



**500 SERIES
FOOD WASTE DISPOSERS**

**MAINTENANCE MANUAL
PLEASE LEAVE WITH OPERATOR**



523 SERIES 12

525 SERIES 14

526 SERIES 15

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EC DECLARATION OF CONFORMITY

(Guarantee of Production Quality)



We, Imperial Machine Company Limited of:
Unit 1, Abbey Road, Wrexham Industrial Estate, Wrexham, LL13 9RF
Declare under our sole responsibility that the machines:

523 – SERIES 12

525 – SERIES 13

526 – SERIES 14

As described in the attached technical documentation is in conformity with the Machine Safety Directive 89/392/EEC as amended by 91/368/EEC and 93/44/EEC and is manufactured under a quality system BS EN ISO 9001. It is also in conformity with the protection requirements of the Electro Magnetic Compatibility Directive 89/336/EEC and is manufactured in accordance with harmonised standards EN 55014-1 Generic Emission and EN 55014-2 Generic Immunity (plus product specific standards).

It also satisfies the essential requirements of the Low Voltage Directive 73/23/EEC amended by 93/68/EEC and is manufactured in accordance with standards BS EN 60335-1 and BS EN 60335-16.

Approved by S Witt, Product Support Manager

A handwritten signature in blue ink, appearing to read 'S Witt', is written over a horizontal line.

Signed at Wrexham, Date

February 2007

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GUARANTEE

This machine is guaranteed by IMC for 1 Year from the date of purchase from IMC or from one of its stockists, dealers or distributors.

The guarantee is limited to the replacement of faulty parts or products and excludes any consequential loss or expense incurred by purchasers. Defects which arise from faulty installation, inadequate maintenance, incorrect use, connection to the wrong electricity supply or fair wear and tear are not covered by the guarantee.

Please observe these instructions carefully

This guarantee applies in this form to installations within the UK only.

WASTE OUTLET CONNECTION

All 500 Series Disposers are fitted with a neoprene housing which is designed to couple to a 42mm copper or plastic fitting, lead piping should not be used. The size of the waste outlet must not be reduced. A running trap should be fitted although 'P' or 'S' type traps can be used. Do not fit a bottle trap. The length of run between the machine and the main junction must be kept to a minimum and the pipe must have a positive fall of at least 1 in 7. Changes of direction should be made with swept bends rather than elbows, and cleaning eyes should be fitted where possible, in accordance with standard plumbing practice.

The waste outlet position can be changed by loosening the hose clip at the top of the neoprene housing. The motor and housing can then be rotated until the outlet is in the required position. Tighten the hose clip once the outlet is in the required position.

All Waste Disposers must have an independent drain pipe that does not also serve sinks, dishwashers or similar equipment. The end of the waste pipe must be beyond any grease traps and if the outlet feeds into an outside gully, the pipe should enter the gully below the covering grid. Use a back entry yard gully.

When fitting the trap make certain that the top invert of the trap lies below the rubber outlet spout of the waste disposer. Failure to do this will prevent the machine from draining completely. Also ensure that on all models the outlet tail does not enter the outlet spout beyond the register, if this tail is fitted to deeply into the spout it will obstruct the outlet flow

The 523 Disposer is sink mounted and the neoprene housing contains an inlet boss for the sink overflow near the top of the housing. If this is required the center of boss needs to be cutout before the overflow is connected.

WATER SUPPLY CONNECTION

A cold water supply with a minimum head of 4m is required on the 525 and 526 Disposers. This is connected to the units at the solenoid valve using a 15mm compression joint, supplied with the machine. A stopcock should be fitted to the water supply. The 523 disposer draws its water supply from the sink tap.

ELECTRICAL CONNECTION

All electrical work must be carried out by a qualified electrician and in accordance with the IEE Codes of Practice. Examine the rating plate attached to the motor to ensure that the characteristics shown are correct for the supply available. The cables fitted to the controller are the minimum required for individual connection to the mains supply. Site conditions may vary with additional length of cable run, encapsulation in trunking, bunched with other cables etc. Should this apply, the electrician must alter the cable accordingly.

All machines are supplied with a starter with forward, reverse and stop buttons. Where automatic water control is supplied the starter also controls the water flow. This unit must be connected to the mains supply using the starter provided. Omission of the starter eliminates overload protection for the motor and will invalidate the guarantee.

The 500 Series Disposers should be connected to a 30A isolator providing at least 3mm separation in all poles. The table below illustrates typical fuse ratings for an ambient temperature of 25 to 35°C. Should the environment temperature be greater than this, derate accordingly.

Voltage	Full Load Current	Fuse Rating per Phase
230 – 1 – 50	5.0 Amps	15 Amps
115 – 1 – 60	10.0 Amps	15 Amps
220 – 1 – 60	5.6 Amps	15 Amps
254 – 1 – 60	5.2 Amps	15 Amps
400 – 3 – 50	1.7 Amps	5 Amps
220 – 3 – 50	3.0 Amps	5 Amps
230 – 3 – 60	2.7 Amps	5 Amps
440/460 – 3 – 60	1.7 Amps	5 Amps

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

Warning: This appliance must be earthed.

If the supply cord becomes damaged it must be replaced by qualified electrician in order to avoid a hazard.

RELEASING A JAM

Food Waste Disposers can jam under overload or if unsuitable materials are placed inside. IMC machines are designed to withstand this and no damage will normally result as the machine will switch itself off. It is necessary to clear the jam as follows:

1. Switch off at the mains isolating switch.
2. Remove the baffle by unscrewing the interlock knob and lifting off.
3. Take out any bulk waste in the disposal chamber. Rubber gloves are recommended
4. If the item which blocked the disposer is apparent, remove it.
5. A release wrench is provided with which to turn the rotor if it is jammed. Place the hexagon socket of the wrench over the hexagonal boss on the centre of the rotor and lever backwards and forwards until the jammed material releases. Remove the release wrench and pull out the material.
6. Replace the wrench, engaging the hexagon and ensure that the rotor is totally free throughout its full rotation.
7. Remove the release wrench
8. Replace the baffle, screwing the interlock knob fully home.
9. Switch on at the mains isolating switch.
10. Press the START button and continue disposal.

FAULT DIAGNOSIS**Machine does not start**

Cause	Action
Electrical supply is not turned on.	Switch on supply.
The fuses have blown or the circuit breaker has tripped.	Call site electrician to change fuse or reset circuit breaker. If problem persists contact service personnel.
Baffle is not correctly fitted.	Check baffle is secured. If problem persists contact service personnel.

Unexpected system stop

Cause	Action
Electrical supply turned off.	Switch on supply.
The fuses have blown or the circuit breaker has tripped.	Call site electrician to change fuse or reset circuit breaker. If problem persists contact service personnel.
Baffle is not correctly fitted.	Check baffle is secured. If problem persists contact service personnel.
Waste jammed in disposer grinding unit.	Remove blockage from grinding unit. See instructions on page 3.
Motor overload has tripped.	Allow motor to cool for 10 minutes and restart. If problem persists contact service personnel.

Waste not processed

Cause	Action
A blockage has occurred in the waste pipe.	Clear blockage from waste pipe

MAINTENANCE

12 Monthly, All models

Check for bearing wear by the sound of motor and side to side movement of rotor.

WARNING – BEFORE ATTEMPTING SERVICE WORK ENSURE THAT ELECTRICITY AND WATER SUPPLIES ARE TURNED OFF AT THE MAIN SUPPLY AND STOP COCK

ORDERING SPARE PARTS:

In the event that spare parts or accessories need to be ordered, please always quote the SERIES AND SERIAL NUMBER of the machine. This is to be found on the rating plate located near the supply cable.

For installations outside the UK please contact your supplier.

For information on IMC spares and service support (if applicable), please call IMC on +44 (0)1978 661155. Alternatively, contact us via email or fax:

IMC Service Desk

Fax: +44 (0)1978 667766

E-mail: service@imco.co.uk

IMC Spares Desk

Fax: +44 (0)1978 667759

E-mail: spares@imco.co.uk

MATERIAL CONTENT

The 500 Series disposers contain the following material:

Metals	Stainless steel, mild steel, brass and copper.
Plastics and rubber	Neoprene rubber. ABS and nylon
Other	Electrical components

WIRING DIAGRAMS

Figure 1 - Wiring Diagram, Single Phase

For supply: 230 – 1 – 50, 115 – 1 – 60, 220 – 1 – 60 & 254 – 1 – 60

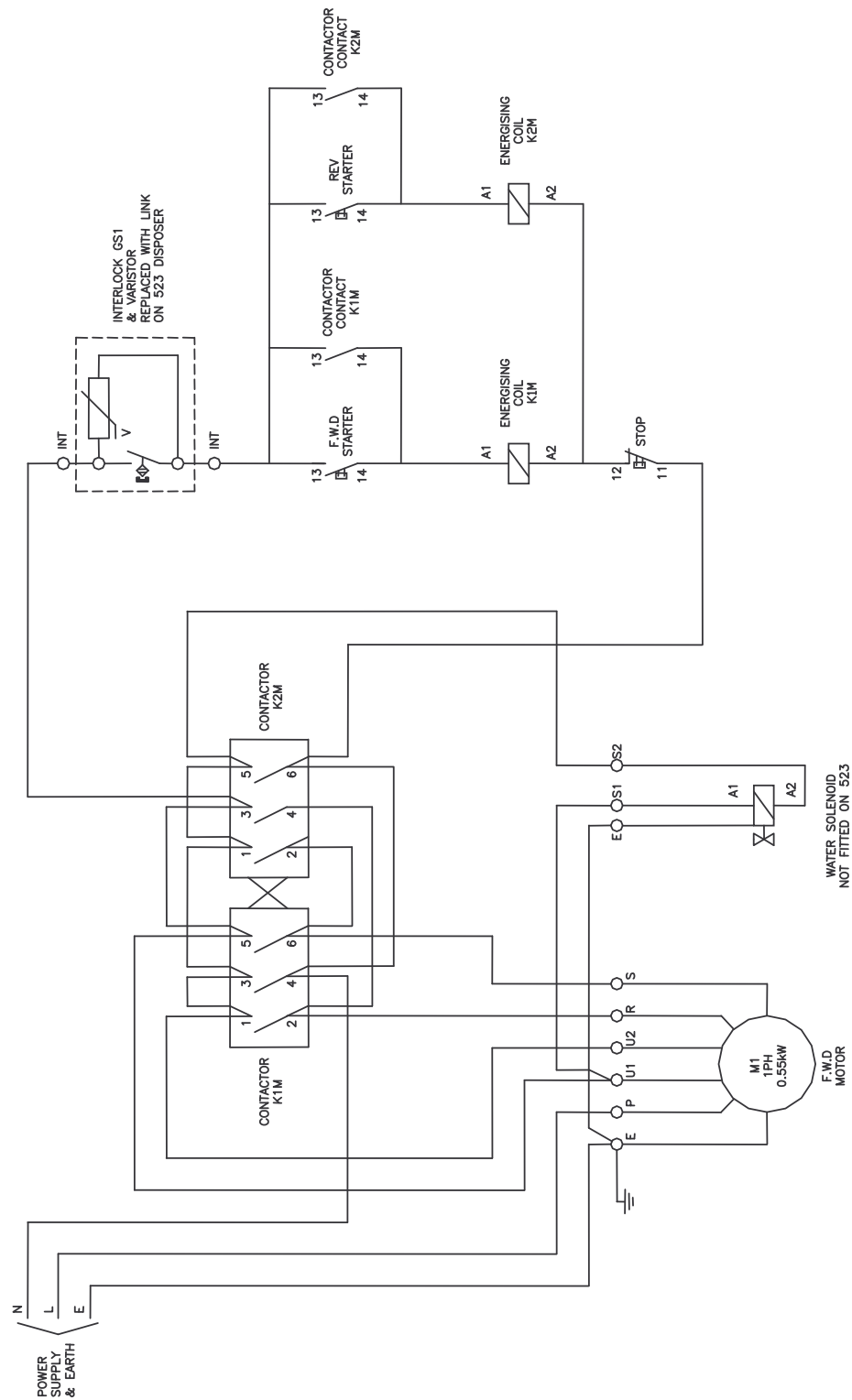


Figure 2 - Wiring Diagram, 3 Phase 4 Wire

For supply: 400 – 3 – 50, 220 – 3 – 50, 440/460 – 3 – 60 & 230 – 3 – 60.

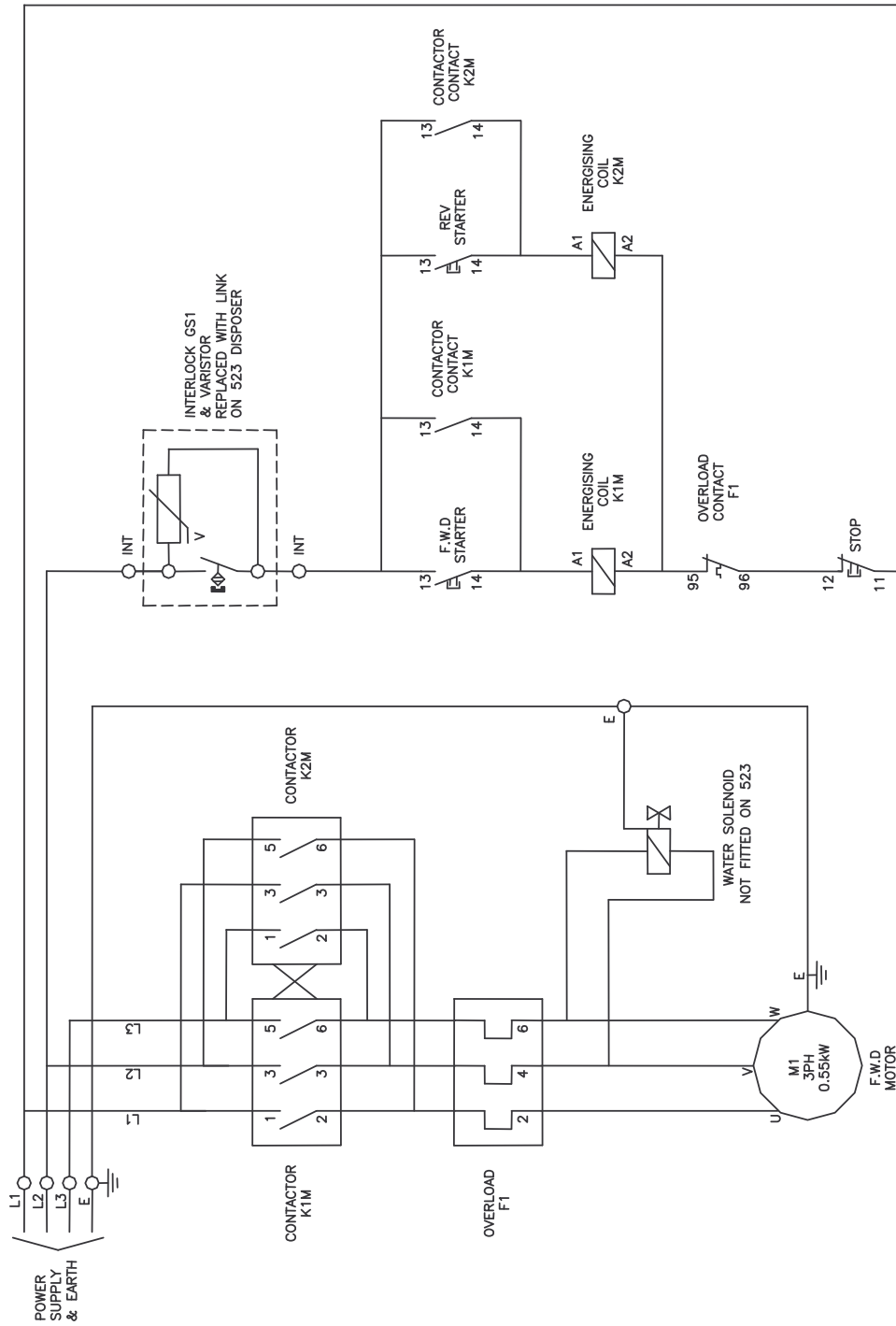
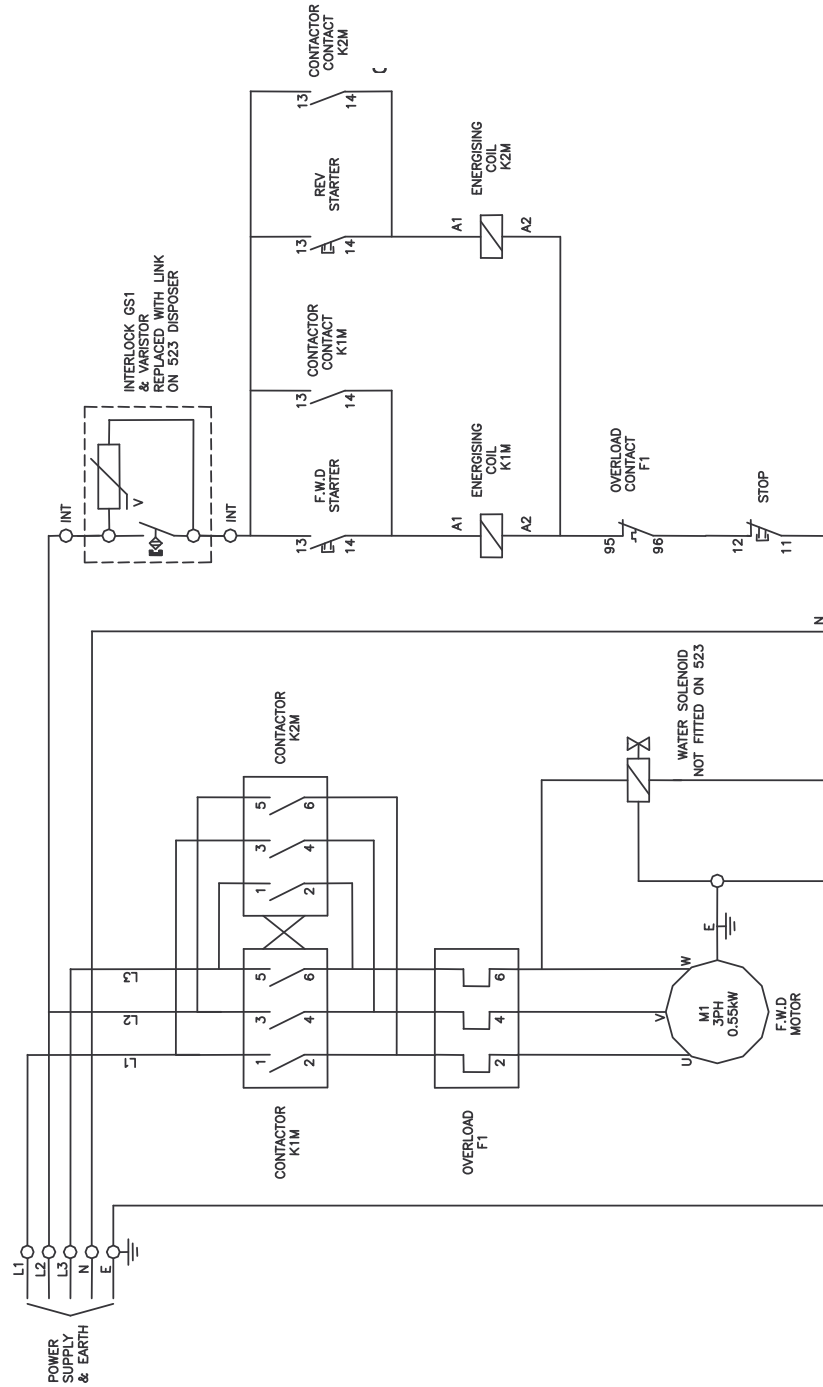
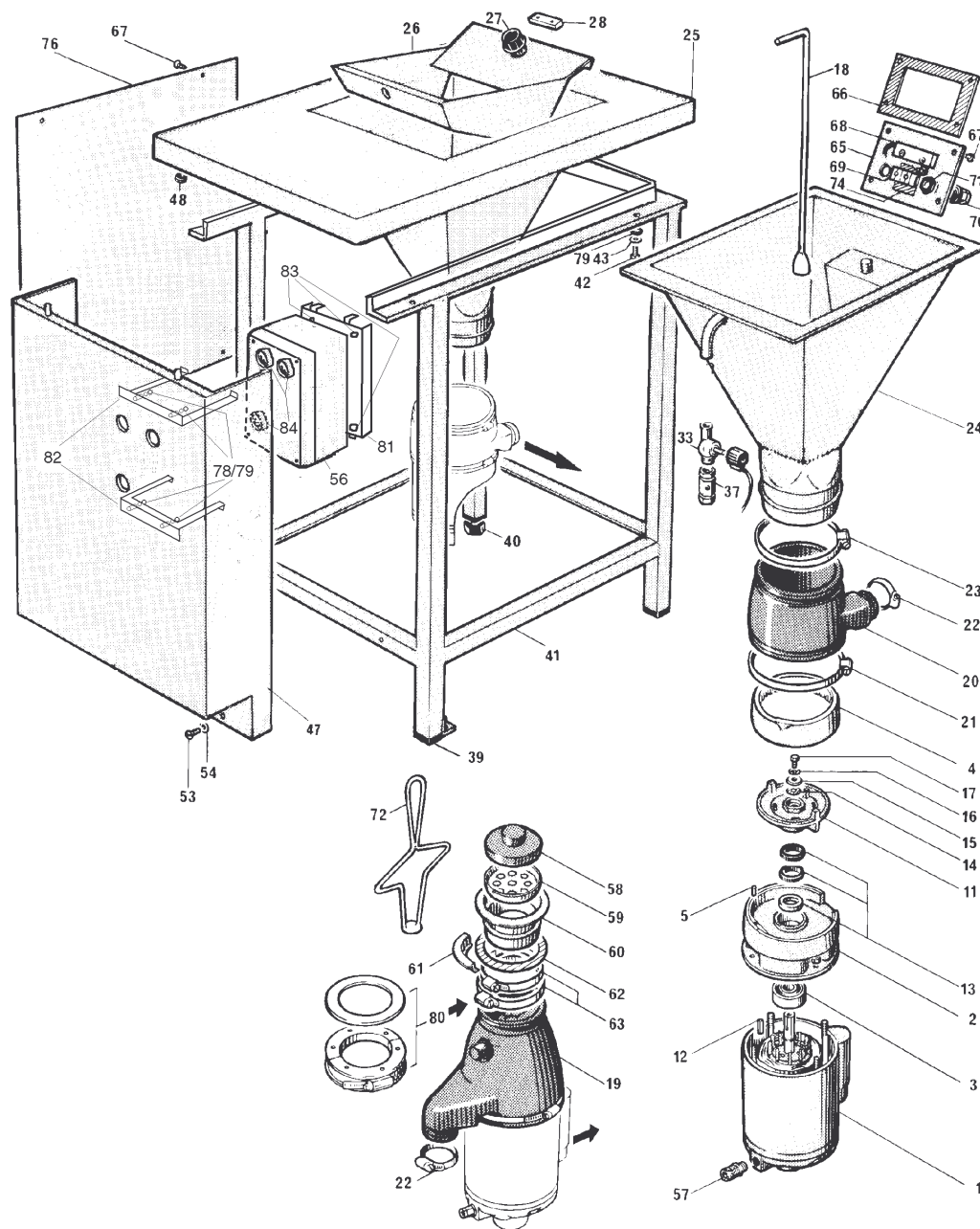


Figure 3 - Wiring Diagram, 3 Phase 5 Wire

For supply: 400 – 3 – 50.



PARTS ILLUSTRATION



PARTS LIST

Item	Part No	Description	Item	Part No	Description
1	G40/168	Motor complete – 1 Phase	60	E10/016	Sink Outlet
	G40/115	Motor complete – 3 Phase	61	E10/017	Clamp
2	C14/019 M2	Endshield	62	A11/027	Gasket
3	A01/047	D E Bearing	63	J06/006	Hose Clip
	A01/036	O D E Bearing	65	E35/070	Interlock Cover
4	C14/014	Cutter	66	A11/176	Gasket
5	D26/010	Pin	67	D22/011	No 8 x 5/16 Self Tapping Screw SS
11	C14/023 M1	Rotor	68	S52/032	Magnetic Switch – 1 Phase
12	D14/012	Key		S52/033	Magnetic Switch – 3 Phase, 4 wire
13	A02/050	Seal – Upper		S52/032	Magnetic Switch – 3 phase, 5 wire
	A02/051	Seal – Lower		D21/037	M4 x 10 Pan Screw SS
	L52/001	Spacer		G35/020	Varistor 480V - 3 phase 4 wire
	A02/054	Rotor Sleeve		G35/022	Varistor 250V - 1 phase & 3 phase 5 wire
14	D25/018	Red fibre washer		D25/007	M4 Shakeproof SS
15	D25/028	Washer 3mm thick		D20/011	M4 Nut SS
16	D25/020	Washer M6 Nylon	69	G264	Terminal Block
17	D19/039	Screw M6 x 16 Hex SS		D21/034	M3 x 16 Pan Screw SS
18	E10/024	Motor Bracket		D20/010	M3 Nut SS
19	E07/018A	Housing 523	70	A10/280	Cable Gland – Solenoid Cable
20	E07/020	Housing 525 & 526		A10/266	Cable Gland – Interconnecting Cable
21	J06/014	Hose Clip	71	A10/224	Back Nut
22	J06/010	Hose Clip	72	E09/033	Rammer
23	J06/039	Hose Clip	74	L36/020	Insulation Strip
24	E35/045	Hopper	76	E35/056	Side Panel (optional)
25	E35/050	Hopper & Top	77	D21/043	M5 x 10 Pan Screw SS
26	S52/031	Baffle Assy inc. knob & Magnet	78	D20/038	M5 Nut SS
	E35/046	Baffle	79	D25/004	M5 Shakeproof SS
27	M68	Interlock Body	80	S51/001	Thick Sink Clamp Assy (optional)
	M69	Interlock Knob	81	E60/007	Back Plate
	M48	Plug	82	E60/006	Bracket
	D26/017	Spirol Pin 3x36W	83	A10/134	Grommet
28	G45/083	Magnet	84	A11/177	Sponge Washer
33	S52/007	Solenoid Valve 1 Phase			
	S52/008	Solenoid Valve 3 Phase, 4 wire			
	S52/007	Solenoid Valve 3 Phase, 5 wire			
37	J03/093	Ballofix Valve			
39	A13/064	Foot Insert			
40	A13/056	Foot			
	A13/065	Foot Frame			
41	E35/051	Frame			
42	D21/044	M5 x 12 Pan Screw SS			
43	D25/056	M5 Washer SS			
47	E35/062	Front Panel			
48	A10/012	Rubber Grommet			
53	D21/050	M6 x 12 Pan Screw SS			
54	D25/005	M6 Shakeproof SS			
56	G30/360	Reversing Starter 1 Phase			
	G30/293	Reversing Starter 3 Phase, 4 wire			
	G30/294	Reversing Starter 3 Phase, 5 wire			
57	A10/280	Cable Gland 1 Phase			
	A10/266	Cable Gland 3 Phase			
58	E10/018	Sink Stopper			
59	E10/019	Silver Saver			

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