Quadruplex Lubricated Rotary Vane
Medical Vacuum System-Stack Mount 5 to 15 HP

System Description:

The *Global Vac & Air* Quadruplex Lubricated Rotary Vane Medical Vacuum System is built as three skids bolted together for ease of transport and installation. Two of the skids consist of two pumps mounted on a vertically configured frame with one pump mounted over the other. The third skid consists of a mounted and wired quadruplex NFPA99 compliant PLC control panel and vertical receiver. The system is completely tested before shipment and is built with single point connection for process inlet, 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 Flooded Rotary Vane Vacuum Pump:

The vacuum pumps are direct driven by a continuous duty TEFC motor available in 208-230/460/3/60 electrical service. Additional electrical supply options available upon request. Each pump is air cooled and rated for continuous operation at an ultimate pressure of 29.3" HgV + without overheating. Each pump contains:

- Integrated anti suck back valve
- High efficiency oil separator element
- Pump mounted check valve
- 5 micron inlet filter with polyester element
- Pump isolation valve
- Air cooled oil cooler
- Oil sight glass & drain valve
- Single shaft direct drive
- Inlet/Exhaust flex connector
- Exhaust high temperature switch

Vacuum Receiver:

The vertical vacuum receiver is ASME coded and rated for 200 PSI and full vacuum. The receiver is equipped with sight glass, 3 valve tank bypass, drain valve, and single point process inlet valve. The receiver is epoxy lined for corrosion resistance. Multiple receiver size options available.

Quadruplex NFPA99 PLC Control Panel:

The system is controlled by a UL labeled quadruplex NFPA99 compliant PLC control panel. The controller provides automatic alternation of the pumps or simultaneous operation if needed. Supplied with comprehensive software package which will display system and pump status and allow adjustment of system parameters.
The control panel is built with:

- Finger safe power distribution block
- Dual 120V control transformer with CB protection for primary and secondary circuits
- Dual 120vac/24vdc power supply
- Transformer switching circuit to allow backup transformer to power circuit in event of primary transformer failure
- Transformer/Power Supply failure warning circuit, activates system general warning relay and PLC display warning indicator if either should fail
- 7" color OIT with integrated Hand/Off/Auto
- Door mounted system disconnect
- Door mounted Emergency Stop button
- Adjustable run-on timer (frequent start protection) integrated into OIT
- 4-20ma transmitter to control pumps
- Selectable, Auto Timed Alternation (default), Auto Alternation or Manual Alternation
- Hour meter integrated into OIT
- Reserve (Lag) Unit in use indicator with audible alarm
- Dry contacts for remote monitoring
- Maintenance screens with adjustable intervals for tracking maintenance items
- UL508A listed NEMA 12 enclosure
- Low vacuum alarm which may be enabled/disabled
- Door mounted Bypass circuit with selector switch
- Panel mounted vacuum gauge
- Ethernet bulkhead for temporary site connection

Quadruplex Lubricated Rotary Vane
Medical Vacuum System-Stack Mount 5 to 15 HP

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
VR05Q-XXM-20V	5	29.9	103	113	200	32,449	22.8
VR07Q-XXM-20V	7.5	29.3	141	155	200	48,673	33
VR10Q-XXM-20V-004	10	29.3	177	195	200	64,898	42
VR10Q-XXM-20V	10	29.3	212	233	200	64,898	42
VR15Q-XXM-20V	15	29.3	305	335	200	97,346	63
VR15Q-XXM-24V	15	29.3	305	335	240	97,346	63

*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 and one pump sitting idle for redundancy