

Quadruplex Lubricated Rotary Vane Industrial Vacuum System-Stack Mount

System Description:

The Global Vac & Air Quadruplex Lubricated Rotary Vane Industrial Stacked Vacuum System is built as three skids bolted together for ease of transport and installation. Two of the skids consist of two lubricated rotary vane vacuum pumps mounted on a vertical frame stacked over one another and piped to a common manifold. The third skid consists of a mounted and wired quadruplex PLC control panel and vertical receiver. The system is completely tested before shipment and is built with a single point connection for process inlet, and system power. The complete assembly is finished in GLOBALVAC gray 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:

Each 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. Each pump is air cooled and rated for continuous operation at an ultimate pressure of 29.9" HgV without overheating. Each pump contains:

- Most efficient IE3 motor in the industry
- Integrated anti suck back valve
- High efficiency oil separator element
- Pump mounted check valve
- 5 micron inlet filter with polyester element
- Pump isolation valve
- Oil tank with dual stage oil separation
- Air cooled oil cooler
- Oil sight glass
- Oil drain valve
- Single shaft direct drive
- Exhaust flex connector
- Inlet flex connector

Vacuum Receiver:

The vertical 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. Multiple receiver size options available.

Quadruplex Control Panel:

The system is controlled by a UL labeled quadruplex 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
- High temperature switch
- PLC controller with HMI
- Vacuum Gauge
- 4-20 mA vacuum transmitter to control pumps via PLC input
- Selectable; automatic timed alternation, auto alternation, or manual alternation
- NEMA 12 Enclosure
- Pump status indicators integrated into HMI display
- UL Listed
- Dry contacts for remote monitoring
- Optional: Real Time Automation (RTA) protocol converter for BMS interface



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Model Number	Pump motor rating (HP)	Maximum Vacuum (" HgV)	Nominal Capacity (ACFM/pump)	System Capacity @ 19" Hg (SCFM/system)	Receiver Size (Gallons)	System Heat Dissipation @ 19" (BTU/hr)**	System FLA @ 460V / 3 / 60 Hz
VR06Q-XXD-20V	6.4	29.9	116	170	200	55,379	37.5
VR08Q-XXD-20V	8.9	29.9	141	207	200	77,012	49.8
VR12Q-XXD-20V	12.1	29.9	211	309	200	104,701	67.8
VR12Q-XXD-24V	12.1	29.9	211	309	240	104,701	67.8
VR17Q-XXD-20V	17.7	29.9	299	438	200	153,158	99.1
VR17Q-XXD-24V	17.7	29.9	299	438	240	153,158	99.1

^{*}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 is for 2 pumps operating with a 60 Hz electrical supply