

# **SPECIFICATION**

## Duplex Lubricated Reciprocating Instrument Air Package-Space Saver 15 HP Base Mount with Single Point Connection and Desiccant Dryers

#### Air Compressor Package

- Two two-stage pressure lubricated reciprocating air compressor modules with inlet filters
- Two motors
- ASME coded corrosion resistant air receiver with bypass
- Duplex desiccant air dryers with purge control and piped with a coalescing pre-filters, particulate after filter activated charcoal filter and regulators
- Duplex control panel with HMI control monitoring system
- All discharge air piping and fittings ASTM B-819 copper tubing, brass and/or stainless steel
- All discharge flex connectors braided, 304 stainless steel
- Compressor isolation valve
- All components completely pre-piped and pre-wired
- 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

- Two-stage splash lubricated reciprocating type
- Sturdy, robust cast iron crankcase
- Deep finned cast iron cylinders, aluminum cooler tubes ensuring superior heat dissipation for higher operating efficiency
- Optimal distribution of load on cylinders for energy efficiency
- Air-cooled
- Stainless steel valve assemblies
- Aero dynamically designed fan with large blades for higher flow
- Forged steel crankshaft supported at both ends for higher dynamic stiffness and least vibrations
- Low expansion aluminum alloy pistons
- Totally enclosed belt guard-OSHA approved
- Load-less starting
- Compressor discharge line equipped with a safety relief valve, check valve, and flex connector

#### Compressor Motor

- NEMA rated Open drip proof
- 1800 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
- Optional seismically restrained isolators at an additional cost

#### 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 -40° F (-40° 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 filters rated for 0.01 micron on each dryer with element change indicator
- Final line regulators and safety relief valves on each dryer
- Isolation valves to permit servicing without shutting down the medical air system
- Air sample port

#### Air Receiver

- Corrosion resistant and integrally mounted with 3-valve bypass
- ASME Code stamped and National Board Certified
- Rated for a minimum 250 PSIG design pressure
- Liquid level sight glass
- Safety relief valve
- Manual drain and Automatic timed solenoid drain valve
  Pressure Gauge

## Dew Point Hygrometer

- Dew point hygrometer pre-piped, 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 -22° F (-30°C) per NFPA 99
- Set point field adjustable
- High dew point indicated with visual/audible alarms

#### System Health

- Monitoring and Trending of key components to provide notification of potential issue with the Health of the System
- Pressure monitoring
- Current monitoring for each motor
- Ambient Temperature monitoring
- Dew Point monitoring

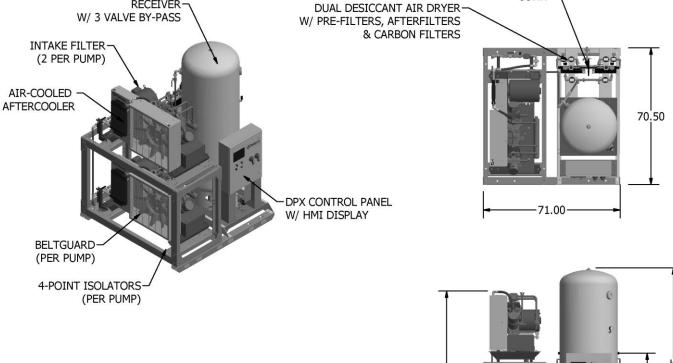
#### Control System

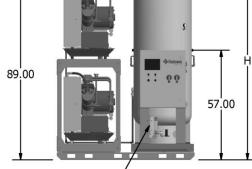
- Mounted and wired duplex control system
- NEMA 12 and UL 508A labeled
- Automatic lead/lag sequencing
- Circuit breaker disconnects for each motor with external operators
- Full voltage motor starters with overload protection
- 120V control circuit transformers for each motor circuit
- Visual and audible 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 1<sup>TM</sup> touch screen gateway

## Standard Screen Displays

- + Air level/Runtime + Replacement parts
- + Alarm history
- + Troubleshooting guidelines+ Historical trending of system status
- + Service Indicator + Historical t
- + 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







Duplex Reciprocating Instrument Air Package Specifications <sup>1</sup>										
Model Number	HP	CFM <sup>2</sup> 188 psi	Package BTU/HR <sup>3</sup>	Noise Level <sup>4</sup>	System FLA			Receiver	Height	Package
					208V (A)	230 (B)	460V (C)	Size (gallons)	(H) (inches)	Weight (pounds)
67e-25-153(A/B/C)	15	35	38,201	84	82	74	37	120	83	2,845
67e-25-154(A/B/C)								200	89	3,022
67e-25-155(A/B/C)								240	100	3,086

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 compressor on standby) and are shown in Actual Cubic Feet per Minute (ICFM).

<sup>3</sup> Package BTU/HR are shown with the reserve compressor on standby.

<sup>4</sup> Noise levels are shown in dB(A) with the reserve pump on standby.

#### **Statement of Warranty**

Patton's Medical warrants all Instrument 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.