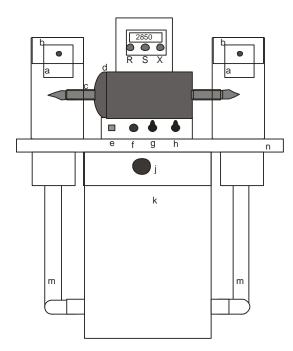
# **POLIMAX 1 Vari speed polishing extractor** operation data (models from 1-1-2006)



a = Clear safety screen

b = Cowl assembly

c = Shaft guard

d = Polishing motor

e = Neon light

f = Fuse 10 amp anti-surge type

g = Power on/off switch

h = Dust extraction and polishing motor on/off switch j = Shaker knob k = Extractor cover m = Flexible connection pipes

n = Work top

R = Run button

S = Stop button

X = Speed control (motor frequency)

Height floor to work top = 900mm

Maximum width = 900mm

Maximum front to rear = 720mm

Maximum wheel/mop size = 200mm

Weight = 50 Kgs nett

Polishing motor speed = 28 to 2800 rpm.

Standard IP54.

Polishing motor power = 1.5hp (1.15kw) 6.6A Motor is 3 phase supplied by the invertor / speed controller

Extractor motor power = 0.5 hp (.37kw) 3.1A

Standard IP64. Cap. 16µF

POLIMAX total maximum current 10 amps

Supply Voltage 220 - 240 volts 50 / 60 Hz.

### Description

The POLIMAX 1 is a continuously rated polishing machine designed for the polishing of metal and other materials.

The motor speed is fully variable from 0 to 2800 rpm.

The extraction system sucks the contaminated air from the polishing area and passes it through fabric filters to remove the dust. The cleaned air is ducted to the rear of the machine for return to the workshop area. The extracted air can also be ducted to another area or outside by fitting an adaptor plate (extra).





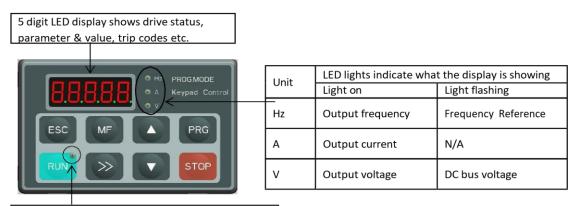
# **Operation**

Switch both "g" and "h" switches upwards and ensure the clear safety screens "a" and shaft guards "c" are in place before connecting the machine to a suitable power supply.

Fit polishing mops (see **Changing polishing mops and wheels**) and slide cowls to fit mops.

Switch POWER switch on, the polishing motor or extraction will not run at this stage.

# Speed Controller Display & Keypad:



Run light turns on when the drives output is active.

Key	Function
	Pressing the <b>Esc</b> key will return to the previous level. See the flow diagram that follows for illustration.
ESC	Pressing & holding the <b>Esc</b> key will display the output frequency (by default, see P05.01 in the Advanced User Manual for alternative settings)
	When the keypad is locked, pressing and holding the <b>Esc</b> key for 5 seconds will unlock.
MF	Programmable <b>Multi-Function</b> key (by default is JOG, see P05.07 in the Advanced User Manual for alternative settings)
PRG	<b>Program</b> key - Enter next level. See the flow diagram that follows for illustration. <b>Note:</b> After a parameter value has been changed, pressing the <b>PRG</b> key saves the new value.
RUN	When in Keypad control mode (default), pressing the <b>RUN</b> key will make the drive Run (enable).
STOP	Pressing the <b>STOP</b> key will stop the drive. <b>Note:</b> P05.06 (keypad lock control) can be set so that this key will not stop the drive, see the Advanced User Manual for more details.  Pressing the <b>STOP</b> key will <b>RESET</b> the drive
	Are used to select parameters and edit their values. In keypad mode, they are used to increase and decrease the speed of the motor.
<b>&gt;&gt;&gt;</b>	Under Run/Stop mode, pressing this key will change what is displayed:     Output frequency, frequency reference, output current, output voltage & DC bus voltage in turn





Always use "anti - surge" fuses when replacing fuses as glass "quick - blow" types may fail. During continuous running the polishing motor may heat up, THIS IS NORMAL Always run the Extractor when operating the polishing motor.

#### Maintenance

Every 8 hours of operation, switch off the POLIMAX at the power point and check that the fan, mounted on the left of the polishing motor is not blocked by polishing debris.

Every 4 hours of use turn off the polishing and extractor motors and allow them to stop, operate the shaker knob "j" by pulling out and releasing it 2 or 3 times to clear debris from the filter bags. Every 40 hours of use, turn off the POLIMAX at the power supply and remove the front cover "k". Pull out and empty the bottom tray of polishing residue. Refit the front cover the correct way up, with the 2 horizontal seals at the base of the machine, in line with the bottom tray.

Every 500 hours of polishing or when the suction level falls, remove the filter bags by undoing the circular clips at the base and undoing the top connection. Shake any loose dust free and wash the bags in a domestic detergent, dry and refit. Every 2000 hours of operation replace the bags.

## **Changing polishing mops and wheels**

Switch off the machine and ensure that no other person can switch on the polishing motor whilst you are changing mops. Use a 3mm rod through the hole in the part of the motor shaft that extends beyond the Shaft guard and rotate the mop towards you from the top of the mop. Place the replacement mop onto the shaft end and rotate it away from you to "wind" it onto the shaft.

Make sure hands are clear and the 3mm rod is removed and re-start the polishing motor.

Do not remove the Shaft Guards as these are fitted to protect you and to comply with current Health and Safety requirements.

### <u>Notes</u>

Wear gloves when polishing. Do not remove Clear safety screens. Wear body protection when polishing large or sharp items.

Always operate the extractor when polishing.

Do not run the polishing machine without mops on both shafts, exposed steel taper shafts are DANGEROUS.

Do not wear finger rings when changing mops, or tape them over so no risk of the taper shaft engaging the space between the finger and the ring.

Take care when operating with some types of workshop lighting, under some conditions mops can appear stationary when they are running due to stroboscopic effects.

Do not operate machinery when tired or under the influence of drugs or alcohol.

Do not smoke when polishing, a spark from smoking will cause a dangerous fire if sucked into the extraction inlets due to the forced air velocity and the presence of flammable material from the polishing wheels and compounds. If fire does occur switch off the extractor and polishing motors and, if safe to do so, block the air inlets with polishing mops or other material that is not flammable to starve the fire of air.

Speed controller / invertor is factory set and it is strongly recommended that you do not change the operational parameters unless you are fully conversant with the setting procedure.



