

– PRELIMINARY VERSION –
(11/25/2014)



OPERATING MANUAL

MVS 630F & 630R

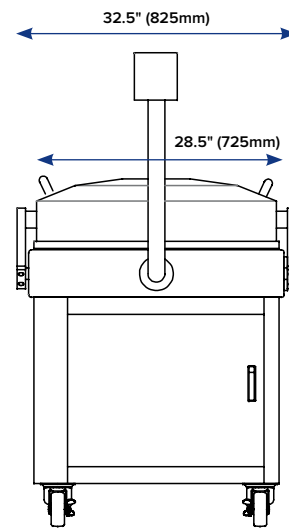
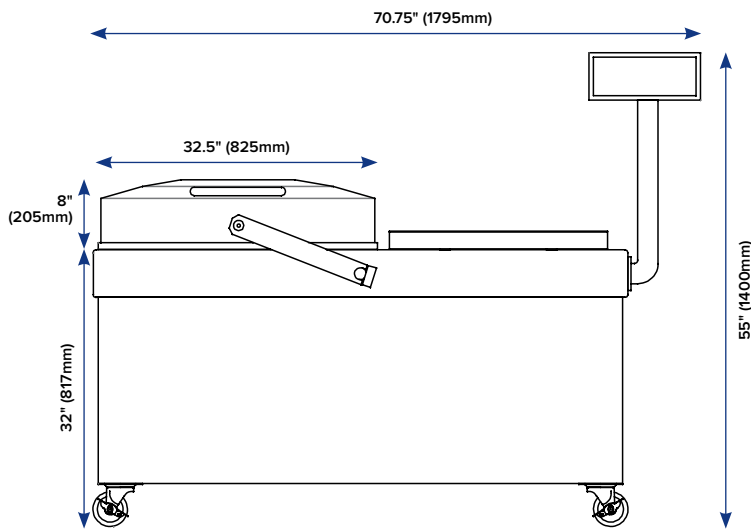
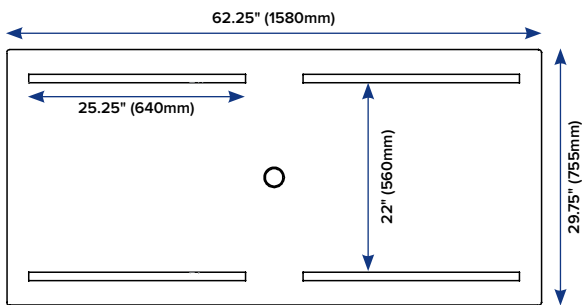
MVS 830F & 830R

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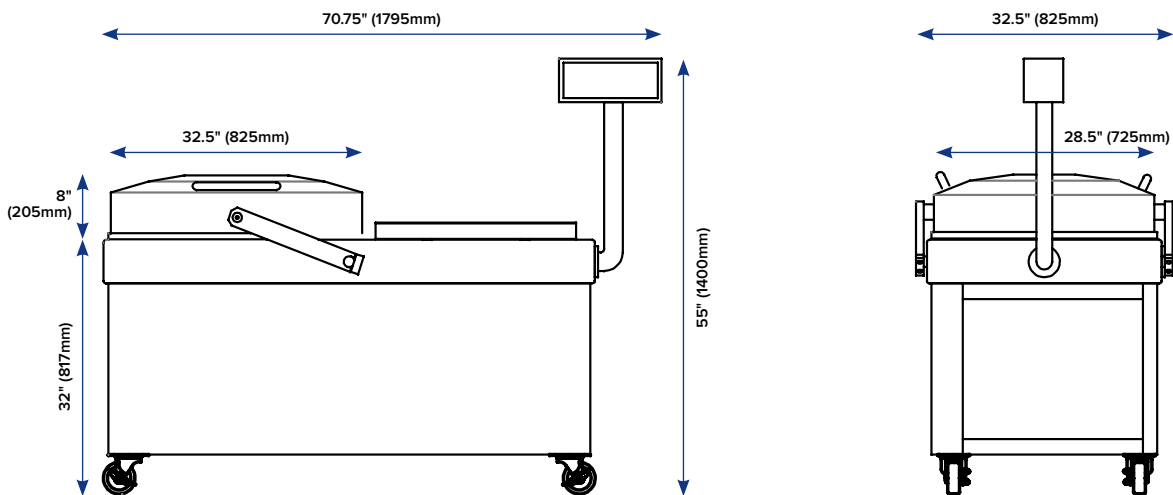
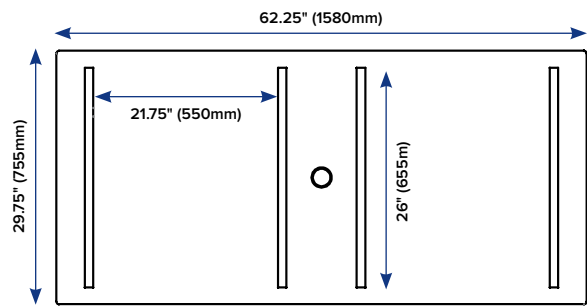
MVS 630F / Front & Back

Order Number:	MV630FFB
Machine Size:	70.75 x 32.5 x 55" (1795 x 825 x 1400mm)
Lid Dimensions:	31.5 x 27.5 x 7.75" (801 x 701 x 200mm)
Seal Bar Length:	25.25" (640mm)
Distance between Seal Bars:	22" (560mm)
Seal Width:	Standard: 0.39" (10mm) <i>(options available)</i>
Pump:	Busch RA 0100 (120m ³ /h · 60Hz)
Power:	208V · 3ph · 60Hz · 23A



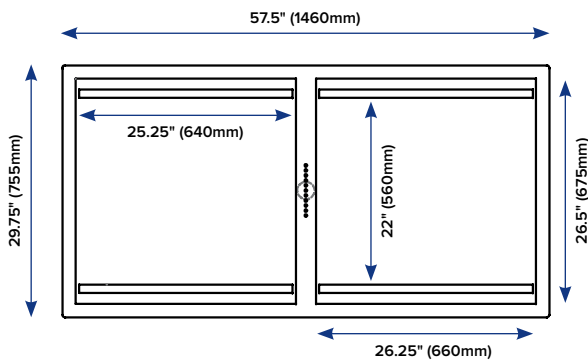
MVS 630F / Left & Right

Order Number:	MV630FLR
Machine Size:	70.75 x 32.5 x 55" (1795 x 825 x 1400mm)
Lid Dimensions:	31.5 x 27.5 x 7.75" (801 x 701 x 200mm)
Seal Bar Length:	26" (655mm)
Distance between Seal Bars:	21.75" (550mm)
Seal Width:	Standard: 0.39" (10mm) <i>(options available)</i>
Pump:	Busch RA 0100 (120m ³ /h · 60Hz)
Power:	208V · 3ph · 60Hz · 23A

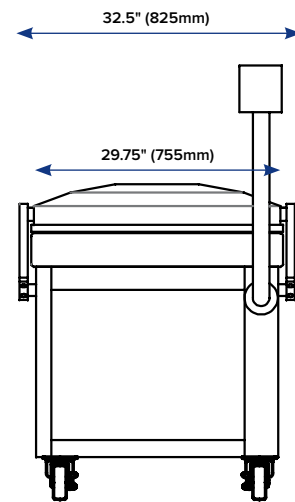
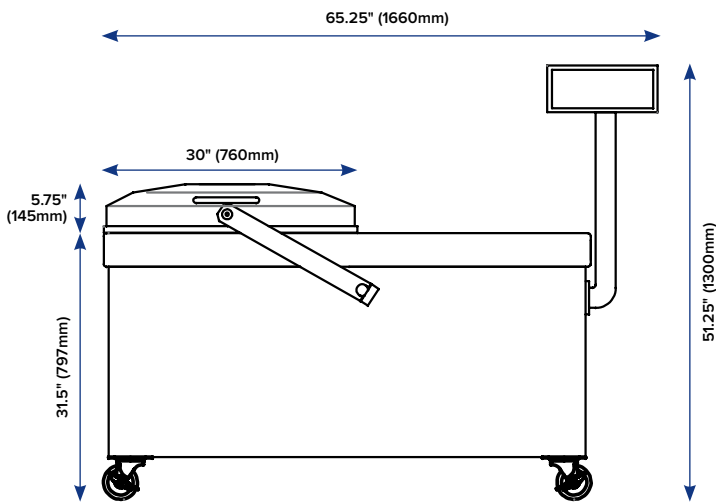
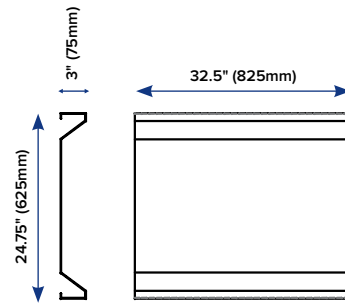


MVS 630R / Front & Back

Order Number:	MV630RFB
Machine Size:	65.25 x 32.5 x 51.25" (1660 x 825 x 1300mm)
Lid Dimensions:	26 x 26.5 x 3.25" (660 x 675 x 80mm)
Seal Bar Length:	25.25" (640mm)
Distance between Seal Bars:	22" (560mm)
Seal Width:	Standard: 0.39" (10mm) <i>(options available)</i>
Pump:	Busch RA 0100 (120m ³ /h · 60Hz)
Power:	208V · 3ph · 60Hz · 23A



Tray for Liquids (included):



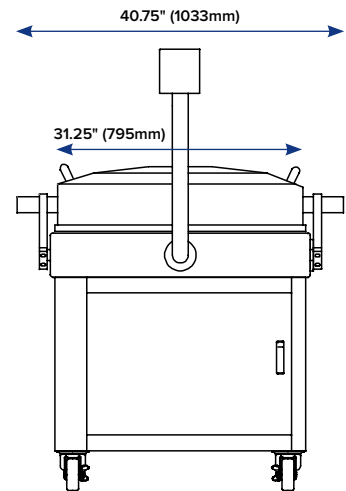
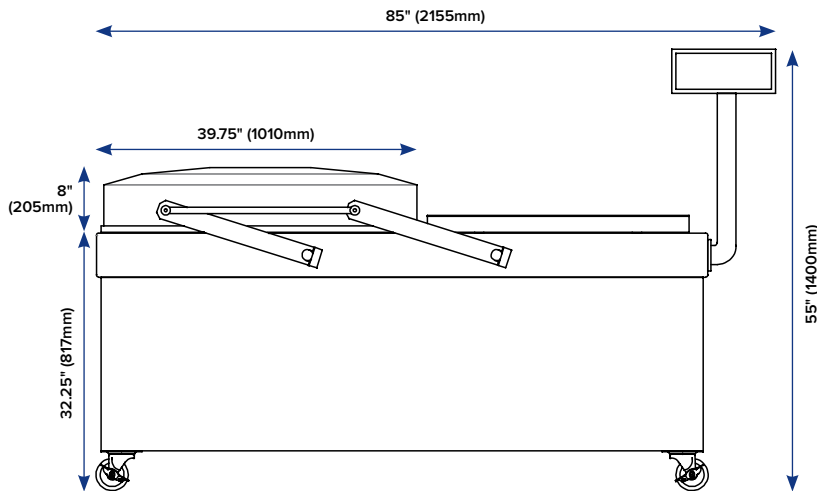
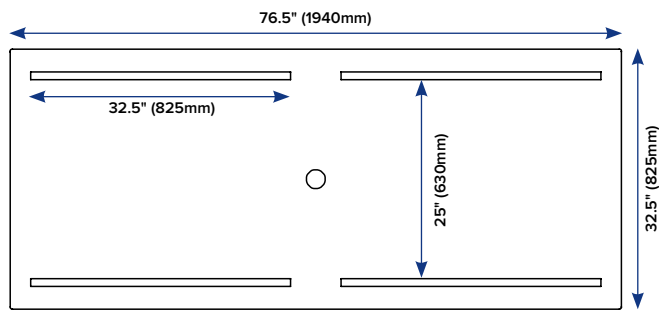
MVS 630R / Left & Right

Order Number:	MV630RLR
Machine Size:	65.25 x 32.5 x 51.25" (1660 x 825 x 1300mm)
Lid Dimensions:	26 x 26.5 x 3.25" (660 x 675 x 80mm)
Seal Bar Length:	26" (655mm)
Distance between Seal Bars:	21.75" (550mm)
Seal Width:	Standard: 0.39" (10mm) <i>(options available)</i>
Pump:	Busch RA 0100 (120m ³ /h · 60Hz)
Power:	208V · 3ph · 60Hz · 23A

Tray for Liquids (included):

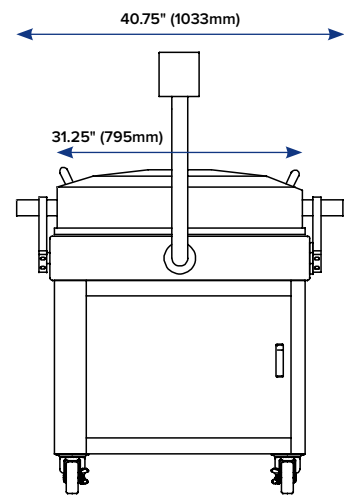
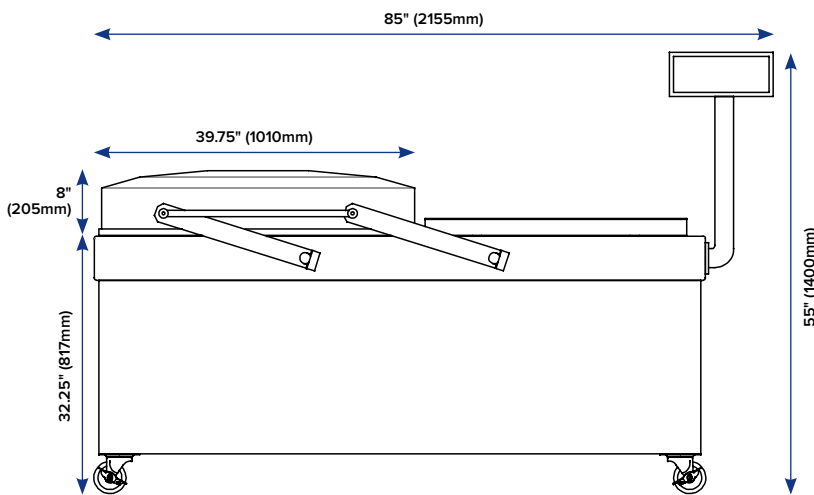
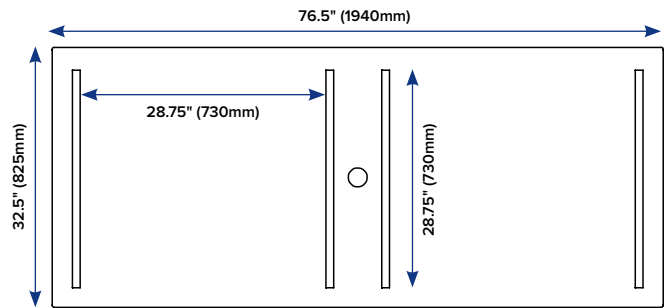
MVS 830F / Front & Back

Order Number:	MV830FFB
Machine Size:	85 x 40.75 x 55" (2155 x 1035 x 1400mm)
Lid Dimensions (inside):	38.75 x 30.25 x 7.75" (985 x 770 x 200mm)
Seal Bar Length:	32.5" (825mm)
Distance between Seal Bars:	25" (630mm)
Seal Width:	Standard: 0.39" (10mm) <i>(options available)</i>
Pump:	Busch R5 0160D (190m ³ /h · 60Hz)
Power:	208V · 3ph · 60Hz · 37A



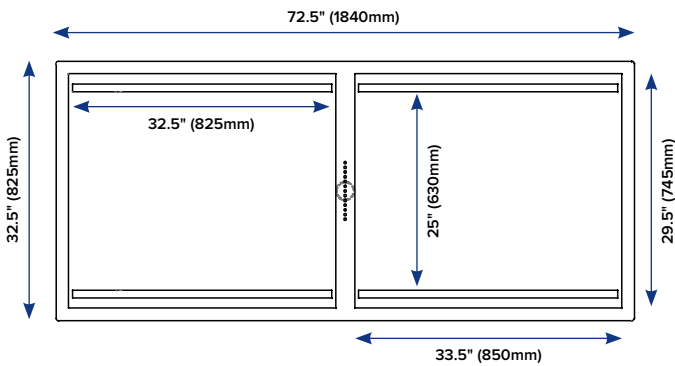
MVS 830F / Left & Right

Order Number:	MV830FLR
Machine Size:	85 x 40.75 x 55" (2155 x 1035 x 1400mm)
Lid Dimensions (inside):	38.75 x 30.25 x 7.75" (985 x 770 x 200mm)
Seal Bar Length:	28.75" (730mm)
Distance between Seal Bars:	28.75" (730mm)
Seal Width:	Standard: 0.39" (10mm) <i>(options available)</i>
Pump:	Busch R5 0160D (190m ³ /h · 60Hz)
Power:	208V · 3ph · 60Hz · 37A

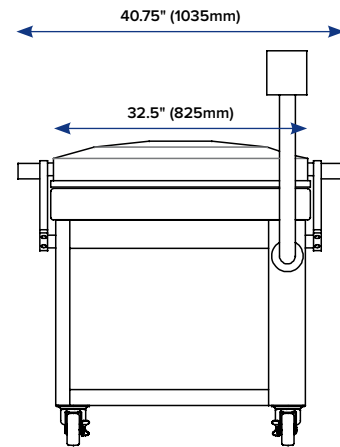
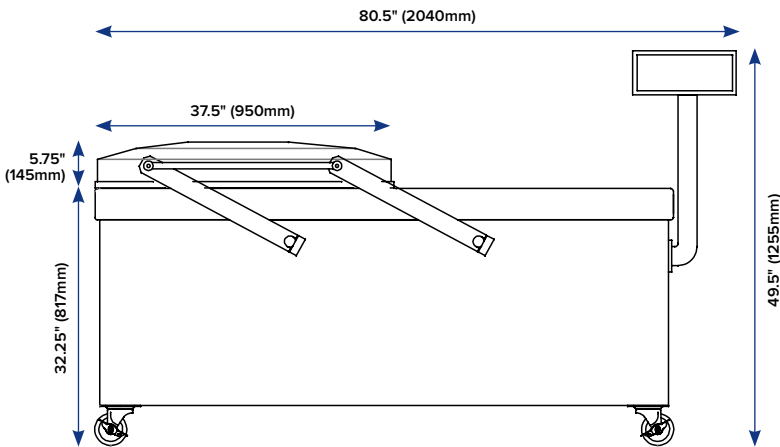
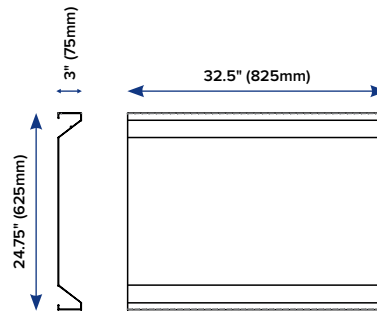


MVS 830R / Front & Back

- Order Number: MV830RFB
- Machine Size: 80.5 x 40.75 x 49.5" (2040 x 1035 x 1255mm)
- Lid Dimensions: 33.5 x 29.25 x 3.25" (850 x 745 x 80mm)
- Seal Bar Length: 32.5" (825mm)
- Distance between Seal Bars: 25" (630mm)
- Seal Width: Standard: 0.39" (10mm) *(options available)*
- Pump: Busch R5 0160D (190m³/h · 60Hz)
- Power: 208V · 3ph · 60Hz · 37A



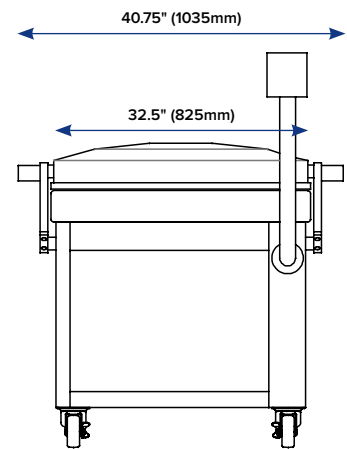
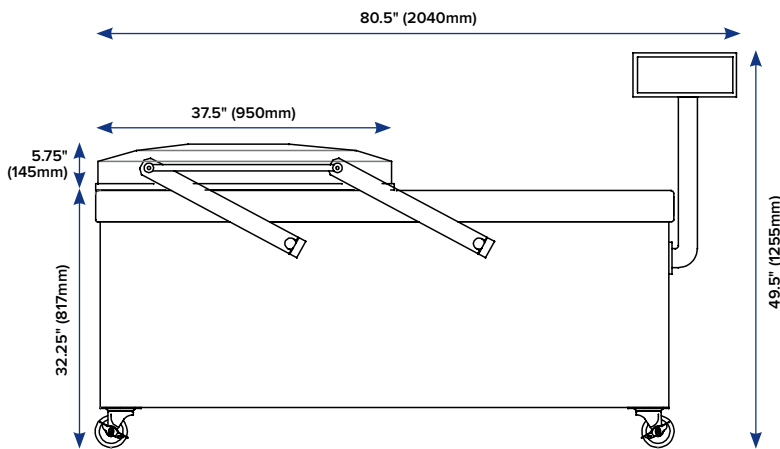
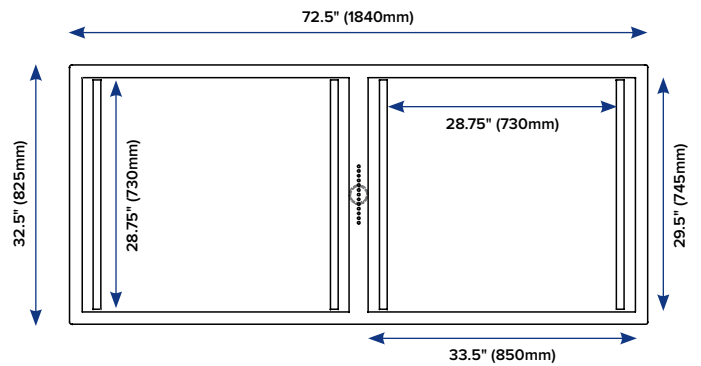
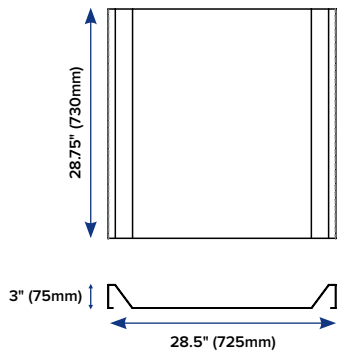
Tray for Liquids (included):



MVS 830R / Left & Right

Order Number:	MV830RLR
Machine Size:	80.5 x 40.75 x 49.5" (2040 x 1035 x 1255mm)
Lid Dimensions:	33.5 x 29.25 x 3.25" (850 x 745 x 80mm)
Seal Bar Length:	28.75" (730mm)
Distance between Seal Bars:	28.75" (730mm)
Seal Width:	Standard: 0.39" (10mm) <i>(options available)</i>
Pump:	Busch R5 0160D (190m ³ /h · 60Hz)
Power:	208V · 3ph · 60Hz · 37A

Tray for Liquids (included):



2. INSTALLATION PROCEDURES

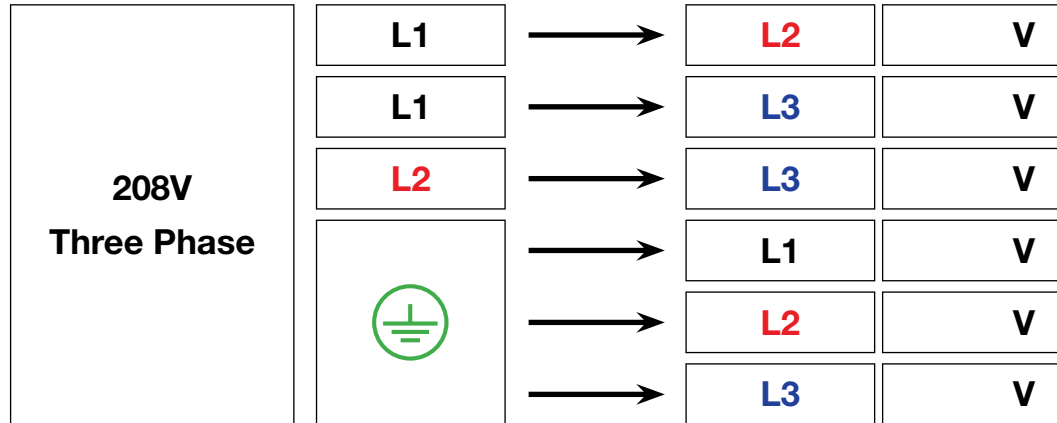
- The machine must be moved or transported in an upright position.
- The machine may **NOT** be tilted as this can cause damage to the pump.
- Place the machine on a flat floor and use the legs to level. This is essential for problem free operation of the machine.
- Enough space must be left around the machine for good ventilation. The space must be at least 12 inches.
- The ambient temperature in which the machine is operated must be between 41°F (5°C) and 86°F (30°C).
- When operating the machine in ambient temperatures above 56°F (13°C), standard 30 weight non detergent oil is required (*included*).
- When operating the machine in ambient temperatures below 56°F (13°C), cold temperature oil works best. We recommend using 15 weight, non-detergent oil (*option*).

POWER / GROUND


- Check that the voltage stated on the machine tag is the same as what is being supplied to machine.
- Always connect the machine correctly to a grounded socket to avoid danger of fire or electrical shocks (ground connection is green/yellow).
- ⚠ **Warning:** This machine is equipped with a relay that verifies phasing is correct. If the pump does not start upon powering on the machine, it is phased incorrectly.
- To change phasing, power off the machine and switch any two of the three (L1, L2, L3) wires.
- The power cable must always be free and nothing may be placed on it.
- Replace the power cable immediately if damaged.

- Always disconnect the power if there are problems with the machine or during maintenance, prior to starting work on the machine.
- If the machine is stationary for long periods then the power should always be disconnected.

For your records please note following power ratings:



VACUUM PUMP

- Check before starting the machine if there is oil in the pump.
-  **NEVER** start the machine without oil in the pump.
- Use the right type of oil for the pump (see "Installation Procedures" on page 7)
- After moving and/or transporting the machine, always first check the oil level before re-starting operation.

CONNECTING THE GAS FLUSH SYSTEM

(if applicable)

- ⚠ **NEVER** use flammable gasses or gas mixtures containing too much oxygen. There is a danger of explosion when using the aforementioned gasses.
- Accidents and/or damage caused by using above mentioned gasses void all liability on the part of the minipack america, Inc. authorized re-seller as well as the warranty.
- The gas bottles must always be correctly secured. If the gas flush function and/or the machine are not in use then the main nozzle of the gas bottle must always be closed.
- ⚠ The pressure of the pressure reducing valve on the gas bottle may **NEVER** be set to more than 15 PSI. A higher pressure may damage the machine. 15 PSI is approximately equal to 1 atmosphere/ATO.
- For more information about the use of gas, consult an authorized gas supplier.

CONNECTING COMPRESSED AIR FOR EXTERNAL SEALING PRESSURE

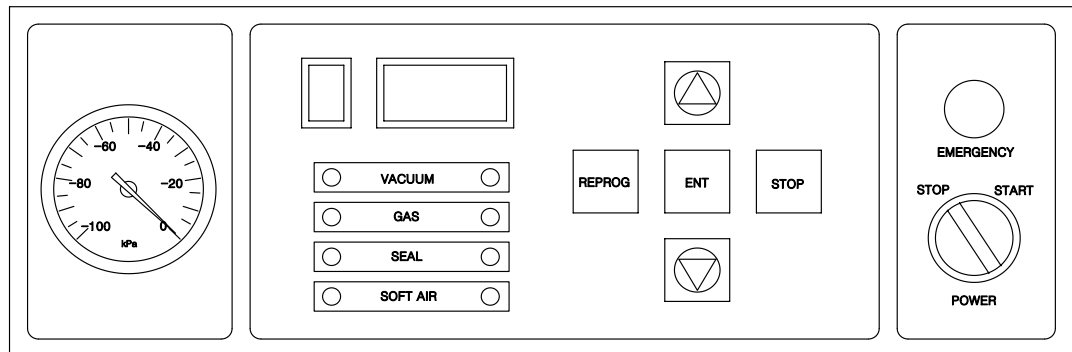
(if applicable)

- ⚠ The pressure from the compressor may **NEVER** be set to more than 15 PSI. A higher pressure may damage the machine.
- Only dry compressed air may be used for the external seal pressure.

GENERAL

- Never pack products that can be damaged during or after vacuum packaging.
- Refer to this manual if in doubt as to the operation and/or functioning of the machine. If the manual does not offer a solution, consult minipack america, Inc. or a minipack america, Inc. authorized re-seller.
- The warranty and/or liability is voided if damage is caused by repairs and/or changes made by you. In the case of malfunctions, contact minipack america, Inc. or a minipack america, Inc. authorized re-seller.
- In the case of malfunctions, always stop the machine and remove the power cable from the wall socket immediately.

3. PROGRAMMING



Upon powering on the machine, display will illuminate the last program being executed.

Setting Programs:

- To select a program 0 - 9, use [▼] or [▲]
- Adjust values of any program by pressing [**REPROG**] button

- Press [**REPROG**] and vacuum LED will blink
Adjust value of vacuum using [▼] and [▲]
Vacuum value is represented in seconds, 0 - 40
- Press [**REPROG**] again and seal LED will blink
Adjust value of seal using [▼] and [▲]
Value of seal is represented in seconds, 0 - 5
- Press [**REPROG**] again and soft air LED will blink
Adjust value of soft air using [▼] and [▲]
Value of soft air is represented at 0 min and 6 max
Press [**ENT**] button to save. Setting is complete.
- Adjusting seal bar cure time:
Press [**STOP**] button for 10 seconds
Press [**REPROG**] button
Adjust value of cure time using [▼] and [▲]
Value of cure time is represented in seconds, 0 - 6

The chart below represents the factory settings:

Program	Seconds	Millibars	Seal Time	Soft Air
0	16	2	2.4	0
1	14	4	2.4	0
2	13.5	6	2.4	0
3	12.5	8	2.4	0
4	12	10	2.4	0

4. START UP AND OPERATION

On/Off Master Switch:

Red and yellow switch located on lower right side of the machine used to supply power to the machine.

On/Off Power Switch:

Black power switch located on the display post.

Emergency Stop:

Red button located above black on/off power switch.

Note: When the machine is turned on (with the On/Off Power Switch), the pump runs continuously. The 3-phase pump needs time to warm up and turning a 3-phase pump on and off has a detrimental effect on its lifespan.

STANDARD OPERATING STEPS

1. Fill the vacuum bag with product. Select the correct size bag that easily fits around the product but is not too large for the product. Ensure hygienic conditions during this operation. Packaging materials, product and hands must be clean and if possible dry.
2. Lay the vacuum bag on the working plate. The open side must be laid over the sealing bar or silicone holder. The bag may not extend from the chamber. If the product is a lot lower than the height of the sealing bar or silicone holder then insert plates which are supplied standard with the machine. This makes the operation easier and reduces the cycle time.
3. The vacuum bag must be laid without folds over the sealing bar or silicone holder.
4. For a gas flush system the opening of the vacuum bag must be pulled over the gas nozzles.

5. Multiple vacuum bags can be placed over the sealing bar/silicone holder if the sealing bar/silicone holder is longer than the vacuum bag. Vacuum bags may not be laid on top of each other on the bar/holder. If there are multiple bars/holders then all bars/holders can be used during the same cycle.
6. Close the lid and the machine automatically runs through the full cycle of all activated functions. The lid opens automatically when the last function "ventilation" has been completed.
7. If necessary the cycle can be partially or fully interrupted by pressing the [**STOP**] key. The [**STOP**] key interrupts the entire cycle and goes immediately to the "ventilation" function.
8. After cycle completion, the packaged product(s) can be removed from the machine.

5. MAINTENANCE

Regular, thorough maintenance is essential for extending the machine's life, for preventing malfunctions and for achieving an optimal packaging result.

There are maintenance procedures that must be carried out which the operator can do himself. Below is a breakdown of these procedures.

IMPORTANT BEFORE & DURING MAINTENANCE

- The machine must always be completely shut down before any maintenance is carried out on it. Remove the plug from the wall socket or put the master switch in the **○** position.
- If the machine is not functioning properly or if it produces strange noises, turn it off immediately with the ON/OFF switch and contact minipack america, Inc. or a minipack america, Inc. authorized re-seller.
- If the machine is equipped with a gas flush system, always close the main nozzle during standard maintenance procedures. Always take care that

the pressure on the pressure reducing valve on the gas bottle is never higher than 1 atmosphere/ATO before, during and after the maintenance is completed. A higher pressure may cause irreparable damage to the machine. **NEVER** use flammable gasses or gas mixtures containing oxygen.

- Water may never be permitted to enter either the extraction nozzle of the chamber or the blow-off opening of the pump. This would cause irreparable damage to the pump.
- Service must always be carried out by a minipack america, Inc. authorized re-seller.
- Minipack america, Inc. cannot be held responsible for any malfunctions or defects if the maintenance instructions in this manual are not followed.
- Contact minipack america, Inc. or a minipack america, Inc. authorized re-seller if there are any doubts or questions about maintenance or malfunctions.

STANDARD MAINTENANCE REQUIREMENTS FOR THE MACHINE

Note: The maintenance intervals depend solely on the individual operating conditions. The guidelines below shall be considered as starting values which should be shortened or extended as appropriate.

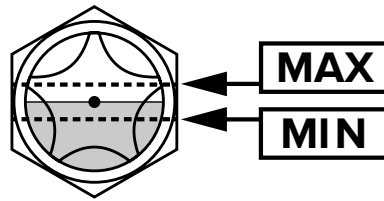
Particularly heavy duty operation, such as high dust loads or high moisture products, other contaminations or ingress of process material, can make it necessary to shorten the maintenance intervals significantly.

Daily

- Clean and sanitize the vacuum chamber, lid, and housing from content after each use with a damp cloth.
- Make sure that no cleaning agents containing solvents are used.

- Check the oil level and color using the sight glass on the pump.

Replace if contaminated. If oil level is below minimum line, add oil until the level reaches the maximum line.



Weekly

- Inspect the sealing bar for damage.
- Inspect Teflon tape/sealing wire for wear. If Teflon tape/sealing wire is no longer tight or straight on the bar, it needs to be replaced.
- Inspect the lid gasket and replace it when the gasket is damaged or stretched.

Every 3-6 Months

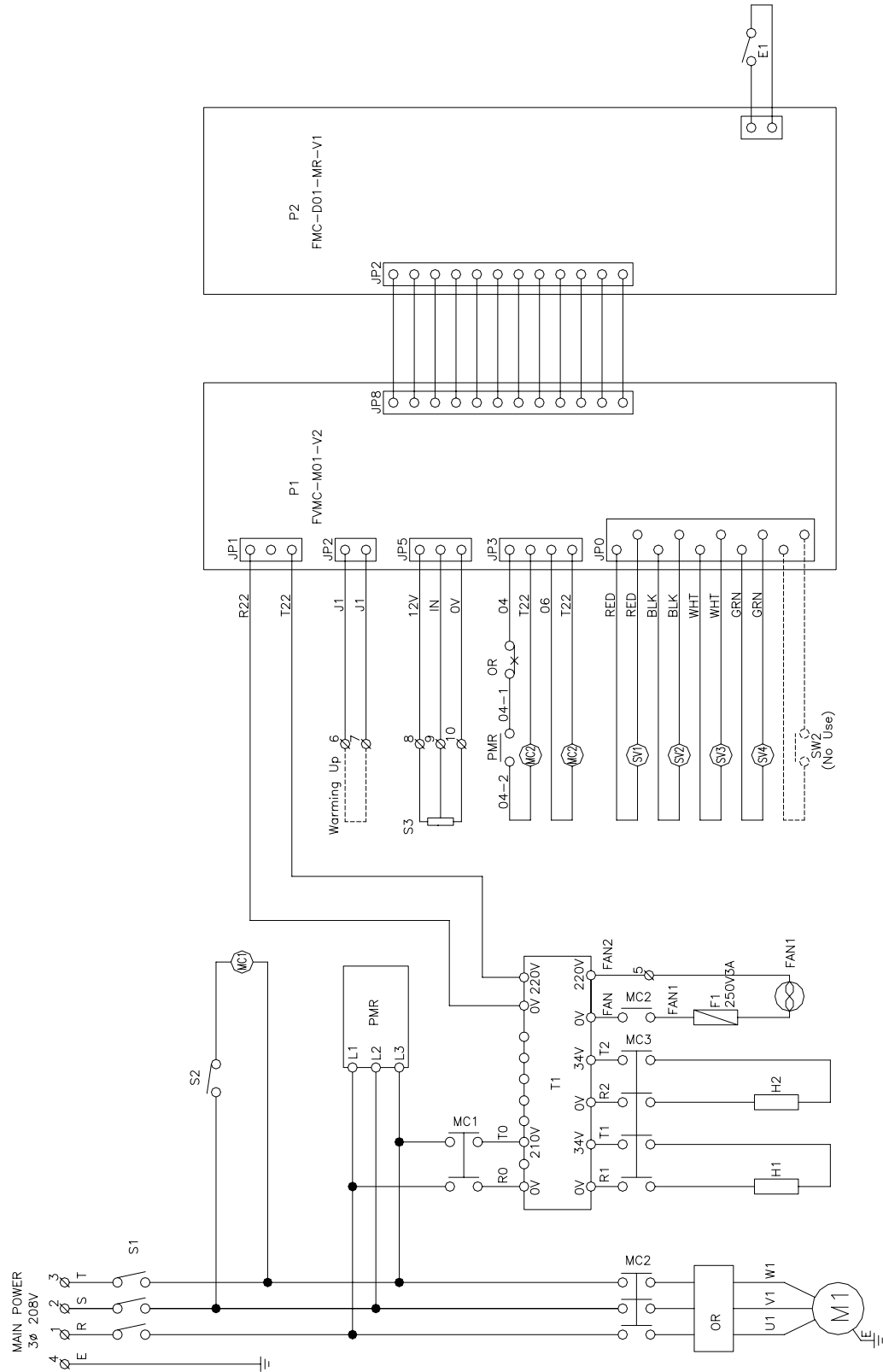
- Replace oil at least once every 3-6 months.
- Check lubrication points.
- Check silicone for damage. Replace if damage is found.

Yearly

- Inspect the oil and exhaust filter(s) for saturation. If saturated, replace the filter.

6. Electrical Diagram

MVS 630 & 830: ELECTRICAL DIAGRAM



Item	Part Number	Description	Quantity
S1	V8300601	Main Switch	1
S2	V8300602	Selector Switch	1
MC1	V8300603	Magnetic Contactor	1
MC2	V8300604	Magnetic Contactor	1
MC3	V8300605	Magnetic Contactor	1
OR	V8300606	Overload Relay	1
T1	V8300607	Transformer	1
PMR	V8300608	Phase Monitoring Relay	1
H1, H2	V8300609	Seal Wire	2
F1	V8300610	Fuse	1
S3	V8300611	Proximity Switch	1
SV1	V8300612	Seal Valve	1
SV2	V8300613	Soft Air Valve	1
SV3	V8300614	Devac Valve	1
SV4	V8300615	Main Valve	1
P1	V8300616	PCB1	1
P2	V8300617	PCB2	1
E1	V8300618	Emergency Switch	1



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