



Duplex Lubricated Rotary Vane Industrial Vacuum System-Horizontal Tank mount

System Description:

The *Global Vac & Air* Duplex Lubricated Rotary Vane Industrial Vacuum System is built as two lubricated rotary vane vacuum pumps mounted and piped to a horizontal receiver with a mounted and wired duplex control panel. 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 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. Multiple receiver size options available.

Duplex Control Panel:

The system is controlled by a UL labeled duplex 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*



**Duplex Lubricated Rotary Vane
Industrial Vacuum System-Horizontal Tank mount**

| Model* | System HP** | Maximum Vacuum (in. HgV) | System ACFM** | System SCFM @ 19" HgV** | Receiver Size (Gallons) | System Heat Dissipation @ 19" (BTU/hr)** | System FLA @ 460V / 3 / 60 Hz |
|-------------------|--------------------|---------------------------------|----------------------|--------------------------------|--------------------------------|---|--------------------------------------|
| VR01B-XXD-08H | 2.4 | 29.9 | 35 | 13 | 80 | 5,192 | 4.8 |
| VR02B-XXD-08H-005 | 4.8 | 29.9 | 56 | 21 | 80 | 10,384 | 8.2 |
| VR02B-XXD-12H-005 | 4.8 | 29.9 | 56 | 21 | 120 | 10,384 | 8.2 |
| VR02B-XXD-08H-006 | 4.8 | 29.9 | 64 | 23 | 80 | 10,384 | 8.2 |
| VR02B-XXD-12H-006 | 4.8 | 29.9 | 64 | 23 | 120 | 10,384 | 8.2 |
| VR02B-XXD-08H-007 | 4.8 | 29.9 | 92 | 34 | 80 | 10,384 | 8.2 |
| VR02B-XXD-12H-007 | 4.8 | 29.9 | 92 | 34 | 120 | 10,384 | 8.2 |
| VR02B-XXD-08H | 4.8 | 29.9 | 99 | 36 | 80 | 10,384 | 8.2 |
| VR02B-XXD-12H | 4.8 | 29.9 | 99 | 36 | 120 | 10,384 | 8.2 |
| VR03B-XXD-12H | 7 | 29.9 | 141 | 52 | 120 | 15,143 | 11.2 |
| VR06B-XXD-20H | 12.8 | 29.9 | 232 | 85 | 200 | 27,690 | 18.8 |
| VR08B-XXD-20H | 17.8 | 29.9 | 282 | 103 | 200 | 38,506 | 26.1 |
| VR08B-XXD-24H | 17.8 | 29.9 | 282 | 103 | 240 | 38,506 | 26.1 |
| VR12B-XXD-20H | 24.2 | 29.9 | 422 | 155 | 200 | 52,351 | 33.9 |
| VR12B-XXD-24H | 24.2 | 29.9 | 422 | 155 | 240 | 52,351 | 33.9 |

*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