



MODEL 82 VACUUM PUMP AND/OR COMPRESSOR SET



Mensor Model 82 Vacuum Pump and/or Compressor Set Manual

Mensor Model 82 - Vacuum Pump and/or Compressor Set

The Mensor Model 82 is a pump and/or compressor set that complements a pressure controller and fits on or under a bench, in a rack, or on a table. The compressor is an oil-less pump with a maximum pressure of 50 psi with an open flow of 1.5 cfm. The vacuum pump is also oil-less and can achieve 28.5 inHG of vacuum with an open flow of 0.8 cfm. In avionics terms, this set is capable of 60,000 feet of altitude and airspeeds in excess of 1000 knots. Both units are shock mounted to reduce noise and vibration. Each unit has a power switch/breaker and can be run independently. This same configuration can also be produced in a standard 19 inch, 4U (7" high) rack mount chassis or desktop version.

Product Warnings

1. The Model 82 should only be used for the purpose of pumping and evacuating air. It is not made for use with other gases or any liquids.
2. The Model 82 was designed for internal use. It should be protected from inclement weather when used in uncontrolled environments.
3. Verify proper power (voltage and frequency) matches power label on rear of instrument before applying power.
4. Do not stay directly in line with open air stream.
5. Do not block air vents in rear of the unit. Normal operating temperature is 40 F to 104 F (4 C to 40 C).

Operation

Operation of the vacuum channel, pressure channel or both channels can be initiated by applying power using the power switch/breakers on the front panel. The 110 volt AC unit requires nominal 110 volt AC, 60 Hz power be applied using the rear power cord. The 230 volt AC unit requires 220 to 230 volt AC, 50 Hz power. Voltages should vary less than plus or minus 10% of rating. No internal regulation of the pressure or vacuum is provided in the unit. Normally, none is needed on the vacuum port, but may be required if less than the approximately 50 psi gauge pressure is need for the pressure supply. Under no load conditions, the compressor can achieve up to 75 psi gauge pressure. The pressure and vacuum is automatically released by internal solenoid valves when power is removed from a channel.

Specifications

Power (depending on 110/230 option):

Nominal 110 VAC, 60 Hz 2.6 Amps (4.9 start-up)

Nominal 230 VAC, 50 Hz 3.4 Amps (6.2 start-up)

Porting:

1/4" male tube fitting standard (additional options available)

Size:

19" Wide (19" rack mount)

18.5" Deep (reserve additional room for rear ports)

7" Tall (4U)

Weight:

55 pounds

Noise:

Approximately 70 - 75 db A weighted

Operating Conditions:

Ambient temperature: 5 – 40

Humidity: 20 – 80% RH

Internal temperature: Pumps can reach 100°C after prolonged operation.

Maintenance

The attached Gast Operation/Maintenance Manual provides information related to the maintenance of the pump and compressor. If the unit is to be taken out of service for an extended period of time, the Shutdown Procedure should be followed. Under normal conditions, the pump should operate in excess of 4000 hours when unit is kept within the recommended temperature operating range. Consult the manual for additional details.