



SP12 & SP25 – SERIES 4

Installation, Operating and Servicing Instructions



Please make a note of your product details for future use:

Date Purchased: _____

Model Number: _____

Serial Number: _____

Dealer: _____

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IMPORTANT INFORMATION



Read these instructions carefully before using this product, paying particular attention to all sections that carry warning symbols, caution symbols and notices. Ensure that these are understood at all times.



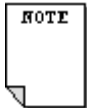
WARNING!

This symbol is used whenever there is a risk of personal injury.



CAUTION!

This symbol is used whenever there is a risk of damaging your Lincat product.



NOTE:

This symbol is used to provide additional information, hints and tips.

KEEP THIS MANUAL FOR FUTURE REFERENCE

WARNINGS AND PRECAUTIONS



This appliance must be installed, commissioned and serviced by a qualified person in accordance with national and local regulations in force in the country of installation.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person.

Ensure that the plug/socket is accessible at all times.

Strip plastic coating and clean the appliance before use.

Disconnect this appliance before servicing, maintenance or cleaning.

DELIVERY

The packaged machine consists of:

| | |
|---|---|
| Peeler Unit, with lid, control box and mounting bracket | 1 |
| Peeling plate | 1 |
| Water supply pipe and 2 hose clips | 1 |
| 1m long 3" flexible waste hose and hose clip | 1 |
| Instruction Booklet | 1 |

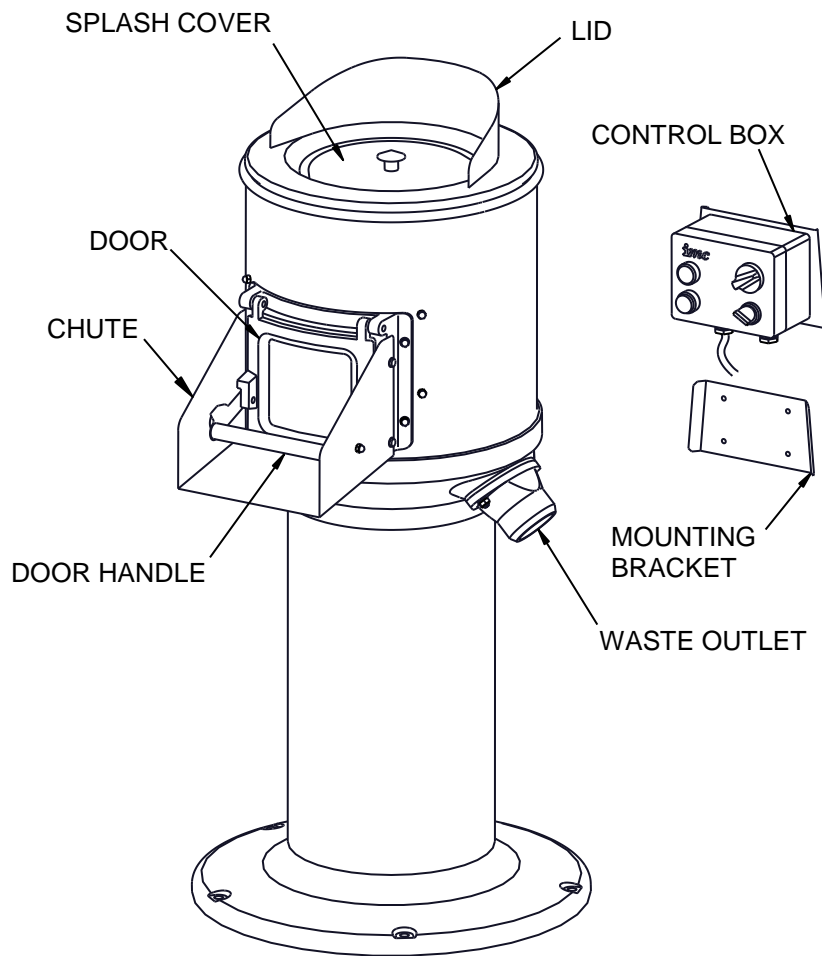
If any accessories have been ordered they will be supplied in separate packages. Please notify both the carrier and the supplier within 24 hours of receipt if anything is missing or damaged.

Check that the correct machine has been supplied and that the voltage, marked on the rating label, is suitable for the supply available. The rating label is located at the back of the cylinder near the supply cable inlet.

INTRODUCTION

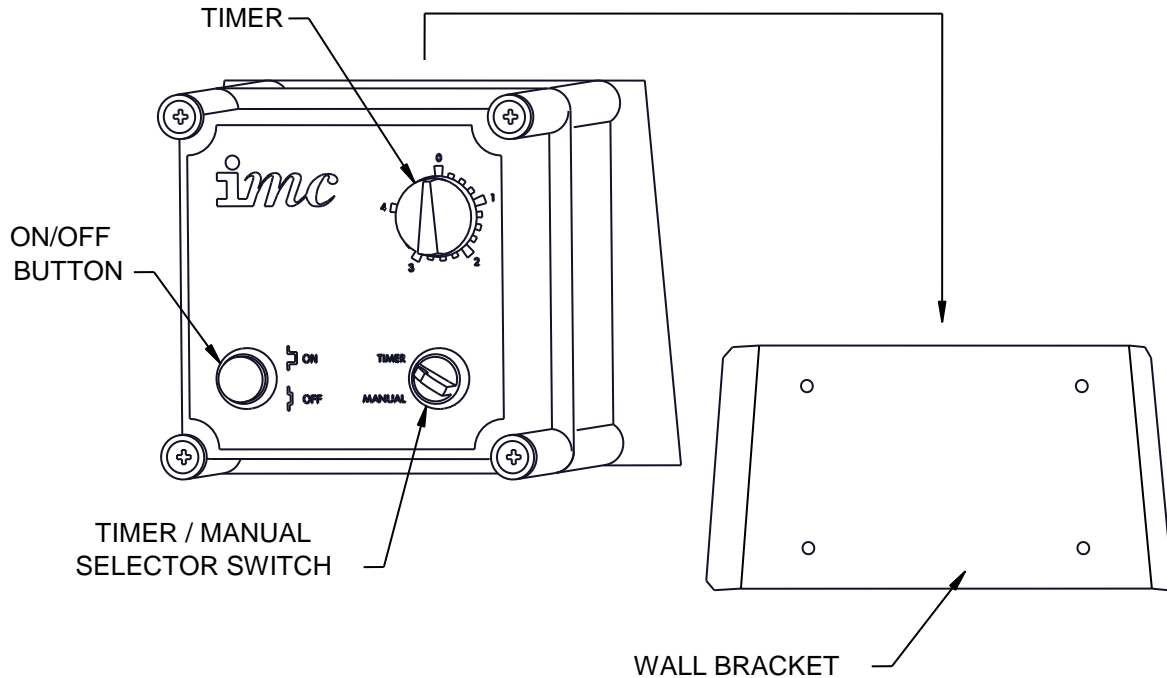
This machine is intended for peeling potatoes. Its use may be extended to other root vegetables. It is not recommended to use this machine for peeling onions.

YOUR PEELER



CONTROLS

The peeler has a separate box for mounting on a wall bracket near the machine.



Note: Control boxes for three phase machines have separate on and off buttons.

INSTALLATION

For the Installer:

These Instructions contain important information designed to help the user obtain the maximum benefit from the investment in an IMC SP Peeler.

Please read them carefully before starting work, and consult with the supplier in the event of any queries.

Be sure to leave this Instruction Manual with the user after the installation of the machine is complete.

Procedure

The SP Range is supplied with a pedestal and is designed to be bolted to the floor. The control box is designed to be mounted on a wall bracket so that it is easily accessible once the machine is installed.

Place the machine in its desired location and mark through the pedestal base the location of the five floor fixing holes. Remove the machine and prepare the floor for rawlbolts or other suitable floor fixings. Replace the unit into working position and fit the rawlbolts or other fixings. Tighten up the fixings.

Place the control box bracket in the desired location and mark through the four screw holes. Remove the bracket and prepare the wall for rawlplugs or other suitable wall fixings. Replace the bracket and secure in place with four screws. Slide the control box onto its wall bracket.

WATER SUPPLY

Connect the water supply pipe to the water inlet located on the top of the lid, and secure using the supplied hose clips. Fit the other end of the supply pipe to a cold water supply that incorporates a tap or shut off valve that can be used to regulate the water flow to approximately 3 – 4 litres per minute. The water inlet is fitted with a baffle to improve the distribution of water into the cylinder. This may cause minor splashing on the surface of the lid; if this becomes severe, reduce water flow as required. The maximum water pressure for the supply is 10 bar. Ensure that the hose supplied with the machine is used and that an old hose is not reused.

PLEASE NOTE: these machines are fitted with an air-break to prevent back syphonage into the mains supply. Some local authorities may nevertheless require connection is made to a storage cistern rather than direct to the mains supply. This applies to UK installations only. Overseas customers should install the machine in accordance with local regulations.

If in doubt, check with your local authority

WASTE OUTLET CONNECTION

The peeler has two possible waste outlet locations. If it is required to change the waste outlet location, remove both the existing waste outlet and the blanking plate on the opposite side. Refit both the waste outlet and the blanking plate in their new positions.

A flexible hose, supplied with the machine, can be fitted over the waste outlet to direct the waste into a gully or intercepting tank. If required, secure with the hose clip supplied. Longer lengths of flexible hose are available from IMC on request.

The waste outlet also incorporates a 2" BSP female thread for connection to standard 54mm (2") waste pipe. DO NOT reduce the diameter of the waste pipe to below 54mm. The length of the pipe should be kept to a minimum and the pipe must have a fall of at least 1:15. Changes of direction should be made by swept bends rather than elbows and cleaning eyes should be fitted where possible in accordance with standard plumbing practice.

A trap is not necessary if the discharge is into a gully or an intercepting tank, although a trap must be provided in the outlet pipe from the intercepting tank. If a trap is required it should be made with 45° bends and not with a 'U' or 'P' bend or with a bottle trap.

WASTE EJECTOR

The waste ejector is an optional fitting that dilutes the waste sludge to enable it to flow easily through the drains without fear of blockage.

Waste Ejectors are not recommended in the follow circumstances;

- A pipe run exceeding 15m between the machine and main drain
- When a fall of 1:15 cannot be achieved
- When piping is exceptionally complex

In any of the above cases an interceptor tank is recommended.

Fitting the waste ejector

If the waste ejector is not fitted to the peeler when it arrives, it can be fitted as follows:

Remove the existing waste outlet. Decide on which side the outlet pipe is to be connected and, if necessary, remove the blanking plate and gasket from the alternative waste outlet position and refit to the other side. Fit the waste ejector and gasket in place of the waste outlet.

The waste ejector has a ½" BSP connection for the water supply on each side of the unit. Select which is to be used for the water connection and utilise the plug for sealing off the other. Connect the hose between the connector at the top of the waste ejector and the water inlet on the peeler lid.

Waste Ejector adjustments

When the pipework is complete set the ejector adjustments to give the correct water flow though the machine. Two adjusting screws and lock nuts are provided for this purpose. The top one controls flow though the peeler and the lower one controls the jet to the waste pipe. Adjust the top screw until the flow through the machine is between 2.25 and 7 litres per minute, then tighten the lock nut. Set the lower screw to allow a jet of water into the waste pipe of 2.25 to 3.5 litre per minute, then tighten the lock nut.

ELECTRICITY SUPPLY CONNECTION

Before connecting, examine the rating plate attached to the machine to ensure that the characteristics shown are correct for the supply available. Any changes to the supply or new mains runs should be carried out by a qualified electrician and in accordance with the IET Codes of Practice.

Single phase machines come supplied with a three pin plug. The socket used should be away from any splash area and be accessible with the peeler installed. A dedicated supply to the socket is recommended and it should be protected by a C or D class circuit breaker rated at 10A for the SP12 and 16A for the SP25.

Three phase machines should be connected to a 15A isolator providing at least 3mm separation in all poles. The isolator should be fused at 10A.

The supply to the machine must also be protected by a 30mA RCD.

The mains lead fitted to the machine is the minimum required for individual connection to the mains supply. Site conditions may vary with additional length of cable run, encapsulation in trunking, etc. being required. Should this apply, a qualified electrician must alter the lead in accordance with the IET Codes of Practice.

WARNING: This machine must be earthed

The wires in the mains lead for single phase supply are coloured:

| | |
|------------------|---------|
| Green and Yellow | Earth |
| Brown | Live |
| Blue | Neutral |

The wires in the mains lead for three phase supply are coloured:

| | |
|------------------|---------|
| Green and Yellow | Earth |
| Brown | Phase 1 |
| Black | Phase 2 |
| Grey | Phase 3 |

The 3 phase machines do not have a neutral wire. If the supply has a neutral wire isolate it and only wire the unit to the 3 phases and earth. An Equipotential earthing point is located on the back of the cylinder near the cable outlet if equipotential bonding is required.

Should the mains lead become damaged, it must be replaced by an IMC service agent or qualified electrician in order to avoid a hazard.

COMMISSIONING

After making the electrical connection, switch on the machine, and check that the direction of rotation of the peeling plate is **CLOCKWISE** when viewed from above. The direction of rotation of single phase units is set at the factory. If it is not rotating in the correct direction contact Lincat. To change the direction of rotation of three phase units, switch off the machine, isolate the supply and interchange any two phase wires.

OPERATION

- 1 Fit the peeling plate, ensuring that it is properly located on the drive shaft.
- 2 Measure out the potatoes into a container which holds a known measured weight of 12kg or 25kg depending on machine size. Check for stones which could damage the abrasive. Should this happen, the noise will indicate the presence of stones. Switch off immediately and remove them. The top of the liner can also be used as a maximum loading line.
- 3 Set the run time required on the control panel - two minutes is normally more than adequate – or select manual operation, and press the green start button. Turn on the water supply.
- 4 Ensure that the chute discharge door is closed.
- 5 Load the potatoes into the peeler and place the splash cover onto the top of the cylinder.
- 6 The machine is now operating. Remove the splash cover to check the progress of peeling process.
- 7 The peeler can be stopped at any time by pressing the Stop button, or it will stop on completion of a timed cycle.
- 8 Turn off the water supply, open the chute door and while keeping the door open, press the Start button to evacuate the potatoes, press the Stop button when the peeler is empty.
- 9 Keep the peeled potatoes under water until required for cooking.



ON NO ACCOUNT put a hand or implement into the machine, or wedge the door open while discharging.

SAFETY

All SP-Range peelers are controlled so that if the electricity supply is interrupted the machine will not restart automatically.

All single phase SP-Range controls are fitted with a thermal trip. This ensures that the controls cannot overheat and become damaged. If the thermal trip cuts in, the machine will not run until it has cooled down and the peeler is switched off and on again. The controls will not overheat in normal usage.

Do not put hands into the machine while it is running.

On single phase machines **do not** unplug the unit with wet hands.

CLEANING

It is essential to clean the machine at least once a day, preferably at the end of each period of operation.

- 1 Switch off at the socket or isolator.
- 2 Remove the lid and splash cover.
- 3 Lift out the peeling plate.
- 4 Clean the peeling plate and cylinder in a sink, potwash or by hosing with a spray.
- 5 Rinse the inside of the peeling chamber and base with warm water, using a mild detergent if necessary to remove starch build up.
- 6 Wipe the exterior of the machine with a damp cloth, again using a mild detergent if required.

DO NOT USE CLEANING MATERIALS CONTAINING ABRASIVES OR BLEACHES.

DO NOT STEAM CLEAN. DO NOT CLEAN WITH A WATER JET.

DO'S AND DON'TS

- Do** Install on a level service.
- Do** Ensure power supply isolator or socket is accessible with the peeler installed.
- Do** Clean the machine after each period of use.
- Don't** Sit or stand on top of the peeler.
- Don't** Place hands inside unit while discharging or peeling.
- Don't** Use the unit outside.

MAINTENANCE

Other than regular cleaning the SP-Range of peelers require no maintenance by the end user. It is recommended that the unit is serviced by a Lincat approved engineer at least once a year.

The motor in the single phase units is controlled via an inverter. The following warnings must be observed before working on this unit.



WARNING. Only suitably qualified personnel should service this equipment, after becoming familiar with all safety notices, installation, operation and maintenance procedures related to the inverter.



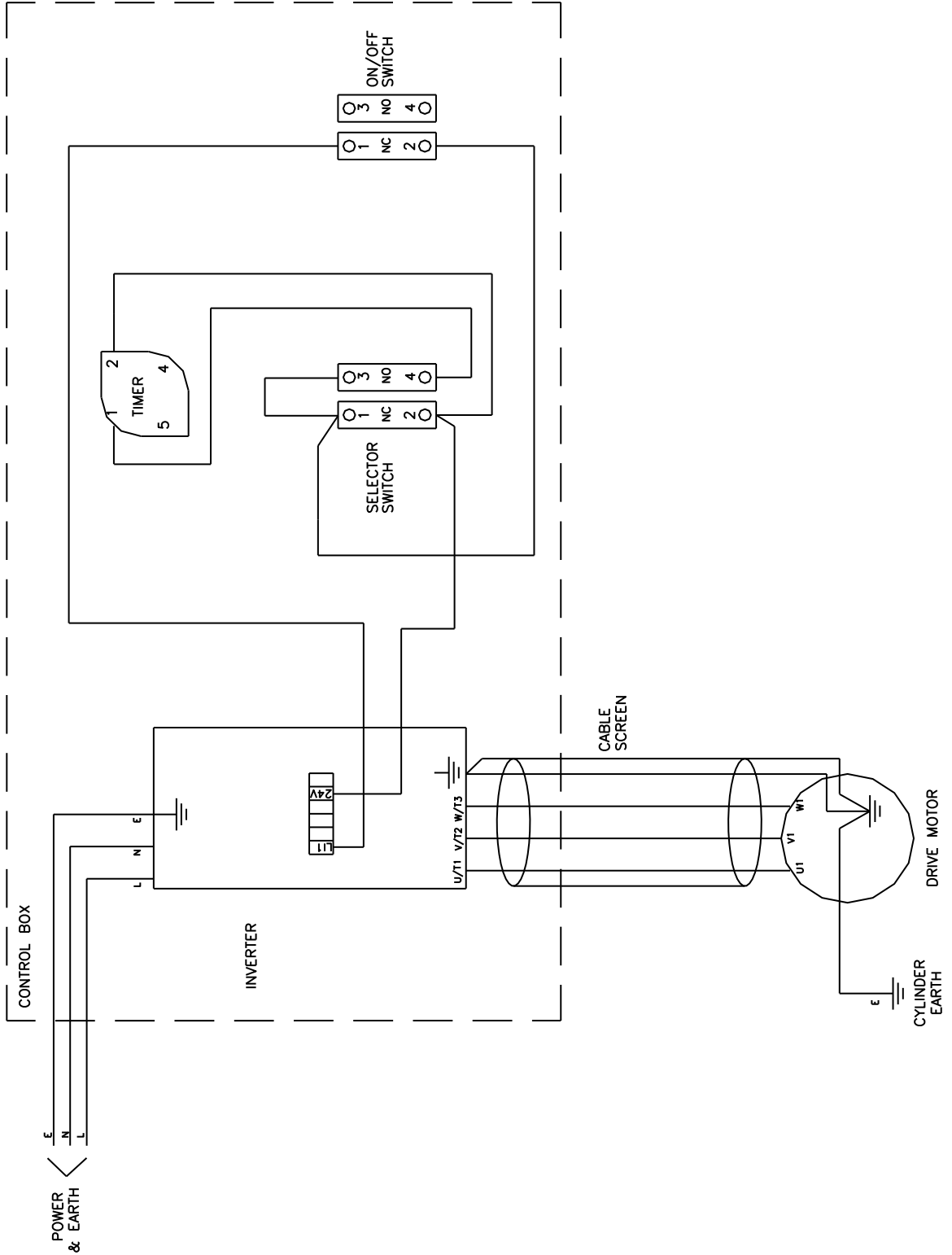
WARNING. Risk of electric shock. The capacitors in the inverter remain charged for 5 minutes after power has been removed. Do not open the control box until 5 minutes after power has been removed.



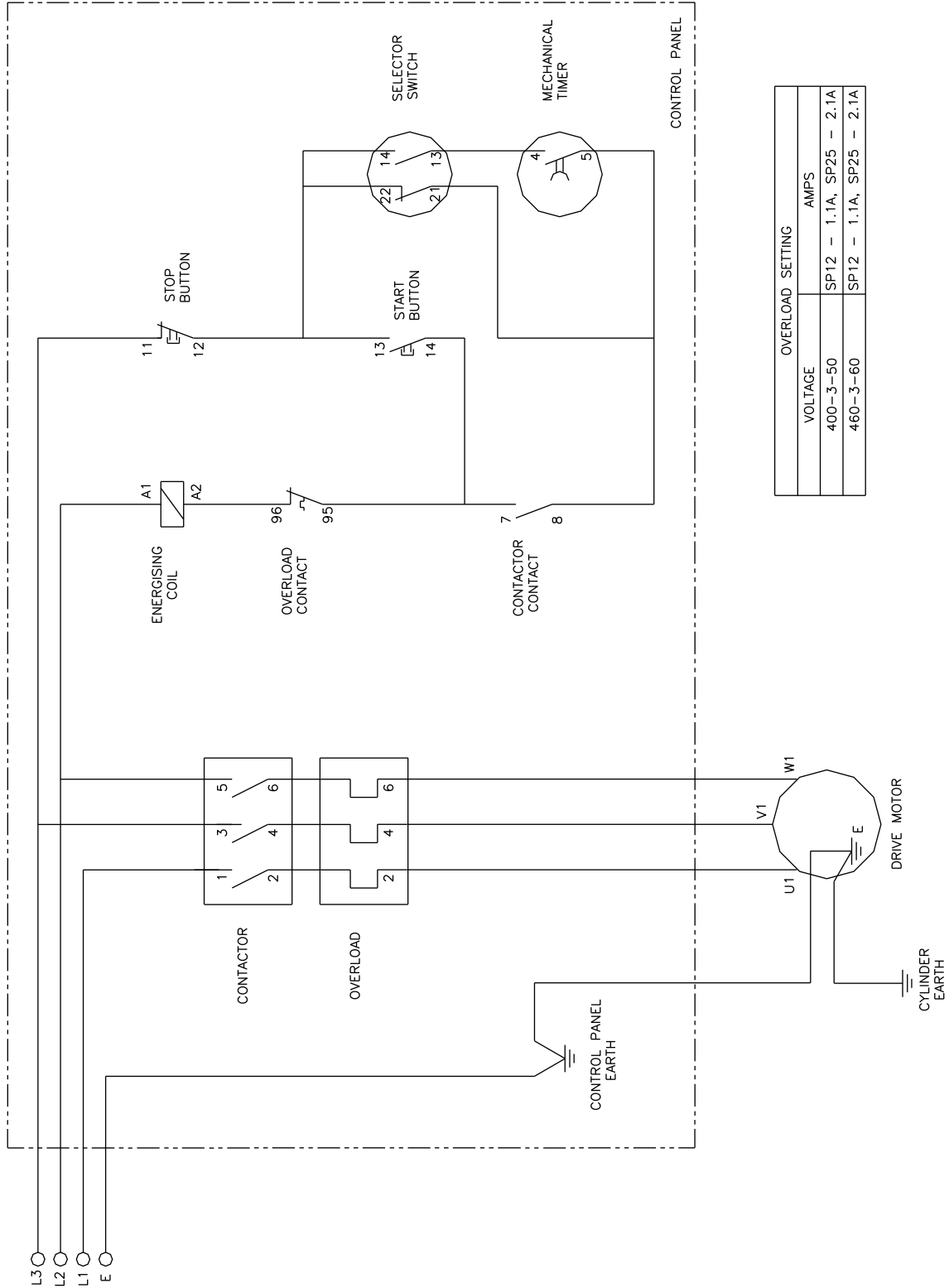
WARNING. Repairs to the inverter may only be carried out by Schneider Service, or by repair centres authorised by Schneider.

Details of Lincat Service Contracts are available on application.

WIRING DIAGRAM SINGLE PHASE UNITS

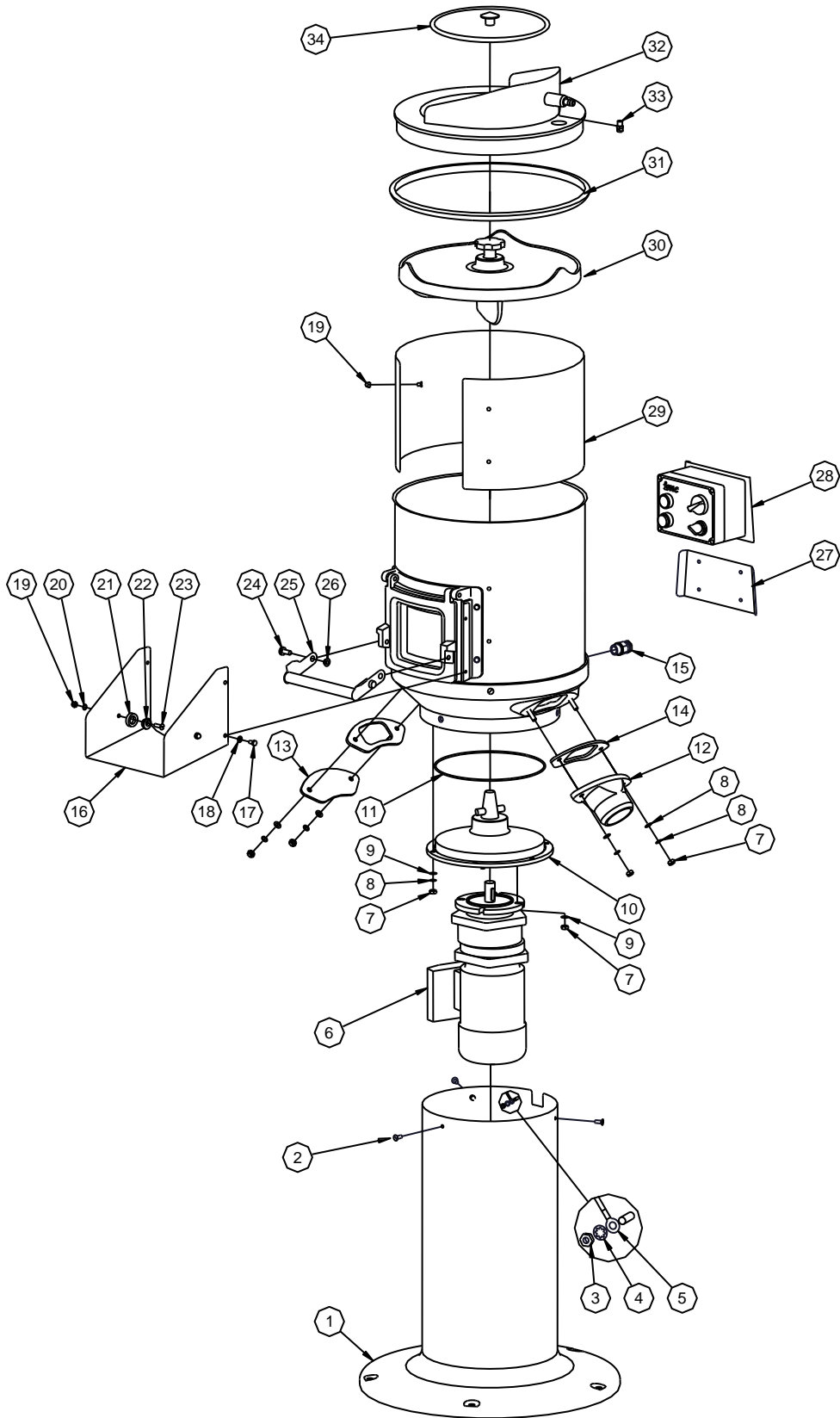


WIRING DIAGRAM THREE PHASE UNITS



| OVERLOAD SETTING | |
|------------------|--------------------------|
| VOLTAGE | AMPS |
| 400-3-50 | SP12 - 1.1A, SP25 - 2.1A |
| 460-3-60 | SP12 - 1.1A, SP25 - 2.1A |

PARTS ILLUSTRATION

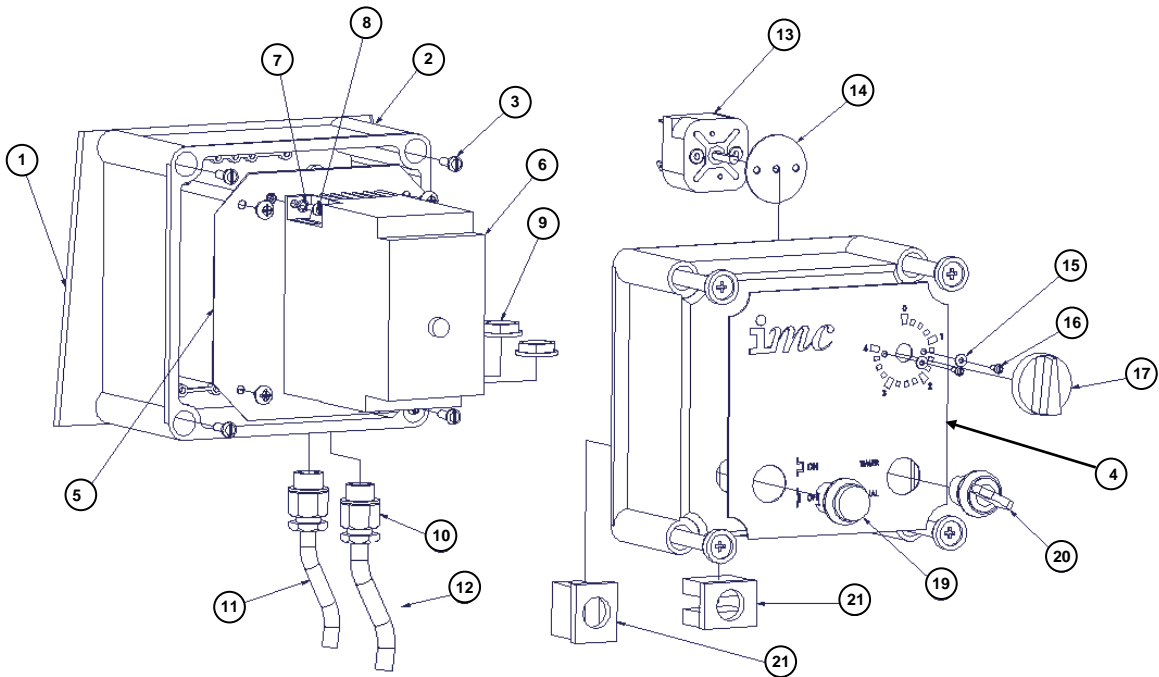


SPARES LIST

| | SP12 | | SP25 | |
|------|-------------------------|---|-------------------------|---|
| Item | Part No | Description | Part No | Description |
| 1 | S58/593 | SP12 Low Pedestal | S58/590 | SP25 Low Pedestal |
| | S58/594 | SP12 High Pedestal | E58/591 | SP25 High Pedestal |
| 2 | D18/050 | Screw M6 x 16 CSK SS | D18/050 | Screw M6 x 16 CSK SS |
| 3 | D20/038 | M5 Full Nut SS | D20/038 | M5 Full Nut SS |
| 4 | D25/004 | M5 Shakeproof Washer SS | D25/004 | M5 Shakeproof Washer SS |
| 5 | G60/369 | Earth Wire, Motor to Pedestal | G60/369 | Earth Wire, Motor to Pedestal |
| 6 | G40/205 | Motorgearbox 0.37kW | G40/216 | Motorgearbox 0.75kW |
| | G60/372 | Motor cable (1ph) | G60/372 | Motor cable (1ph) |
| | G60/373 | Motor cable (3ph) | G60/373 | Motor cable (3ph) |
| | G86/003 | Ferrite (1ph only) | G86/003 | Ferrite (1ph only) |
| 7 | D18/050 | M8 Full Nut SS | D18/050 | M8 Full Nut SS |
| 8 | D25/079 | M8 Spring Washer SS | D25/079 | M8 Spring Washer SS |
| 9 | D25/068 | M8 Plain Washer SS | D25/068 | M8 Plain Washer SS |
| 10 | S58/549 | Bearing Housing Assembly | S58/549 | Bearing Housing Assembly |
| 11 | A02/070 | O Ring | A02/070 | O Ring |
| 12 | C28/023 M1 Z2 | Waste Outlet, Machined | C28/023 M1 Z2 | Waste Outlet, Machined |
| 13 | E58/059 | Waste Outlet Cover Plate | E58/059 | Waste Outlet Cover Plate |
| 14 | A11/026 | Waste Outlet Gasket | A11/026 | Waste Outlet Gasket |
| 15 | G80/029 | Cable Gland | G80/029 | Cable Gland |
| 16 | E58/081 | Chute | E58/081 | Chute |
| 17 | D20/031 | Screw M6 x 12 Hex SS | D20/031 | Screw M6 x 12 Hex SS |
| 18 | D25/052 | M6 Plain Washer SS | D25/052 | M6 Plain Washer SS |
| 19 | D20/031 | M6 Dome Head Nut | D20/031 | M6 Dome Head Nut |
| 20 | D25/005 | M6 Shakeproof Washer SS | D25/005 | M6 Shakeproof Washer SS |
| 21 | M79 | Door Roller | M79 | Door Roller |
| 22 | L21/048 | Eccentric | L21/048 | Eccentric |
| 23 | D18/051 | Screw M6 x 20 CSK SS | D18/051 | Screw M6 x 20 CSK SS |
| 24 | D21/057 | Screw M8 x 20 Pan SS | D21/057 | Screw M8 x 20 Pan SS |
| 25 | S59/253 | Door Handle | S59/253 | Door Handle |
| 26 | A00/058 | Nylon Shoulder Washer | A00/058 | Nylon Shoulder Washer |
| 27 | E58/096 | Wall Bracket (1ph) | E58/096 | Wall Bracket (1ph) |
| | E58/111 | Wall Bracket (3ph) | E58/111 | Wall Bracket (3ph) |
| 28 | S58/587 | SP12 Control Box 1ph (Inverter) (Inc. Wall Bracket & cables) | S58/588 | SP25 Control Box 1ph (Inverter) (Inc. Wall Bracket & cables) |
| | S58/596 | SP12 Control box 3ph (Inc. Wall Bracket & cables) | S58/595 | SP25 Control box 3ph (Inc. Wall Bracket & cables) |
| | G60/370 M2 | Mains cable and plug (1ph) | G60/370 M2 | Mains cable and plug (1ph) |
| | G60/371 | Mains cable (3ph) | G60/371 | Mains cable (3ph) |
| 29 | E58/113 Z | SP12 Liner | E58/114 Z | SP25 Liner |
| 30 | S58/545 | SP12 Peeler Plate | S58/546 | SP25 Peeler Plate |
| 31 | M58/011 M1 | SP12 Rim Moulding | M58/011 M2 | SP25 Rim Moulding |
| 32 | S58/592 | SP12 Cast Lid assembly (Including Spray Nozzle) | S58/589 | SP25 Cast Lid assembly (Including Spray Nozzle) |
| 33 | J04/324 | Spray Nozzle | J04/324 | Spray Nozzle |
| 34 | S58/541 | SP12 Splash Cover | S58/542 | SP25 Splash Cover |
| | | | | |
| | SP12 ACCESSORIES | | SP25 ACCESSORIES | |
| | A29/003 | Splash Cover Retaining Strap | A29/003 | Splash Cover Retaining Strap |
| | S58/568 | Integral Filter Basket | S58/568 | Integral Filter Basket |
| | S58/569 | Floor Standing Interceptor Tank | S58/569 | Floor Standing Interceptor Tank |
| | S58/570 | Waste ejector | S58/570 | Waste ejector |

When ordering spare parts or accessories always quote the SERIES AND SERIAL NUMBER of the machine, found on the rating label.

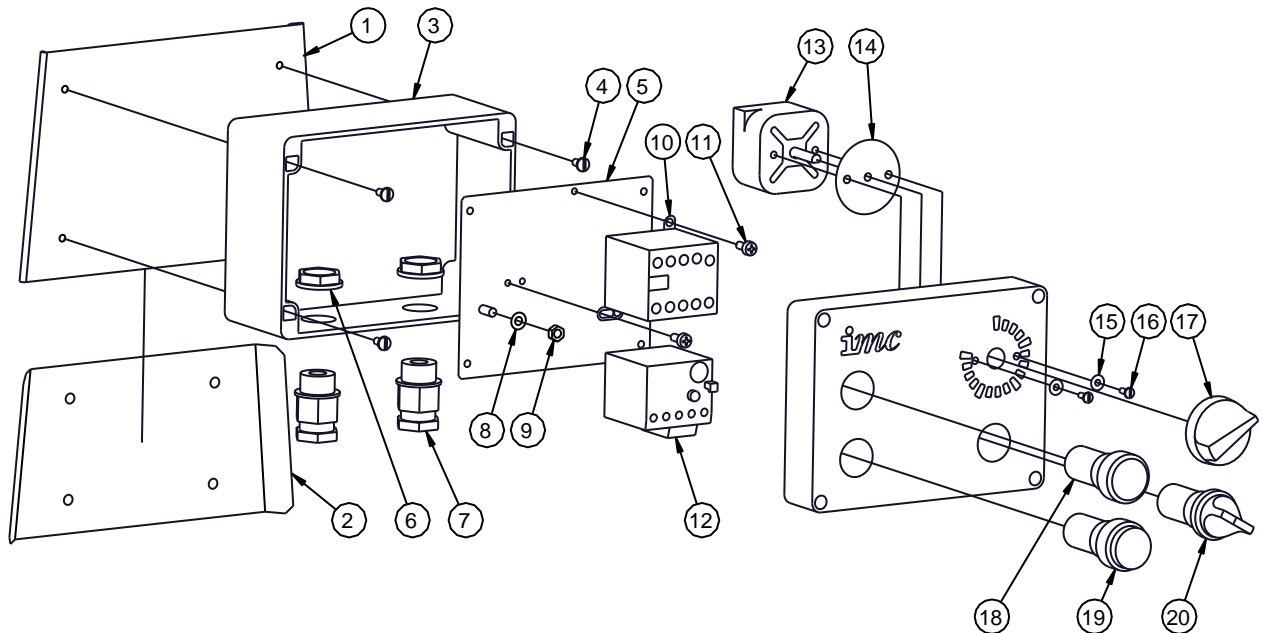
1PH CONTROL BOX SPARE PARTS LIST



| | SP12 | | SP25 | |
|------|------------|-----------------------------|------------|-----------------------------|
| Item | Part No | Description | Part No | Description |
| 1 | E58/096 | Mounting Bracket | E58/096 | Mounting Bracket |
| | E58/097 | Wall Bracket (Not shown) | E58/097 | Wall Bracket (Not shown) |
| 2 | G76/031 M2 | Control Box | G76/031 M2 | Control Box |
| 3 | D21/052 | Screw M6 x 16 Pan SS | D21/052 | Screw M6 x 16 Pan SS |
| 4 | A08/641 | Decal | A08/641 | Decal |
| 5 | E58/116 | Control Box Plate | E58/116 | Control Box Plate |
| 6 | G30/431 | Inverter 0.75kW (Schneider) | G30/431 | Inverter 0.75kW (Schneider) |
| 7 | D25/033 | M4 Shakeproof Washer SS | D25/033 | M4 Shakeproof Washer SS |
| 8 | D21/038 | Screw M4 x 12 Pan SS | D21/038 | Screw M4 x 12 Pan SS |
| 9 | A10/224 | Cable Gland Nut | A10/224 | Cable Gland Nut |
| 10 | G80/029 | Cable Gland | G80/029 | Cable Gland |
| 11 | G60/372 | Motor cable 1ph | G60/372 | Motor cable 1ph |
| 12 | G60/370 M2 | Mains cable and plug1ph | G60/370 M2 | Mains cable and plug1ph |
| 13 | G34AL | Timer | G34AL | Timer |
| 14 | A11/219 | Timer Gasket | A11/219 | Timer Gasket |
| 15 | D25/066 | M3 Seloc Washer | D25/066 | M3 Seloc Washer |
| 16 | D21/031 | Screw M3 x 8 Pan SS | D21/031 | Screw M3 x 8 Pan SS |
| 17 | G45/066 | Timer Knob | G45/066 | Timer Knob |
| 18 | | | | |
| 19 | G45/113 | Push Button Black | G45/113 | Push Button Black |
| 20 | G45/114 | Selector Switch | G45/114 | Selector Switch |
| 21 | G45/111 | Button contacts and holder | G45/111 | Button contacts and holder |

When ordering spare parts or accessories always quote the SERIES AND SERIAL NUMBER of the machine, found on the rating label.

3PH CONTROL BOX SPARE PARTS LIST



| | SP12 | | SP25 | |
|------|------------|------------------------|------------|------------------------|
| Item | Part No | Description | Part No | Description |
| 1 | E58/117 | Mounting Bracket | E58/117 | Mounting Bracket |
| 2 | E58/119 | Wall Bracket | E58/119 | Wall Bracket |
| 3 | G76/041 M1 | Control Box (inc lid) | G76/041 M1 | Control Box (inc lid) |
| 4 | D21/097 | Screw M4 x 8 Pan SS | D21/097 | Screw M4 x 8 Pan SS |
| 5 | E58/118 | Control Box Plate | E58/118 | Control Box Plate |
| 6 | A10/224 | Cable Gland Nut | A10/224 | Cable Gland Nut |
| 7 | G80/029 | Cable Gland | G80/029 | Cable Gland |
| 8 | D25/004 | M5 Shakeproof Washer | D25/004 | M5 Shakeproof Washer |
| 9 | D20/038 | M5 Full Nut SS | D20/038 | M5 Full Nut SS |
| 10 | G30/316 | Contactor 400V (3ph) | G30/316 | Contactor 400V (3ph) |
| 11 | D22/022 | Screw No8 x 1/2" | D22/022 | Screw No8 x 1/2" |
| 12 | G30/318 | Overload (3ph) | G30/299 | Overload (3ph) |
| 13 | G34AL | Timer | G34AL | Timer |
| 14 | A11/219 | Timer Gasket | A11/219 | Timer Gasket |
| 15 | D25/066 | M3 Seloc Washer | D25/066 | M3 Seloc Washer |
| 16 | D21/031 | Screw M3 x 8 Pan SS | D21/031 | Screw M3 x 8 Pan SS |
| 17 | G45/066 | Timer Knob | G45/066 | Timer Knob |
| 18 | G45/099 | Green Push Button | G45/099 | Green Push Button |
| 19 | G45/100 | Red Push Button | G45/100 | Red Push Button |
| 20 | G45/102 | Selector Switch | G45/102 | Selector Switch |
| | G60/371 | Mains supply cable 3ph | G60/371 | Mains supply cable 3ph |
| | G60/373 | Motor cable 3ph | G60/373 | Motor cable 3ph |

When ordering spare parts or accessories always quote the SERIES AND SERIAL NUMBER of the machine, found on the rating label.

GUARANTEE

This unit carries a comprehensive UK mainland 2 year warranty. The guarantee is in addition to, and does not diminish your statutory or legal rights.

The guarantee does not cover:

- Accidental damage, misuse or use not in accordance with the manufacturer's instructions.
- Consumable items (such as filters, glass, bulbs, slot toaster elements and door seals.)
- Damage due to incorrect installation, modification, unauthorised service work or damage due to scale, food debris build-up, etc.

The manufacturer disclaims any liability for incidental, or consequential damages.

Attendance is based on reasonable access to the appliance to allow the authorised technician to carry out the warranty work.

Service calls to equipment under warranty will be carried out in accordance with the conditions of sale. Unless otherwise specified, a maximum of 15 minutes of administrative time, not spent directly carrying out servicing work, is provided for within the warranty. Any requirement for staff attending the call to spend greater time than 15 minutes due to administrative requirements, such as on health and safety risk assessments, will be chargeable at the prevailing rate.

SERVICE INFORMATION

For help with the installation, maintenance and use of your **Lincat** equipment, please contact our service department:

☎ UK: 01522 875520

For non-UK customers, please contact your local Lincat dealer

All service work, other than routine cleaning should be carried out by one of our authorised service agents. We cannot accept responsibility for work carried out by other persons.

To ensure your service enquiry is handled as efficiently as possible, please tell us:

- Brief details of the problem
 - Product code
 - Type number
 - Serial number
- } All available on serial plate

Lincat reserve the right to carry out any work under warranty, given reasonable access to the appliance, during normal working hours, Monday to Friday, 08:30 to 17:00.