



Metcalfe 56SS Potato Peeling Machine

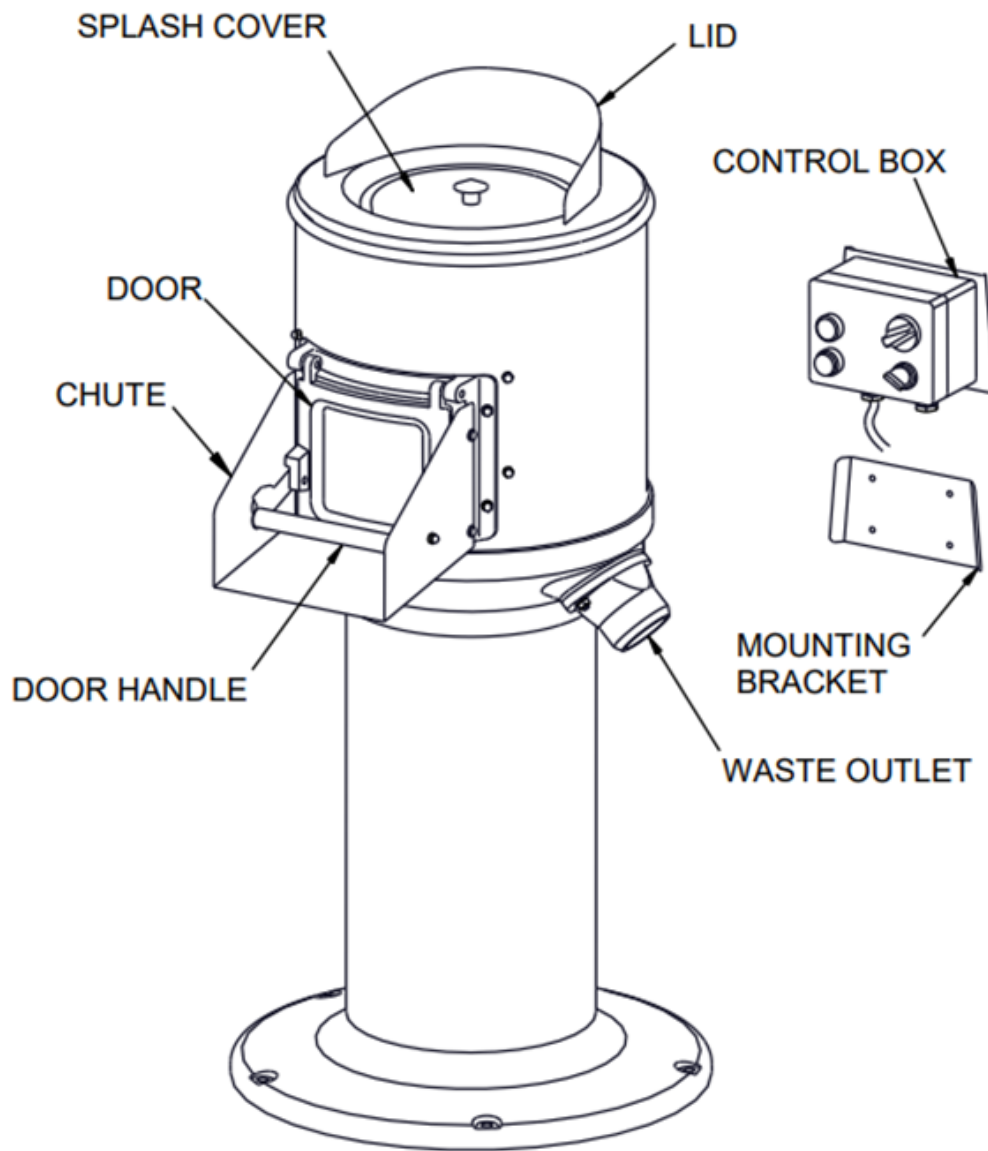
Installation & Operating Instruction Manual & Breakdown Drawings



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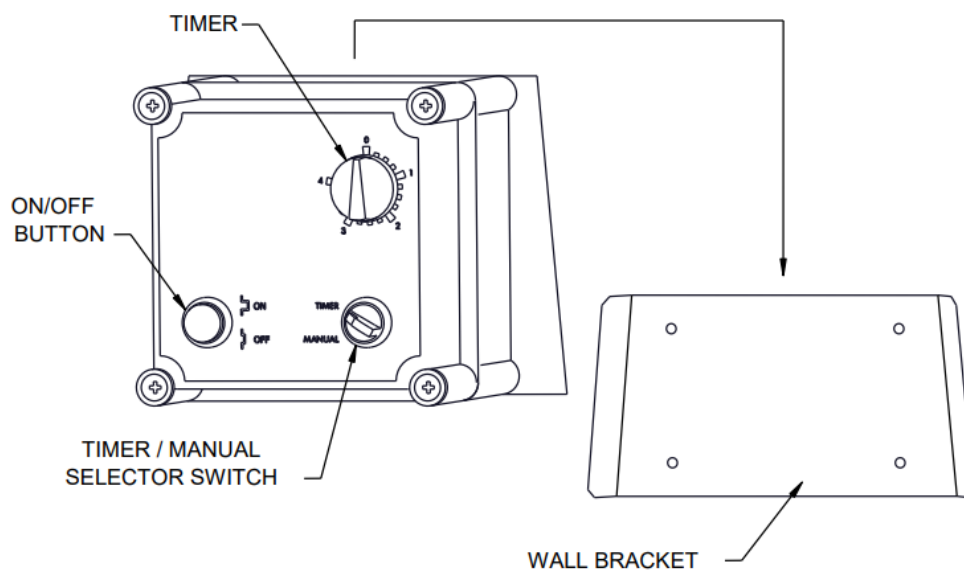
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Your Peeler



Controls

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



Metcalfe 56SS - 25kg/56lb Heavy Duty Pedestal Peeler

The extremely efficient and robust 56SS Peeler is designed for regular high-volume use and enables up to 250kg of potatoes to be prepared every hour.

Features

- Featuring a large hopper opening with a robust lip, and simple to use wall mounted controls. To ensure operator safety the control unit also prevents automatic restart in the event of the power being cut.
- The motor and water inlet both run exceptionally quiet, minimising the impact on the working environment.
- The 56SS is incredibly energy efficient, combined with faster peeling results in significant cost savings. The 1hp motor ensures that performance and reliability are maximised.
- Hygienic brushed stainless-steel finish. Water and waste drain away efficiently from the smooth cylinder base of the machines with the help of large paddles under the peeler plate, which are easy to remove and clean.
- Its solid cast aluminium peeler plate, stainless steel chute and hopper, tough door mechanism combine to offer a long maintenance-free service life
- Single phase machines come supplied with a 3-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 16amps.
- 3 phase machines should be connected to a 16amp isolator providing at least 3mm separation in all poles. The isolator should be fused at 10amp. The supply to the machine must also be protected by a 30ma RCD (residual circuit breaker)

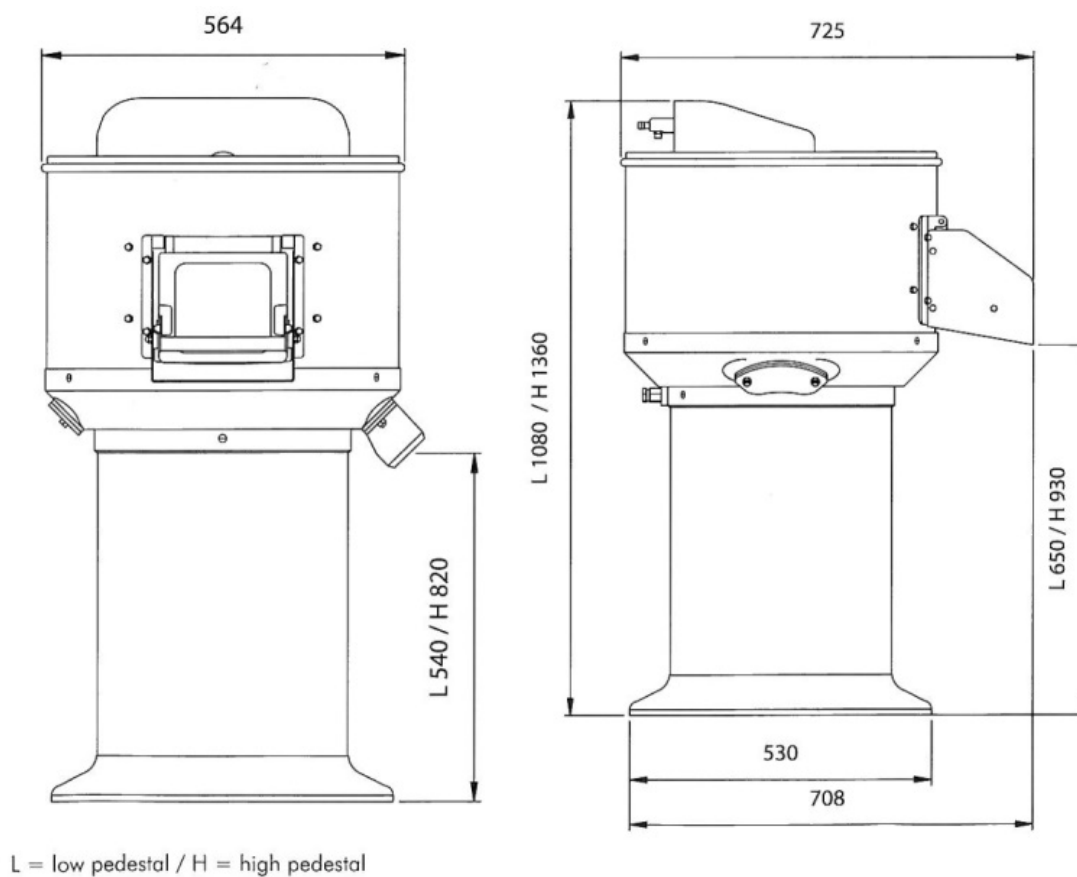
Technical Specifications

Model	Product Code	Capacity (kg)	Discharge Height (mm)	Phase (Ø)	Motor (Volt)	Frequency (Hz)	AMP (A)	Power (kW/hp)
56SS (Low)	5P566	25	650	1	230	50	2.1	0.75 / 1.0
56SS (Low)	5P568	25	650	3	400	60	2.1	0.75 / 1.0
56SS (High)	5P563	25	930	1	230	50	2.1	0.75 / 1.0
56SS (High)	5P564	25	930	3	400	60	2.1	0.75 / 1.0

Dimensions | Shipping Information

Model	Overall Dimensions D x W x H (mm)	Net Weight (kg)	Packed Dimensions D x W x H (mm)	Packed Weight (Kg)	Volume (m3)
56SS (Low)	725 x 564 x 1080	64.5	790 x 640 x 1200	80	0.607
56SS (Low)	725 x 564 x 1080	64.5	790 x 640 x 1200	80	0.607
56SS (High)	725 x 564 x 1360	64.5	790 x 640 x 1480	80	0.748
56SS (High)	725 x 564 x 1360	64.5	790 x 640 x 1480	80	0.748

56SS Drawing



Optional Extras

Item	Product Code
Guarded Discharge Chute	9P80

Item	Product Code
Waste Disposal Adaptor (WDA)	9P79

Material Content

The Metcalfe 56SS Peelers contain the following materials:

Metals	Stainless steel, Mild steel (inc. plated), Aluminium and Copper
Plastics and rubber	Polycarbonate, Nylon, Neoprene Rubber
Other	Aluminium oxide, electrical components

Installation

Unpacking

Unpack the peeler immediately after receipt. Please inspect the peeler to ensure there is no damage and that all parts are included. If the machine is found to be damaged, keep all the packaging and contact us, or your supplier of the equipment, immediately.

You should receive:

- 1 x Peeler unit, with lid, control box & mounting bracket
- 1 x Peeling/rotor plate
- 1 x Water supply pipe and 2 hose clips
- 1 x 1m long 3" flexible waste hose and hose clip
- 1 x Instruction Manual

If any of the above items were not received with your peeler, please refer to page 16 for contact details and inform us immediately for replacements.

Check that the correct machine has been supplied and that the voltage, marketing 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.

The machine should be secured to the floor before first use.

These Instructions contain important information designed to help the user obtain the maximum benefit from the investment in a Metcalfe 56SS 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 Metcalfe 56SS 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 Metcalfe 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 1/2" 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 IEE 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 16A for the 56SS Peeler.

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 IEE Codes of Practice.

WARNING: This machine must be earthed

The wires in the mains lead for **1 Phase** supply are coloured:

Green and Yellow:	Earth
Brown:	Live
Blue:	Neutral

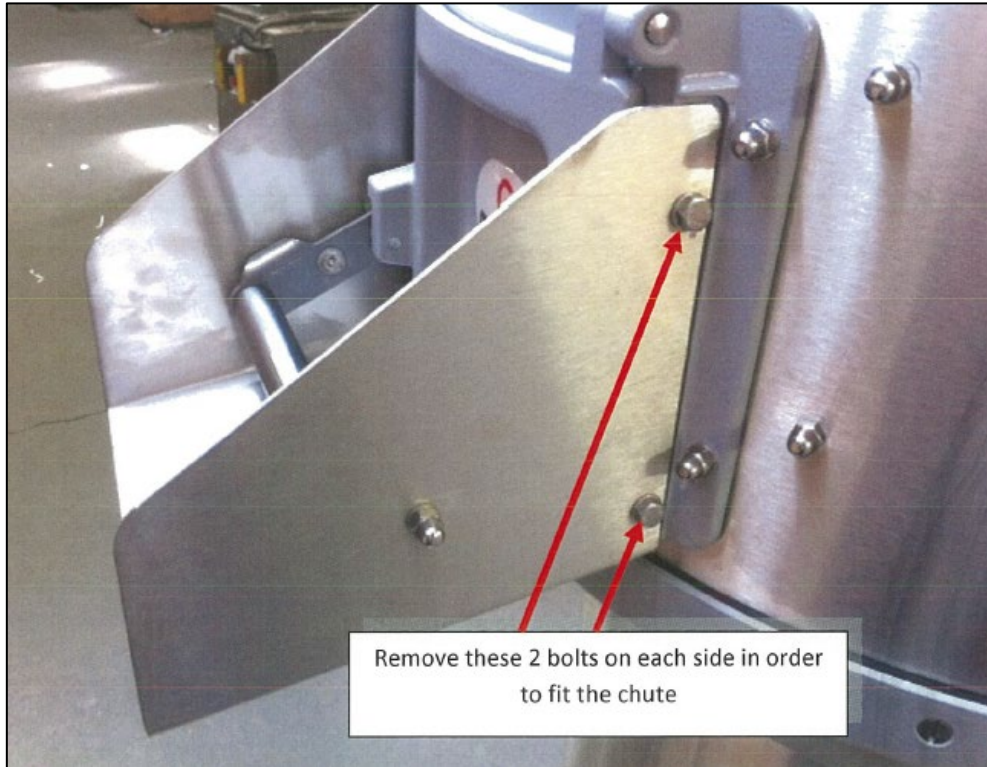
The wires in the mains lead for **3 Phase** supply are coloured:

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 a Metcalfe service agent or qualified electrician to avoid a hazard.

Fitting Guarded Discharge Chute



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 Metcalfe. 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.



DO NOT load the potatoes before running the unit as this will damage the bearings, shaft assembly & motor and will void the warranty.

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.



DO NOT at any point put your hand or any implement into the machine, or wedge the door open whilst it is in operation.

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.

Safety

All 56SS Peeler is controlled so that if the electricity supply is interrupted the machine will not restart automatically.

All 1 Phase 56SS Peeler 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 whilst it is running.

On 1 Phase machines **do not** unplug the unit with wet hands.

Cleaning Instructions

Daily cleaning should be considered mandatory for all equipment used in the preparation of food. Once your peeler has made contact with any food product, the entire peeler, including removable parts must be thoroughly cleaned. This process is to be repeated essentially at least once a day, or at the end of each operation period. If the machine has not been used for a while it must be cleaned before use as well.

1. Switch off unit at socket or isolator.
2. Remove 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 56SS requires no maintenance by the end user. It is recommended that the unit is serviced by a Metcalfe 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 suitable qualified personnel should service this equipment, after becoming familiar with all safety notices, installation, operation and maintenance procedures related to the inverter.

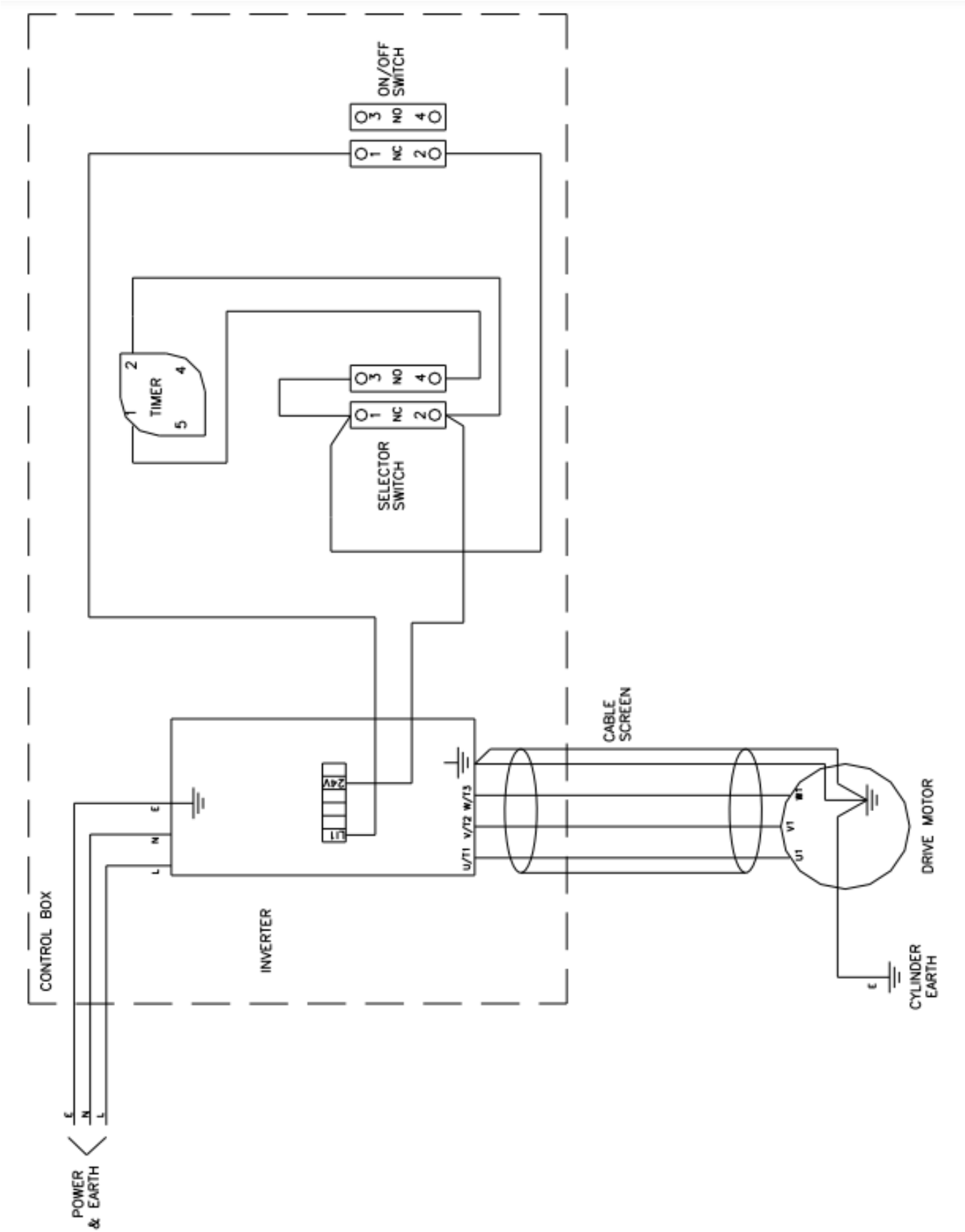


WARNING. Risk of electric shock. The capacitors in the inverter remain charged for 5 minutes after power has been removed. Do not open the control box until 5 minutes after power has been removed.

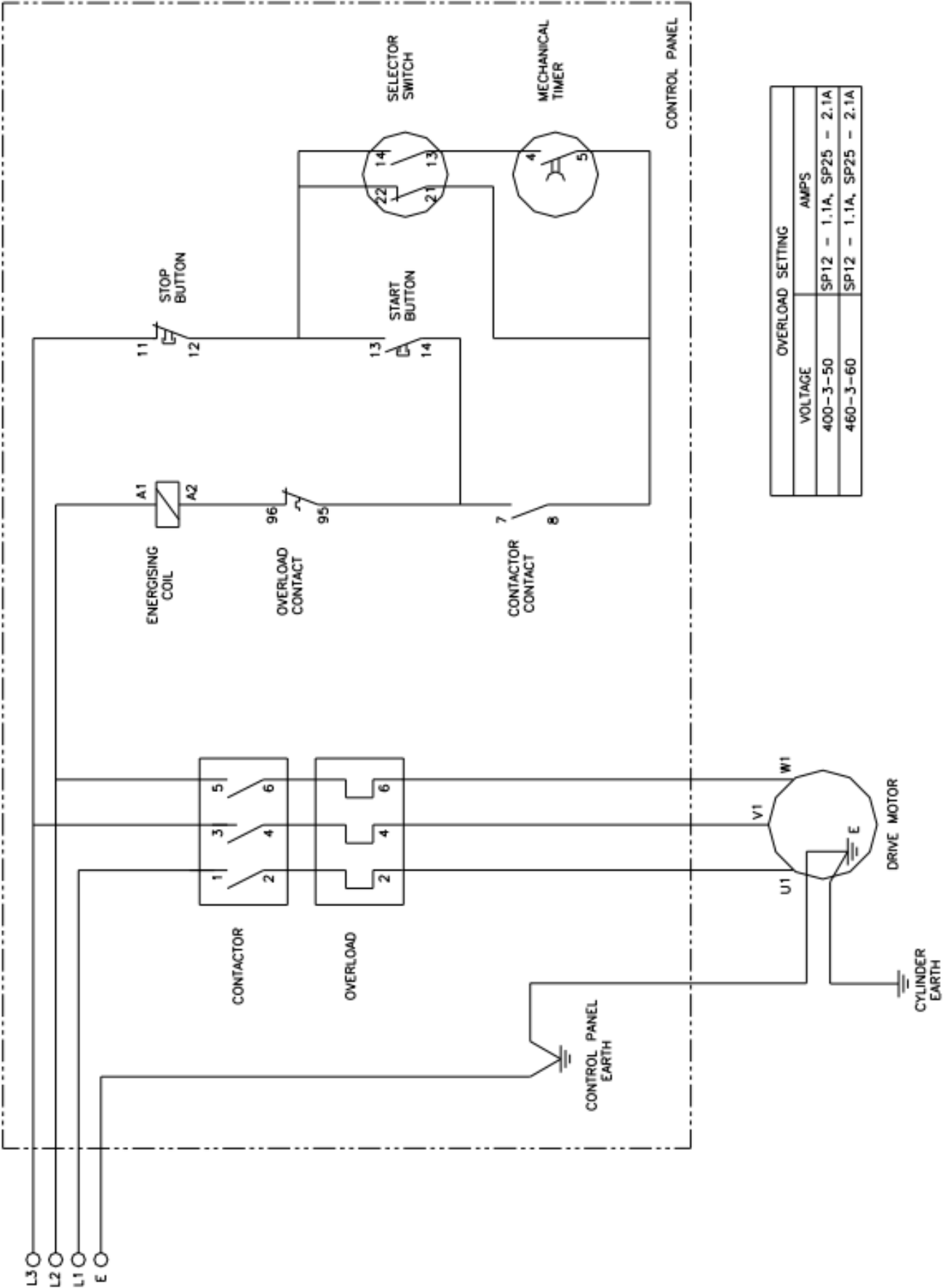


WARNING. Repairs to the inverter may only be carried out by Metcalfe or by repair centres authorised by Metcalfe.

Wiring Diagram – Singe Phase Units

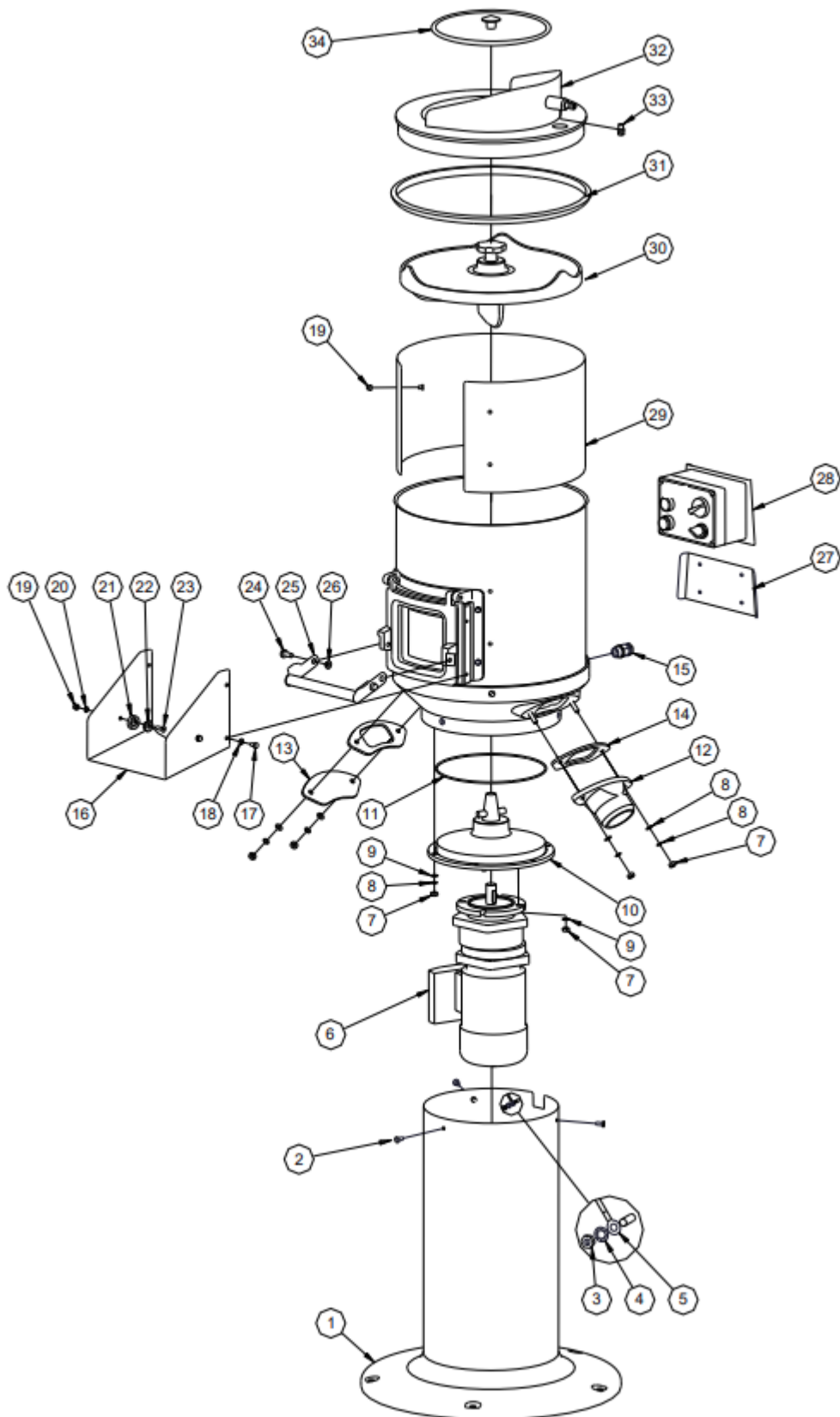


Wiring Diagram – Three Phase Units



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

Parts Diagram

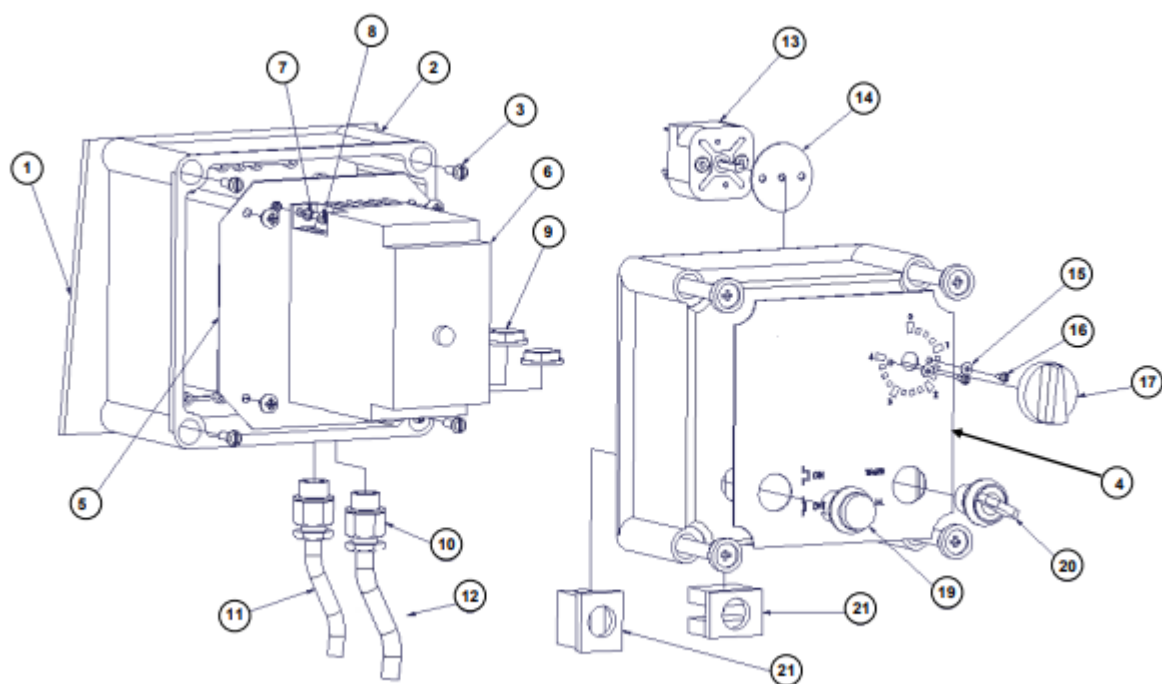


Parts List

Item	Part Number	Description
1	S58/590	Low Pedestal
	E58/591	High Pedestal
2	D18/050	Screw M6 x 16 CSK SS
3	D20/038	M5 Full Nut SS
4	D25/004	M5 Shakeproof Washer SS
5	G60/369	Earth Wire, Motor to Pedestal
6	G40/216	Motorgearbox 0.75kW
	G60/372	Motor cable (1ph)
	G60/373	Motor cable (3ph)
	G86/003	Ferrite (1ph only)
7	D18/050	M8 Full Nut SS
8	D25/079	M8 Spring Washer SS
9	D25/068	M8 Plain Washer SS
10	S58/549	Bearing Housing Assembly
11	A02/070	O Ring
12	C28/023 M1 Z2	Waste Outlet, Machined
13	E58/059	Waste Outlet Cover Plate
14	A11/026	Waste Outlet Gasket
15	G80/029	Cable Gland
16	E58/081	Chute
17	D19/038	Screw M6 x 12 Hex SS
18	D25/052	M6 Plain Washer SS
19	D19/038	M6 Dome Head Nut
20	D25/005	M6 Shakeproof Washer SS
21	M79	Door Roller
22	L21/048	Eccentric
23	D18/051	Screw M6 x 20 CSK SS
24	D21/057	Screw M8 x 20 Pan SS
25	S59/253	Door Handle
26	A00/058	Nylon Shoulder Washer
27	E58/096	Wall Bracket (1ph)
	E58/111	Wall Bracket (3ph)
28	S58/588	Control Box 1ph (Inverter) (Inc. Wall Bracket & cables)
	S58/595	Control box 3ph (Inc. Wall Bracket & cables)
	G60/370	M2 Mains cable and plug (1ph)
	G60/371	Mains cable (3ph)
29	E58/114 Z	Liner
30	S58/546	Peeler Plate
31	M58/011 M2	Rim Moulding
32	S58/589	Cast Lid assembly (Including Spray Nozzle)
33	J04/324	Spray Nozzle
34	S58/542	Splash Cover

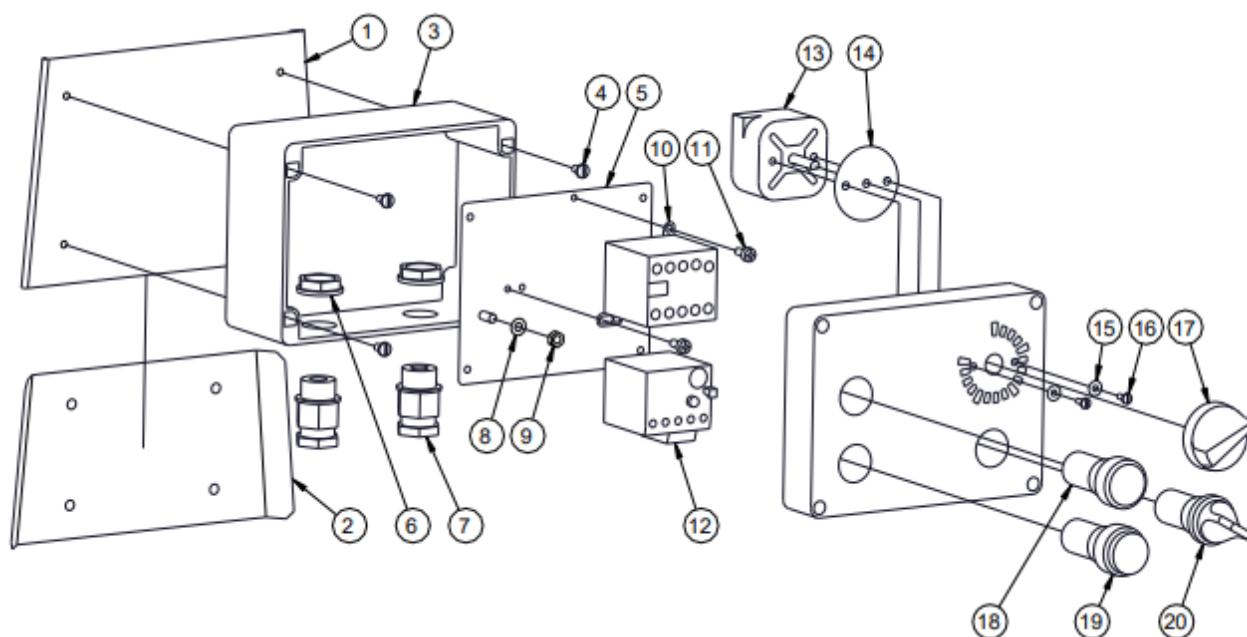
Part Number	Accessory Description
A29/003	Splash Cover Retaining Strap
S58/568	Integral Filter Basket
S58/569	Floor Standing Interceptor Tank
S58/570	Waste ejector

Single Phase Control Box Spare Parts List



Item	Part Number	Description
1	E58/096	Mounting Bracket
	E58/097	Wall Bracket (not shown)
2	G76/031 M2	Control Box
3	D21/052	Screw M6 x 16 Pan SS
4	A08/641	Decal
5	E58/116	Control Box Plate
6	G30/431	Inverter 0.75kW (Schneider)
7	D25/033	M4 Shakeproof Washer SS
8	D21/038	Screw M4 x 12 Pan SS
9	A10/224	Cable Gland Nut
10	G80/029	Cable Gland
11	G60/372	Motor Cable 1ph
12	G60/370 M2	Mains Cable and Plug 1ph
13	G34AL	Timer
14	A11/219	Timer Gasket
15	D25/066	M3 Seloc Washer
16	D21/031	Screw M3 x 8 Pan SS
17	G45/066	Timer Knob
18	-	-
19	G45/113	Push Button Black
20	G45/114	Selector Switch
21	G45/111	Button contacts and holder

Three Phase Control Box Spare Parts List



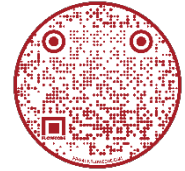
Item	Part Number	Description
1	E58/117	Mounting Bracket
2	E58/119	Wall Bracket
3	G76/041 M1	Control Box (inc lid)
4	D21/097	Screw M4 x 8 Pan SS
5	E58/118	Control Box Plate
6	A10/224	Cable Gland Nut
7	G80/029	Cable Gland
8	D25/004	M5 Shakeproof Washer
9	D20/038	M5 Full Nut SS
10	G30/316	Contactor 400V (3ph)
11	D22/022	Screw No 8 x ½"
12	G30/299	Overload (3ph)
13	G34AL	Timer
14	A11/219	Timer Gasket
15	D25/066	M3 Seloc Washer
16	D21/031	Screw M3 x 8 Pan SS
17	G45/066	Timer Knob
18	G45/099	Green Push Button
19	G45/100	Red Push Button
20	G45/102	Selector Switch
	G60/371	Mains supply cable 3ph
	G60/373	Motor Cable 3ph

Spare Parts and Service

For more information on Metcalfe spare parts, accessories and service support, please contact us on the details below.

Please always quote the Serial Number of the machine. This can be found on the serial number plate which is located at the back of the cylinder near the supply cable inlet.

Metcalfe Sales & Spares Department	sales@metcalfecatering.com
Metcalfe Service Department	service@metcalfecatering.com
Metcalfe Website	www.metcalfecatering.com
Metcalfe Telephone Number	01766 830 456



Additional copies of this instruction manual can be obtained by either visiting our website or contacting the sales department.

Metcalfe Warranty

All Metcalfe products are guaranteed against defects in material and workmanship for a period of one year from date of invoice, except where specifically noted.

The Company's obligation under this warranty is limited to repairing or replacing, without charge, any part or parts found to be defective under normal use, in accordance with the specified operations manual and capacity ratings.

On all return to factory warranty items, it is the responsibility of the purchaser to return the entire unit to the factory, in a clean condition, properly packed and labelled.

All repairs, alterations or replacement of materials or parts not authorised by Metcalfe will automatically void all warranties in their entirety.

All Metcalfe slicers (except Simple Line) and EC20 chipper are covered by a 2-year warranty (1st year parts and labour, 2nd year parts only) and full after sales service.

All Metcalfe MP mixers are covered by a 3-year warranty (1st years parts and labour, 2nd and 3rd year parts only) and full after sales service.

There is a limited 6-month warranty on the following:

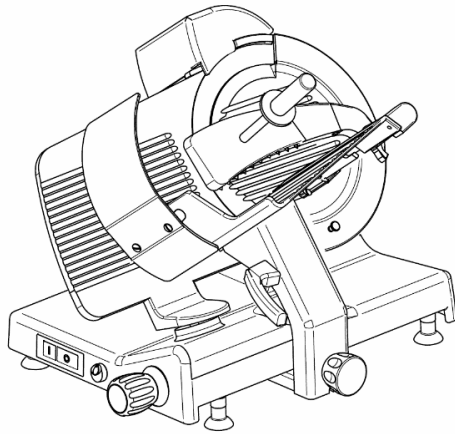
- Mixer attachments (beater, whisk and dough hook)
- Chipper blades
- Parts purchased or supplied for the repair of Metcalfe equipment

This warranty does not cover the following:

- Failure due to incorrect installation
- Failure due to neglect, abuse, careless handling or misuse of machine
- Failure caused due to improper maintenance
- Blender clutches
- Knives and gears on can openers
- Sharpening of slicer blades
- General wear and tear

Metcalfe and its suppliers reserve the right to make changes in design and specification to any product without prior notification.

Some other products in the Metcalfe portfolio:



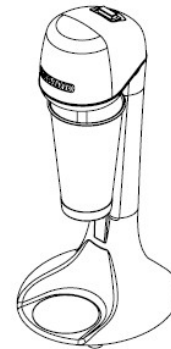
NS Slicers



Chippers



Ceado



Roband



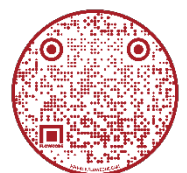
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10/2023

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