

# SPECIFICATION

**74v-33-104-PDS** Page 1 of 2 1/23/2020

# NFPA 99 Compliant Triplex "Oil-Less" Claw Medical Vacuum Package 10 HP Base Mounted With Single Point Connection, Variable Frequency Drive (VFD)

#### 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
- Triplex control panel with automatic lead/lag controls
- All components completely pre-piped and pre-wired
- 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

- Oil-less rotary claw pump
- Direct-driven through a shaft coupling
- Air-cooled
- End (ultimate) vacuum = 28.4" Hg
- Dry-running, with two claw-type, non-contacting rotors
- Sealing fluid not required
- Virtually maintenance-free operation
- Oil change required at approximately 5,000 operating hour intervals in the gearbox only
- Built-in, anti-suck-back valve mounted at the pump inlet and equipped with an inlet filter for removal of particulates

# Vacuum Motor

- NEMA rated
- C-face
- TEFC
- 3600 RPM, with 1.15 service factor
- 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 connector between pump and manifold
- Flexible connectors for inlet and discharge and vibration pads included

#### Vacuum Receiver

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

## System Health

- Monitoring and Trending of key components to provide notification of potential issue with the Health of the System
- Vacuum monitoring
- Current monitoring for each motor
- Ambient Temperature monitoring
- Trending of pumps running

## **Control System**

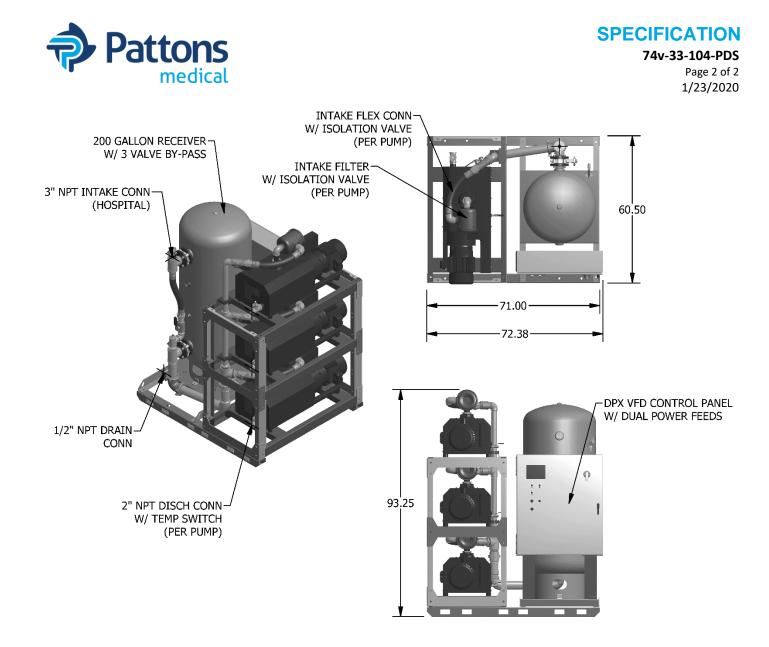
- Mounted and wired triplex control system
- NEMA 12 and U.L. labeled
- Variable frequency drive to control one pump at a time
- Automatic lead/lag sequencing
- Circuit breaker disconnects for each motor with external operators
- Full voltage motor starters with overload protection
- 120V control circuit 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 firston/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<sup>™</sup> touch screen gateway

## Standard Screen displays

- + Vacuum level /Runtime
- + Alarm history + Troubleshooting guidelines
- + Service indicator
- + Historical trending of system status

+ Replacement parts

- + Maintenance schedule + System Health
  - + 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 Claw Medical Vacuum Package Specifications <sup>1</sup>										
Model Number	HP	Capacity @19" Hg <sup>2</sup>		Dackage	Receiver	Noise	System FLA			Weight
		Pump (SCFM)	System (SCFM)	Package BTU/HR <sup>3</sup>	(gallons)	Level <sup>4</sup>	208V	230V	460V	(lbs.)
74v-33-104A	10	87	174	51,000	200	88	81		37	3,552
74v-33-104B								73		
74v-33-104C										

### Notes:

<sup>1</sup> Normal Operating conditions at a maximum ambient of 105° F. Consult factory for higher ambient conditions.

<sup>2</sup> Capacities are shown as NFPA system capacities (reserve vacuum pump on standby).

 $^{\rm 3}$  Package BTU/HR are shown with the reserve pump on standby.

 $^{\rm 4}$  Noise levels are shown in dB(A) with the 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.