

Custom systems

Model 83 rack mounted

Vacuum pump and compressor

09/2023

Description

The Mensor Model 83 vacuum pump and compressor is a piece of equipment that compliments a pressure controller and can fit on a bench or in a rack-mounted configuration.

Functionality

The compressor is an oil-less pump with a maximum pressure of 2.5 Bar and a maximum flow rate of 24 L/min. The Vacuum pump is an oil-less pump that is rated for 98% vacuum or 29" Hg and has a maximum flow rate of 7.5 L/min. The model 83 requires an external power source that is 85-264 VAC, 47-63 Hz.

Unit setup

Ensure the power cable is connected to the mains power input plug on the rear of the unit. Connect the required pressure/vacuum connections onto the applicable, labeled ports on the rear of the unit. Power on the unit's main power by turning on the mains power input switch on the rear of the unit; you will hear the two cooling fans turn on.

Maintenance

Periodically (monthly is suggested by the manufacture):

- Check the unit for loose fittings, hardware, or panels and tighten as required.
- Ensure that there is not an accumulation of dust or debris within the unit.
- Ensure that the pumps are properly lubricated and function without strain or issue.
- Ensure that the cooling fans spin without binding or increased strain.
- Each new unit has a 1-year warranty from the date of delivery.



Model 83 - Vacuum pump and compressor

Versions

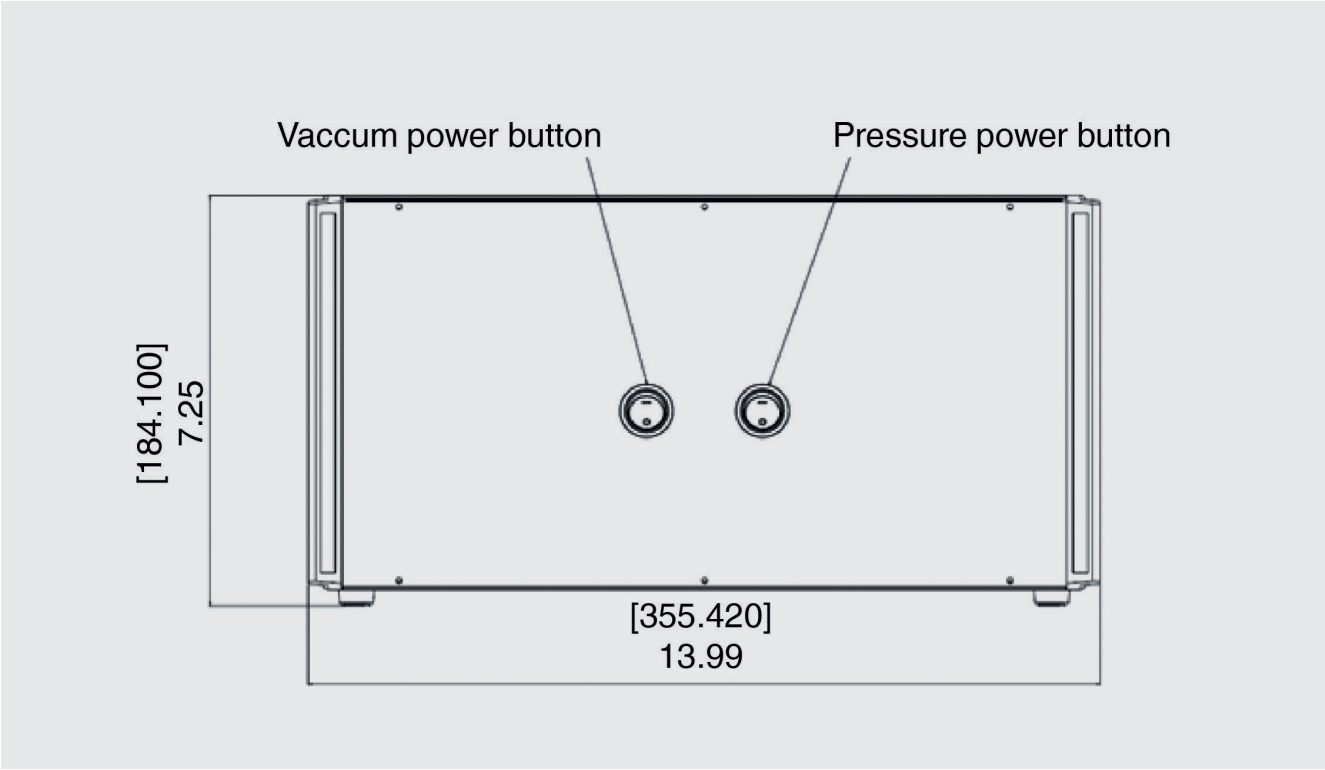
Single compressor	Model 83 - C
Single vacuum	Model 83 - V
Dual compressor	Model 83 - CC
Dual compressor	Model 83- 2C (Single channel, parallel pumps, higher volume flow rate)
Dual vacuum	Model 83- V V (Two vacuum channels)
Dual vacuum	Model 83- 2V (Single channel, parallel pumps, higher volume flow rate)
Vacuum and compressor	Model 83 - VC

1) Append -D for desktop model and -R for rack-mount model power cord options available

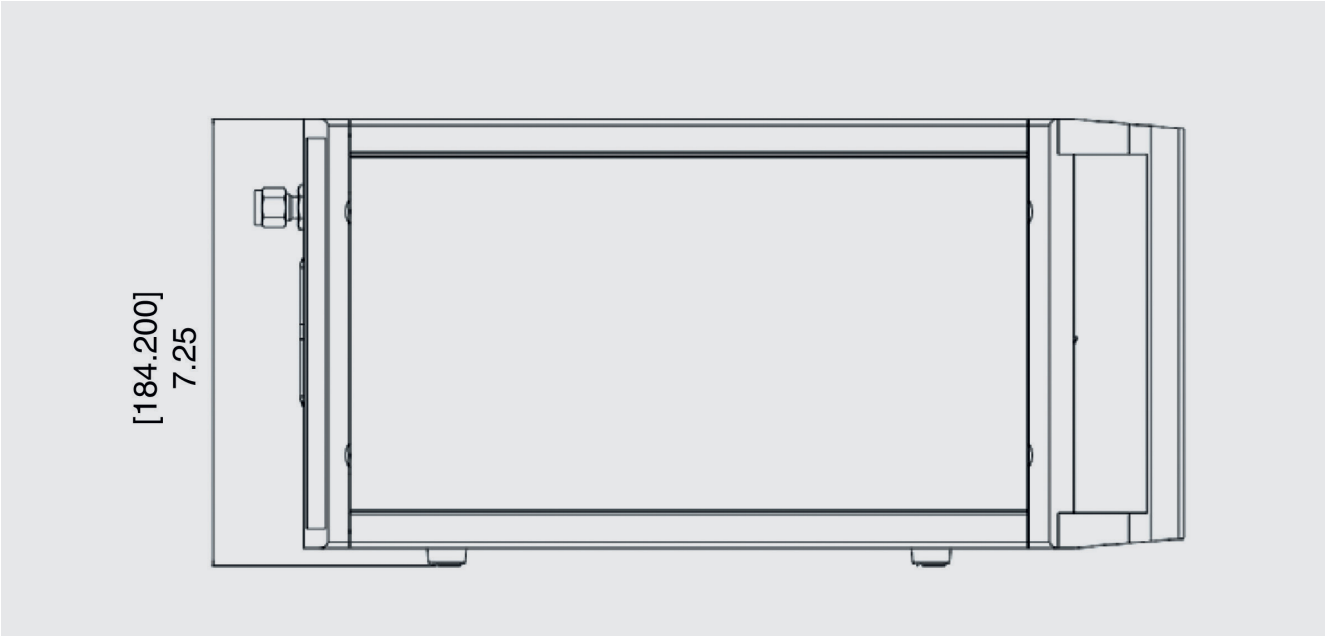
Specifications
Model 83

Basic instruments - Model 9415	
Power	85-264 VAC, 47-63 Hz
	0.5 Amps (1.2 startup) with dual pumps
	Main Power input and switch on rear panel
	Independent pump power switches on front panel.
Pressure	1/4" male tube fitting standard (additional options available)
	Compressor max. intermittent duty 2.5 bar
	Compressor max. continuous pressure 0.5 bar
	Approximately 29 in HG per vacuum channel
Flow	Approximately 24 L/min open flow per single compressor channel
	Approxiamtely 7.5 L/min open flow per single vacuum channel
Size	13.99" wide (19" wide for rack mount option)
	13.20" deep (reserve additional room for rear ports)
	7.25" tall (4U)
Weight	Dual pump approximately 15 pounds
	Single pump approximately 10 pounds
Noise	Approximately 55dB a weighted at 6 ft.
	Approximately 64 dB a weighted at 1ft.

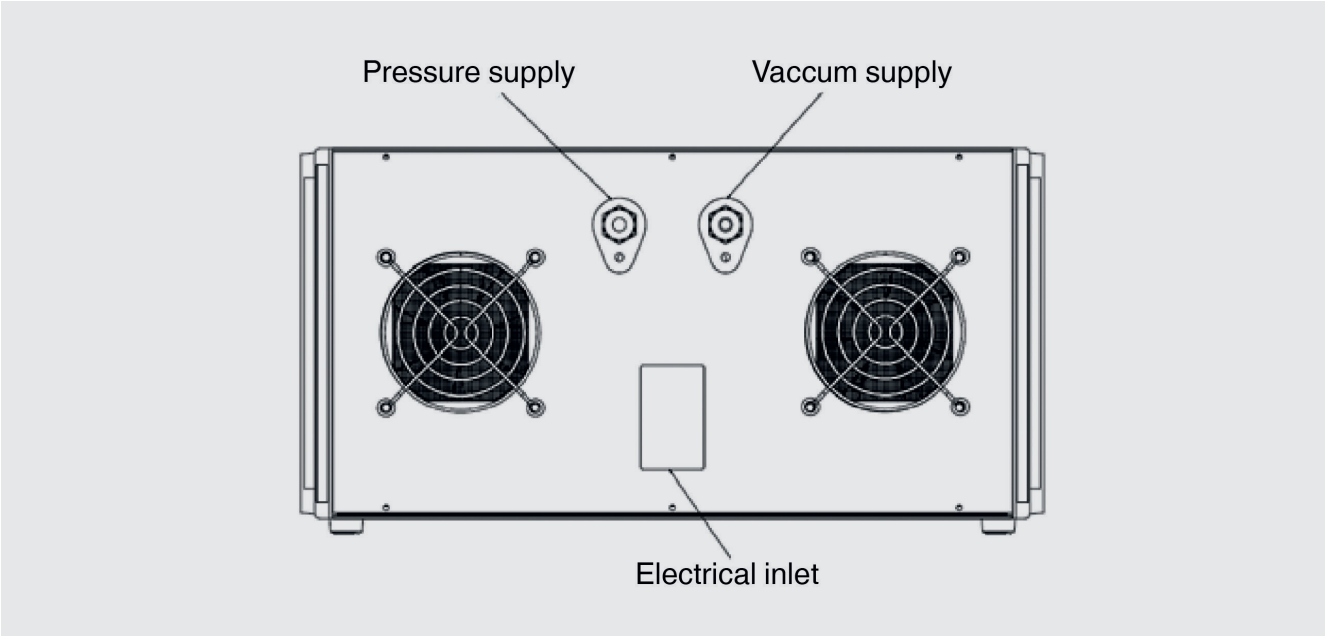
Front panel features: inches [millimeters]



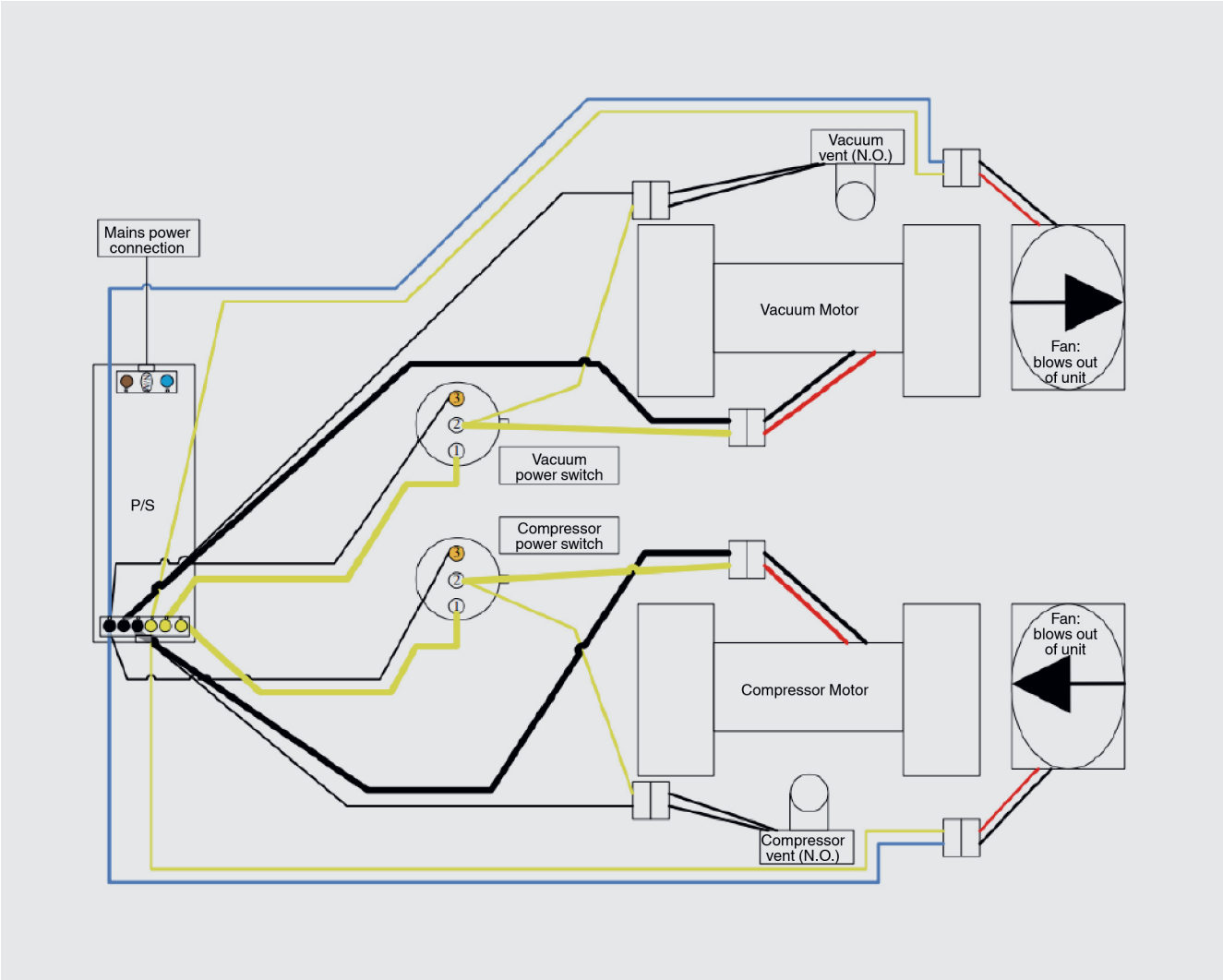
Side: inches [millimeters]



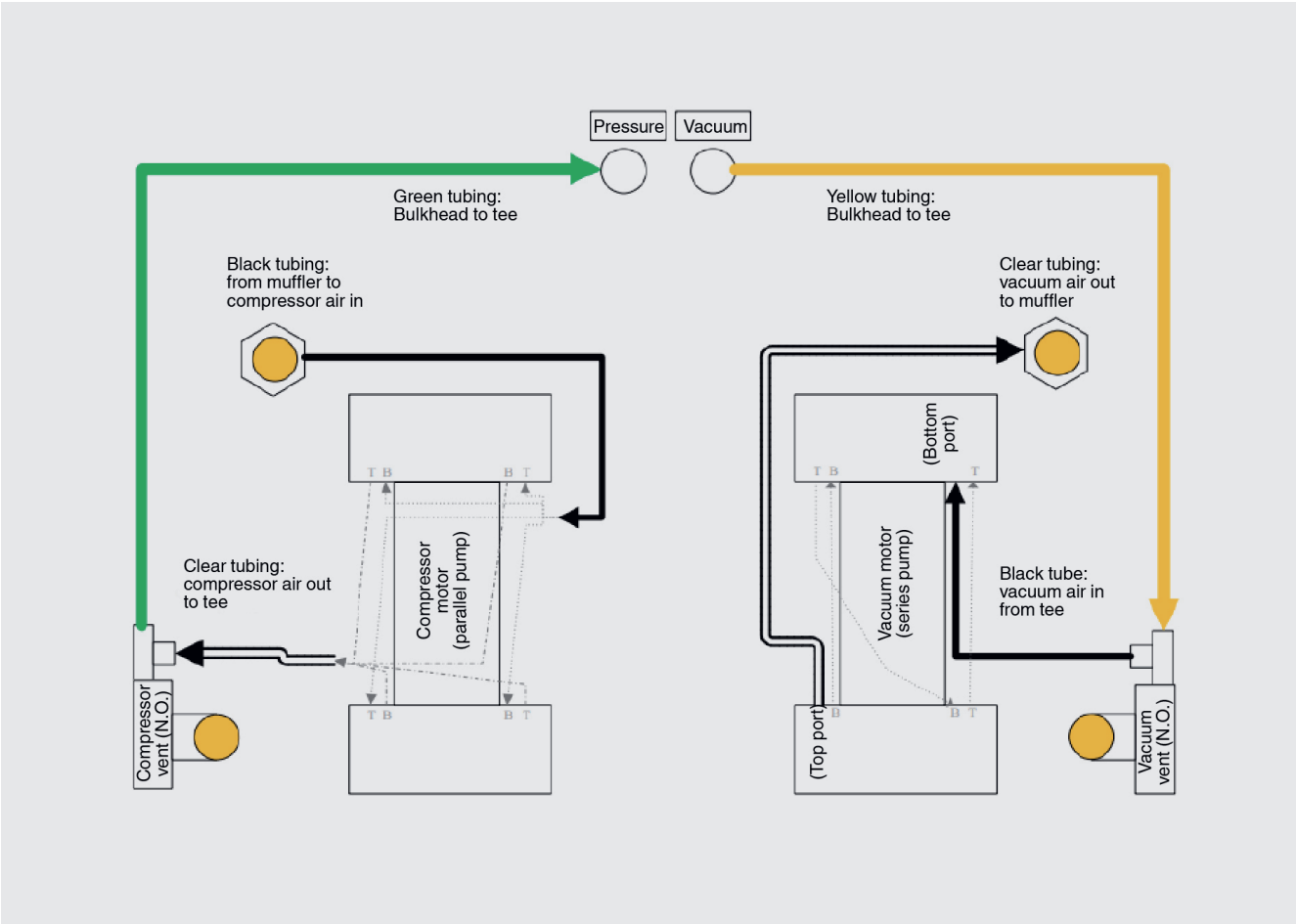
Rear panel features: inches [millimeters]



Model 83 CV wiring diagram



Model 83 CV pneumatics diagram



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