

## Quadruplex "Oil-Less" Scroll Lab Air Package 10 HP Base Mounted with Single Point Connection and Desiccant Dryers

### Air Compressor Package

- Four "oil-less" scroll air compressor modules with inlet filters
- Four motors
- ASME coded corrosion resistant air receiver with bypass
- Duplex desiccant air dryer system with purge control and piped with duplex pre-filters, after filters and regulators
- Quad control panel with HMI control monitoring system
- All discharge air piping and fittings - ASTM B-819 copper tubing, brass and/or stainless steel
- All brazed joints per NFPA 99
- All discharge flex connectors - braided, 304 stainless steel
- Individual compressor isolation valve
- All components completely pre-piped and pre-wired to single point service connections
- All interconnecting piping and wiring is completed and operationally tested prior to shipment
- Liquid tight conduit, fittings and junction boxes for all control and power wiring

### Air Compressor Module

- Continuous duty rated with permanently lubricated, sealed bearings
- Air-cooled single stage scroll type
- Constructed of one fixed and one orbiting scroll sealed with PTFE tip seals between the scroll halves
- Rated for 120 psig discharge pressure
- Protected from dust or contamination with a two part face seal
- Orbiting bearings - grease filled
- Drive Bearings – Grease filled and lip sealed
- Drive bearing maintenance interval – 10,000 hours
- Scroll housing constructed of die cast aluminum
- Integral cooling and air ducting for maximum heat dissipation
- Air-cooled aftercoolers for each compressor module with maximum approach temperature of 15° F and automatic solenoid drain valves
- V-belt drive with means of adjustment
- OSHA approved, totally enclosed belt guard
- High discharge air temperature shutdown switch wired to the compressor control system for each compressor
- Discharge line valve for load-less starting
- Each compressor discharge line equipped with a safety relief valve, a check valve, isolation valve, and flex connector

### Compressor Motor

- NEMA rated – Open drip proof
- 3600 RPM, with 1.15 service factor
- 208 or 230/460V

### Vibration Isolation System

- Compressor and motor - fully isolated from the package base by means of a four-point, heavy duty, isolation system
- Minimum of 95% isolation efficiency
- Optional seismically restrained isolators at an additional cost

### Air Receiver

- Galvanized and integrally mounted with 3-valve bypass
- ASME Code stamped and National Board Certified
- Rated for a minimum 200 PSIG design pressure
- Liquid level sight glass
- Safety relief valve
- Manual drain
- Automatic timed solenoid drain valve

### Dryer/Filter/Regulator System

- Dual desiccant air dryers with an integral demand based purge saving control system
- Each dryer individually sized for peak calculated demand and capable of producing a 10° F (-12° C) pressure dew point
- High efficiency coalescing pre-filter rated for 0.01 micron on each dryer with automatic drain and element change indicator
- Particulate final line filter rated for 0.01 micron on each dryer with element change indicator
- Final line regulator and safety relief valve on each dryer
- Isolation valves to permit servicing without shutting down the medical air system
- Air sample port

### Dew Point Hygrometer Monitor

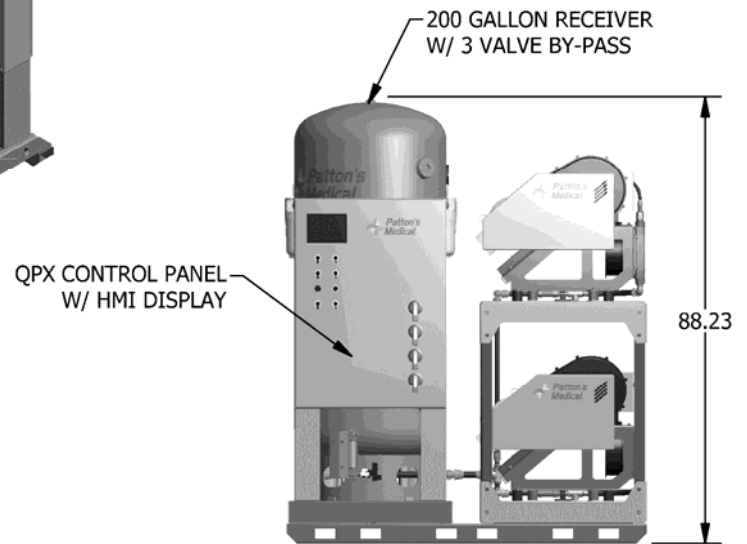
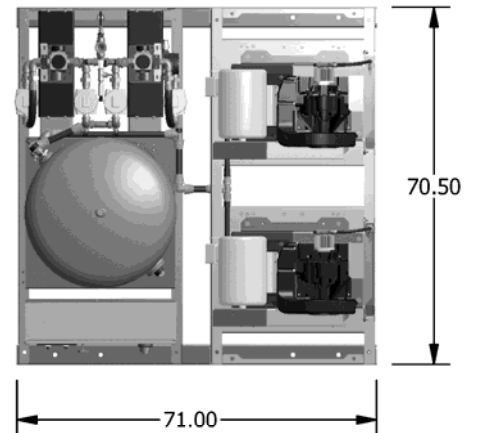
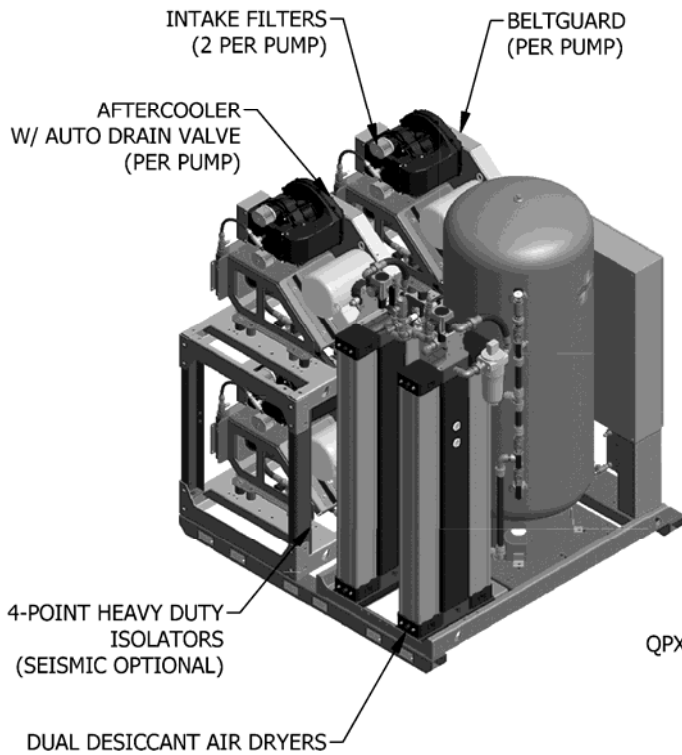
- Dew point hygrometer monitor wired and includes remote alarm contacts
- Hygrometer sensor - ceramic type
- Accuracy - minimum of  $\pm 2^\circ$  F for dew point
- Dew point alarm - factory set at 36° F (2° C) per NFPA 99
- Set points field adjustable
- High dew point indicated with visual/audible alarms

### Control System

- Mounted and wired quadruplex 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
- Visual and audible alarm indication for high discharge air temperature shutdown with isolated contacts for remote alarm
- SIGNAL 1™ – touch screen gateway

#### Standard Screen Displays

- |                        |                                        |
|------------------------|----------------------------------------|
| + Air 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 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 BACnet IP, Ethernet IP, and Modbus TCP/IP
  - + Built-in 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 & mobile devices
  - + Share data between HMI and Building Management systems with no additional software to implement



Quadruplex Scroll Lab Air Package Specifications <sup>1</sup>								
Package Model No.	HP	System Capacity <sup>2</sup>	Package <sup>3</sup> BTU/HR	Noise Level <sup>4</sup>	System FLA			Package Weight
		100 psig			208V	230V	460V	
68L-43-104A	10	128	92,056	78.5	137.5			2,755
68L-43-104B						124		
68L-43-104C							62.5	

**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 with all pumps running and are shown in Inlet Cubic Feet per Minute (ICFM).
- <sup>3</sup> Package BTU/HR are shown with all pumps running.
- <sup>4</sup> Noise levels are shown in dB(A) and reflect all pumps running.

**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.