



## QUADRUPLEX STACK MOUNTED SCROLL MEDICAL AIR SYSTEM 15 HP

The EMSE CORPORATION continuous duty Medical Air System is stack mounted, completely packaged, NFPA 99 and NEC compliant assembly with 100% oil-less, rotary scroll air compressors, U.L. listed control cabinet, an ASME receiver and all accessories required to meet and exceed the current code. All components are pre-piped and pre-wired to single-point service connections. The only field connections are air intake, air discharge and power at the control panel. All interconnecting copper/brass piping and wiring is complete and operationally tested prior to shipment. Liquid tight conduit, fittings and junction boxes are provided for all control and power wiring.

The medical air compressors are rotary oil-less scroll, air-cooled design. They are dynamically balanced for very low noise levels and little vibration. **No oil is used in operation of the compressors, so the discharge air is 100% oil-free.** Cooling is provided with an integral radial fan.

Compressors are V-belt driven by 3 phase, 60 cycle, 3550 RPM, NEMA design B motors. Included are slide bases for belt tension adjustment and totally enclosed OSHA approved belt guards.

The system includes a corrosion resistant receiver of ASME construction rated for 200 PSI MWP service. The tank includes a pressure gauge, safety relief valve, 3 way by-pass, gauge glass and an automatic electronic drain with manual override.

Standard equipment includes air cooled aftercoolers, compressor discharge check valves, safety relief valves, intake and discharge flexible connectors, solenoid drain valves, isolation valves, high discharge temperature shut-down switches, pressure control switches, a shut-off cock for gauge and switches.

The system includes a UL labeled control panel in a NEMA 12 enclosure. The panel includes the following standard accessories for **each** pump: externally operable circuit breaker with a door interlock, control circuit transformer with fused primary and secondary coils, H-O-A switch, run light, hour meter and magnetic starter with 3 leg overload protection and reset switch. A plug-in type programmable controller with removable terminals allows quick and easy replacement in the field. The system is designed to function even if the PLC fails. If one of the compressors is out of service, the system control shall omit that unit from the alternating cycle, automatically alternating between the remaining compressors. The system shall revert to normal automatic alternation when



the condition is corrected. The system is also supplied with forced time alternation in the event the compressor is unable to satisfy the demand in 30 minutes.

Local audible and visual alarms are provided per NFPA 99 for compressor thermal malfunction and "Backup in use". The alarms include indicating lights and horn. Thermal malfunction shut-down is provided with a manual reset. The audible alarm can be cancelled with the "Silence" button. The visual alarm remains energized until the problem is corrected. Each alarm function includes a set of dry contacts for connection to the master alarm. All control and alarm functions remain energized while any compressor in the system is electrically on-line.

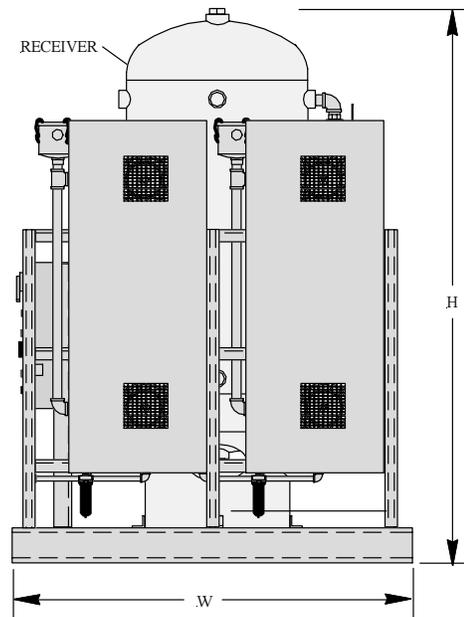
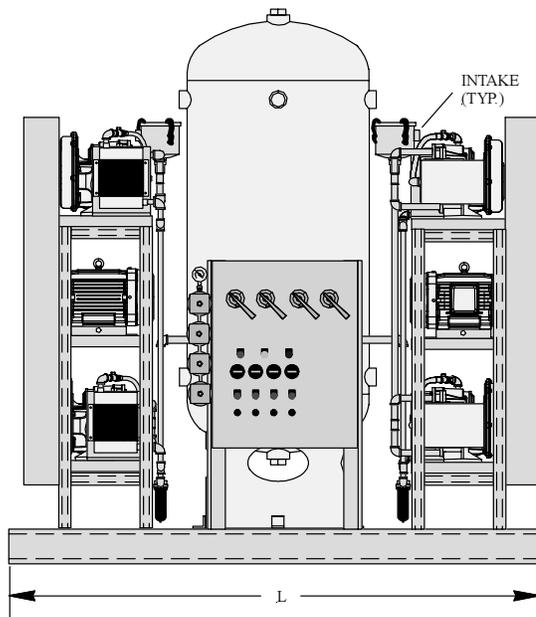
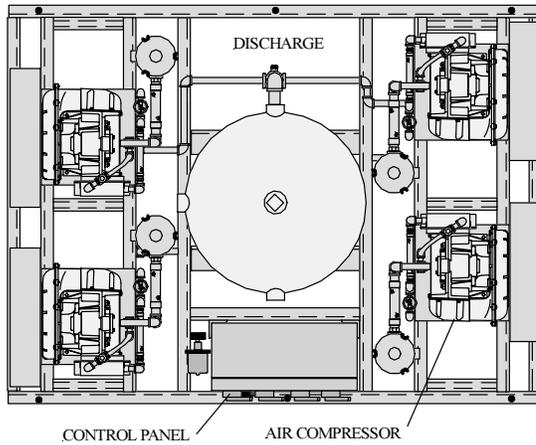
Field adjustable control switches are pre-set to operate the lead compressor between 90 PSIG and 110 PSIG, the lag 1 compressor between 85 PSIG and 105 PSIG and the lag 2 compressor between 80 PSIG and 100 PSIG. The stand-by compressor will automatically start at 75 PSIG if one of the other compressors fails to operate.

The Medical Air Plant is guaranteed by the manufacturer for a period of 12 months from the date of start-up or 18 months from the date of shipment (whichever comes first) against defects in design, materials, or construction. In addition, the compressors are guaranteed for 36 months from the date of shipment.

# QUADRUPLEX STACK MOUNTED SCROLL MEDICAL AIR SYSTEMS

## 15 HP

### LAYOUT AND PERFORMANCE TABLE



System Model Number	Horsepower		System Capacity ICFM <sup>1</sup>		Disch. Conn.	Tank (Gal.)	Dimensions, In.			Weight Lbs.
	Each	Total	50 PSIG	120 PSIG			L	W	H	
3QOHS15S200D-B	15	60	151.2	144.0	1.5"	200	87	66	84	4070

**Notes:**

1. Capacity shown is NFPA system capacity with reserve compressor on stand-by.
2. Maximum ambient temperature: 100°F. For higher ambient temperatures consult factory.

**Power Requirements:**

(Four) \_\_\_\_\_ HP Motors, 3 Phase 60 Hertz     208 v     230 v     460 v