

SPECIFICATION 70BI-34-053 70BI-34-054 70BI-34-055

NFPA 99 Compliant Triplex Oil-Less Rotary Vane Medical Vacuum Package

5 HP Base Mounted Modular

Vacuum Package

- Fully compliant with the latest edition of NFPA 99
- Three oil-less rotary vane type vacuum pumps with integrated inlet filter and isolation valve for each
- 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 to single • point service connections (per module)
- Vibration isolation mountings
- · 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 (per module)

Vacuum Pump

- Dry rotary vane type pump
- Self-lubricating carbon/graphite vanes
- Direct-driven through a shaft coupling ٠
- Air-cooled
- Internal inlet filter for removal of particulates •
- Vacuum relief valve
- Check valve to prevent backflow through off-cycle units •
- Sealing fluid not required
- Vibration Isolation

Vacuum Motor

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

Vibration Isolation System

- Vacuum and motor fully isolated from the package base by means of a four-point, heavy duty, isolation system
- Minimum of 95% isolation efficiency

Intake/Discharge Piping

- · Vacuum pumps are connected to a common manifold
- Inlet check valve on each pump
- Inlet isolation valve on each pump
- Flexible connectors between pumps and manifold
- Flexible connectors for inlet and discharge connections
- Discharge flex connection shipped loose

Vacuum Receiver

- Integrally mounted bypass and manual drain
- 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

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Control System

- Mounted and wired triplex control system
- NEMA 12 and UL 508A labeled
- 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 for reliable back-up
- Automatic alternation of compressors based on a first-on/first-off principle with provisions for simultaneous operation
- · Automatic activation of reserve unit if required
- Visual and audible alarm indication for high discharge air temperature shutdown with isolated contacts for remote alarm
- SIGNAL 1TM touch screen gateway

Standard Screen Displays

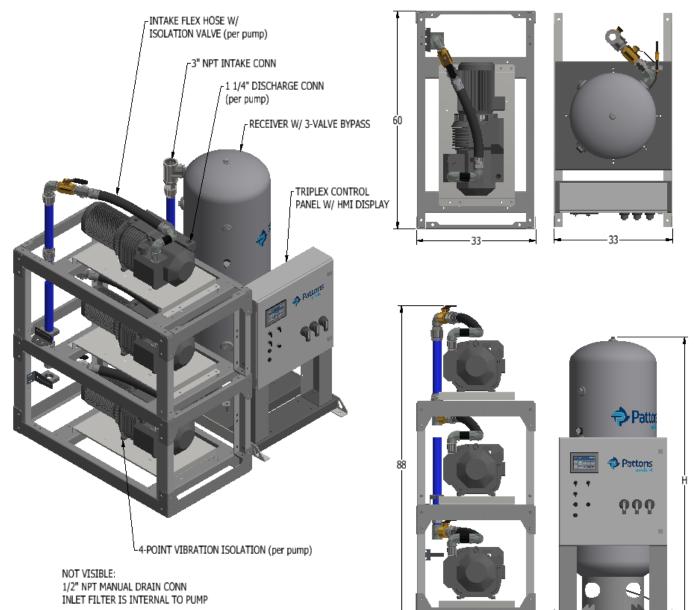
- + Air level/Runtime
- + Replacement parts + Troubleshooting guidelines
- + Service Indicator
- + Maintenance Schedule + System Health
- 7" Wide TFT Graphic Touch Screen with Motion Actuated Backlit LED and Bright 65,536 (16-bit) Colors
- Downloadable Trend Information via USB Host Port or Network Device
- 128MB Flash Memory, 64MB DRAM
- Built-in Ethernet Port 10/100 Base-T (RJ45)
- Supports over 100 Communication Protocols including Ethernet IP, and Modbus TCP/IP
- Built-in VNC server allowing remote monitoring of live graphics through standard browser, smart phones & mobile devices
- Share data between HMI and Building Management systems

- + Historical trending of system status
- + Alarm history



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Triplex Oil Less Rotary Vane Medical Vacuum Package Specification											
Model Number	HP	Capacity @19" Hg ²				System FLA			Receiver		Package
		Pump (SCFM)	System (SCFM)	Package BTU/HR ³	Noise Level ⁴	208V (A)	230V (B)	460V (C)	Size (gallons)	H (inches)	Weight (pounds)
70BI-34-053(A/B/C)	5	22	44	20,360	80	50	45	23	120	83	2,713
70BI-34-054(A/B/C)									200	88	2,943
70BI-34-055(A/B/C)									240	100	3,081

Notes:

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

² Capacities are shown per NFPA 99 standard with one pump in reserve.

³ Package BTU/HR are shown with one pump in reserve.

⁴ Noise levels are shown in dB(A) and reflect one vacuum modules in reserve.

Statement of Warranty

Patton's Medical warrants all Medical Air 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.