



Simplex Oil Free Claw Laboratory Vacuum System-Horizontal Tank mount

System Description:

The *Global Vac & Air* simplex oil-free dry claw laboratory vacuum system is built as one dry claw vacuum pump mounted and piped to a horizontal receiver with a mounted and wired simplex control panel. The system is completely tested before shipment and is built with single point connection for process inlet, pump discharge and system power. The complete assembly is finished in GLOBALVAC white and supplied with inlet and discharge flex connectors and vibration pads. The system is piped, wired and factory tested prior to shipment.

Oil-Free Dry Claw Vacuum Pump:

The vacuum pump is direct driven by a continuous duty TEFC motor available in 208-230/460/3/60 electrical service. Additional electrical supply options available upon request. The contact free operating principle provides a nearly maintenance-free operation. The pump is oil-free in the pumping chamber and only requires oil change of gear oil. Each pump is air cooled and rated for continuous operation at an ultimate pressure of 28.1" HgV without overheating. Each pump contains:

- Integrated and pump mounted check valves
- 5 micron inlet filter with polyester element
- Internal inlet screen
- Pump isolation valve
- Oil sight glass (gear oil)
- Oil drain valve (gear oil)
- Exhaust high temperature switch
- Inlet & outlet flex connector

Automatic Purge System:

Each pump is equipped with an automatically controlled purge system. The purge system actuates prior to pump shutdown by closing an inlet solenoid valve and opening a separate purge solenoid valve to atmosphere to remove any gases from the pumping chamber thus preventing condensation as the pump cools.

Vacuum Receiver:

The horizontal vacuum receiver is ASME coded and rated for 200 PSI and full vacuum. The receiver is equipped with sight glass, drain valve, and single point process inlet valve. The receiver is epoxy lined for corrosion resistance. Multiple receiver size options available.

Simplex Control Panel:

The system is controlled by a UL labeled simplex mounted and wired control panel.

The control panel is built with:

- Line Voltage Motor Starter with Overload Protection
- 120 Volt Control Transformer with protected Primary and Secondary Circuits
- Hand/Off/Auto Selector Switch
- Vacuum Gauge
- Panel Mounted Vacuum Switch
- Through the Door Disconnect
- Run Light
- Hour Meter
- NEMA 12 Enclosure
- UL Listed



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Model Number*	Pump motor rating (HP)**	Maximum Vacuum (in. HgV)	Nominal Capacity (ACFM/pump)**	System Capacity @ 19" Hg (SCFM/system)**	Receiver size (Gallons)	System BTU/hr**	System FLA @ 460 V / 3 / 60 Hz
VC02A-XXL-12H	2	28.1	44	16	120	4,327	3.4
VC03A-XXL-12H	3	28.1	57	21	120	6,490	4.8
VC04A-XXL-12H	4	28.1	79	29	120	8,653	6.2
VC05A-XXL-12H	5.4	28.1	103	38	120	11,682	8.2

*XX in the model number is a placeholder for system voltage. 43=460V/3/60Hz, 23=230V/3/60Hz, 53=575V/3/60Hz

** All data shown assumes 60 Hz electrical supply