

NFPA 99 Compliant Triplex Lubricated Rotary Vane Medical Vacuum Package 20 HP Base Mounted Single Point Connection

Vacuum Package

- Fully compliant with the latest edition of NFPA 99
- Three oil-less rotary claw type vacuum pumps with inlet filter and isolation valve for each
- Three motors
- ASME coded vacuum receiver with bypass and manual drain
- Quad control panel with automatic lead/lag controls
- All components completely pre-piped and pre-wired to single point service connections
- Liquid tight conduit, fittings and junction boxes for all control and power wiring
- All interconnecting piping and wiring is completed and operationally tested prior to shipment

Vacuum Pump

- Lubricated rotary vane pump
- Three non-metallic, non-asbestos vanes with minimum life of 30,000 hrs.
- Direct-driven through a shaft coupling
- Air-cooled
- End (ultimate) vacuum = 29.3" Hg
- Integral, fully recirculating oil supply
- Spin-on oil filter
- High discharge temperature switch
- Oil drain valve assembly with temperature gauge
- Integral oil separation system with three stage oil and smoke eliminators capable of removing 99.9+% of particles from the exhaust gas stream
- Built-in, anti-suck-back valve mounted at the pump inlet
- 2 micron inlet filter for removal of particulates
- Shipped with initial charge of pump fluid

Vacuum Motor

- NEMA rated
- C-face
- TEFC
- 208 or 230/460V 3-phase

Intake Piping

- Vacuum pumps are connected to a common manifold and piped to a vertical receiver
- Inlet check valve on each pump
- Inlet isolation valve on each pump
- Flexible connectors between pumps and receiver
- Flexible connectors for discharge connections

Vacuum Receiver

- Vertical orientation with integrally mounted bypass and manual drain
- ASME Code stamped
- National Board Certified
- Rated for a minimum 200 PSIG design pressure
- Vacuum gauge
- Manual drain

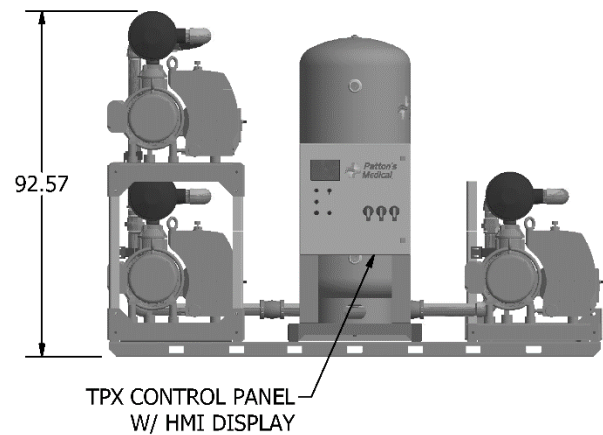
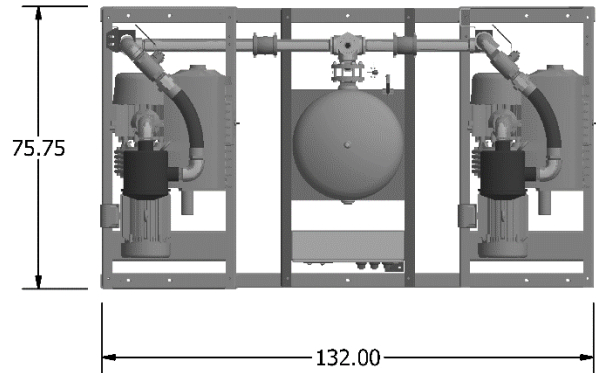
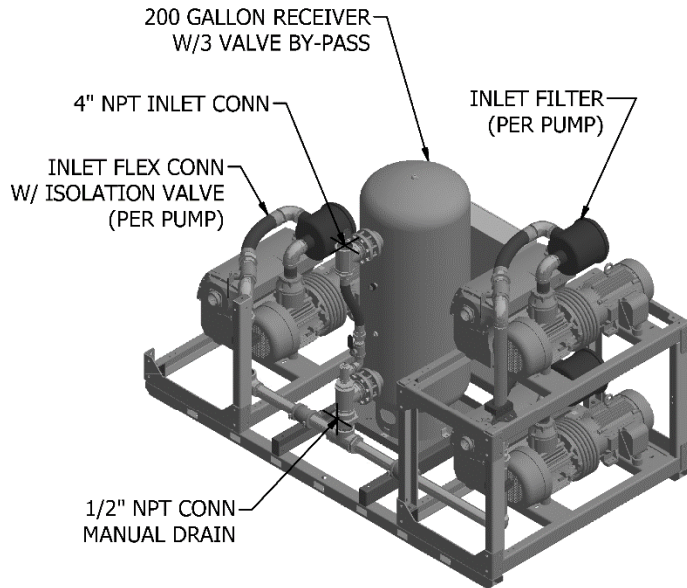
Control System

- Mounted and wired Triplex control system
- NEMA 12 and U.L. labeled
- Variable frequency drive to control one pump at a time
- Automatic lead/lag sequencing
- Circuit breaker disconnects for each motor with external operators
- Full voltage motor starters and VFD contactors with overload protection
- 120V control circuit transformers for each motor circuit
- Visual and audible reserve unit alarm with isolated contacts for remote alarm
- Hand-off-auto selector switches
- Automatic alternation of all vacuum pumps based on a first-on/first-off principle with provisions for simultaneous operation if required
- Automatic activation of reserve unit if required
- Visual and audible alarm indication for high discharge temperature shutdown with isolated contacts for remote alarm
- SIGNAL 1™ – touch screen gateway

Standard Screen displays

- | | |
|-------------------------|--|
| + Vacuum level /Runtime | + Replacement parts |
| + Alarm history | + Troubleshooting guidelines |
| + Service indicator | + Historical trending of system status |
| + Maintenance schedule | |

- + 7" Wide TFT Graphic Touch Screen with Motion Actuated Backlit LED
- + Bright 65,536 (16-bit) Colors
- + Downloadable Trend Information via USB Host Port or Network Device
- + 128MB Flash Memory, 64MB DRAM
- + Built-in Ethernet Port 10/100 Base-T (RJ45)
- + Supports over 100 Communication Protocols including BACnet IP, Ethernet IP, and Modbus TCP/IP
- + With Multiple Ports it can handle three (3) additional Protocols simultaneously
- + Built-in VNC server allowing remote monitoring over Ethernet/Internet network for "Real Time" monitoring of live graphics through standard browser, smart phones and mobile devices.
- + Share data between HMI and Building Management systems with no additional software to implement.



Triplex Lubricated Rotary Vane Medical Package Specifications ¹										
Complete Package Model No.	HP	Capacity @19" Hg ²		Package ³ BTU/HR	Receiver ⁴	Noise Level ⁵	System FLA Quad			Package Weight
		50 psig	110 psig				A 208V	B 230V	C 460V	
72-33-204A	15	137	274	102,000	200 Gal.	87	165			6298
72-33-204B								158		
72-33-204C									79	

Notes:

- ¹ Normal Operating conditions at a maximum ambient of 105° F. Consult factory for higher ambient conditions.
- ² Capacities are shown as NFPA system capacities (reserve vacuum pump on standby).
- ³ Package BTU/HR are shown with the reserve pump on standby.
- ⁴ Receivers of 240 gallon capacity are standard
- ⁵ Noise levels are shown in dB(A) and reflect reserve pump on standby.

Statement of Warranty

Patton's Medical warrants all Medical Vacuum packages, to be free of defects in material and workmanship under normal use for a period not to exceed thirty (30) months from date of shipment, or twenty-four (24) months from date of start-up.