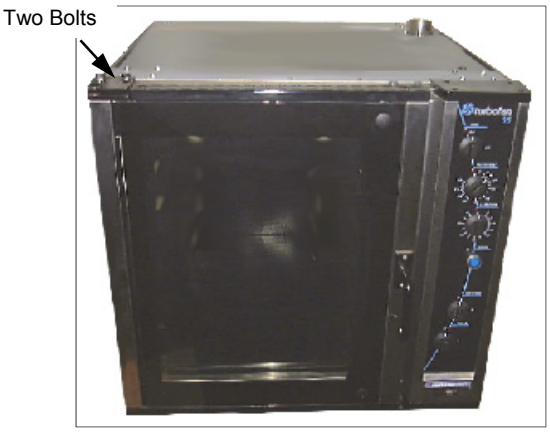


Figure 6.4.3a

3) Adjust oven door position and tighten two bolts.
4) Check door operation. Repeat steps 2 and 3 as necessary to ensure that door closes and latches evenly.

6.4.3b DOOR SETTING ADJUSTMENT (From Lot No.0818001)

1) Open oven door.
2) Loosen the two bolts securing the door top and bottom hinge plates to the oven.

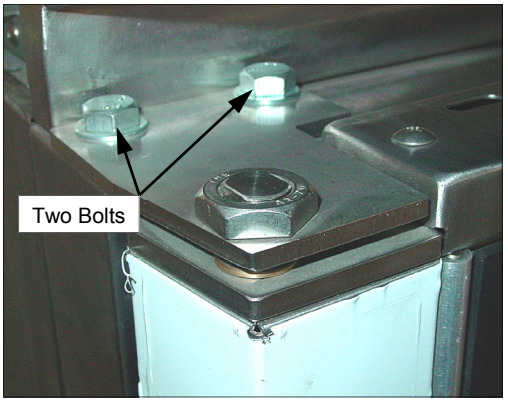


Figure 6.4.3b

3) Adjust oven door position and tighten four bolts (2 top and 2 bottom).
4) Check the door operation. Repeat steps 2 and 3 as necessary to ensure that the door closes and latches evenly.

6.4.4 DOOR SEAL ADJUSTMENT (From Lot No.0818001)

1) With the oven door closed and latched shut, lightly push the top of the door in the hinge area and tighten the top pivot pin nut.

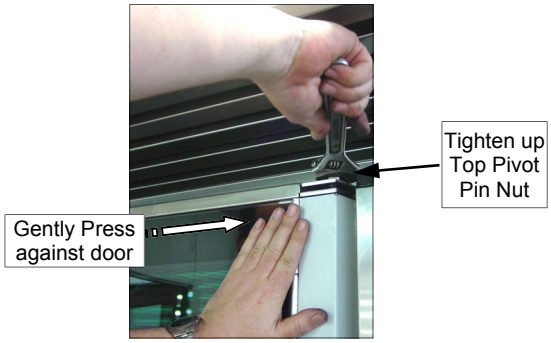


Figure 6.4.4

2) Repeat for the lower hinge.

6.4.5 DOOR LATCH ADJUSTMENT (From Lot No.0818001)

1) Open the oven door to reveal the locking dog.

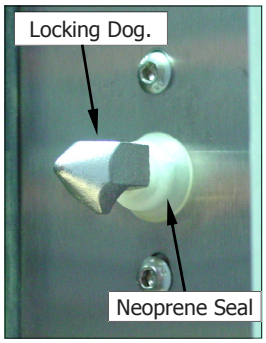


Figure 6.4.5a

2) Pull back the neoprene seal to reveal the lock nut.

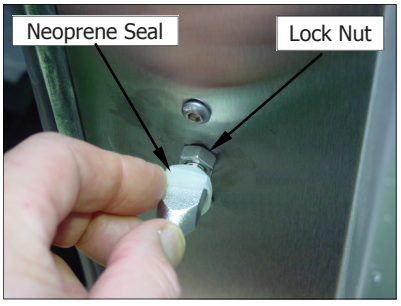


Figure 6.4.5b

3) Slacken the lock nut.
4) Adjust the locking dog to the required position.
5) Slam the door shut and ensure that the door is not a loose fit when closed and that pressure is maintained against the door seal.
6) Continue to adjust the locking dog until the door shuts correctly.
7) Tighten up the lock nut and reposition the neoprene seal over the lock nut.

6.4.6a REVERSING THE DOOR (Up to Lot No.0817099)

1) Open the oven door.
2) Undo the top and bottom door hinge pivot pins (whilst supporting the door). Remove the oven door.

Figure 6.4.6a

3) Undo the bolts securing the top hinge plate and bottom hinge plate to the left hand side of the oven door opening and remove.

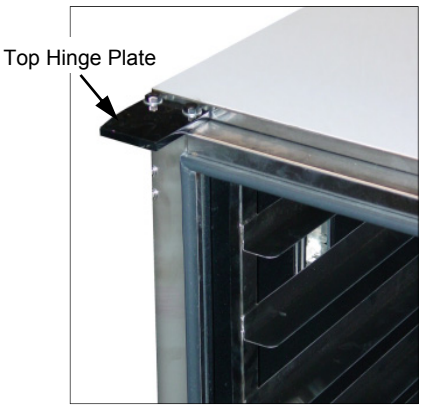


Figure 6.4.6b

4) Remove the bolt catches (secured by two screws each) from the right hand side of the door frame, and secure to the left hand side of the door frame.

Figure 6.4.6c

5) Remove the microswitch nut.

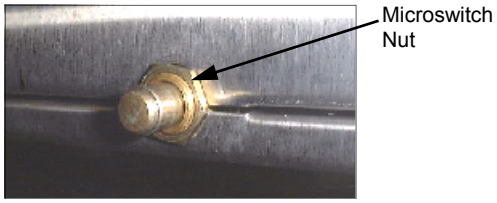


Figure 6.4.6d

6) Undo the three screws securing the micro-switch cover panel to the bottom of the oven.

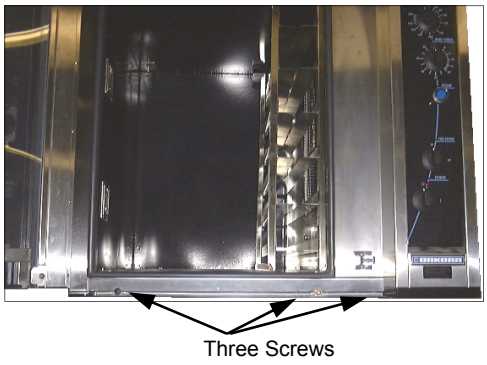


Figure 6.4.6e

7) Undo the 2 screws securing the microswitch mounting bracket to the cover panel, turn the bracket around, and re-secure the micro-switch (facing the other way).

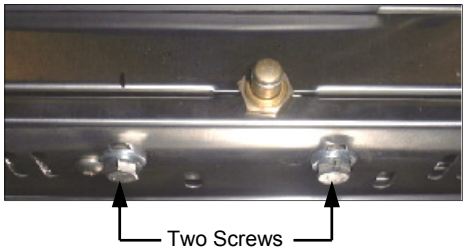


Figure 6.4.6f

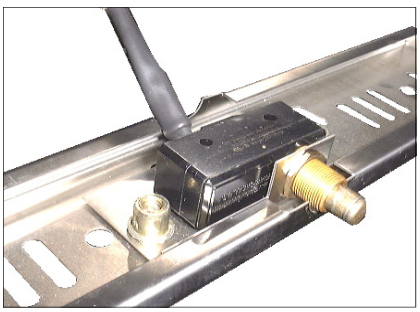


Figure 6.4.6g

8) Refit the cover panel to the bottom of the oven with the microswitch at the left hand side of the oven.

9) Fit the top and bottom hinge plates (removed in step 2) to the right hand side of the oven door opening. (The plates should be turned upside-down from their position on the left hand side of the oven).

10) Turn the door over and refit the pivot pins to the hinge plates to secure the door to the right hand side of the door opening.

11) Check the operation of the door microswitch and adjust as necessary.

NOTE:

The door handle mechanism will now operate in the 'Up' direction rather than in the 'Down' direction.

6.4.6b REVERSING THE DOOR (From Lot No.0818001)

1) Isolate the oven from the mains power supply.
2) Close the oven door.
3) Loosen the upper pivot pin nut (this will assist when re-assembling door to oven).
4) Undo and remove the securing bolts securing the top hinge bracket to the oven. **Take care to support the oven door**.

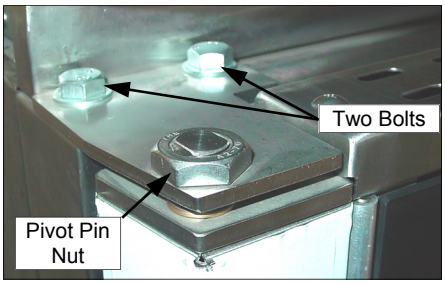


Figure 6.4.6h

5) Lift and remove the door and top hinge plate from the oven.
6) Loosen the lower pivot pin nut (this will assist when re-assembling door to oven).
7) Remove the 3 bolts from the lower hinge bracket and remove the bracket from the oven.

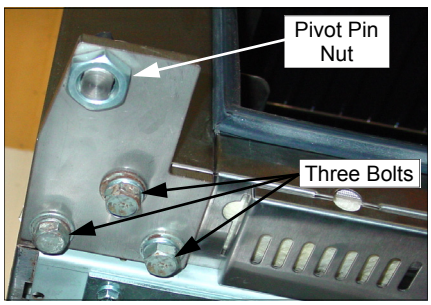


Figure 6.4.6i

8) Remove the bottom sill by removing the 3 screws securing the sill to the oven.

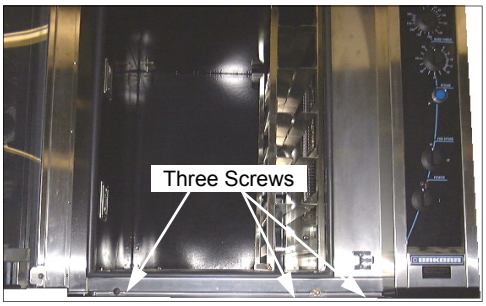


Figure 6.4.6j

9) Loosen nut on front of microswitch, located at bottom right of door frame.

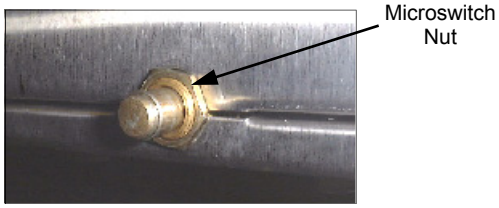


Figure 6.4.6k

10) Unscrew and remove the 2 bolts securing the microswitch bracket to the bottom sill.

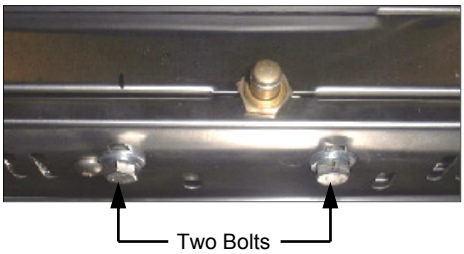


Figure 6.4.6l

11) Remove the microswitch from the bottom sill.
12) Rotate the bottom bracket by 180º.
13) Refit the microswitch bracket in new position at the door handle end of the door opening.

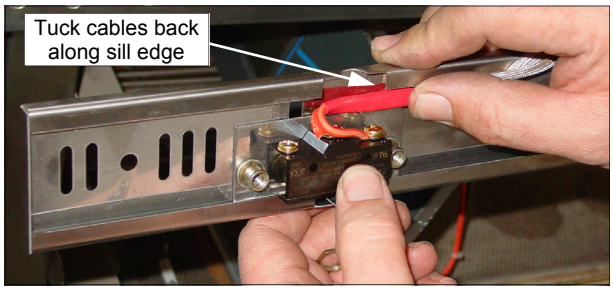


Figure 6.4.6m

NOTE:

Ensure microswitch cables are tucked back along the edge of the bottom sill.

14) Refit the bottom sill to the oven and fit a blanking plug to the old microswitch position.

15) Invert the bottom pivot plate and fit loosely to the opposite side of the door opening.

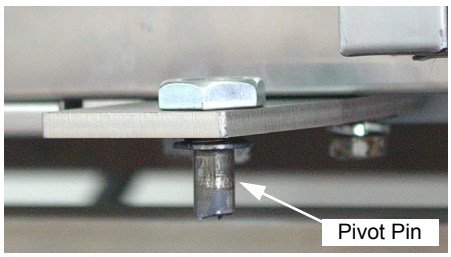


Figure 6.4.6n

16) Remove the pivot pin from the lower bracket and refit to bracket with the pivot pin upwards.

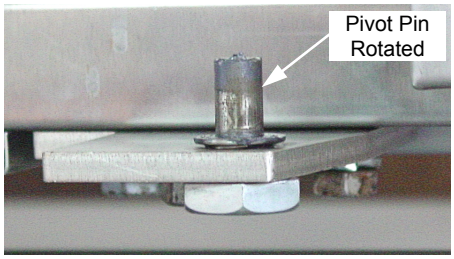


Figure 6.4.6o

17) Invert the top pivot pin in the top mounting bracket, and secure finger tight.

18) Change the door latch over to the opposite side of the door. (refer to 6.3.27b for latch removal / refitting).

19) Remove the blanking screws from the top of the oven and transfer these to the old top hinge position.

20) Carefully rotate the door, bottom side up.

21) Fit the top hinge plate to the door.

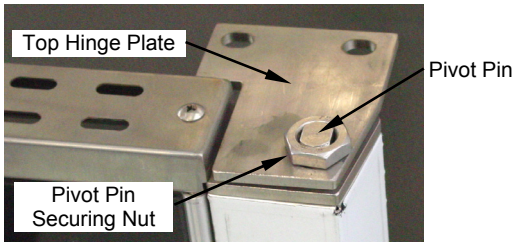


Figure 6.4.6p

22) Lift and fit the door onto the lower pivot.

23) Align the top hinge plate fitted to the door, with the screw holes at the top of the oven and secure the top hinge plate to the top of the oven.

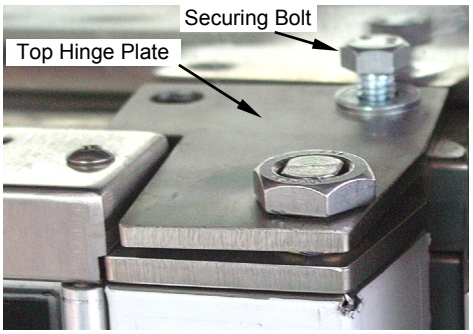


Figure 6.4.6q

24) Align the door with the oven and tighten the top 2 and lower 3 securing bolts.

Door Seal Adjustment:

25) Refer to 6.4.4 for Door Seal Adjustment.

Door Latch Adjustment:

26) Refer to 6.4.5 for Door Latch Adjustment.

Microswitch Adjustment:

27) Refer to 6.4.1 for Door Microswitch Adjustment.

6.4.7 FAN & STEAM TIMER OPERATION / ADJUSTMENT (Up to Lot No.0817099)

All the timers have a dial on the front that adjusts the time the timer switches for when control energised. All the timers have an LED on the front that flashes when the timer is switched.

T1 Fan Cycle Timer
This timer switches power between the clockwise and anti-clockwise fan direction circuits, the time set is the duration on each fan direction.

Factory set to 1 $^{1}/_{2}$ minute.

Refer to Appendix C for timer settings.

T2 & T4 Steam Timers (2)
These should be set the same and determine the duration of the steam, one for clockwise fan circuit and one for anti-clockwise fan circuit. If the steam cycle is too long water will condense on the product and oven chamber, and oven may cool too much - it is usually better to have multiple cycles than a long cycle.

Factory set to 10 seconds.

Refer to Appendix C for timer settings.

T3 & T5 Dwell Timers (2)
Once again these should be set the same, this is the delay time between fan directions and after steaming, when no power is applied to the fan motor. One is for the clockwise fan circuit and one is for the anti-clockwise fan circuit.

Factory set to 10 seconds.

Refer to Appendix C for timer settings.

Figure 6.4.7 shows the function of the timers on a time line. The grey areas are when a timer is switched (LED flashing) or where fan is rotating / steam injecting. The dark lines show when the steam button has been pressed, the first is most common while the next two show the effect of steaming at the beginning or end of a direction cycle. Priority (power flow) is top to bottom on the chart (cycle timer effects all others)

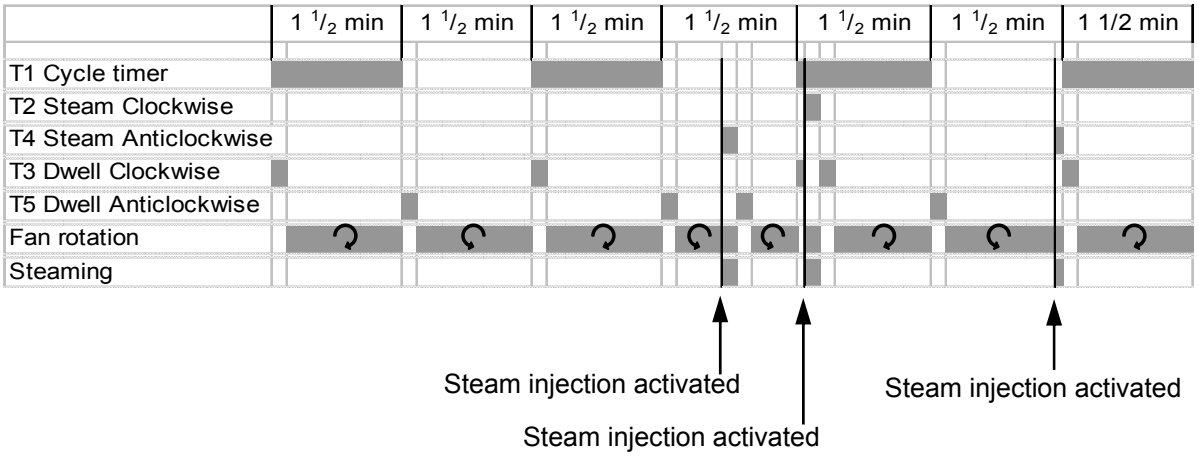
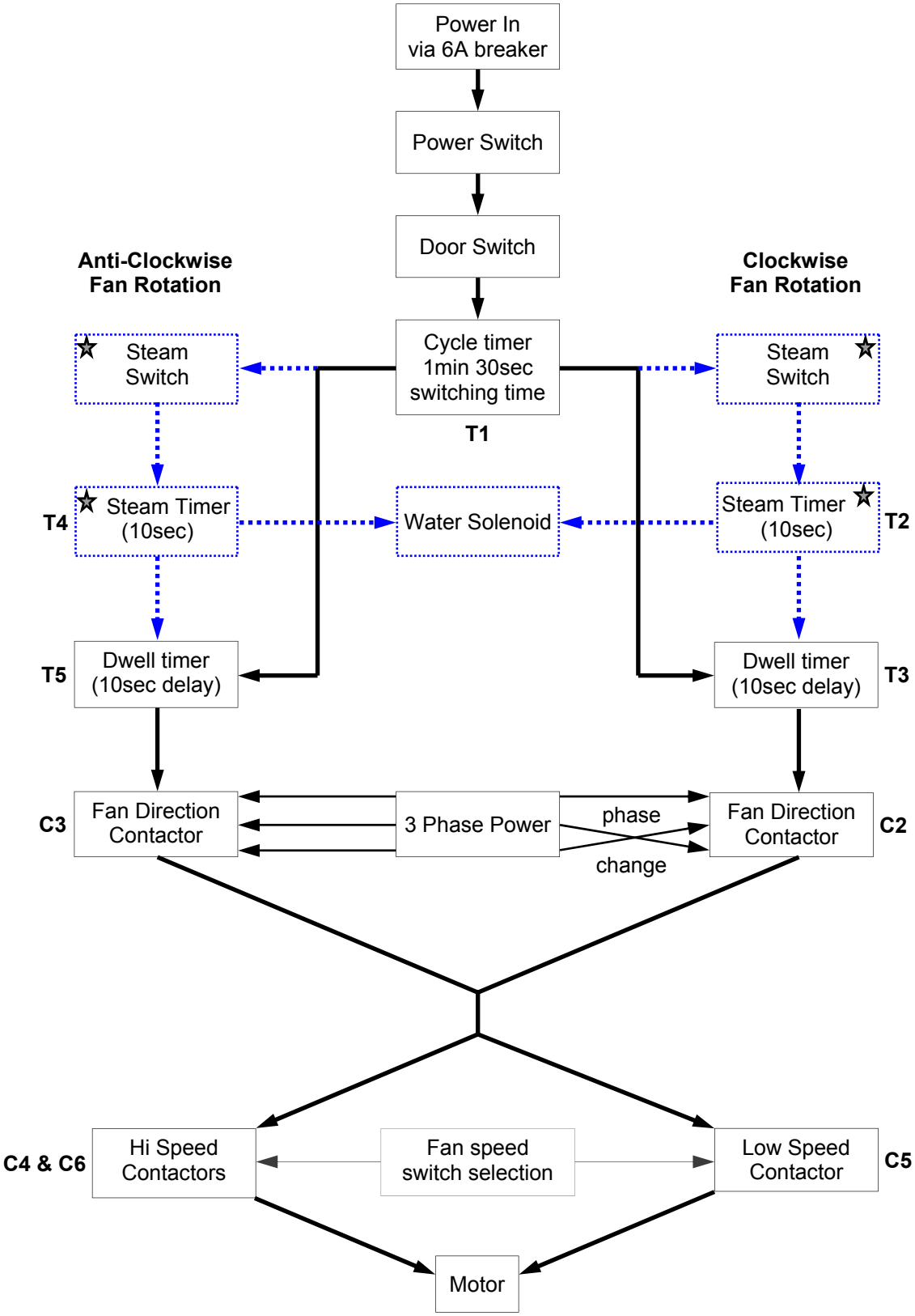


Figure 6.4.7

Fan / Steam Flow Chart (Pre Lot No.0818001)

This is a guide only, for accurate representation of all connections refer to the wiring chart.



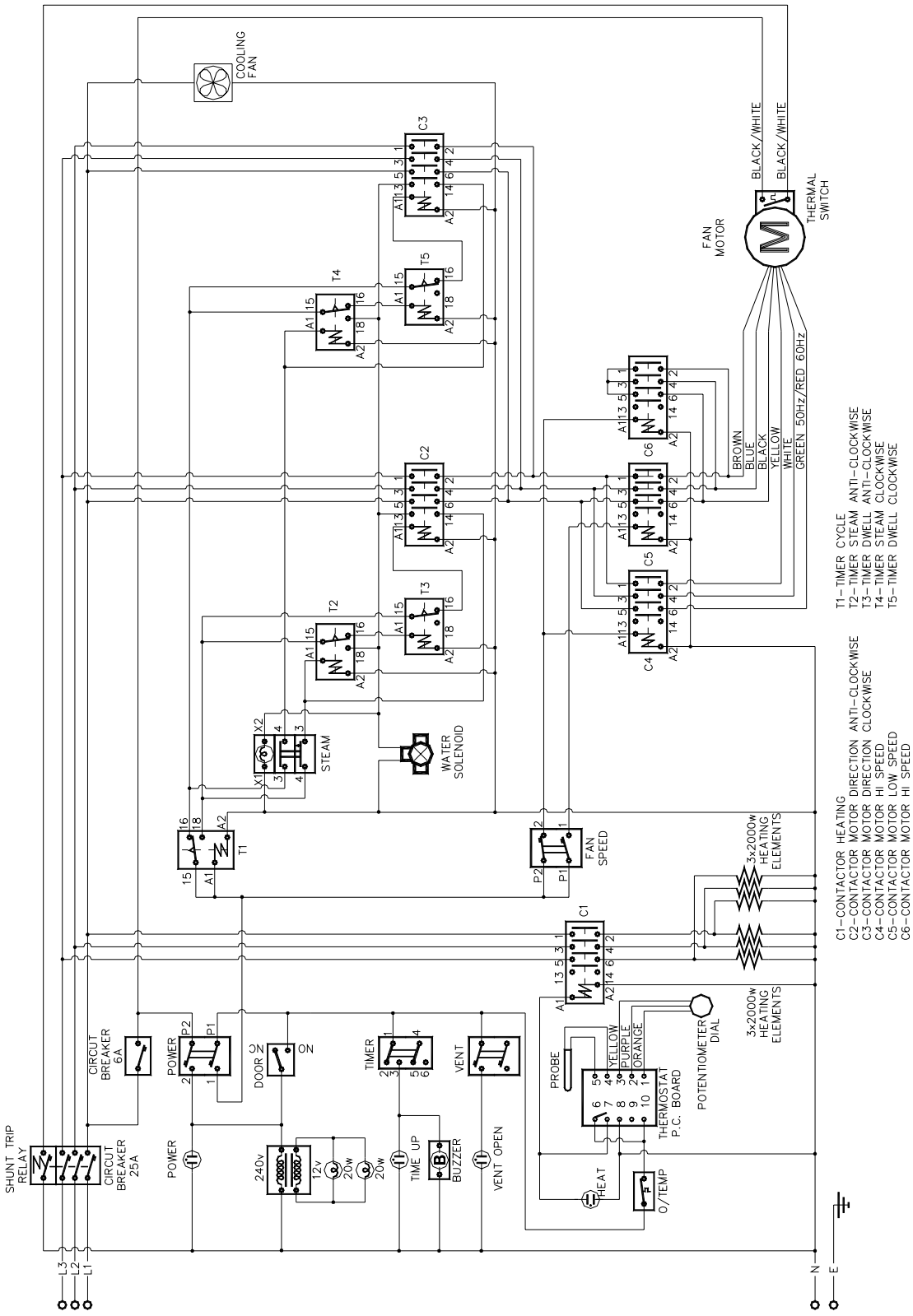
☆ Steam switch on control panel - manual activation.

☆ Timers T4 and T2 only operate when steaming (otherwise is direct connection).

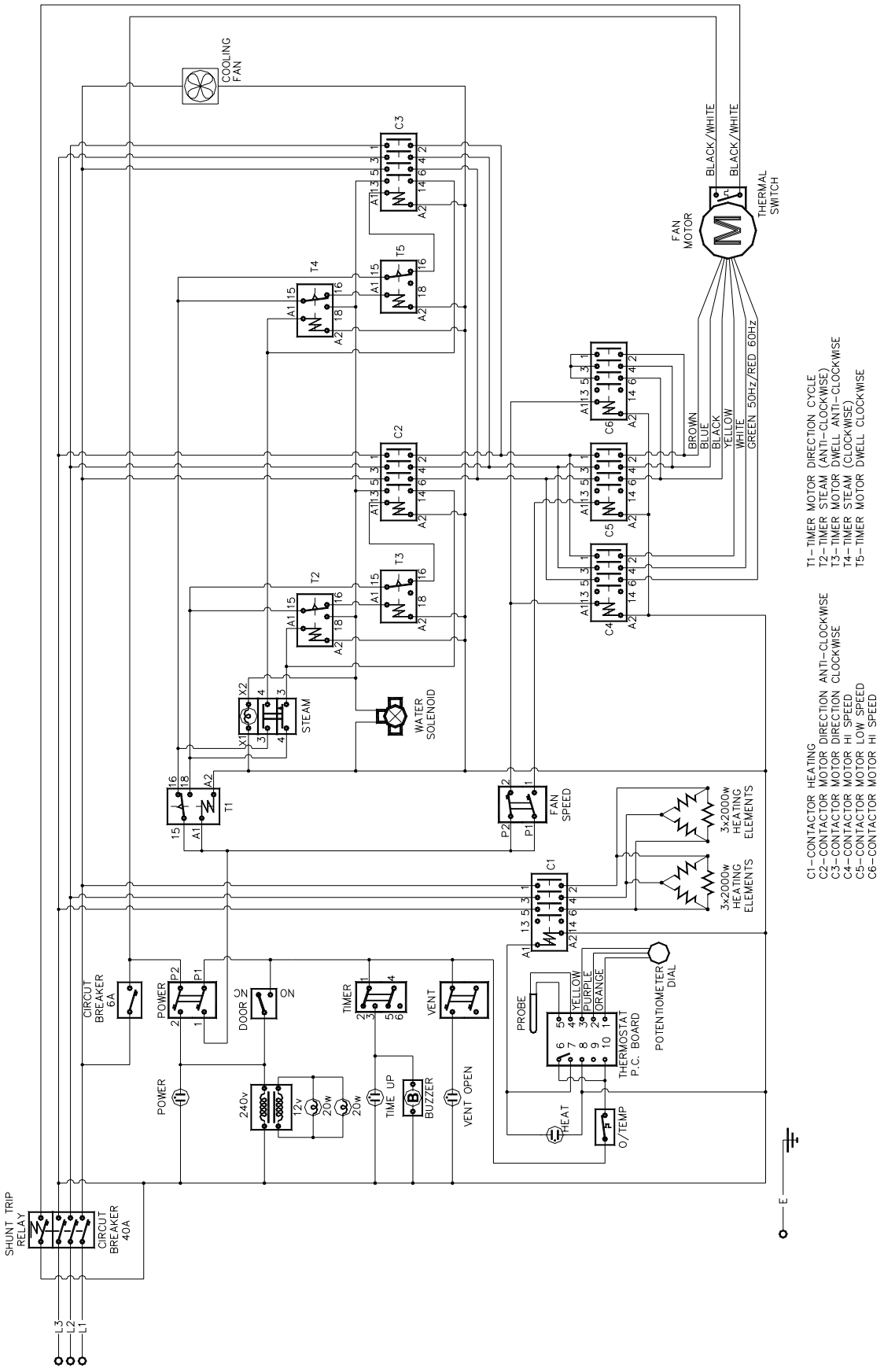
7. ELECTRICAL CIRCUIT SCHEMATIC

7.1 E35 MODELS UP TO LOT NUMBER 0817999

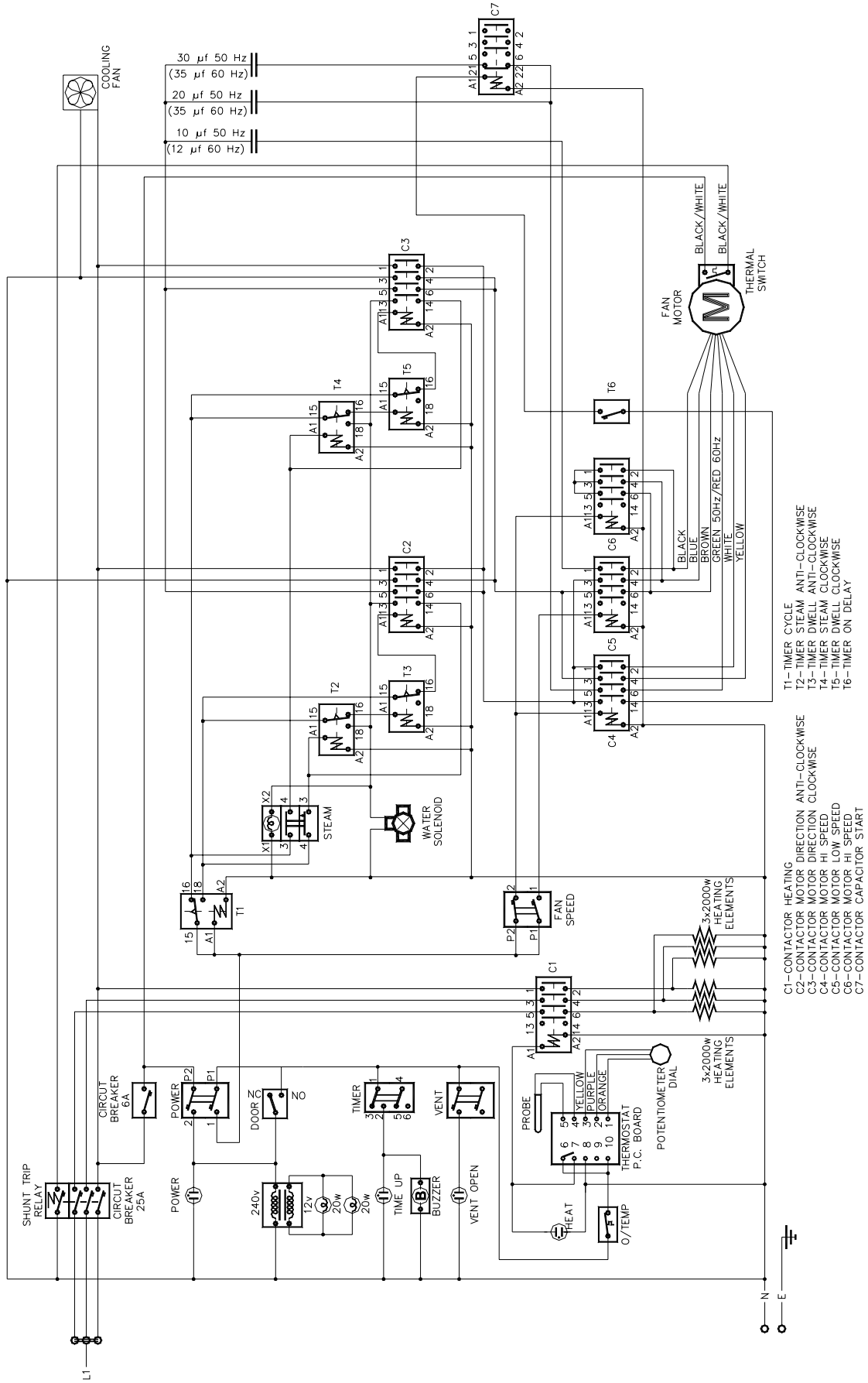
7.1.1 380-415V, 3P+N+E (Up to Lot No. 0817999)



7.1.2 208-240V, 3P+E (up to lot number 0817999)

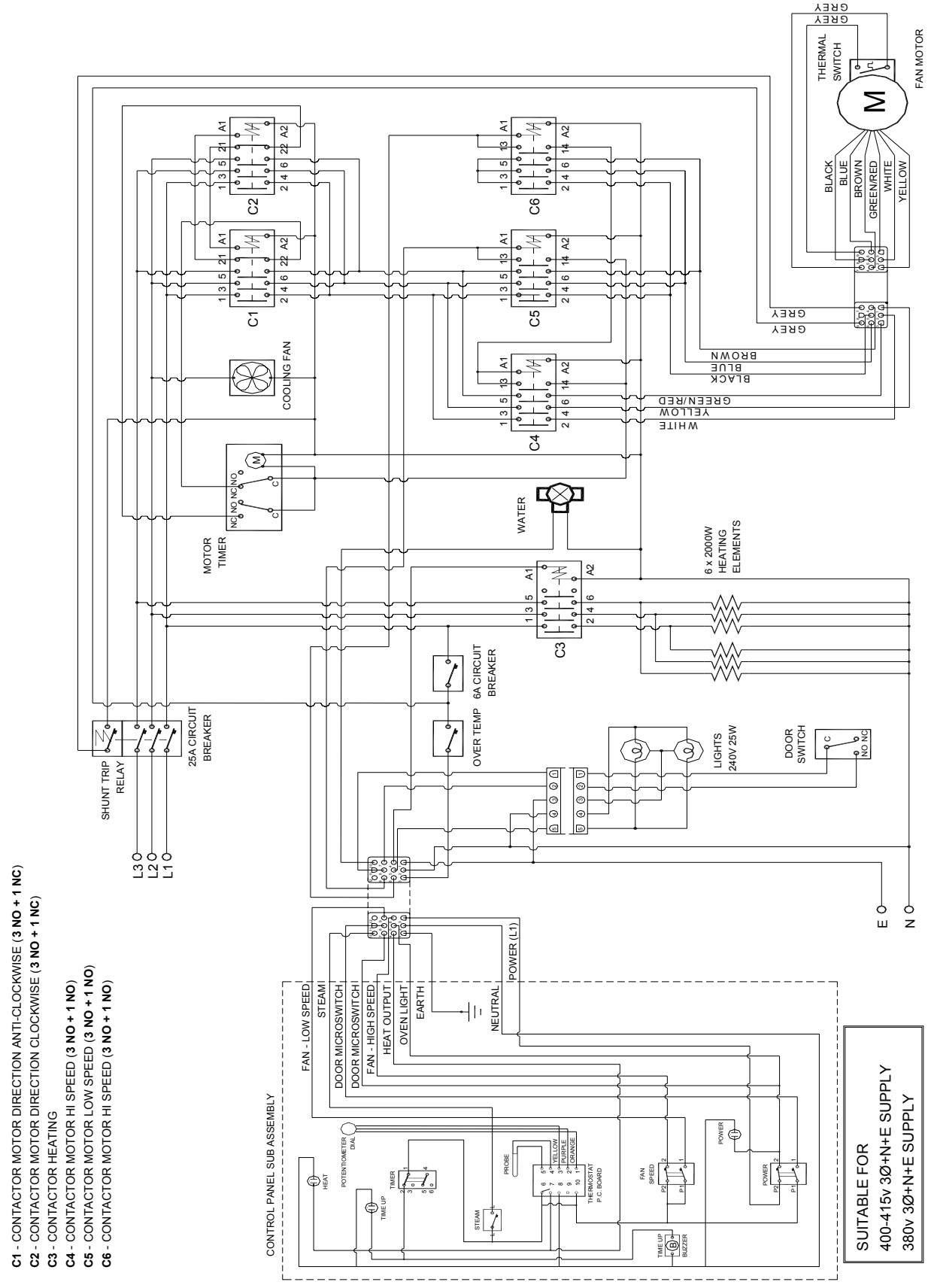


7.1.3 208-240V, 1P+N+E (up to lot number 0817999)

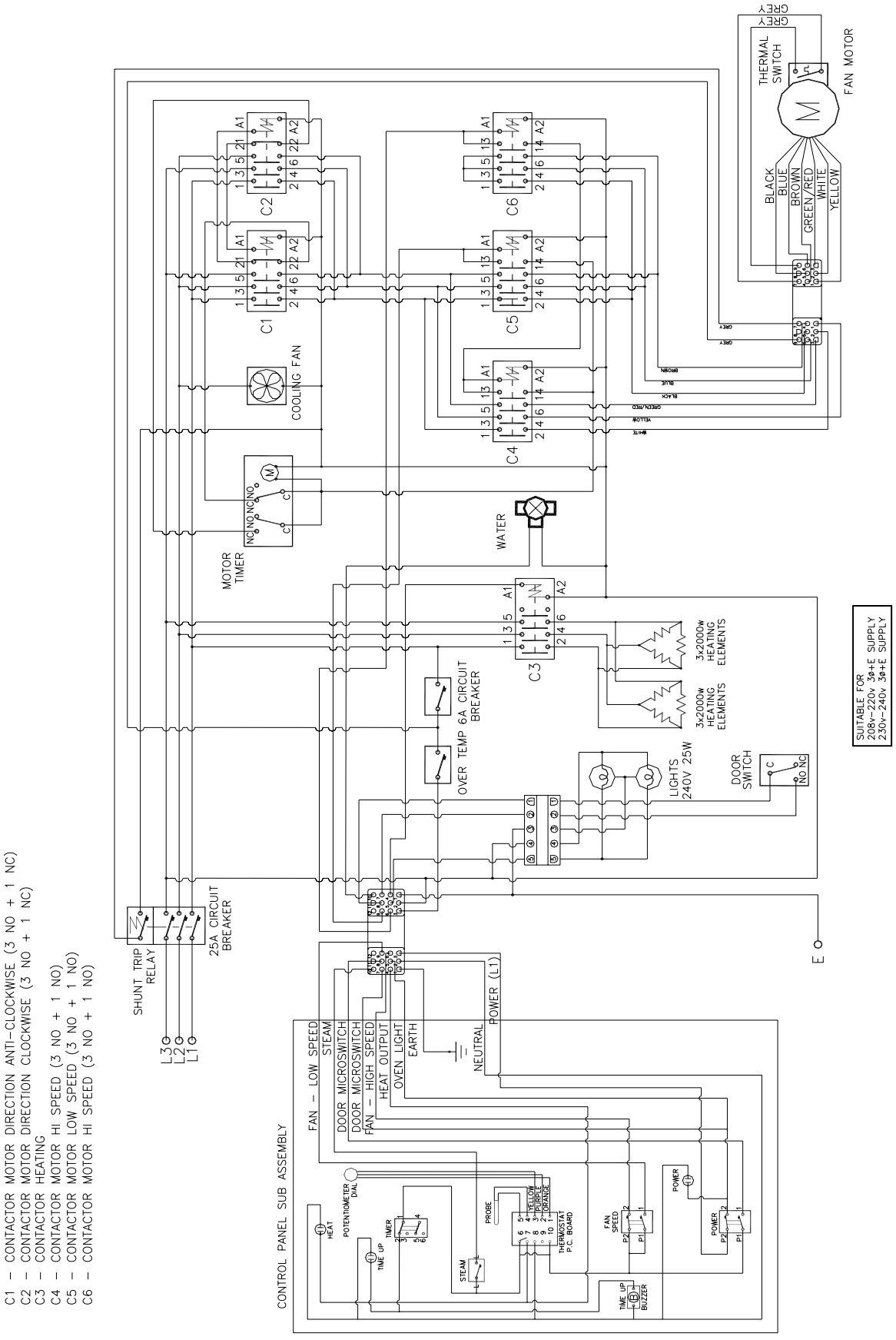


7.2 E35 MODELS FROM LOT NUMBER 0818001

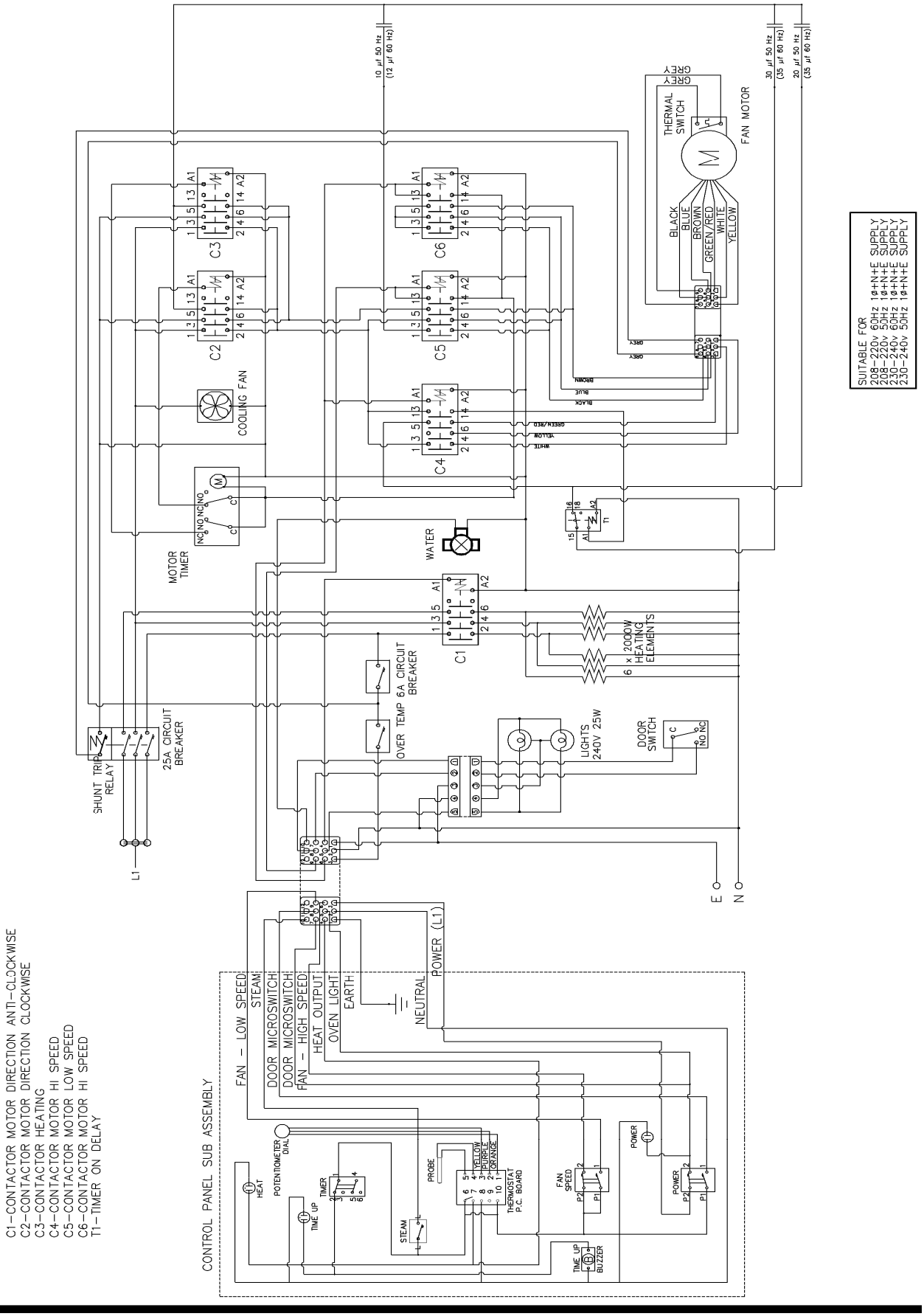
7.2.1 380-415V, 3P+N+E (from lot number 0818001)



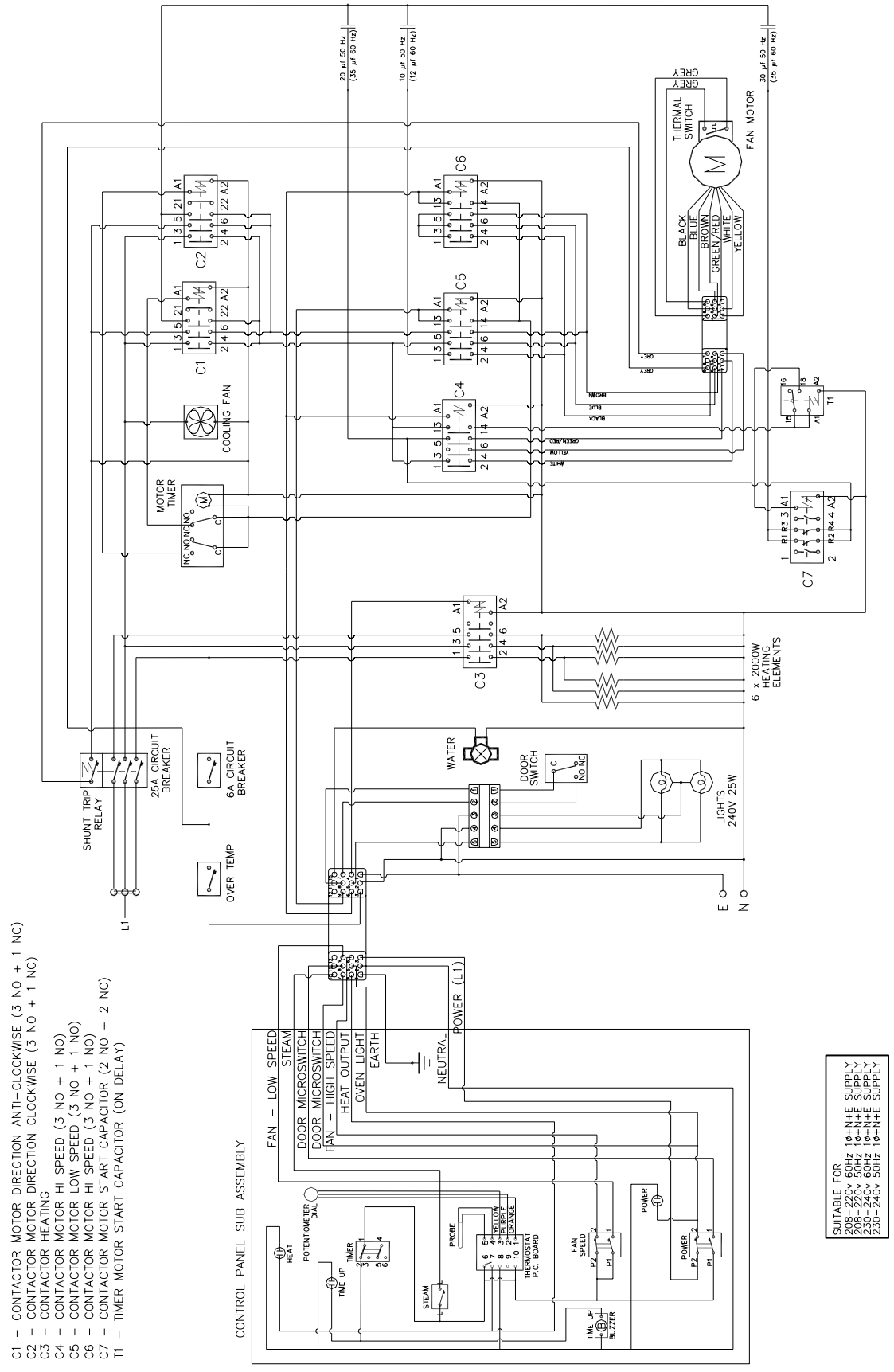
7.2.2 208-240V, 3P+E (from lot number 0818001)



7.2.3 208-240V, 1P+N+E (from lot number 0818001 to lot number 0938xxx)



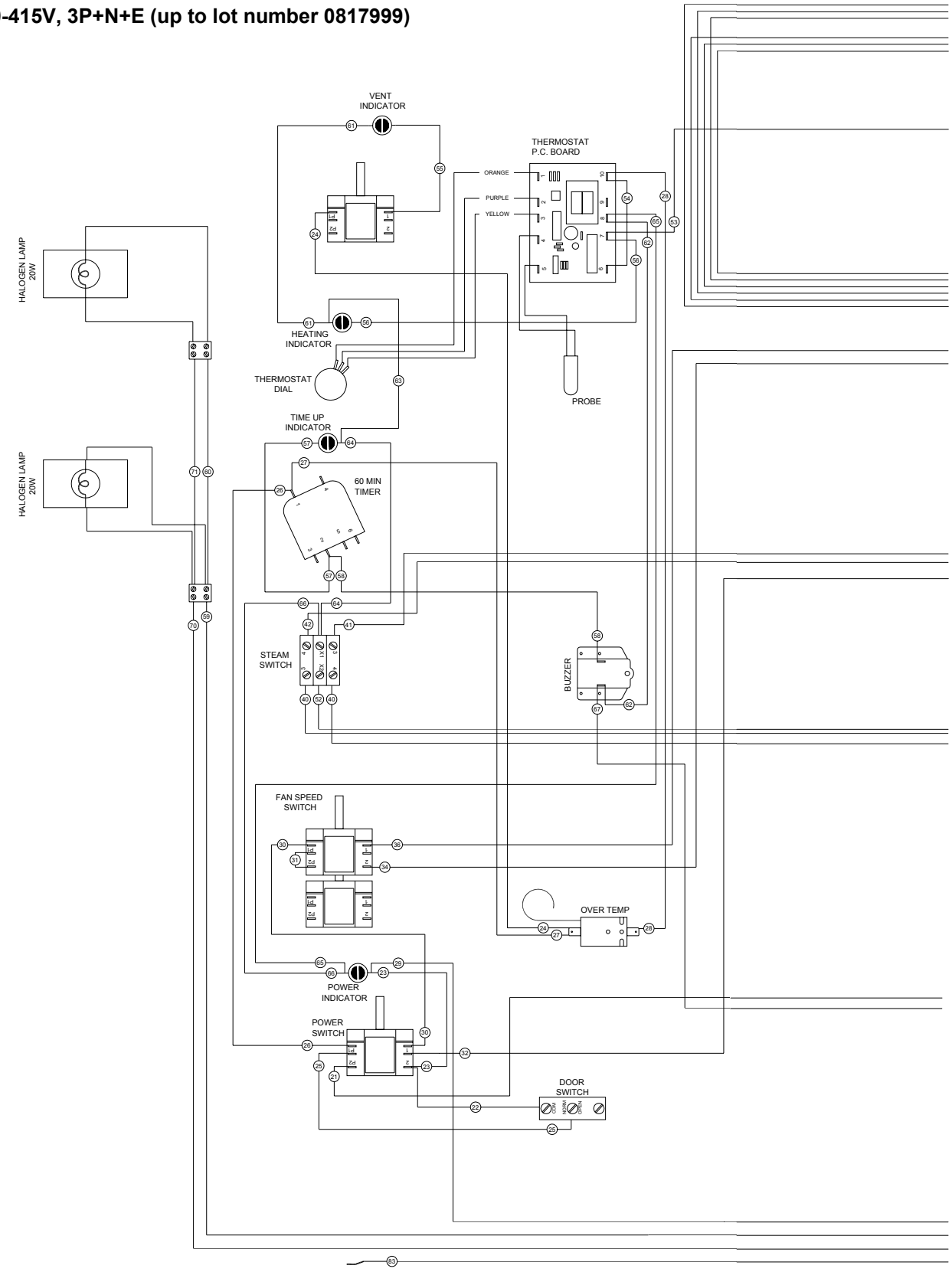
7.2.4 208-240V, 1P+N+E (from lot number 0938xxx)

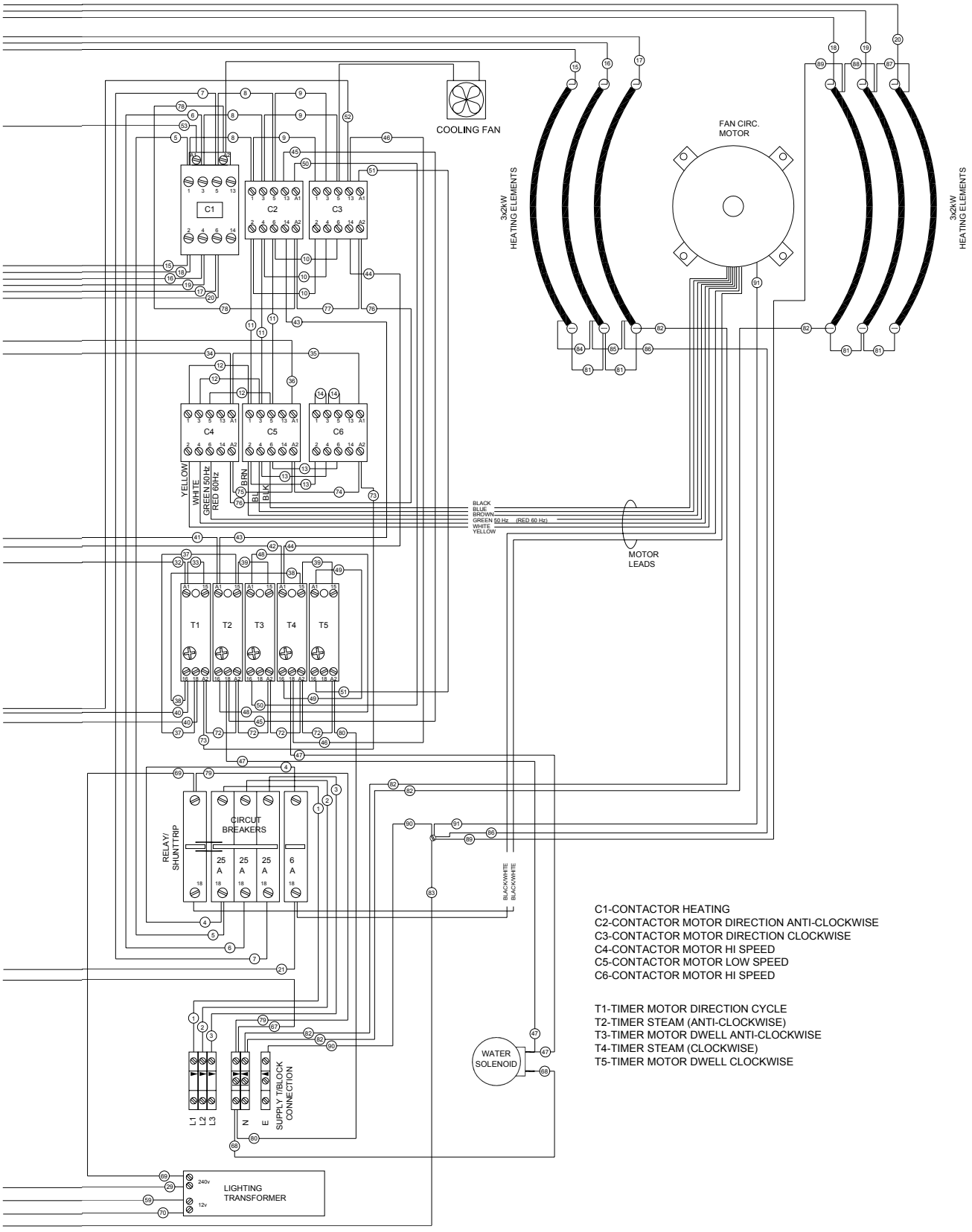


8. ELECTRICAL WIRING DIAGRAM

8.1 E35 MODELS UP TO LOT NUMBER 0817999

8.1.1 380-415V, 3P+N+E (up to lot number 0817999)

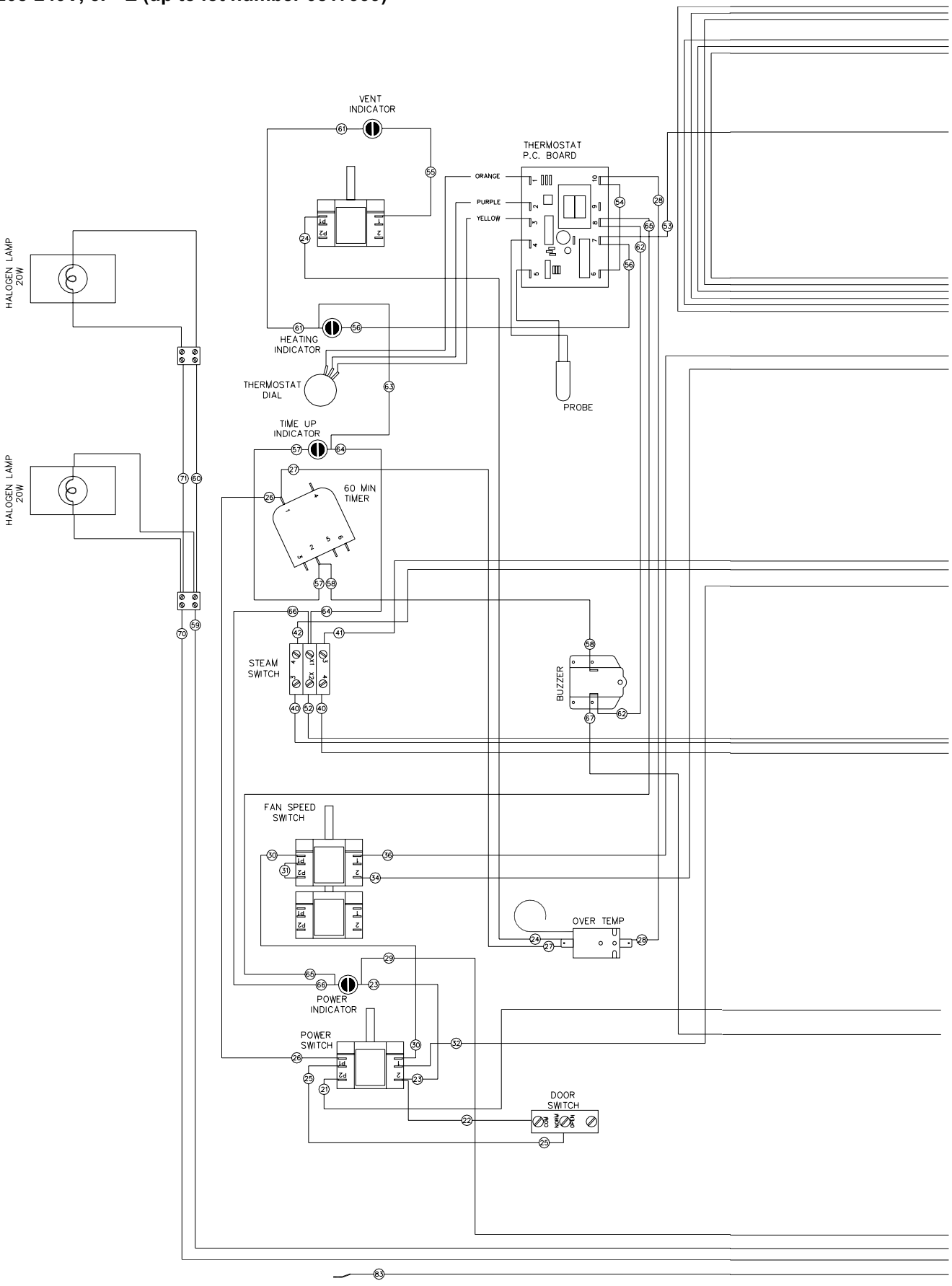


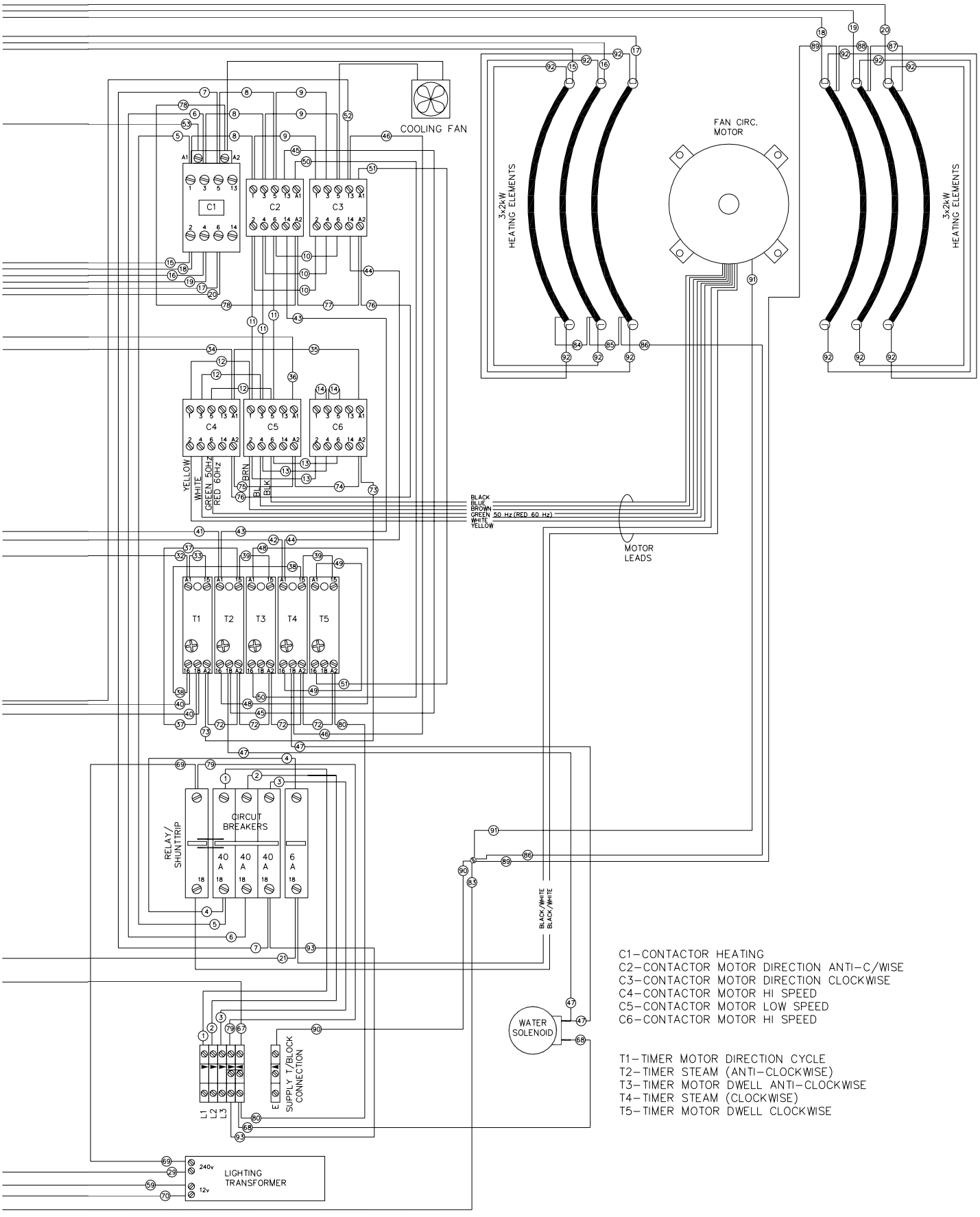


C1-CONTACTOR HEATING
C2-CONTACTOR MOTOR DIRECTION ANTI-CLOCKWISE
C3-CONTACTOR MOTOR DIRECTION CLOCKWISE
C4-CONTACTOR MOTOR HI SPEED
C5-CONTACTOR MOTOR LOW SPEED
C6-CONTACTOR MOTOR HI SPEED

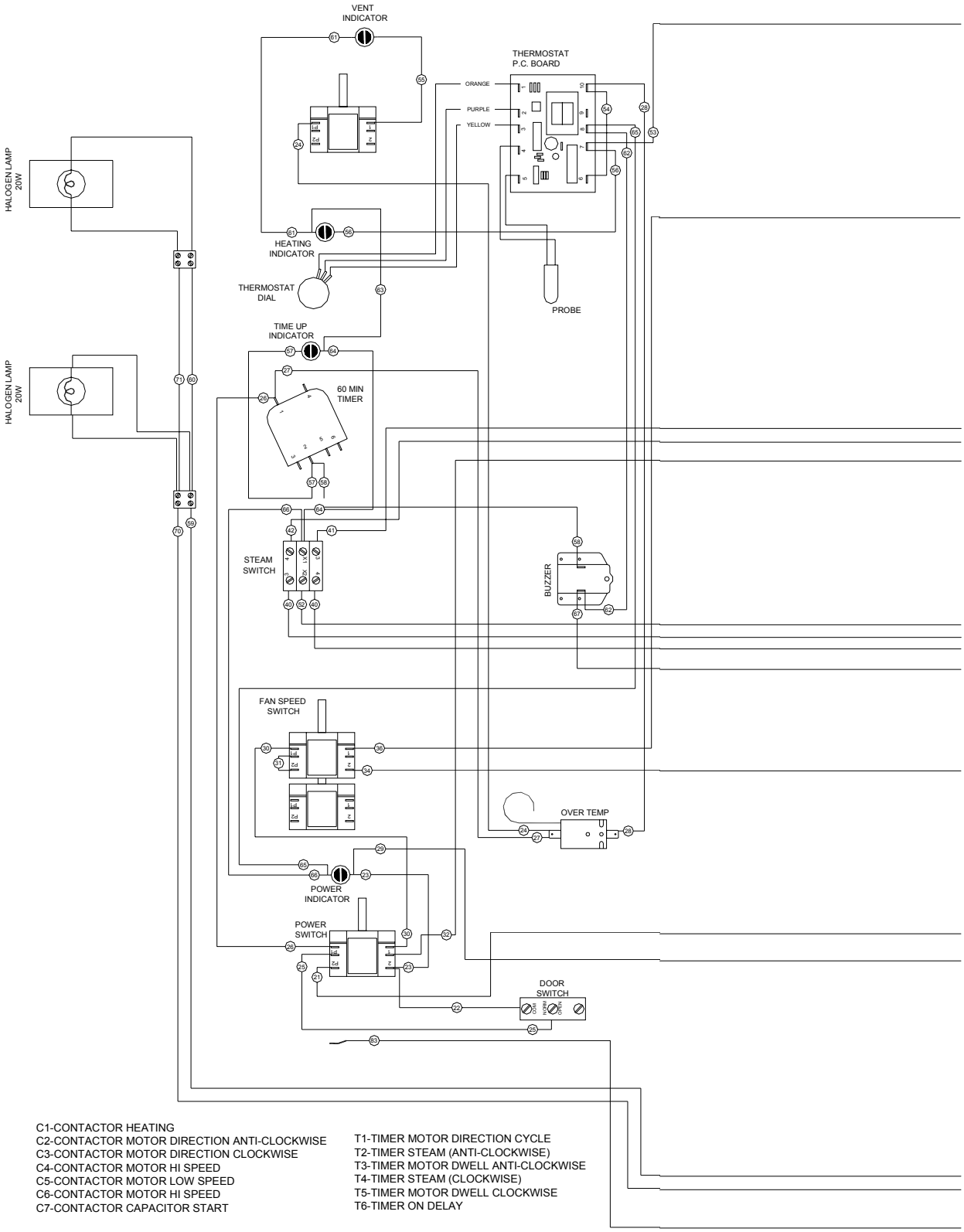
T1-TIMER MOTOR DIRECTION CYCLE
T2-TIMER STEAM (ANTI-CLOCKWISE)
T3-TIMER MOTOR DWELL ANTI-CLOCKWISE
T4-TIMER STEAM (CLOCKWISE)
T5-TIMER MOTOR DWELL CLOCKWISE

8.1.2 208-240V, 3P+E (up to lot number 0817999)



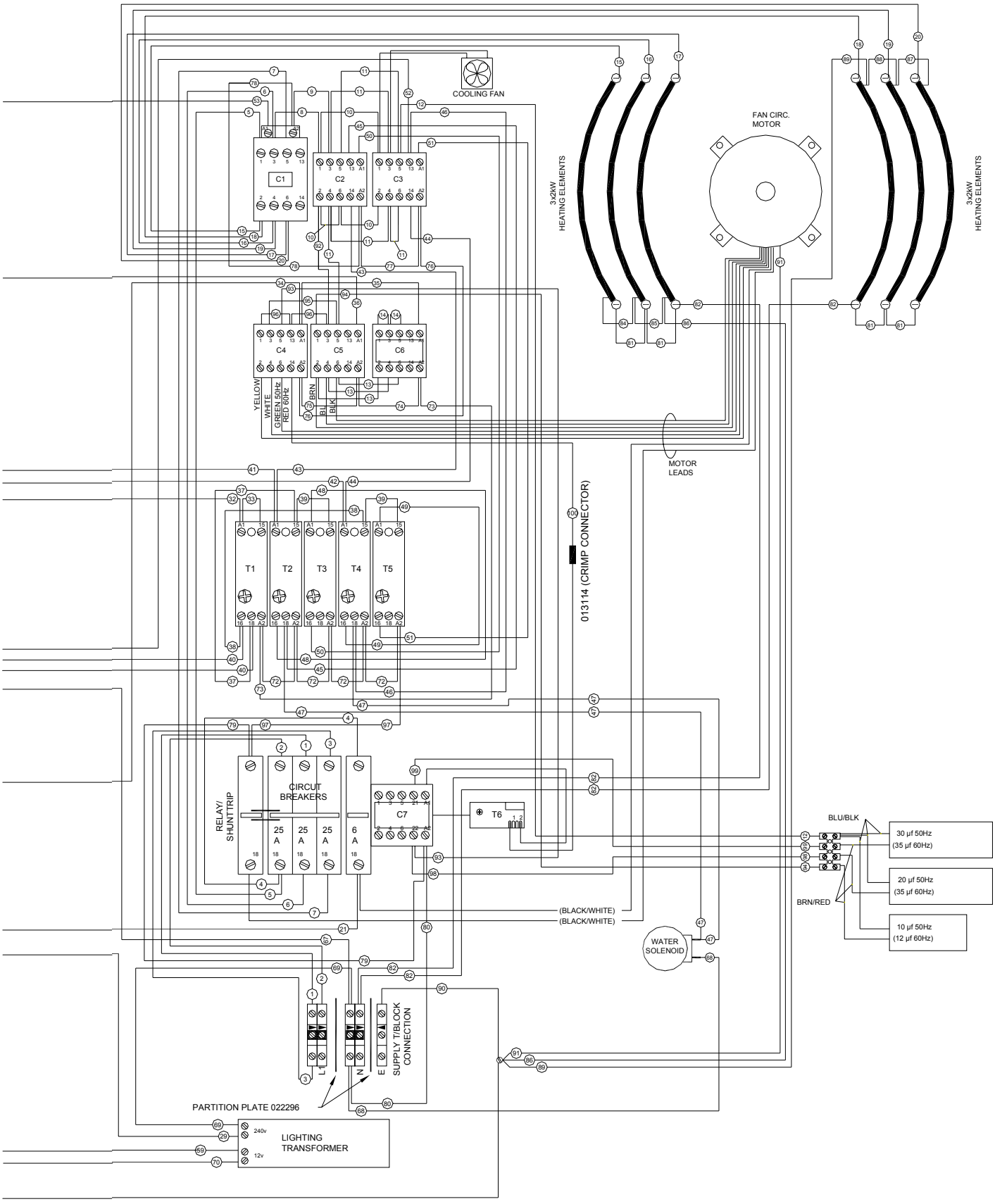


8.1.3 208-240V, 1P+N+E (up to lot number 0817999)



C1-CONTACTOR HEATING
C2-CONTACTOR MOTOR DIRECTION ANTI-CLOCKWISE
C3-CONTACTOR MOTOR DIRECTION CLOCKWISE
C4-CONTACTOR MOTOR HI SPEED
C5-CONTACTOR MOTOR LOW SPEED
C6-CONTACTOR MOTOR HI SPEED
C7-CONTACTOR CAPACITOR START

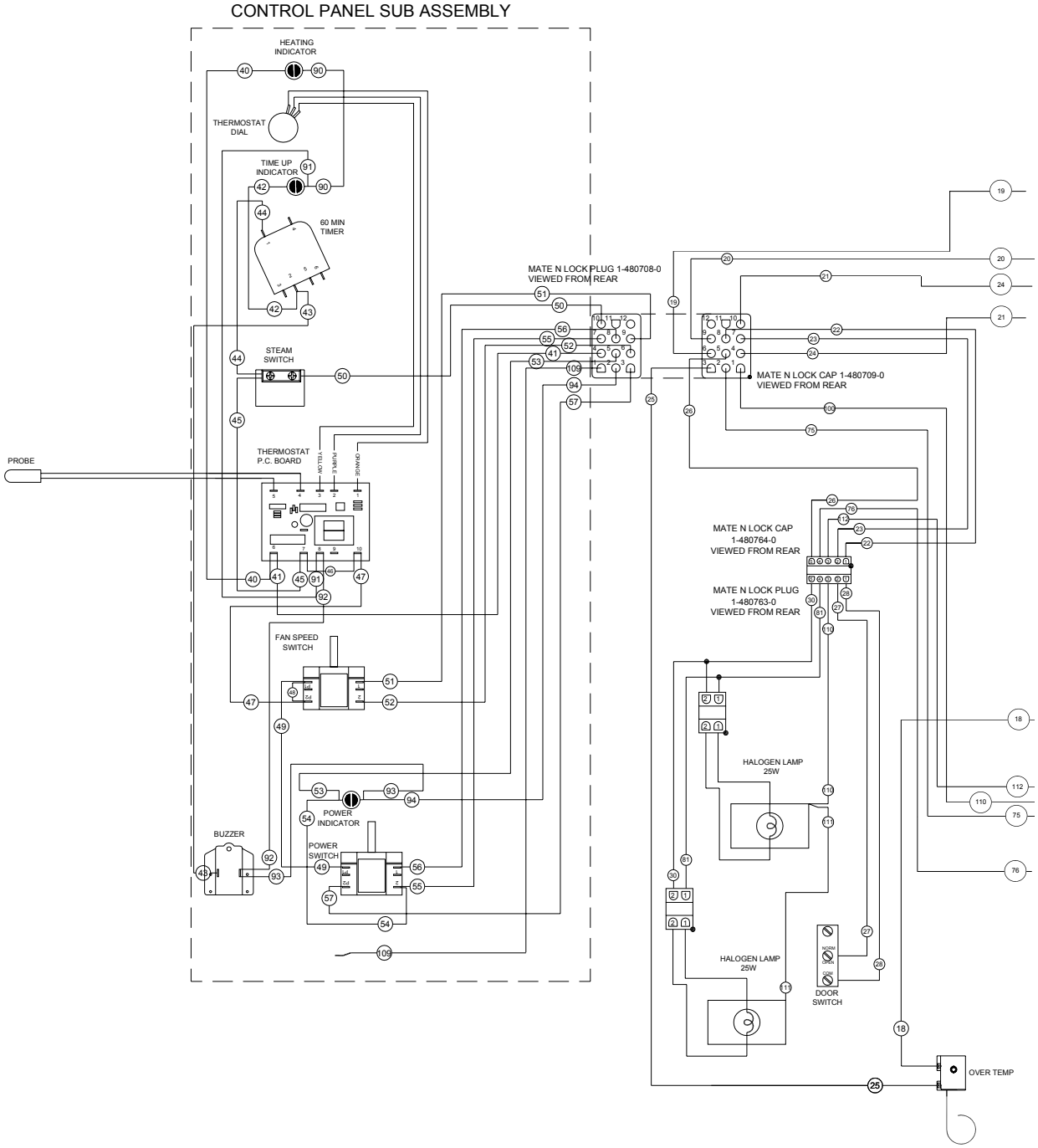
T1-TIMER MOTOR DIRECTION CYCLE
T2-TIMER STEAM (ANTI-CLOCKWISE)
T3-TIMER MOTOR DWELL ANTI-CLOCKWISE
T4-TIMER STEAM (CLOCKWISE)
T5-TIMER MOTOR DWELL CLOCKWISE
T6-TIMER ON DELAY

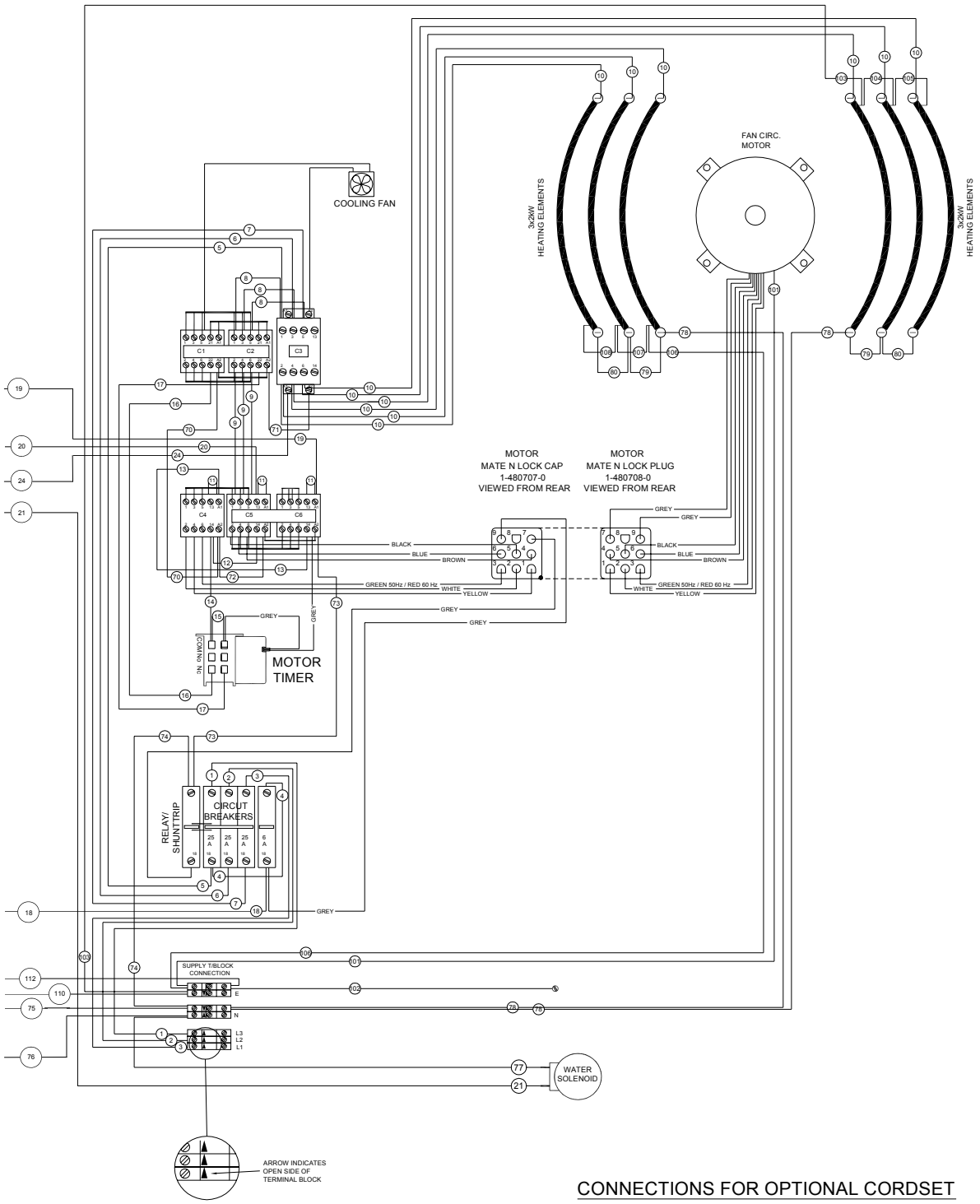


8.2 E35 MODELS FROM LOT NUMBER 0818001

8.2.1 380-415V, 3P+N+E (from lot number 0818001)

C1 - CONTACTOR MOTOR DIRECTION ANTI-CLOCKWISE (**3 NO + 1 NC**)
C2 - CONTACTOR MOTOR DIRECTION CLOCKWISE (**3 NO + 1 NC**)
C3 - CONTACTOR HEATING
C4 - CONTACTOR MOTOR HI SPEED (**3 NO + 1 NO**)
C5 - CONTACTOR MOTOR LOW SPEED (**3 NO + 1 NO**)
C6 - CONTACTOR MOTOR HI SPEED (**3 NO + 1 NO**)





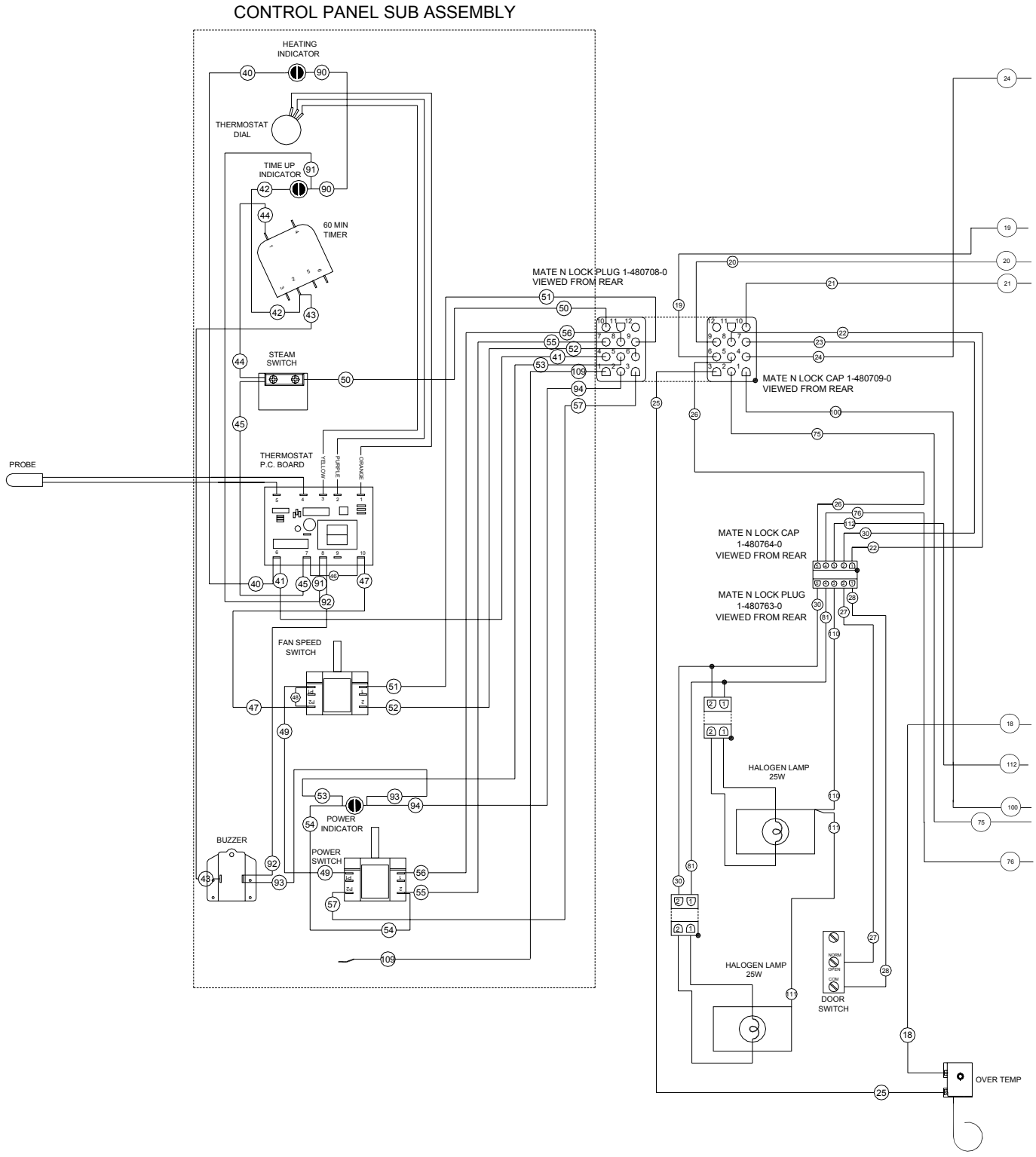
SUITABLE FOR
400-415v 3Ø+N+E SUPPLY
380v 3Ø+N+E SUPPLY

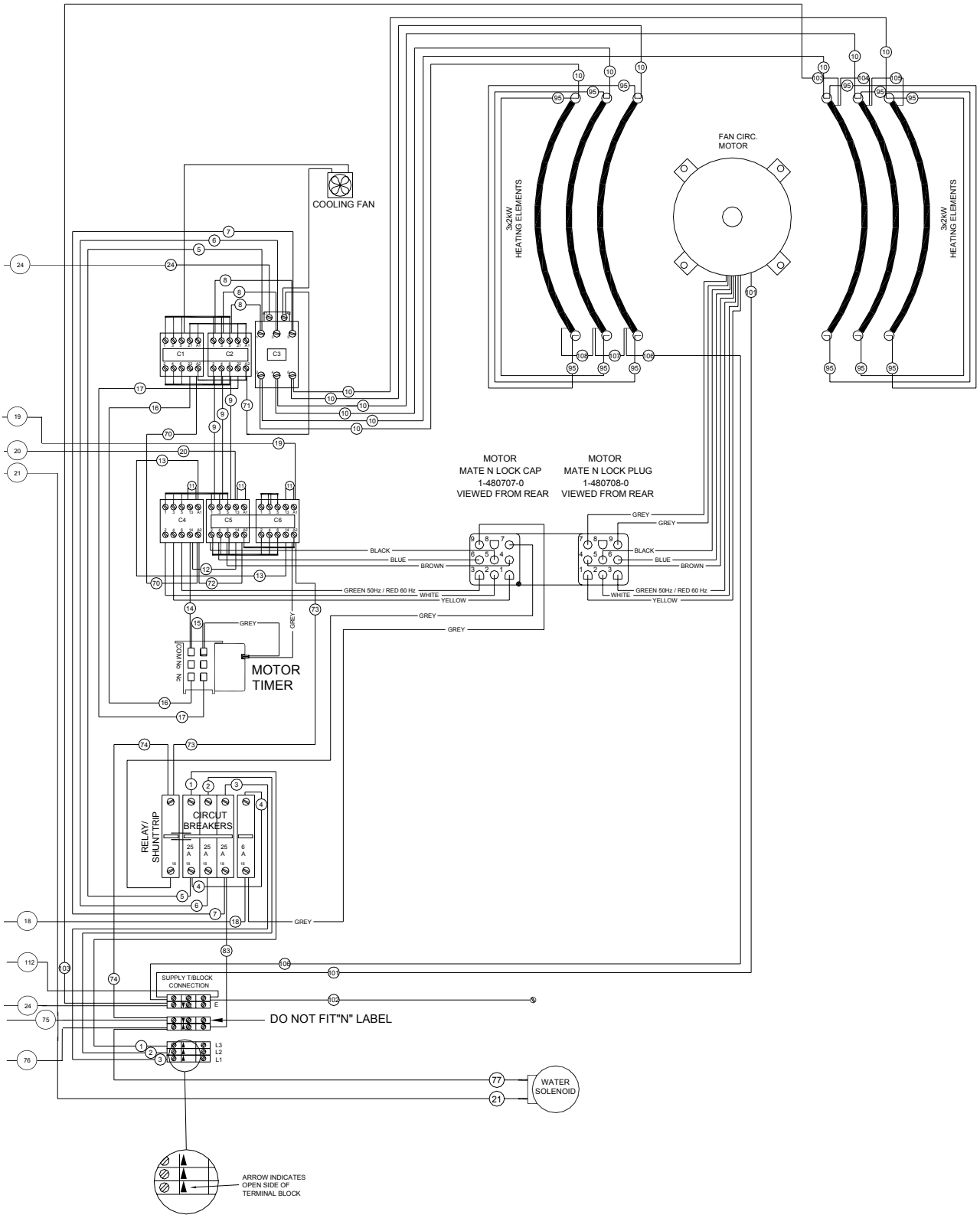
CONNECTIONS FOR OPTIONAL CORDSET

EARTH	= GREEN / YELLOW
NEUTRAL	= BLUE
LINE 1	= BROWN
LINE 2	= BLACK
LINE 3	= GREY

8.2.2 208-240V, 3P+E (from lot number 0818001)

C1 - CONTACTOR MOTOR DIRECTION ANTI-CLOCKWISE (**3 NO + 1 NC**)
C2 - CONTACTOR MOTOR DIRECTION CLOCKWISE (**3 NO + 1 NC**)
C3 - CONTACTOR HEATING
C4 - CONTACTOR MOTOR HI SPEED (**3 NO + 1 NO**)
C5 - CONTACTOR MOTOR LOW SPEED (**3 NO + 1 NO**)
C6 - CONTACTOR MOTOR HI SPEED (**3 NO + 1 NO**)





SUITABLE FOR
208v 3Ø+E SUPPLY
220v 3Ø+E SUPPLY
240v 3Ø+E SUPPLY

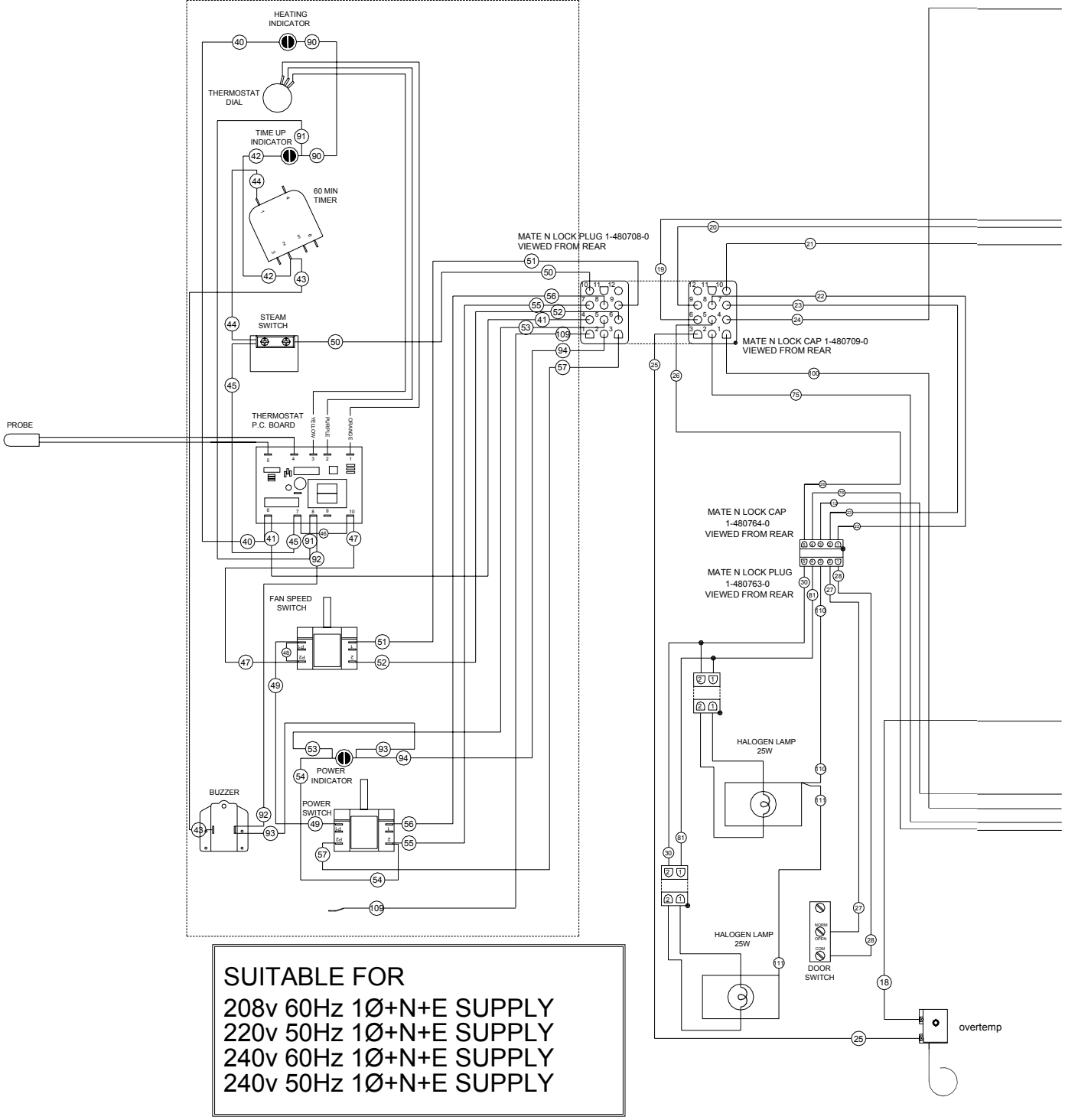
CONNECTIONS FOR OPTIONAL CORDSET

EARTH	= GREEN / YELLOW
LINE 1	= BROWN
LINE 2	= BLACK
LINE 3	= GREY

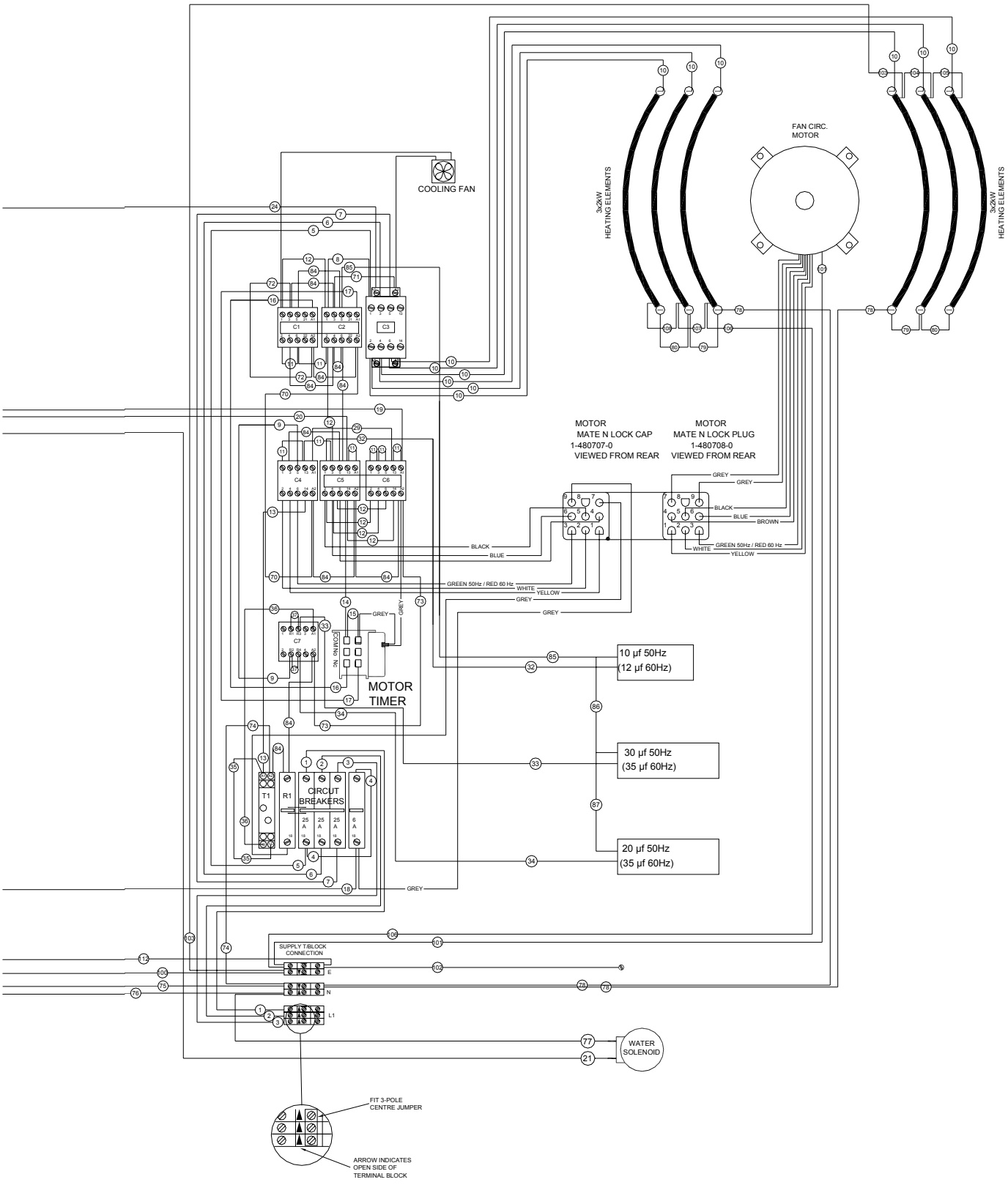
8.2.3 208-240V, 1P+N+E (from lot number 0818001 to lot number 0938xxx)

C1 - CONTACTOR MOTOR DIRECTION ANTI-CLOCKWISE (3NO + 1NC)
C2 - CONTACTOR MOTOR DIRECTION CLOCKWISE (3NO + 1NC)
C3 - CONTACTOR HEATING
C4 - CONTACTOR MOTOR HI SPEED (**3 NO + 1 NO**)
C5 - CONTACTOR MOTOR LOW SPEED (**3 NO + 1 NO**)
C6 - CONTACTOR MOTOR HI SPEED (**3 NO + 1 NO**)
C7 - CONTACTOR MOTOR START CAPACITOR (**2 NO + 2 NC**)
T1 - TIMER MOTOR START CAPACITOR (ON DELAY)
R1 - SHUNT TRIP

CONTROL PANEL SUB ASSEMBLY



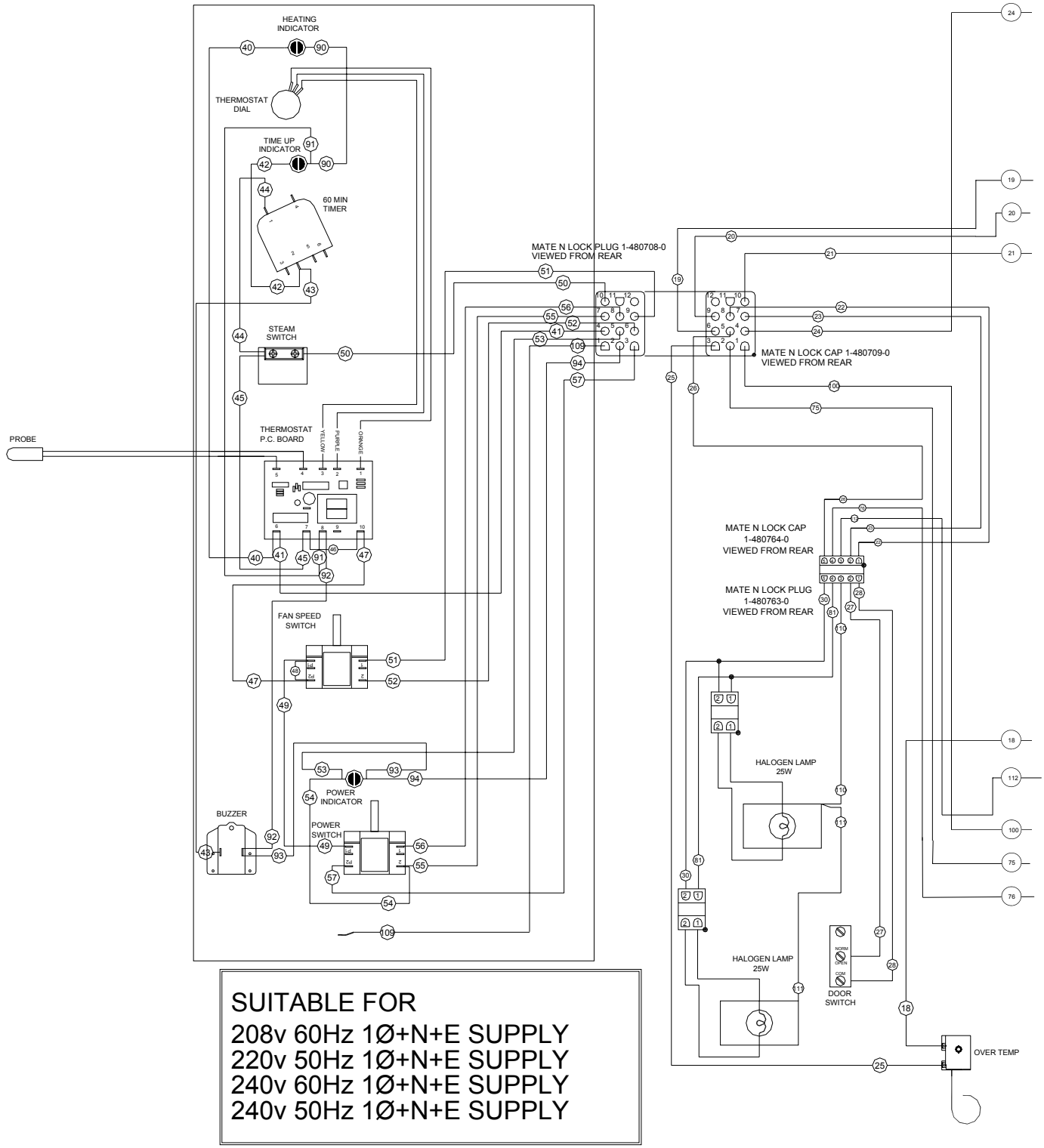
SUITABLE FOR
208v 60Hz 1Ø+N+E SUPPLY
220v 50Hz 1Ø+N+E SUPPLY
240v 60Hz 1Ø+N+E SUPPLY
240v 50Hz 1Ø+N+E SUPPLY



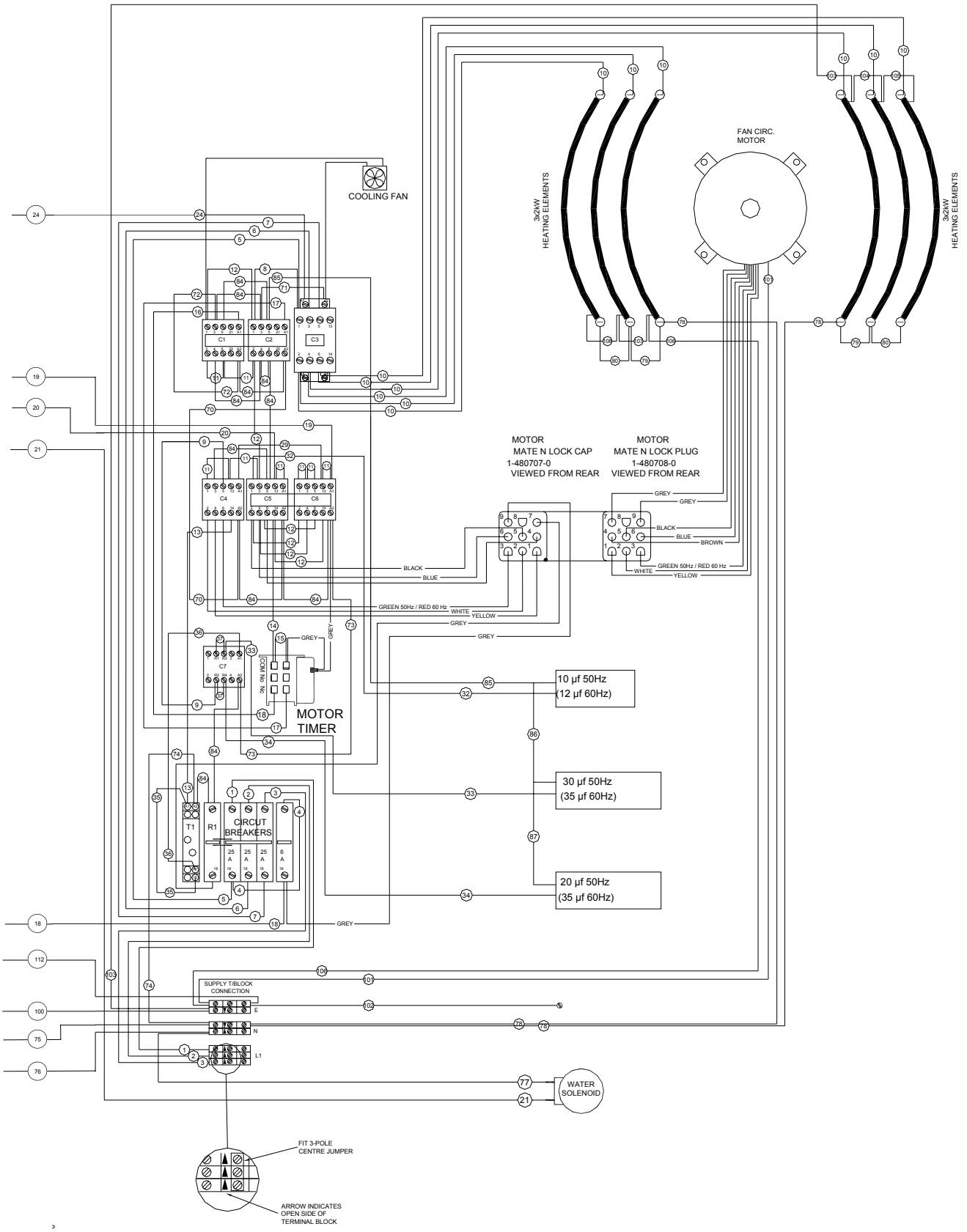
8.2.4 208-240V, 1P+N+E (from lot number 0938xxx)

C1 - CONTACTOR MOTOR DIRECTION ANTI-CLOCKWISE (3NO + 1NC)
C2 - CONTACTOR MOTOR DIRECTION CLOCKWISE (3NO + 1NC)
C3 - CONTACTOR HEATING
C4 - CONTACTOR MOTOR HI SPEED (**3 NO + 1 NO**)
C5 - CONTACTOR MOTOR LOW SPEED (**3 NO + 1 NO**)
C6 - CONTACTOR MOTOR HI SPEED (**3 NO + 1 NO**)
C7 - CONTACTOR MOTOR START CAPACITOR (**2 NO + 2 NC**)
T1 - TIMER MOTOR START CAPACITOR
R1 - SHUNT TRIP

CONTROL PANEL SUB ASSEMBLY

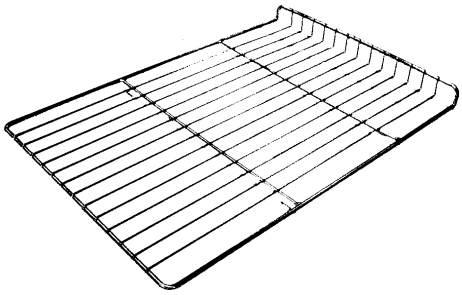


SUITABLE FOR
208v 60Hz 1Ø+N+E SUPPLY
220v 50Hz 1Ø+N+E SUPPLY
240v 60Hz 1Ø+N+E SUPPLY
240v 50Hz 1Ø+N+E SUPPLY



9. ACCESSORIES

OVEN RACKS



Part numbers:

015168	E35-26
020993	E35-30
025183	E35GN-26

100 MM (FOUR INCH) LEG OPTION

Part number 021348 x 4

150 MM (SIX INCH) LEG OPTION

Part number 018724 x 4

DOUBLE STACKING KIT
(PART No. 021236[26"] / 021237[30"])

A26 STAINLESS STEEL STAND

10. PARTS DIAGRAMS

SECTION **PAGE NO.**

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10.1.1 Main Assembly 70
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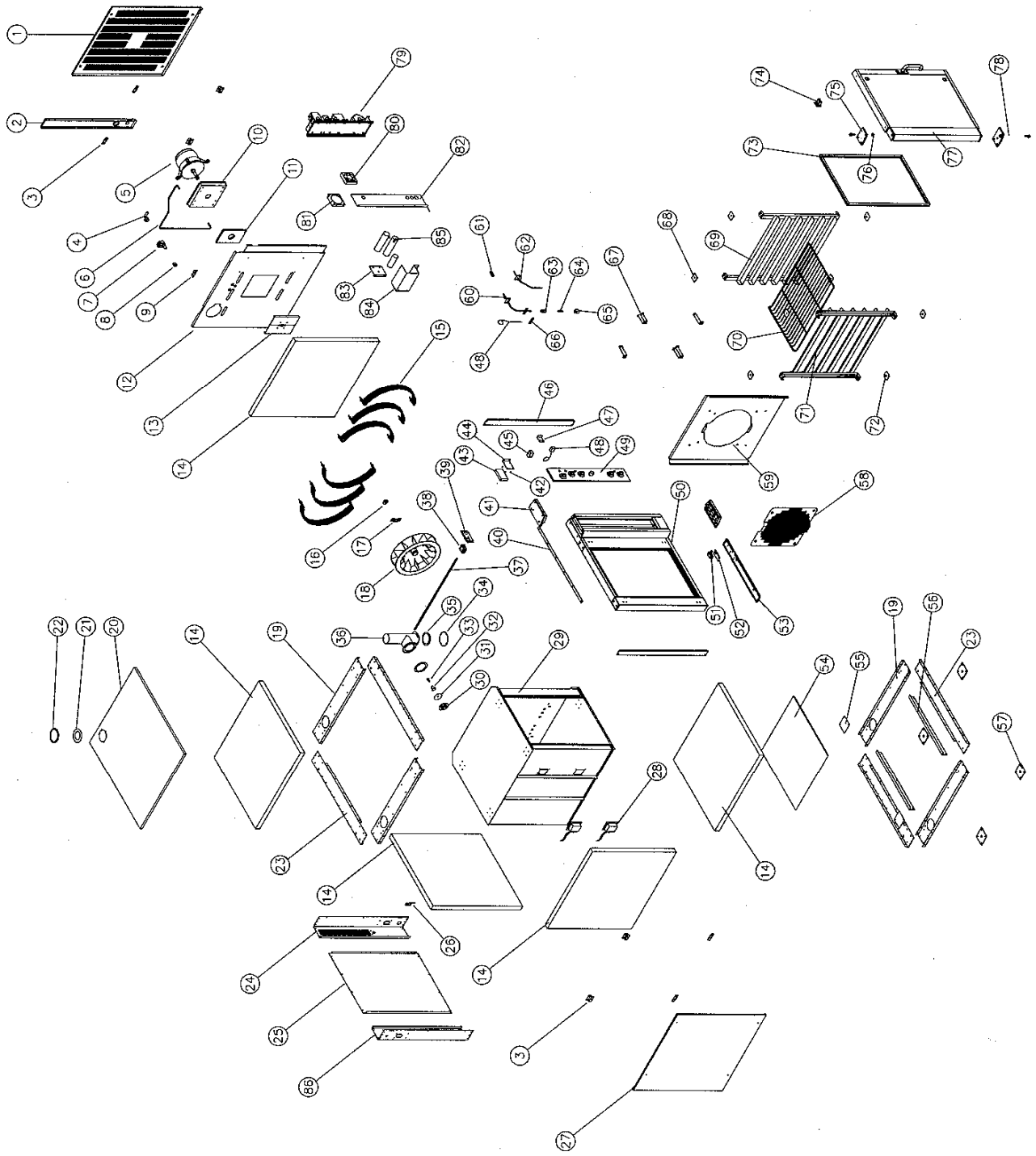
10.4.4 Glass Door Assembly E35GN-26 (from lot no 0818001) 90
10.4.5 Stainless Steel Door Assembly E35-26 / E35-30 (to lot no 0817999) 91

10.1 OVEN MAIN ASSEMBLY

10.1.1 MAIN ASSEMBLY



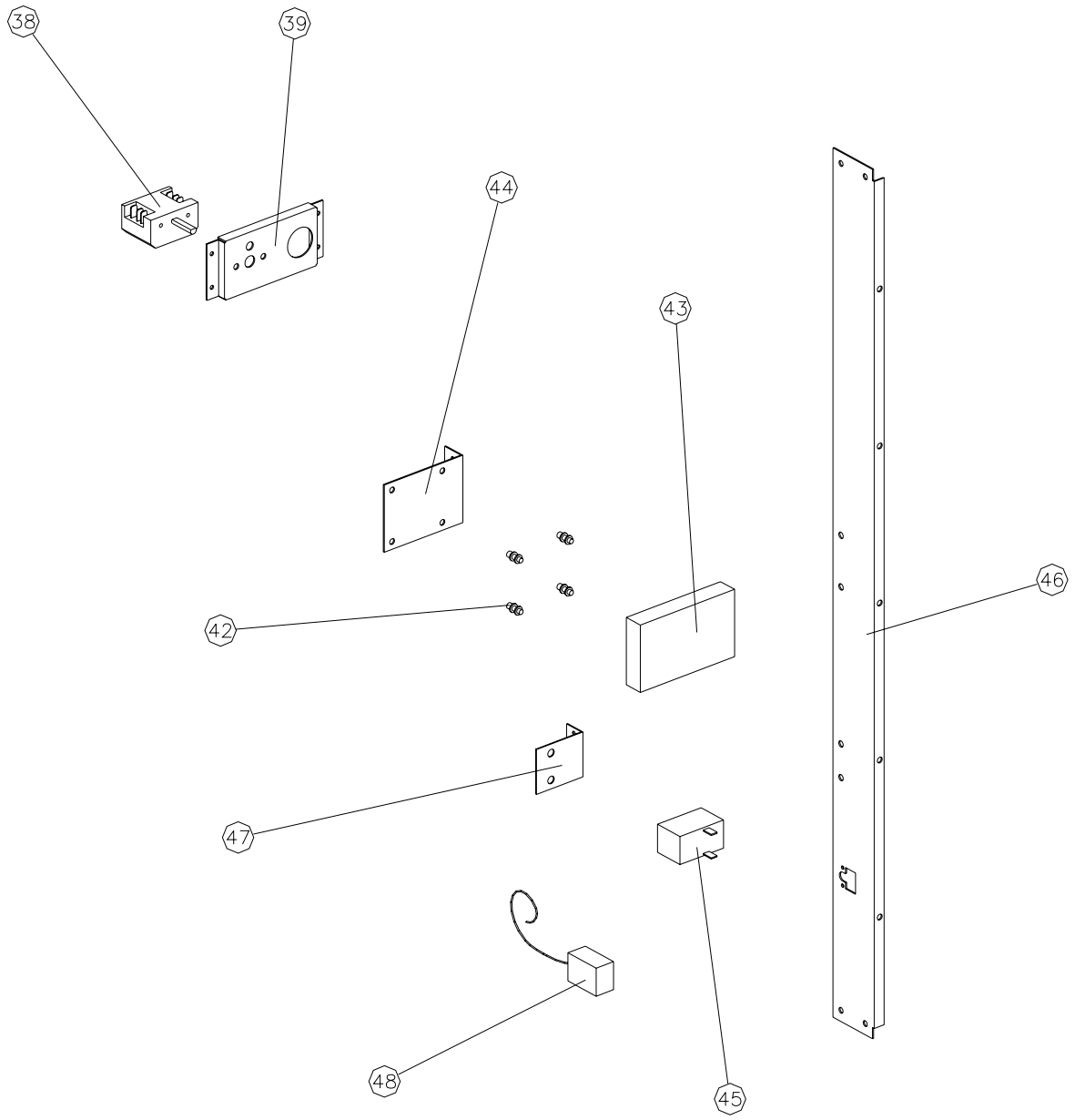
Pos	Part No.	Description
1	020788	SIDE PANEL RH **(E35-26 / E35GN-26 only, to Ser. No. 215839) (Replace with 023971)**
	023971	SIDE PANEL RH **(E35-26 / E35GN-26 only, from Ser. No. 215840)**
	020790	SIDE PANEL RH **(E35-30 only, to Ser. No. 215839) (Replace with 023972)**
	023972	SIDE PANEL RH **(E35-30 only, from Ser. No. 215840)**
2	020792	SERVICE ENTRY PANEL
	019213	CABLE ENTRY BUSH **(Not illustrated - to Ser. No. 205999)**
3	020785	PANEL MOUNTING BRACKET
4	021526	WATER INLET ELBOW **(Refer 10.1.3)**
	021527	WATER INLET WASHER
5	020745K	MOTOR **(380-415V 50Hz 3ø)**
	020885K	MOTOR **(220-240V 50Hz 1ø/3ø)**
	020886K	MOTOR **(208-240V 60Hz 1ø/3ø)**
	----------	Motor Front Bearing - SKF 6204-2Z/C3LHT23.
	----------	Motor Rear Bearing - NSK 6203Z.
	025751	FAN MOTOR HEAT FLINGER
6	020860	WATER SUPPLY TUBE **(E35-26 / E35GN-26 only) (Refer 10.1.3)**
	020862	WATER SUPPLY TUBE **(E35-30 only) (Refer 10.1.3)**
7	020851	WATER SOLENOID **(Refer 10.1.3)**
8	020869	CONNECTOR - 3/8"F x 1/4" COMPRESSION **(Refer 10.1.3)**
9	020991	MOUNTING BRACKET **(Refer 10.1.3)**
10	020897	MOTOR INSULATION PLATE
11	020778	MOTOR MOUNTING PLATE
12	020797	SIDE INSULATION PANEL **(E35-26 / E35GN-26 only ,Up to Lot No. 0817999)**
	231798	SIDE INSULATION PANEL (**E35-26 / E35GN-26 only, From Lot No. 0818001)**
	020798	SIDE INSULATION PANEL **(E35-30 only, Up to Lot No. 0817999)**
	231808	SIDE INSULATION PANEL **(E35-30 only, From Lot No. 0818001)**
13	021160	OVEN SIDE PLATE
14	090416	FIBREGLASS INSULATION 730x780x38 (**E35-26 / E35GN-26 only)**
	090417	FIBREGLASS INSULATION 730x880x38 **(E35-30 only)**
15	020762	ELEMENT - 220-240V 2000W **(H,N,T only)**
	020763	ELEMENT - 208-220V 2000W **(P,X only)**
	022259	ELEMENT - 208-220V 1250W **(8kW units only - option)**
	015292	SEALING WASHER
16	020896	MOTOR SHAFT SEAL
17	020898	MOTOR SEAL HOUSING
18	025396	FAN
19	020780	CHASSIS HORIZONTAL SIDE **(E35-26 / E35GN-26 only)**
	020786	CHASSIS HORIZONTAL SIDE **(E35-30 only)**
20	020795	TOP COVER **(E35-26 only)**
	020796	TOP COVER **(E35-30 only)**
	025184	TOP COVER **(E35GN-26 only)**
21	022425	VENT SEAL
22	022426	VENT SEAL FLANGE PLATE
23	020781	CHASSIS HORIZONTAL **(E35-26 / E35-30 only)**
	025169	CHASSIS HORIZONTAL **(E35GN-26 only)**
24	023970	CHASSIS VERTICAL REAR RH
25	020791	BACK PANEL **(E35-26 / E35-30 only)**
	025189	BACK PANEL **(E35GN-26 only)**
26	020895	CABLE GUIDE BRACKET
27	020787	SIDE PANEL LH **(E35-26 / E35GN-26 only)**
	020789	SIDE PANEL LH **(E35-30 only)**
28	021351	OVEN LAMP HOLDER & BULB **(Up to Lot No. 0817999)**
	232108	OVEN LAMP HOLDER & BULB **(From Lot No. 0818001)**
	021352	OVEN LAMP - GLASS LENS
	021354	OVEN LAMP - GASKET
	021350	OVEN LAMP - BULB G4/20W **(Up to Lot No. 0817999)**

	231814	OVEN LAMP BULB G9/25W **(From Lot No. 0818001)**
	021353	OVEN LAMP -SUPPORT FRAME
29	004703	OVEN WA - ENAMELLED **(E35-26 only)**
	004704	OVEN WA - ENAMELLED **(E35-30 only)**
	004983	OVEN WA - ENAMELLED **(E35GN-26 only)**
	020874	OVEN WA STAINLESS STEEL **(E35-26 only)**
	020875	OVEN WA STAINLESS STEEL **(E35-30 only)**
30	020828	VENT FLAP
31	020827	VENT OVER PRESSURE PLATE
32	020819	OVER PRESSURE SPRING
33	041425	SCREW - M4 x 6 PAN POZI
34	016241	VENT HOOD
35	020824	VENT GASKET
36	020845	VENT WA
37	020821	VENT OPERATING ROD **(E35-30 only Up to Lot No. 0817999)**
	231810	VENT OPERATING ROD **(E35-30 only) From Lot No. 0818001)**
	020820	VENT OPERATING ROD **(E35-26 / E35GN-26 only Up to Lot No. 0817999)**
	231809	VENT OPERATING ROD **(E35-26 / E35GN-26 only From Lot No. 0818001)**
38	020822	SELECTOR SWITCH **(Refer 10.1.2 Up to Lot No. 0817999 Only)**
39	020834	VENT SWITCH BRACKET **(Refer 10.1. 2 Up to Lot No. 0817999)**
	231789	VENT SWITCH BRACKET **(From Lot No. 0818001)**
40	020761	TOP BUTT STRAP
41	020764	CONTROL HOUSING CAP
	020865	SCREW CAP - BLACK
42	018768	STAND-OFF **(Refer 10.1.2)**
43	020882K	THERMOSTAT - SOLID STATE **(Refer 10.1.2)**
44	020775	THERMOSTAT BOARD MOUNTING BRACKET **(Refer 10.1.2)**
45	011794	BUZZER **(Refer 10.1.2)**
46	020783	CHASSIS VERTICAL FRONT **(Refer 10.1.2)**
47	014032	BUZZER MOUNTING BRACKET **(Refer 10.1.2)**
48	019369K	OVERTEMP THERMOSTAT KIT **(Refer 10.1.2, 10.1.3)**
	013506	GLAND WASHER
	013507	GLAND BUSH
	013508	GLAND NUT
	020887	SPLIT GLAND NUT ASSY **(c/w Split nut, Seal & Washer)**
	020892	GLAND BUSH MOUNTING PLATE
49	----------	CONTROL PANEL ASSEMBLY **(Refer 10.2)**
50	020841	FACIA WA **(E35-26 / E35-30 Up to Lot No. 0817999)**
	232080	FACIA WA **(E35-26 / E35-30 From Lot No. 0818001)**
	025173	FACIA WA **(E35GN-26 Up to Lot No. 0817999)**
	232121	FACIA WA **(E35GN-26 From Lot No. 0818001)**
51	020774	MICROSWITCH
52	020829	MICROSWITCH MOUNTING BRACKET
53	020830	MICROSWITCH COVER PANEL **(E35-26 / E35-30 Up to Lot No. 0817999)**
	232217	MICROSWITCH COVER PANEL **(E35-26 / E35-30 From Lot No. 0818001)**
	025172	MICROSWITCH COVER PANEL **(E35GN-26 Up to Lot No. 0817999)**
	232220	MICROSWITCH COVER PANEL **(E35GN-26 From Lot No. 0818001)**
54	020793	BASE COVER SHEET **(E35-26 only)**
	020794	BASE COVER SHEET **(E35-30 only)**
	025171	BASE COVER SHEET **(E35GN-26 only)**
55	020899	BLANKING PLATE
56	020784	OVEN SUPPORT BRACKET **(E35-26 / E35-30 only)**
	025170	OVEN SUPPORT BRACKET **(E35GN-26 only)**
57	230577	LEG PLATE
	021348	LEG 100MM (Not illustrated)
	230578	LEG 150MM (Not illustrated)
58	020881	FAN GUARD
59	020879	FAN BAFFLE **(E35-xxx-26 only)**
	020880	FAN BAFFLE **(E35-xxx-30 only)**
60	020857	STEAM TUBE WA **(Refer 10.1.3)**

61	020861	COMPRESSION UNION ¼" **(Refer 10.1.3)**
62	020883K	PROBE KIT **(Refer 10.1.3)**
	020856	GASKET
63	016794	MALE CONNECTOR **(Refer 10.1.3) (From Ser. No. 261985)**
	020855	FEMALE CONNECTOR **(Refer 10.1.3) (Up to Ser. No. 261984)**
64	020852	CHECK VALVE **(Up to Ser. No. 261984)**
65	020853	SPRAY BODY - WHIRLJET **(Refer 10.1.3)**
	020856	GASKET
66	020890	PROBE SECURING BRACKET **(Refer 10.1.3)**
67	020844	BAFFLE SPACER WA
68	020802	RACK LOCATION UPPER WA
69	020810	SIDE RACK 6 TRAY RH WA **(E35-26 only)**
	020812	SIDE RACK 6 TRAY RH WA **(E35-30 only)**
	025180	SIDE RACK 6 TRAY RH WA **(E35GN-26 only)**
	023019	SIDE RACK 8 TRAY RH WA **(E35-30 only)**
	025090	SIDE RACK 8 TRAY RH WA **(E35-26 only)**
	025917	SIDE RACK 4 TRAY RH WA **(E35-26 only)**
	026787	SIDE RACK 5 TRAY RH WA **(E35-30 only)**
	026128	SIDE RACK 5 TRAY RH WA **(E35-26 only)**
70	015168	OVEN RACK **(E35-26 only)**
	020993	OVEN RACK **(E35-30 only)**
	025179	OVEN RACK **(E35GN-26 only)**
71	020809	SIDE RACK 6 TRAY LH WA **(E35-26 only)**
	020811	SIDE RACK 6 TRAY LH WA **(E35-30 only)**
	025179	SIDE RACK 6 TRAY LH WA **(E35GN-26 only)**
	023018	SIDE RACK 8 TRAYLH WA **(E35-30 only)**
	025089	SIDE RACK 8 TRAY LH WA **(E35-26 only)**
	025916	SIDE RACK 4 TRAY LH WA **(E35-26 only)**
	026786	SIDE RACK 5 TRAY LH WA **(E35-30 only)**
	026127	SIDE RACK 5 TRAY LH WA **(E35-26 only)**
72	020803	RACK LOCATION LOWER WA
73	231438	DOOR SEAL **(E35-26 / E35-30 only)**
	232119	DOOR SEAL **(E35GN-26 only)**
74	020754	BOLT CATCH
75	020737	HINGE MOUNTING PLATE TOP **(To Ser. No. 205999)**
	023050	HINGE MOUNTING PLATE TOP **(From Ser. No. 206000 ,Up to Lot No. 0817999)**
	230741	HINGE MOUNTING PLATE TOP **(From Lot No. 0818001)**
	020876	TOP HINGE BOLT
	020831	DOOR PIVOT PIN **(Up to Lot. No. 0817999)**
	230744	DOOR PIVOT PIN **(From Lot No. 0818001)**
76	020738	HINGE BUSH **(Up to Lot. No. 0817999)**
	230745	HINGE BUSH **(From Lot No. 0818001)**
	230746	HINGE NUT **(From Lot No. 0818001)**
77	----------	DOOR ASSEMBLY **(Refer 10.4)**
78	020750	HINGE MOUNTING PLATE BOTTOM **(To Ser. No. 205999)**
	023051	HINGE MOUNTING PLATE BOTTOM **(From Ser No 206000,Up to Lot No. 0817999)**
	230742	HINGE MOUNTING PLATE BOTTOM **(From Lot No. 0818001)**
79	----------	GEAR PLATE **(Refer 10.3)**
80	021156	COOLING FAN
81	021157	COOLING FAN BRACKET
82	021158	HEAT BAFFLE **(Up to Lot. No. 0817999)**
	231784	HEAT BAFFLE **(From Lot No. 0818001)**
83	021388	CAPACITOR MOUNTING BRACKET **(1ø ONLY)**
84	021389	CAPACITOR SHIELD **(1ø ONLY)**
85	021551	CAPACITOR 10uF (H AND X) **(50Hz 1ø ONLY)**
	021553	CAPACITOR 20uF (H AND X) **(50Hz 1ø ONLY)**
	021554	CAPACITOR 30uF (H AND X) **(50Hz 1ø ONLY) To Lot No.0817999**
	021552	CAPACITOR 12uF (P AND T) **(60Hz 1ø ONLY)**
	021555	CAPACITOR 35uF (P AND T) **(60Hz 1ø ONLY)**

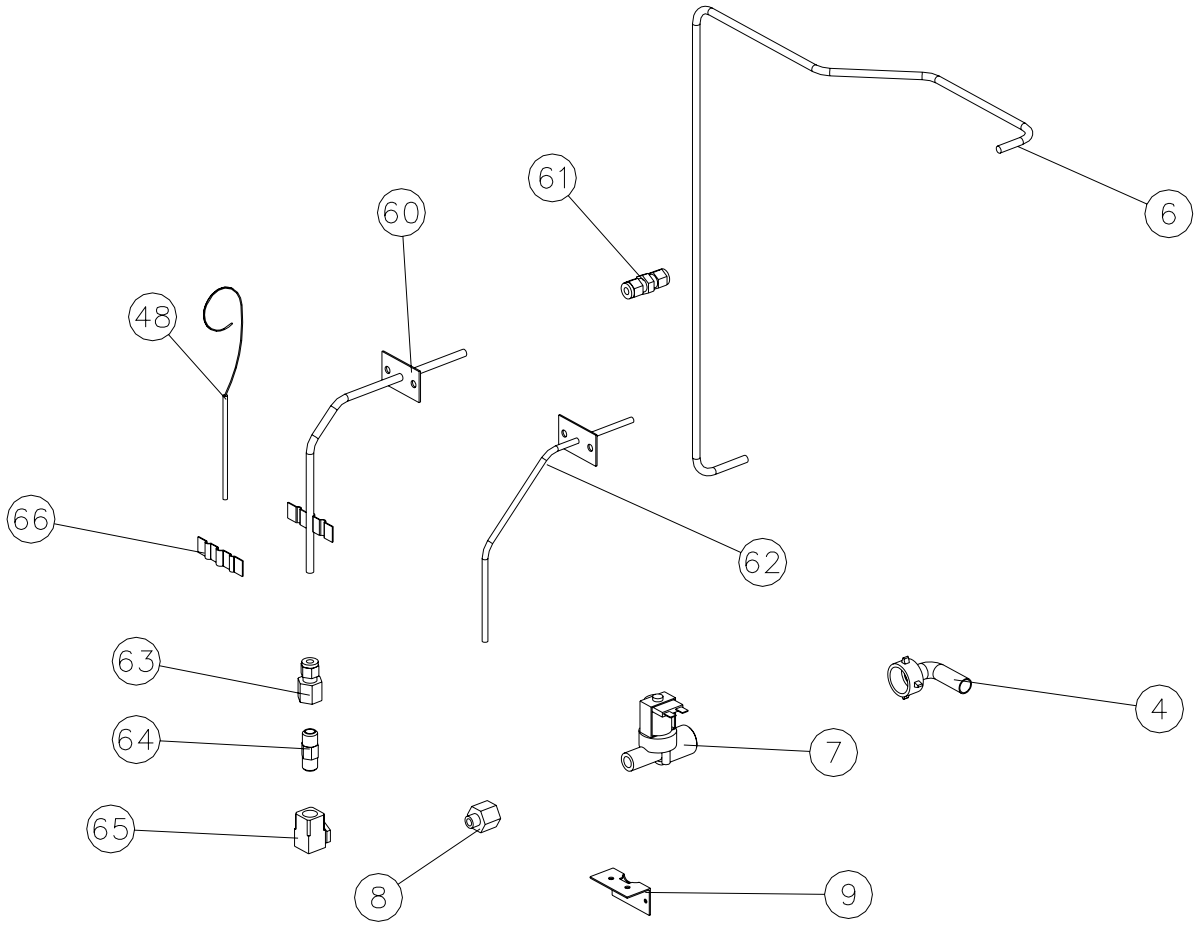
For models after Lot No. 0818000, refer to Section 10.3.4 for single phase Capacitors.

10.1.2 FRONT UPRIGHT CONTROL ASSEMBLY



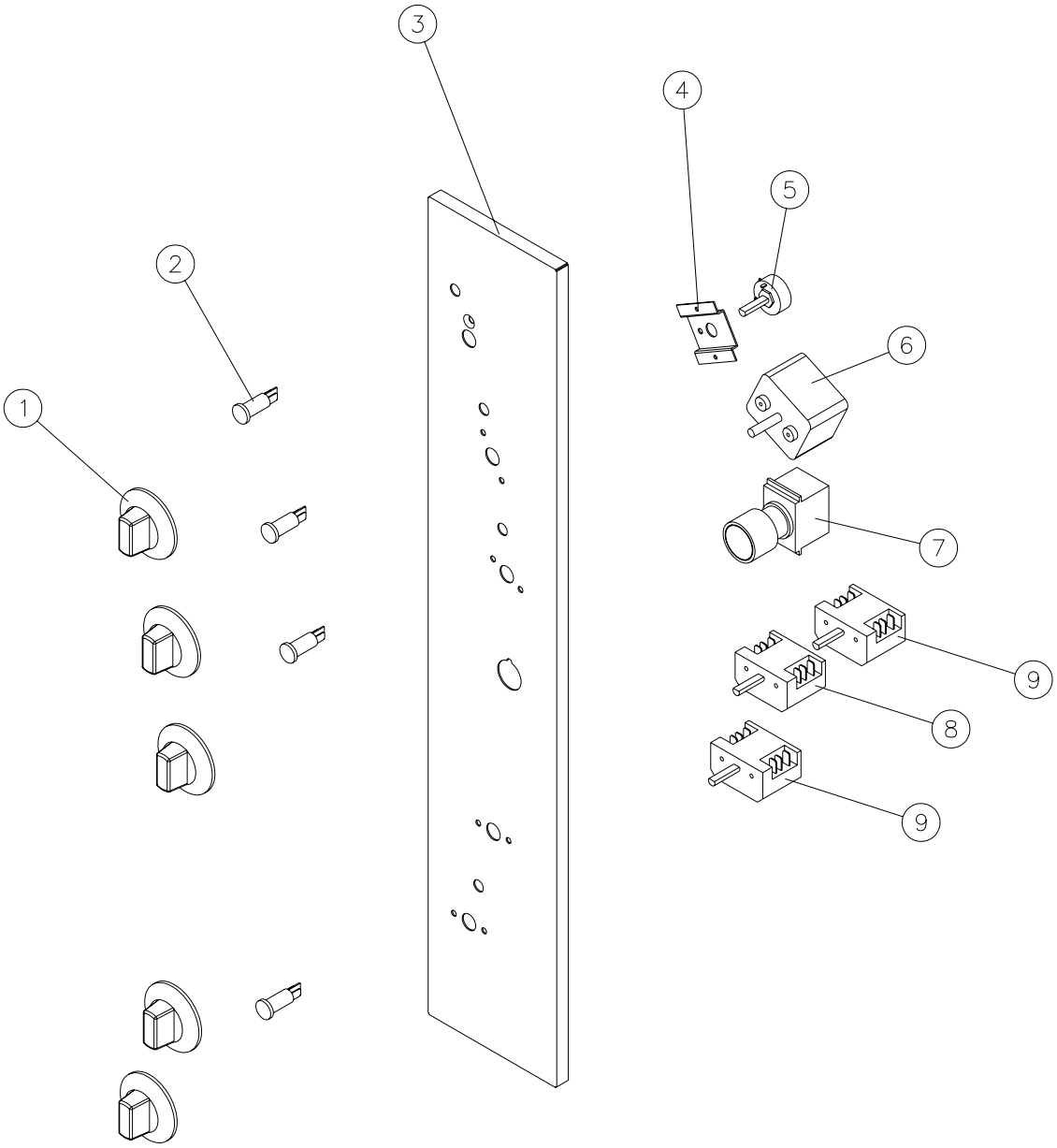
Pos	Part No.	Description
38	020822	SELECTOR SWITCH **(Up to Lot No. 0817999)**
39	020834	VENT SWITCH BRACKET **(Up to Lot No. 0817999)**
	231789	VENT SWITCH BRACKET **(From Lot No. 0818001)**
42	018768	STAND-OFF
43	020882K	THERMOSTAT - SOLID STATE (Kit includes Potentiometer)
44	020775	THERMOSTAT BOARD MOUNTING BRACKET
45	011794	BUZZER
46	020783	CHASSIS VERTICAL FRONT
47	014032	BUZZER MOUNTING BRACKET **(Up to Lot No. 0817999)**
	231797	BUZZER MOUNTING BRACKET **(From Lot No. 0818001)**
48	019369K	OVERTEMP THERMOSTAT KIT

10.1.3 WATER INJECTION ASSEMBLY



Pos	Part No.	Description
4	021526	WASHER INLET ELBOW **(c/w Washer)**
6	020860	WATER SUPPLY TUBE **(E35-xxx-26 only)**
	020862	WATER SUPPLY TUBE **(E35-xxx-30 only)**
7	020851	WATER SOLENOID
8	020869	CONNECTOR - $^{3}/_{8}$"F x $^{1}/_{4}$" COMPRESSION
9	020991	MOUNTING BRACKET
48	019369K	OVERTEMP THERMOSTAT KIT
	013506	GLAND WASHER
	013507	GLAND BUSH
	013508	GLAND NUT
	020887	SPLIT GLAND NUT ASSY **(c/w Split Nut, Seal & Washer)**
	020892	GLAND BUSH MOUNTING PLATE
60	020857	STEAM TUBE WA
61	020861	COMPRESSION UNION $^{1}/_{4}$"
62	020883K	PROBE KIT
	020856	GASKET
63	016794	MALE CONNECTOR **(From Ser. No. 261985)**
	020855	FEMALE CONNECTOR **(To Ser. No. 261984)**
64	020852	CHECK VALVE **(To Ser. No. 261984)**
65	020853	SPRAY BODY - WHIRLJET
	020856	GASKET
66	020890	PROBE SECURING BRACKET

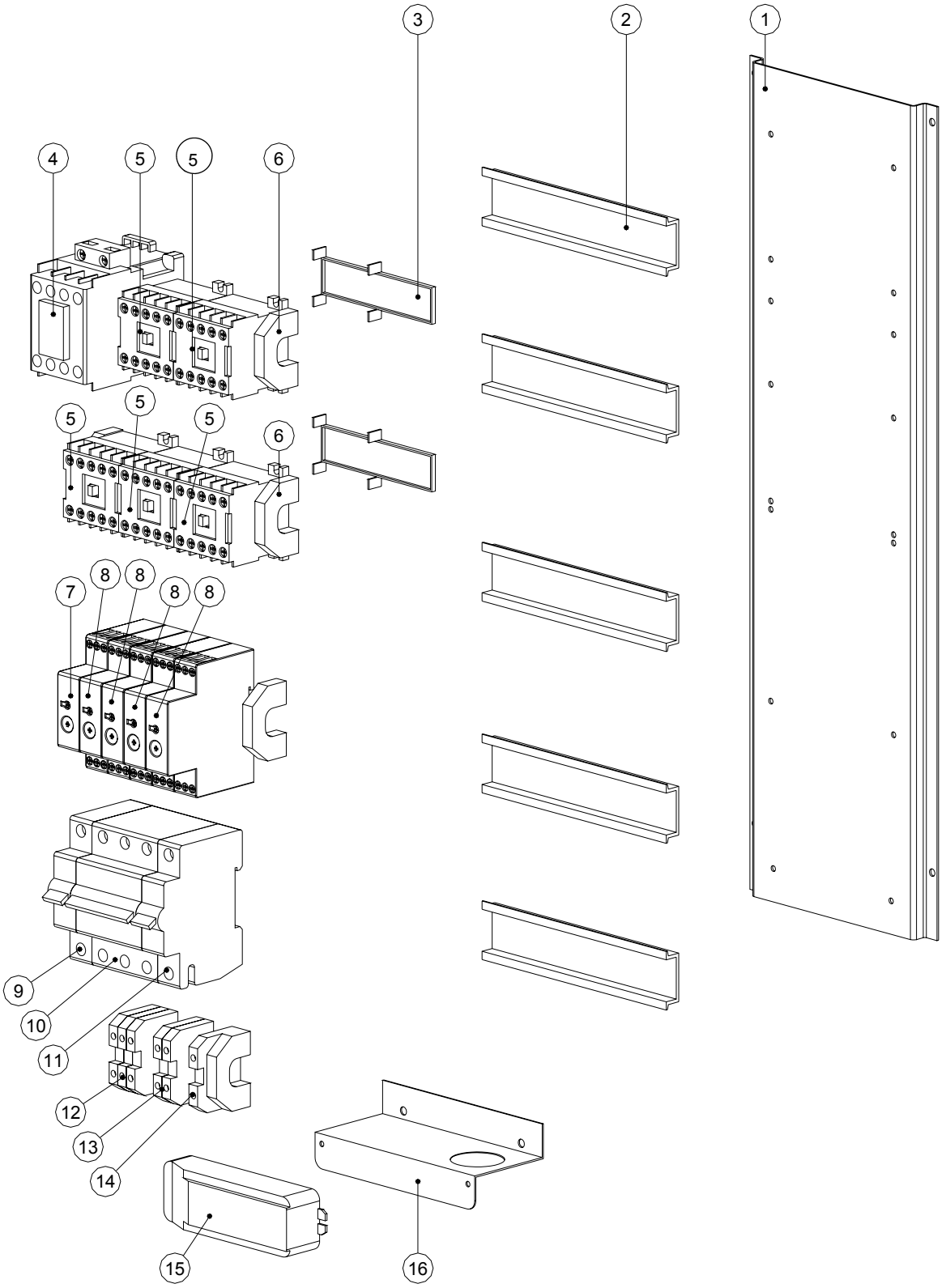
10.2 CONTROL PANEL ASSEMBLY



Pos	Part No.	Description
1	020823	KNOB **(Vent)**
	020848	COMPRESSION RING
2	020849	NEON INDICATOR
3	004705	CONTROL PANEL ºF **(Up to Lot No. 0817999)**
	231812	CONTROL PANEL ºF **(From Lot No. 0818001)**
	004706	CONTROL PANEL ºC **(Up to Lot No. 0817999)**
	231819	CONTROL PANEL ºC **(From Lot No. 0818001)**
4	020976	POTENTIOMETER BRACKET
5	020985K	POTENTIOMETER
6	011760	TIMER - (60 Minute)
7	020893	STEAM SWITCH ASSEMBLY (Up to Lot No 0817999)
	232411	STEAM SWITCH ASSEMBLY (From Lot No 0818000)
8	020888	SELECTOR SW. **(Fan Speed)**

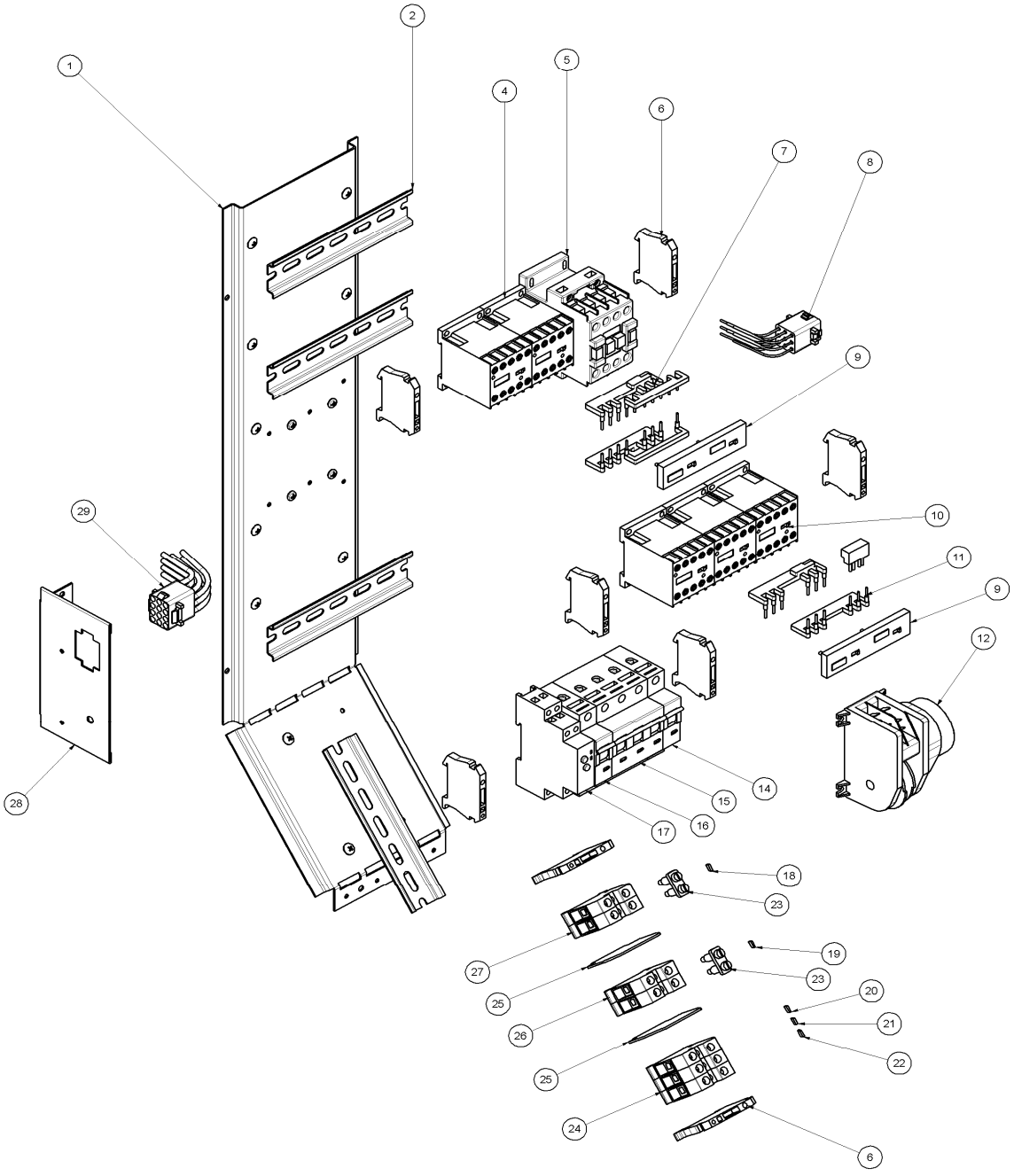
10.3 GEAR PLATE ASSEMBLY

10.3.1 GEAR PLATE ASSEMBLY (3 PHASE MODELS ONLY) Up to lot number 0817999



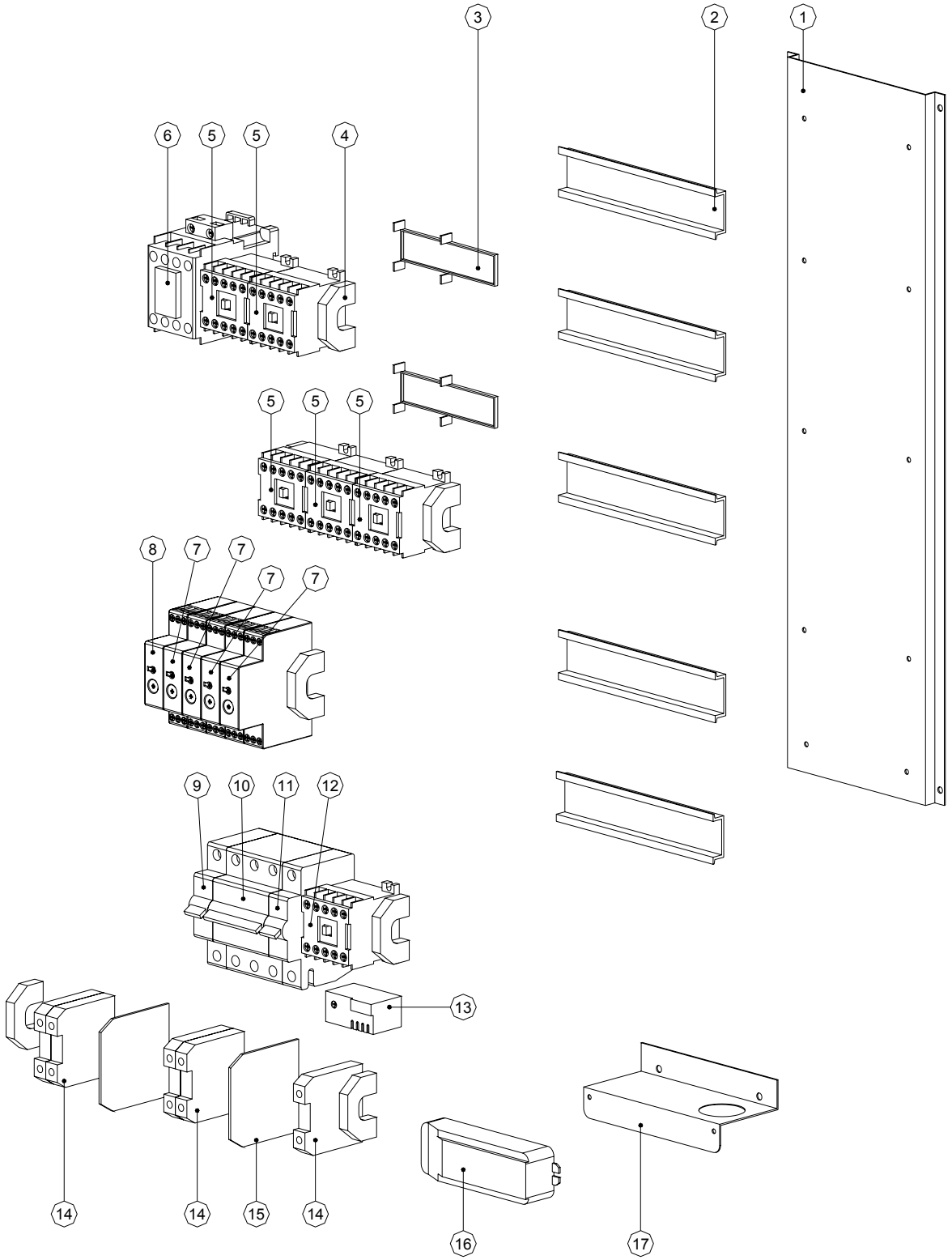
Pos	Part No.	Description
1	020891	GEAR PLATE
2	020990	DIN RAIL
3	020769	CONTACTOR INTERLOCK **(C2&C3 AND C5&C6)**
4	015966	HEATING CONTACTOR 50Hz
	020974	HEATING CONTACTOR 50Hz **(X253 ONLY)**
	020772	HEATING CONTACTOR 60Hz
5	020768	MOTOR CONTACTOR
6	020995	END ANCHOR
7	020863	TIMER - FAN DIRECTION **(TO Ser. No. 204012)**
	023059	TIMER - FAN DIRECTION **(FROM Ser. No. 204013)**
8	020773	TIMER - FAN DWELL / STEAM DOSE **(TO Ser. No. 204012)**
	023058	TIMER - FAN DWELL / STEAM DOSE **(FROM Ser. No. 204013)**
9	020770	SHUNT TRIP (VYNKIER) **(50Hz to Ser. No. 230810)**
	021345	SHUNT TRIP (AB) **(50Hz FROM Ser. No. 230811; 60Hz All)**
10	020776	CIRCUIT BREAKER - 3ø 25A (VYNKIER) **(To Ser. No. 230810)**
	021563	CIRCUIT BREAKER - 3ø 25A (AB) **(From Ser. No. 230811)**
	020975	CIRCUIT BREAKER - 3ø 40A (AB) **(263 & 253 UNITS ONLY)**
11	020777	CIRCUIT BREAKER - 6A (VYNKIER) **(50Hz To Ser. No. 230810)**
	021344	CIRCUIT BREAKER - 6A (AB) **(50Hz From Ser. No. 230811; 60Hz All)**
12	025715	TERMINAL BLOCK - M10 RED **(From Ser. No. 261183)**
	020999	TERMINAL BLOCK - M6 RED **(To Ser. No. 261182)**
13	025714	TERMINAL BLOCK - M10 GREY **(From Ser. No. 261183)**
	020998	TERMINAL BLOCK - M6 GREY **(To Ser. No. 261182)**
	025716	CENTRE JUMPER - 2 POLE M10 **(From Ser. No. 261183)**
	020996	CENTRE JUMPER - 2 POLE M6 **(To Ser. No. 261182)**
14	025713	TERMINAL BLOCK - M10 GREEN **(From Ser. No. 261183)**
	020997	TERMINAL BLOCK - M6 GREEN **(To Ser. No. 261182)**
15	020213	LIGHTING TRANSFORMER
16	021159	TRANSFORMER BRACKET

10.3.2 GEAR PLATE ASSEMBLY (3 PHASE MODELS ONLY) From lot number 0818001



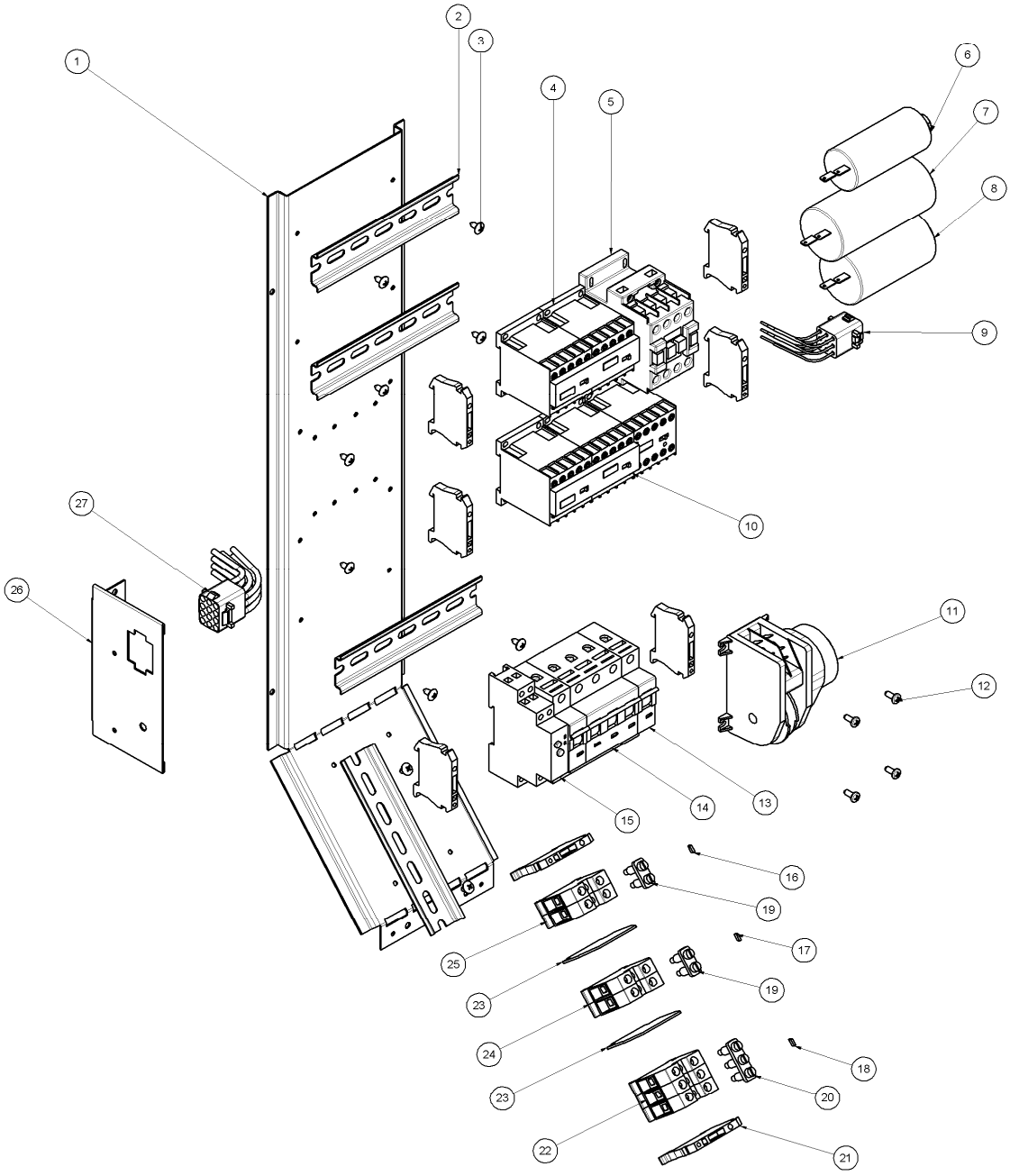
Pos	Part No	Description
1	231510	GEAR PLATE
2	020990	DIN RAIL
4	231742	CONTACTOR 11BG0601A230
5	231739	CONTACTOR LOVATO BF1810A230 (3 phase 380-415 Volts Models)
	231740	CONTACTOR 11BF3200A230 (3 phase 208-240 Volt Models)
6	020995	END ANCHOR
7	231745	REVERSING STARTER KIT SMX9022
8	232466	MOTOR WIRING LOOM
9	231743	CONTACTOR INTERLOCK 11BGX5000
10	231741	CONTACTOR No. 11BG0610A230
11	231745	REVERSING STARTER KIT SMX9022
12	024567	MOTOR TIMER
14	232407	CIRCUIT BREAKER 6A
15	232408	CIRCUIT BREAKER 25A 3PH.
16	232410	SHUNT TRIP
17	231748	ON DELAY TIMER 24-240VAC
18	021229	TERMINAL MARKING TAG - E
19	021228	TERMINAL MARKING TAG - N
20	021227	TERMINAL MARKING TAG - L3
21	021226	TERMINAL MARKING TAG - L2
22	021225	TERMINAL MARKING TAG - L1
23	022297	CENTER JUMPER 2 POLE
24	231759	TERMINAL BLOCK 16mm RED
25	022296	PARTITION PLATE
26	022295	TERMINAL BLOCK 16mm GREY
27	231760	TERMINAL BLOCK 16mm GREEN
28	231511	CONNECTION BRACKET
29	232577	WIRE LOOM GEAR PLATE

10.3.3 GEAR PLATE ASSEMBLY (1 PHASE MODELS ONLY) Up to lot number 0817999



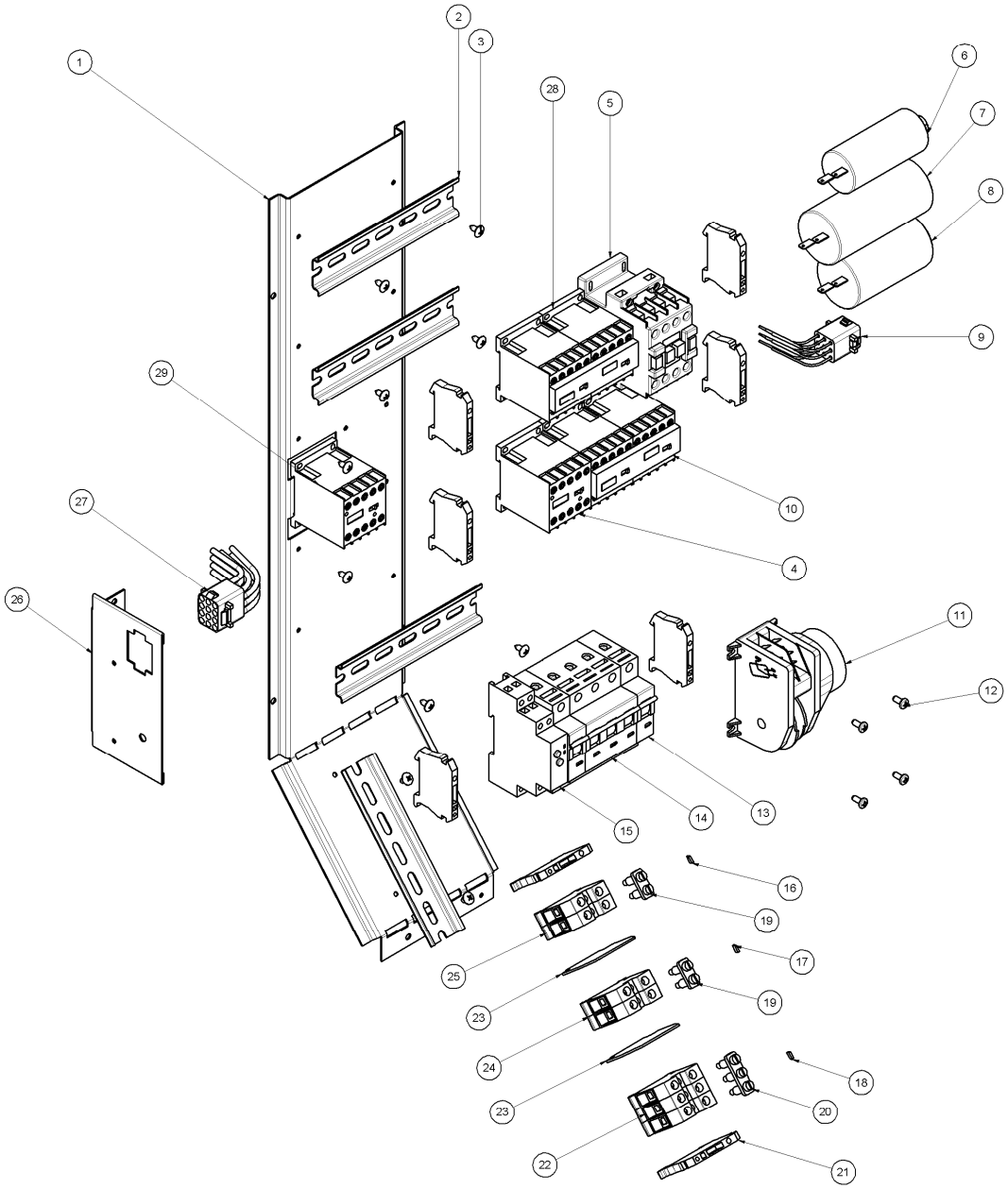
Pos	Part No.	Description
1	020891	GEAR PLATE
2	020990	DIN RAIL
3	020769	CONTACTOR INTERLOCK **(C2&C3 AND C5&C6)**
4	020995	END ANCHOR
5	020768	MOTOR CONTACTOR
6	015966	HEATING CONTACTOR 50Hz
	020772	HEATING CONTACTOR 60Hz
7	020773	TIMER - FAN DWELL / STEAM DOSE **(To Ser. No. 204013)**
	023058	TIMER - FAN DWELL / STEAM DOSE **(From Ser. No. 204014)**
8	020863	TIMER - FAN DIRECTION **(To Ser. No. 204013)**
	023059	TIMER - FAN DIRECTION **(From Ser. No. 204014)**
9	020770	SHUNT TRIP (VYNKIER) **(50Hz To Ser. No. 230810)**
	021345	SHUNT TRIP (AB) **(50Hz From Ser. No. 230811; 60Hz All)**
10	020776	CIRC. BREAKER 3 POLE 25A (VYNKIER) **(50Hz to Ser. No. 230810)**
	021563	CIRC. BREAKER 3 POLE 25A (AB) **(50Hz From Ser. No. 230811; 60Hz All)**
11	020777	CIRCUIT BREAKER - 1ø 6A (VYNKIER) **(50Hz to Ser. No. 230810)**
	021344	CIRCUIT BREAKER - 1ø 6A (AB) **(50Hz From Ser. No. 230810; 60Hz All)**
12	022281	CONTACTOR **(MOTOR START CAPACITOR)**
13	021562	TIMER - ON DELAY 1-30 SECOND **(MOTOR START CAPACITOR)**
14	022295	TERMINAL BLOCK - 16mm GREY
	022297	CENTRE JUMPER - 2 POLE **(Not Illustrated)**
15	022296	PARTITION PLATE
16	020213	LIGHTING TRANSFORMER
17	021159	TRANSFORMER BRACKET

10.3.4 GEAR PLATE ASSEMBLY (1 PHASE MODELS ONLY)
from lot number 0818001 to lot number 0938xxx



Pos	Part No	DESCRIPTION
1	231510	GEAR PLATE
2	020990	DIN RAIL
3	041045	SCREW 8x3/8" TRUSS HD PHL NP
4	231741	CONTACTOR NO 11BG0610A230
5	231739	CONTACTOR LOVATO BF1810A230
6	232551	CAPACITOR 10 mF (for 50Hz models)
	232552	CAPACITOR 12 mF (for 60Hz models)
7	232554	CAPACITOR 30 mF (for 50Hz models)
	232555	CAPACITOR 35 mF (for 60Hz models)
8	232553	CAPACITOR 20 mF (for 50Hz models)
	232555	CAPACITOR 35 mF (for 60Hz models)
9	232466	MOTOR WIRING LOOM
10	231743	CONTACTOR INTERLOCK 11BGX5000
11	024567	MOTOR TIMER
12	041036	SCREW 3/8”X8B PAN PH NP
13	232407	CIRCUIT BREAKER 6A
14	232410	SHUNT TRIP
14	232408	CIRCUIT BREAKER 25A 3PH.
15	231748	ON DELAY TIMER 24-240VAC
16	021229	TERMINAL MARKING TAG - E
17	021228	TERMINAL MARKING TAG - N
18	021225	TERMINAL MARKING TAG - L1
19	022297	CENTER JUMPER 2 POLE
20	022527	CENTER JUMPER 3 POLE
21	020995	END ANCHOR
22	231759	TERMINAL BLOCK 16mm RED
23	022296	PARTITION PLATE
24	022295	TERMINAL BLOCK 16mm GREY
25	231760	TERMINAL BLOCK 16mm GREEN
26	231511	CONNECTION BRACKET
27	232577	WIRE LOOM GEAR PLATE

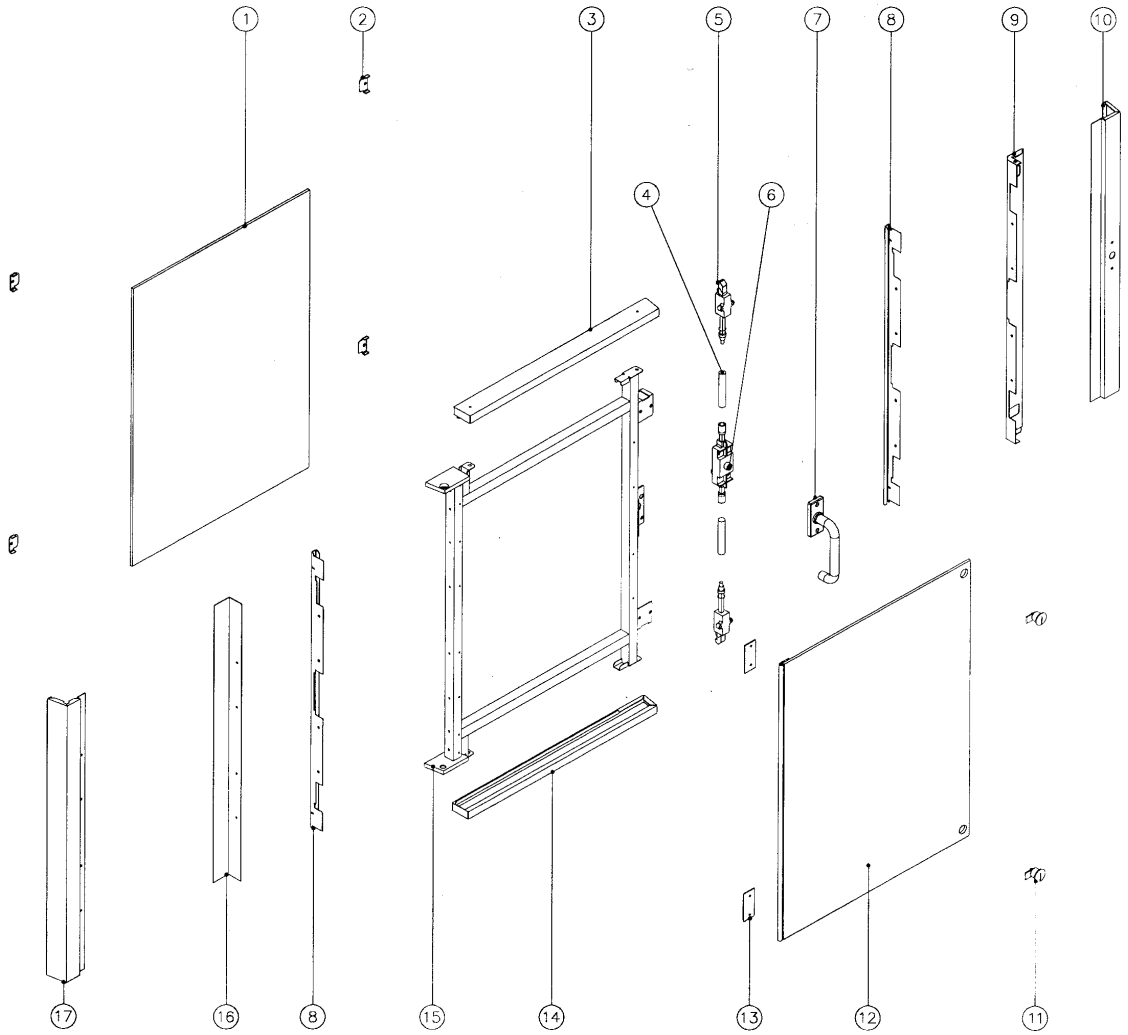
10.3.5 GEAR PLATE ASSEMBLY (1 PHASE MODELS ONLY) from lot number 0938xxx



Pos	Part No	DESCRIPTION
1	231510	GEAR PLATE
2	020990	DIN RAIL
3	041045	SCREW 8x3/8" TRUSS HD PHL NP
4	231741	CONTACTOR NO 11BG0610A230
5	231739	CONTACTOR LOVATO BF1810A230
6	232551	CAPACITOR 10 mF (for 50Hz models)
	232552	CAPACITOR 12 mF (for 60Hz models)
7	232554	CAPACITOR 30 mF (for 50Hz models)
	232555	CAPACITOR 35 mF (for 60Hz models)
8	232553	CAPACITOR 20 mF (for 50Hz models)
	232555	CAPACITOR 35 mF (for 60Hz models)
9	232466	MOTOR WIRING LOOM
10	231743	CONTACTOR INTERLOCK 11BGX5000
11	024567	MOTOR TIMER
12	041036	SCREW 3/8”X8B PAN PH NP
13	232407	CIRCUIT BREAKER 6A
14	232410	SHUNT TRIP
14	232408	CIRCUIT BREAKER 25A 3PH.
15	231748	ON DELAY TIMER 24-240VAC
16	021229	TERMINAL MARKING TAG - E
17	021228	TERMINAL MARKING TAG - N
18	021225	TERMINAL MARKING TAG - L1
19	022297	CENTER JUMPER 2 POLE
20	022527	CENTER JUMPER 3 POLE
21	020995	END ANCHOR
22	231759	TERMINAL BLOCK 16mm RED
23	022296	PARTITION PLATE
24	022295	TERMINAL BLOCK 16mm GREY
25	231760	TERMINAL BLOCK 16mm GREEN
26	231511	CONNECTION BRACKET
27	232577	WIRE LOOM GEAR PLATE
28	231742	CONTACTOR
29	234033	CONTACTOR 2NC 11BG09T2A230

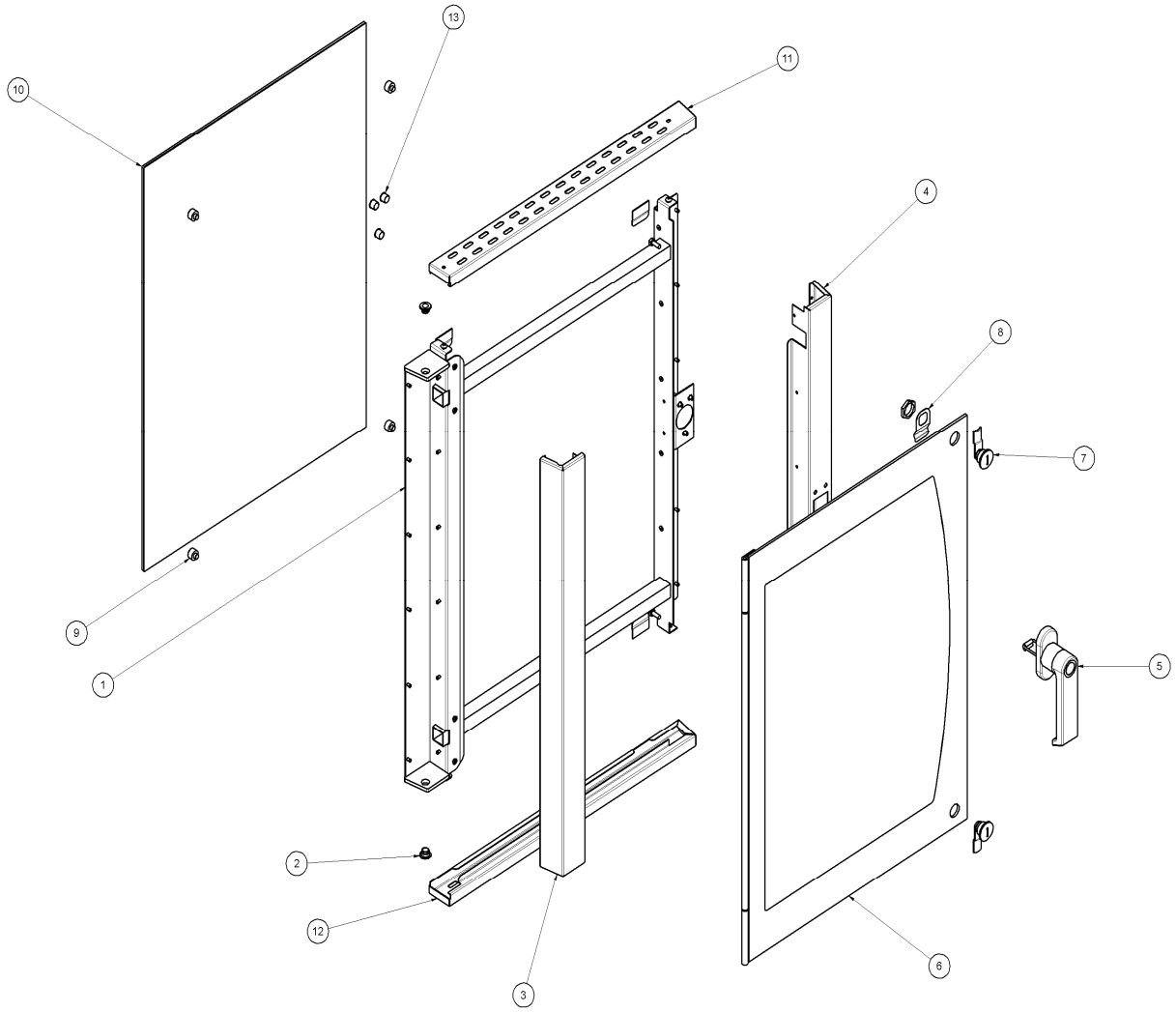
10.4 OVEN DOOR ASSEMBLY

10.4.1 GLASS DOOR ASSEMBLY - E35-26 / E35-30 Up to lot number 0817999



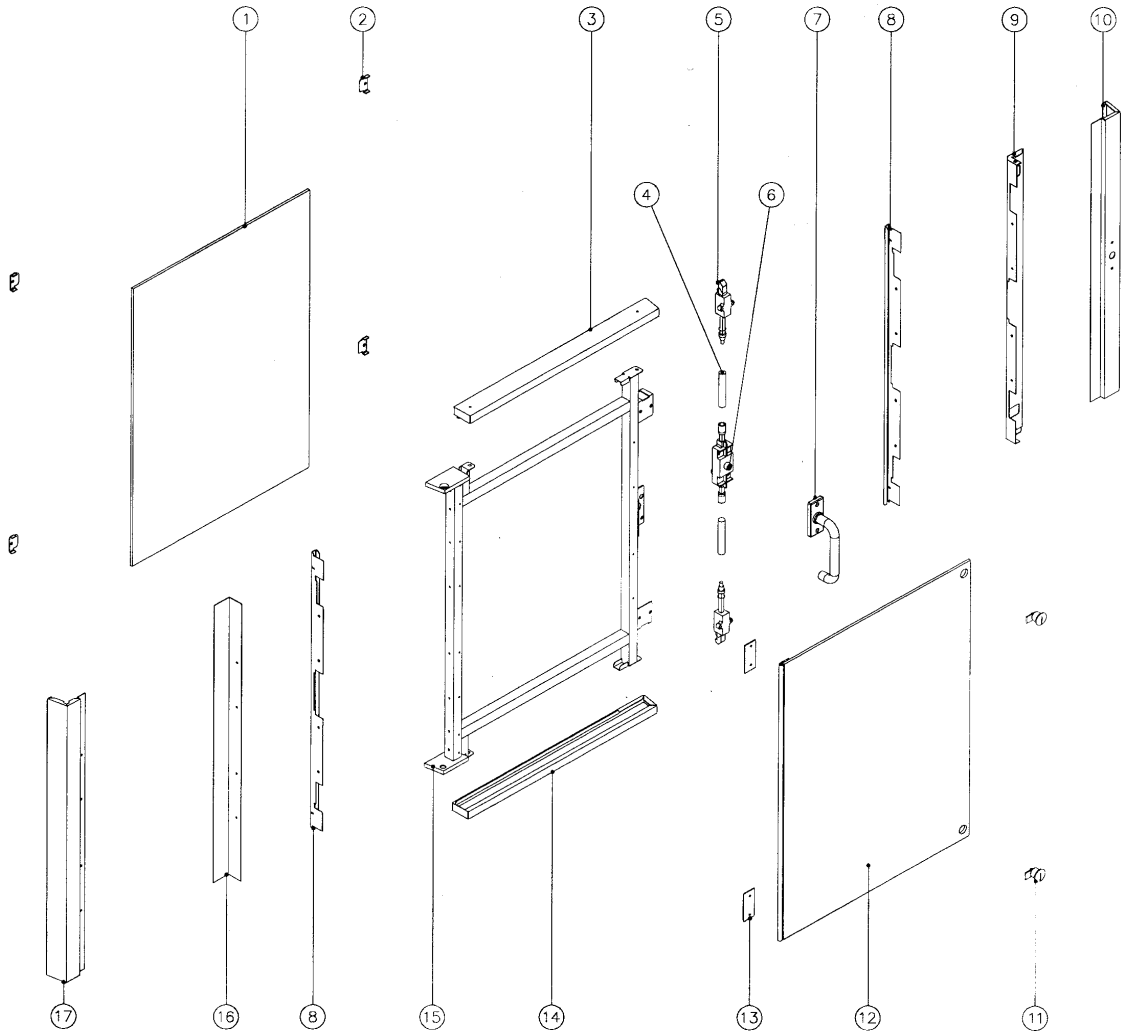
Pos	Part No.	Description
1	020713K	DOOR INNER GLASS (745.5mmx536mm)
	022314	GLASS SEAL
	022311	**INNER GLASS UPGRADE KIT (Up to Ser. No. 39600)** (745.5mmx536mm)
2	022308	GLASS CLAMP
3	004715	DOOR COVER TOP
4	020833	DOOR BOLT CONNECTING ROD
	047308	SPLIT PIN - 32x3.2 ST/ST
5	020753	BOLTING ELEMENT
6	020752	HANDLE GEAR
7	020751K	DOOR HANDLE KIT
	020865	SCREW CAP - BLACK
8	022309	GLASS SPACER TRIM
9	020730	DOOR TRIM INNER RH
10	020731	DOOR TRIM OUTER RH
11	020766	LATCH ASSEMBLY
12	021154	OUTER GLASS HINGED (744mmx553mm)
	090014	GLASS SEAL - 750mm **(INSEAL 10 x 6mm)**
13	021153	HINGE SPACER PLATE
14	004716	DOOR COVER BOTTOM
15	020725	DOOR FRAME
16	020732	DOOR TRIM INNER LH
17	020733	DOOR TRIM OUTER LH
	SD7031	COMPLETE DOOR ASSEMBLY

10.4.2 GLASS DOOR ASSEMBLY - E35-26 / E35-30 From lot number 0818001



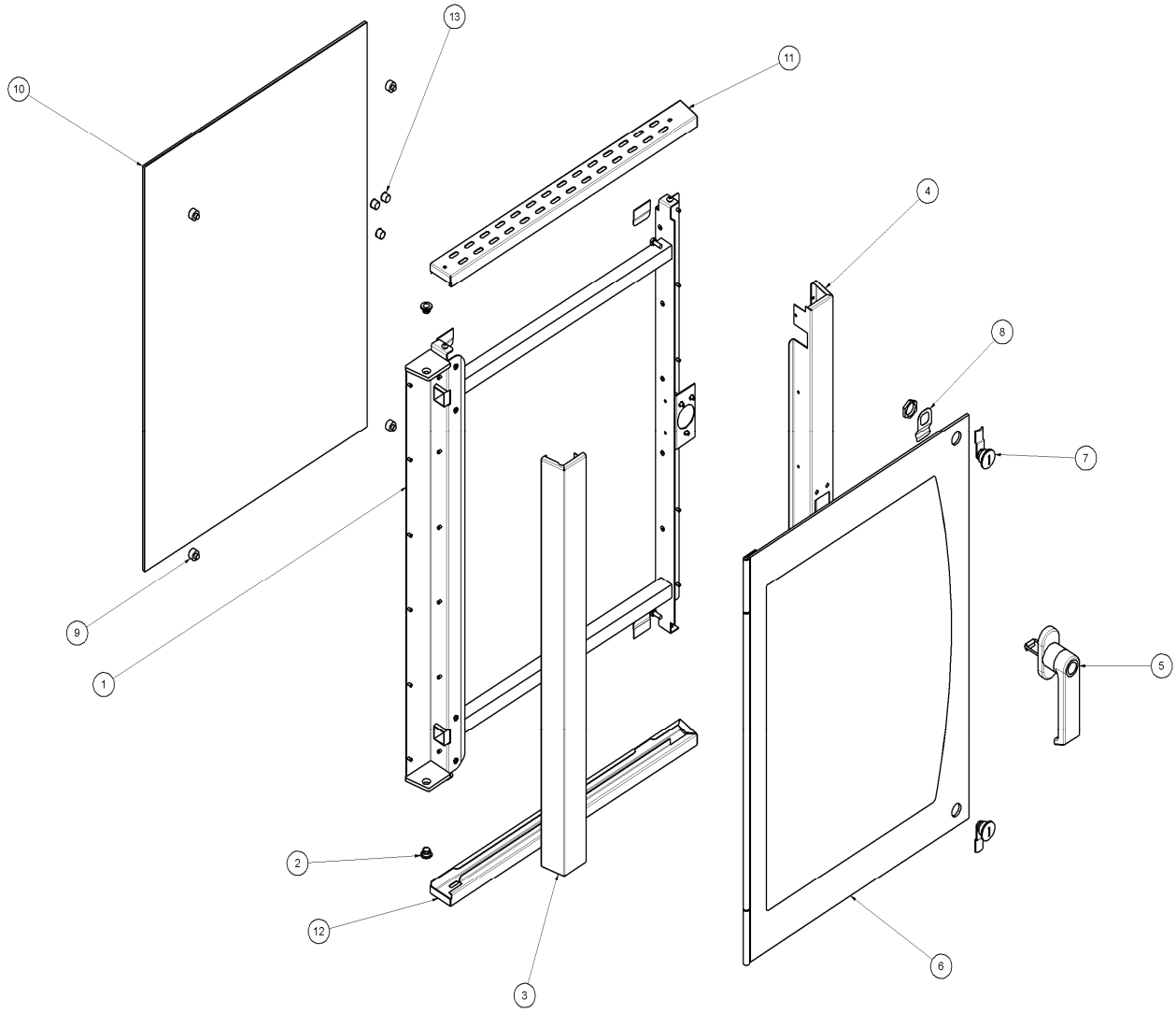
Pos	Part No	Description
1	230725	DOOR FRAME WA E35
2	230745	HINGE BUSH
	230744	HINGE PIN
	230746	HINGE NUT
3	230735	DOOR TRIM LH
4	230736	DOOR TRIM RH
5	231494	HANDLE / LOCK - SLAMSHUT
	231804	SINGLE STEP LOCKING DOG
	231805	DUAL STEP LOCKING DOG
6	232134	DOOR OUTER GLASS ASSEMBLY(744mmx525mm)
7	232588	QUAD LATCH
8	232364	DOOR OUTER GLASS SPRING
9	231801	DOOR INNER GLASS BUFFER
10	231803	DOOR INNER GLASS E35(745.5mmx536mm)
11	231773	DOOR TRIM TOP WA
12	231774	DOOR TRIM BOTTOM WA
13	020866	DOME PLUG DIA. 12.7
	232103	DOOR ASSEMBLY

10.4.3 GLASS DOOR ASSEMBLY - E35GN-26 Up to lot number 0817999



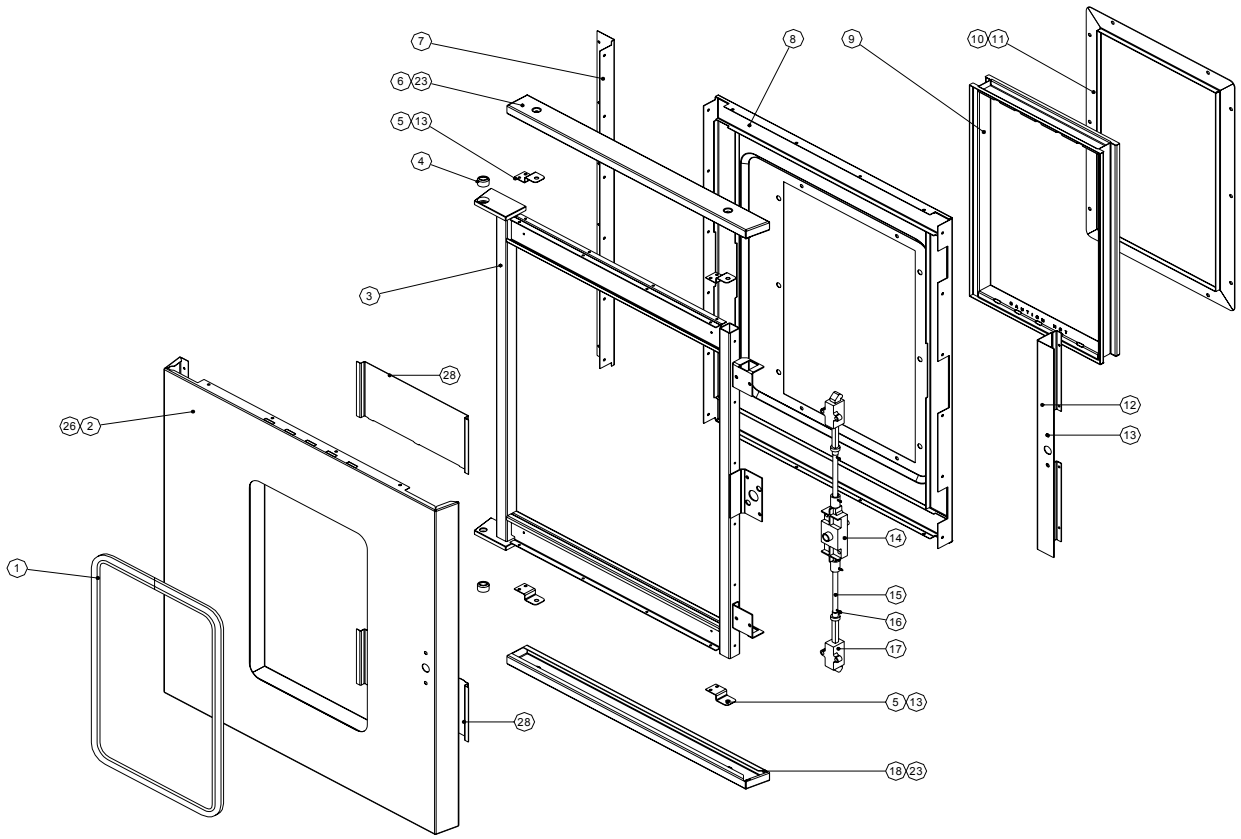
Pos	Part No.	Description
1	025161	DOOR INNER GLASS E35GN (744mmx626mm)
	022314	GLASS SEAL
2	022308	GLASS CLAMP
3	004981	DOOR COVER TOP E35GN
4	020833	DOOR BOLT CONNECTING ROD
	047308	SPLIT PIN - 32x3.2 ST/ST
5	020753	BOLTING ELEMENT
6	020752	HANDLE GEAR
7	020751K	DOOR HANDLE KIT
	020865	SCREW CAP - BLACK
8	022309	GLASS SPACER TRIM
9	020730	DOOR TRIM INNER RH
10	020731	DOOR TRIM OUTER RH
11	020766	LATCH ASSEMBLY
12	025159	OUTER GLASS HINGED E3GN (744mmx643mm)
	090014	GLASS SEAL - 750mm **(INSEAL 10 x 6mm)**
13	021153	HINGE SPACER PLATE
14	004982	DOOR COVER BOTTOM E3GN
15	025162	DOOR FRAME E35GN
16	020732	DOOR TRIM INNER LH
17	020733	DOOR TRIM OUTER LH

10.4.4 GLASS DOOR ASSEMBLY - E35GN-26 From lot number 0818001



Pos	Part No	Description
1	232122	DOOR FRAME WA E35GN
2	230745	HINGE BUSH
	230744	HINGE PIN
	230746	HINGE NUT
3	230735	DOOR TRIM LH
4	230736	DOOR TRIM RH
5	231494	HANDLE / LOCK - SLAMSHUT
	231804	SINGLE STEP LOCKING DOG
	231805	DUAL STEP LOCKING DOG
6	232135	DOOR OUTER GLASS ASSEMBLY E35GN (744mmx615mm)
7	232588	QUAD LATCH
8	232364	DOOR OUTER GLASS SPRING
9	231801	DOOR INNER GLASS BUFFER
10	232123	DOOR INNER GLASS E35GN (745.5mmx626mm)
11	232125	DOOR TRIM TOP WA E35GN
12	232126	DOOR TRIM BOTTOM WA E35GN
13	020866	DOME PLUG DIA. 12.7
	232118	E35GN-26 DOOR ASSEMBLY

10.4.5 STAINLESS STEEL DOOR ASSEMBLY - E35-26 / E35-30 Up To lot number 0817999



Pos	Part No.	Description
1	024103	OUTER GLASS SEAL
2	024079	DOOR OUTER PANEL WA
3	004892	DOOR FRAME WA
4	020738	HINGE BUSH
5	024098	COVER SUPPORT BRACKET
6	004893	DOOR COVER TOP
7	024099	DOOR TRIM INNER LH
8	024083	DOOR INNER PANEL WA
9	024090	GLASS MODULE(480mmx310mm)
10	024104	INNER GLASS SEAL
11	024087	GLASS CLAMP WA
12	024101	HANDLE SUPPORT
13	047100	NUTSERT 3/16”
14	020752	HANDLE GEAR RH
15	020833	DOOR BOLT CONNECTING ROD
16	047308	SPLIT PIN 32 x 3.2
17	020753	BOLTING ELEMENT
18	004894	DOOR COVER BOTTOM
19	041409	SCREW M5 x 25 MUSH SLOT
20	045410	WASHER M5 SPRING
21	044017	NUT M5 HEX
22	041045	SCREW 3/8” x 8 TRUSS
23	041436	SCREW 3/4” x 3/16 SD POZI BLACK
24	090005	SILICONE RTV CLEAR
25	090402	FIBREGLASS
26	044206	NUT SPIRE M5
27	041411	SCREW M5 x 16 PAN SLT 304 SS
28	024242	WINDOW VENT

APPENDIX A. STACKING KIT INSTRUCTIONS

A. UNPACKING

Check kit includes correct parts and correct quantities for the kit purchased as listed.

ITEM	DESCRIPTION	Qty	
A	Stand Frame	2	Figure A.1
B	Stand side (top)	2	
C	Clamp plate	4	
D	Screw - $^{3}/_{4}$" x $^{1}/_{4}$" hex hd	12	
	Washer - $^{1/}_{4}$" spring	12	
	Washer - $^{1/}_{4}$" flat	12	
E	Bolting bracket	4	
F	Screw - 2"x$^{3}/_{4}$"BSW hex black	4	
G	Double stack front WA	1	
H	Double stack back	1	Figure A.6
I	Double stack side	2	
J	Screw- 1"x $^{3}/_{16}$" raised CSK	4	
K	Screw - $^{3}/_{4}$"x$^{3}/_{16}$"pozi mush	16	
L	Top sheet	2	
M	Screw - $^{1}/_{2}$"x8A pozi mush	6	
N	Vent extension WA	1	Figure A.8
	Vent gasket	1	
O	Connection sleeve	1	
P	Hose clamp - 3"	2	
Q	RTV clear - 150g tube	1	

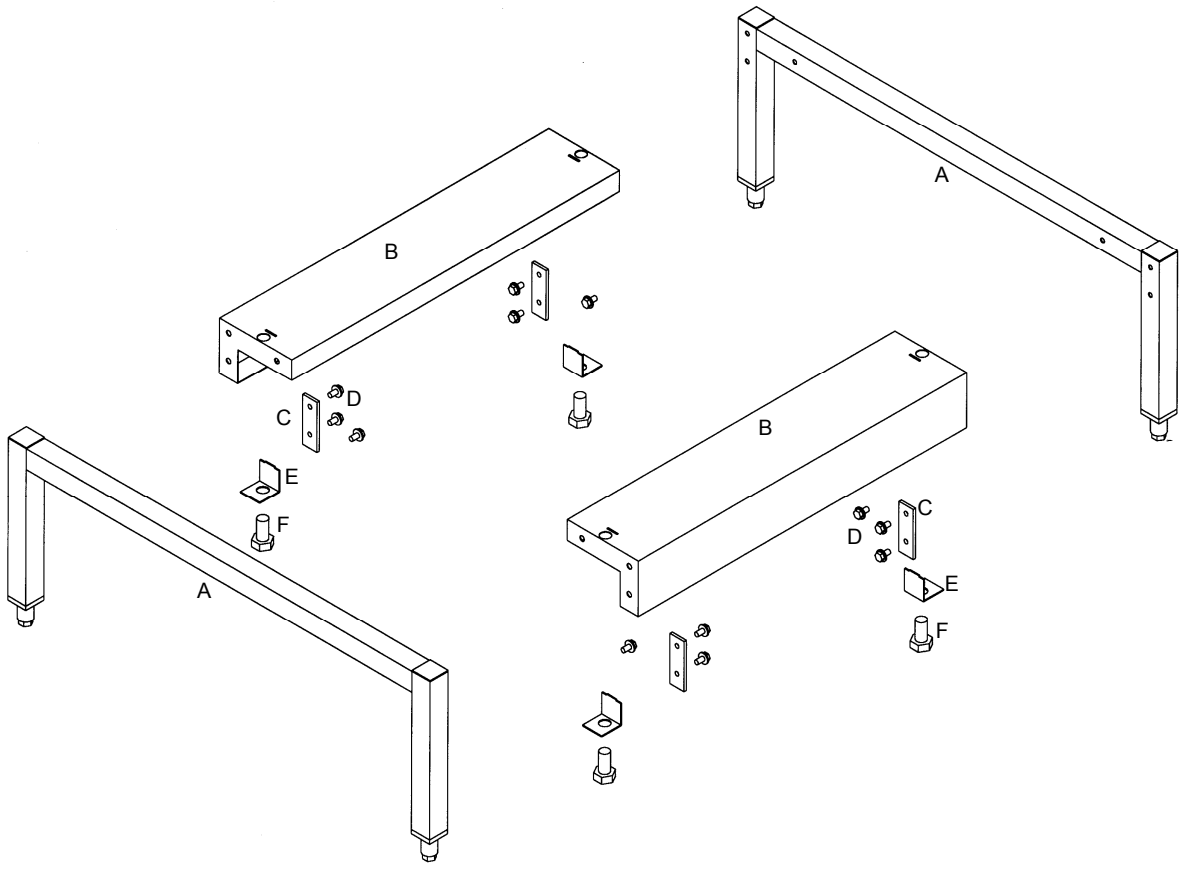


Figure A.1

B. STAND

1) Place one stand frame (A) on working surface with threaded holes face up.
2) Fit both sides (C), to the stand frame with the screws and washers (E). Ensuring the clamp plates (D) are fitted on the upright sections inside the sides (Figure A.2).
3) Place the other stand frame (A) on working surface with threaded holes face up.
4) Turn the assembly (as in 1&2 above) over onto the stand frame.
5) Secure the sides to the stand frame with the screws and washers (E). Ensuring the clamp plates (D) are fitted on the upright sections inside the sides (Figure A.2).
6) Feet are already inserted into the ends of the stand frames.

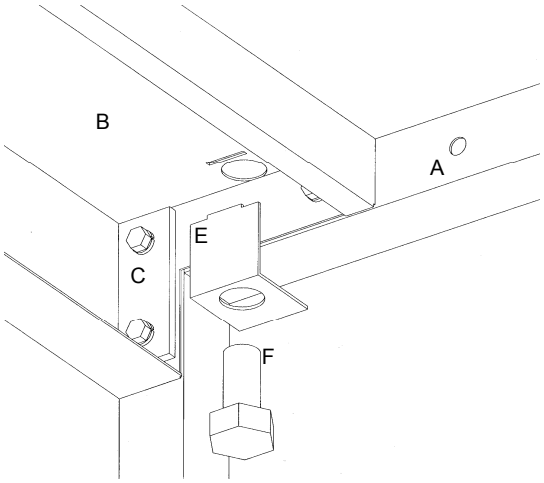


Figure A.2

C. BOTTOM OVEN

Onto Stand

1) Remove feet from oven.
2) Oven should be place onto stand with threaded holes in ovens foot plates lining up with holes on stand (at ends of sides B).
3) Secure oven using screws (F). It is essential that the Bolting Bracket (E) is correctly in position, refer Figure A.2. Bolt up through mounting bracket and stand into oven foot plate.
4) Adjust stand feet to level the oven.

Remove Panels

5) Remove side panels from oven, each side panel is held on by 4 screws.
6) Remove rear RH side corner panel (power and water entry points), secured with 3 screws at front edge of panel. (Figure A.3)

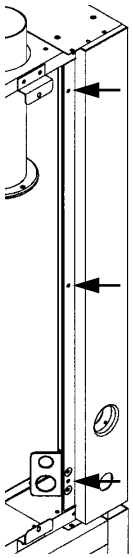


Figure A.3

7) Remove the 2 front top side panel support brackets, 2 screws each. (Figure A.4)

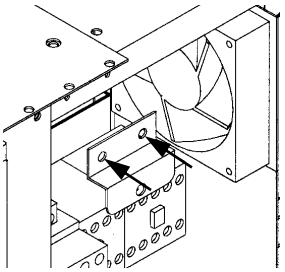


Figure A.4

Stacking Assembly

8) Place insulation panels (L) onto oven top (Figure A.5) fitting into the top of the oven to cover the insulation. There are 3 screws (M) down each side to secure the 2 panels.

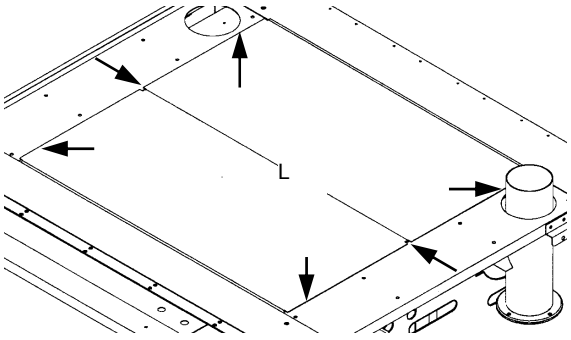


Figure A.5

9) Assemble loosely the front (G), back (H) and sides (I), with one screw (J) at each corner (Figure A.6), in from the sides.
10) Place stacking assembly on top of the lower oven and loosely attach, using 2 screws (K) in each corner of the unit (at front and back up from the sides).

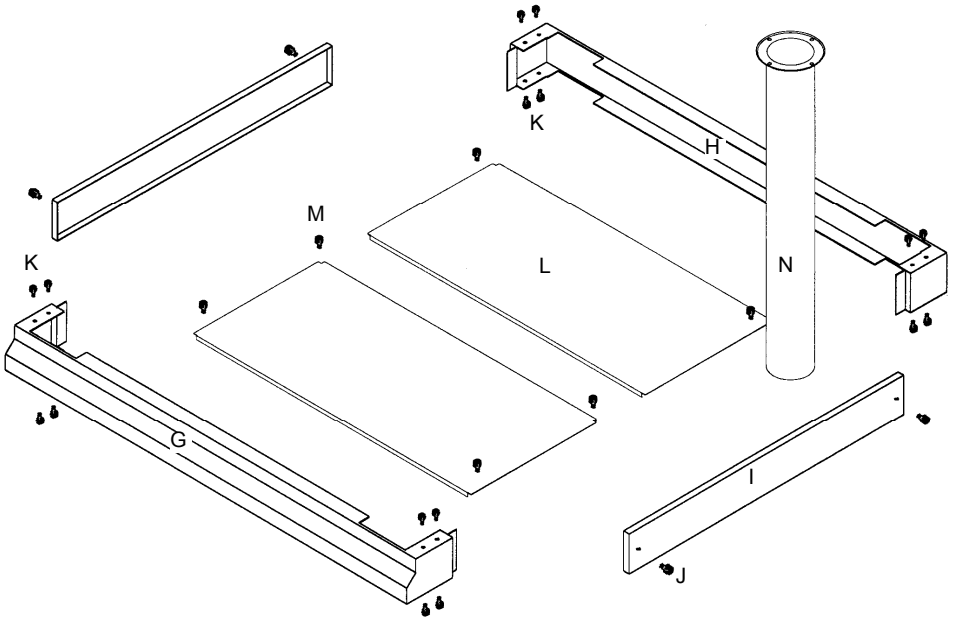


Figure A.6

D. TOP OVEN

Remove Panels

1) Remove side panels from oven, each side panel is held on by 4 screws.
2) Remove rear RH side corner panel (power and water entry points), secured with 3 screws at front edge of panel (Figure A.3).
3) Remove the 2 front bottom side panel support brackets, 2 screws each.

E. STACKING

Stack

1) Remove legs / feet from top unit and place onto bottom unit (on stacking assembly) secure using 2 screws (K) in each corner of the unit (at front and back down from the sides).
2) Remove the RH double stack side (I).
3) Remove vent bottom plate, 4 screws from underneath.
4) Secure vent extension (N) with 3 screws (screw closest to oven is inaccessible), using sealant provided (Q) to ensure sealed connection. See Figure A.7.
5) Refit the RH double stack side (I).
6) Tighten all screws on the stacking assembly.
7) Place connection sleeve (O) over join in vent using plenty of sealant (Q) between vent and sleeve, and secure using hose clamps (P). See Figure A.8.

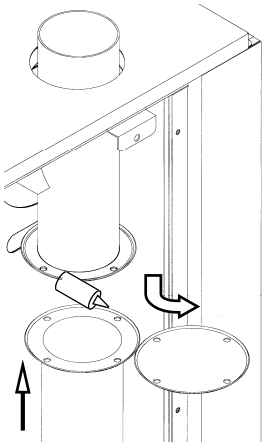


Figure A.7

Re-assembly

8) Replace side cover support brackets (Figure A.4) at top front of bottom unit and bottom front of top unit, using original screws.
9) Replace rear RH panel (Figure A.3) on each unit using original screws.
10) Replace side panels, using original screws.

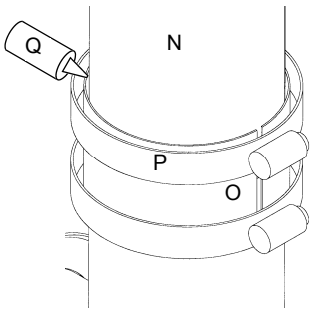


Figure A.8

APPENDIX B. STAND MOUNTING INSTRUCTIONS

A. UNPACKING

Check stand includes correct parts and correct quantities for the stand purchased as listed.

A26C has 'Castor Stem Sockets' in Stand Frames, not feet.

ITEM	DESCRIPTION	Qty
A	Stand frame front (Nutserts one side only)	1
B	Stand frame rear (Nutserts both sides)	1
D	Rack	2
E	Screw - $^3/_4$"x$^1/_4$" BSW hex hd	8
E	Washer - $^1/_4$" Spring	8
E	Washer - $^1/_4$" Flat	8
F	Screw - 2 $^1/_4$"x$^3/_4$" hex hd	4
	Castor (A26C only)	2
	Castor braking (A26C only)	2

B. ASSEMBLY (diagram on reverse side)

Stand

1) Place front stand frame (A) on working surface with threaded holes and oven supports face up.
2) Fit both racks (D) to the stand frames (A).

   Take care which holes are used to secure the racks as inside holes in rack uprights (D) are used for 18" (460mm) wide trays, and outside holes are used for 16" (405mm) wide trays.
3) Turn assembly upright.

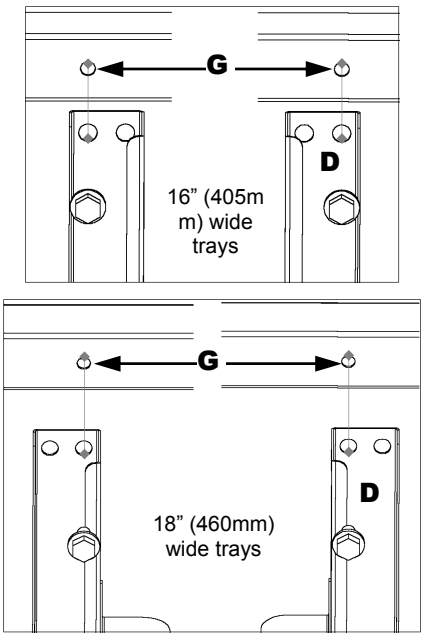


Figure B.1

4) Fit the other stand frame (B) with screws and washers (E).

NOTE:

- **Take care which way around the frame is. For 26" oven have the oven supports facing the racks, for 30" oven have the supports (C) facing away from racks (refer figure B.2).**
- **Take care which holes are used to secure the racks, as in 2 above.**

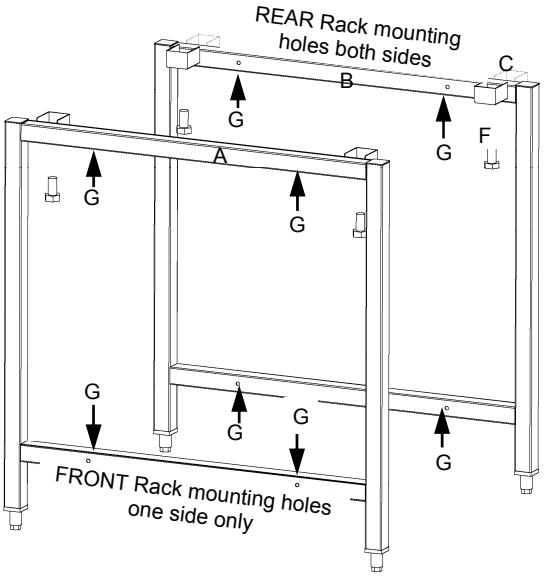


Figure B.2

5) A26C only. Insert castors into Stand Frames, ensure 2 braking castors are in front frame. (Front frame has nutserts in one face only)

Oven - Mounting on Stand

6) Remove feet from oven (if fitted).
7) Oven should be place onto stand with threaded holes in ovens foot plates lining up with holes in oven supports on stand.
8) Secure oven using screws (F).
9) A26 only. Adjust stand feet to level the oven.
10) A26C only. Ensure braking castors are in front frame.

APPENDIX C. MOTOR CONTROL AND STEAM TIMER ADJUSTMENT GUIDE Up to Lot No. 0817999 Only)

FS Series Timers—Settings E35 Convection Oven (Figure C.1)

NOTE: Superceded by FE Series Timers—see below.

Figure C.1

Timer	Type	Function	Time Adjust Setting	Actual Time
T1	FSF3	Fan motor direction	0.15	1.5 minutes
T2	FSD3	Steam time	0.3	10 seconds
T3	FSD3	Fan delay	0.3	10 seconds
T4	FSD3	Steam time	0.3	10 seconds
T5	FSD3	Fan delay	0.3	10 seconds

FE Series Timers—Settings E35 Convection Oven (Figure C.2)

NOTE: Supercedes FS Series Timers.

FE series timers interchangeable with earlier FS series timers (above). Time scale settings as per listing below.

Figure C.2

Timer	Type	Function	Scale Setting	Time Adjust Setting	Actual Time
T1	FEF3T	Fan motor direction	10 minutes	0.15	1.5 minutes
T2	FED3T	Steam time	10 seconds	1.0	10 seconds
T3	FED3T	Fan delay	10 seconds	1.0	10 seconds
T4	FED3T	Steam time	10 seconds	1.0	10 seconds
T5	FED3T	Fan delay	10 seconds	1.0	10 seconds