TRIPLEX STACK MOUNTED "X" SERIES MEDICAL AIR PLANTS WITH DESICCANT AIR DRYERS 10 THROUGH 15 HP

The EMSE CORPORATION continuous duty Medical Air Plant is a stack mounted completely packaged NFPA 99 and NEC compliant system featuring 100% oil-less air compressors, U.L. listed control cabinet, ASME receiver and duplex desiccant air dryers with purge control, duplex pre-filters, after-filters and regulators, safety relief valves, test port, dew point monitor and CO monitor.

All components are piped and wired to single-point service connections. The only field connections are air intake, air discharge and power at the control panel. All interconnecting piping and wiring is complete and operationally tested prior to shipment. Liquid tight conduit, fittings and junction boxes are provided for control and power wiring.
The medical air compressors are oil-less, reciprocating, air-cooled design. Connecting rod and bearings are packed and sealed with life-time lubrication. **No oil is used in operation of the compressors. The discharge air is 100% oil-free.** Cooling is provided by a radial fan with shroud.

Compressors are V-belt driven by 3 phase, 60 cycle, 1750 RPM, NEMA design B motors. Slide bases for belt tension adjustment and totally enclosed, OSHA approved, belt guards are provided.

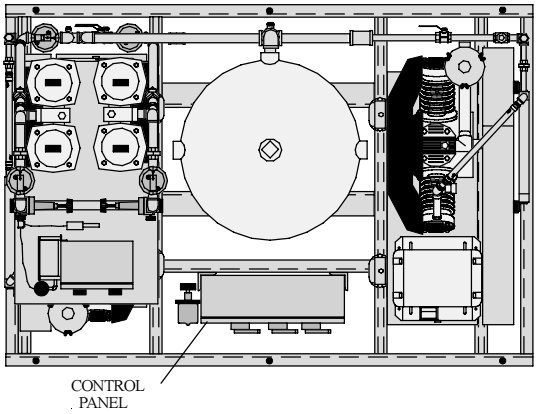
The system includes an ASME, corrosion resistant receiver rated for 200 PSI MWP service. The tank is equipped with a pressure gauge, safety relief valve, 3 way by-pass, gauge glass and electronic tank drain with manual override.

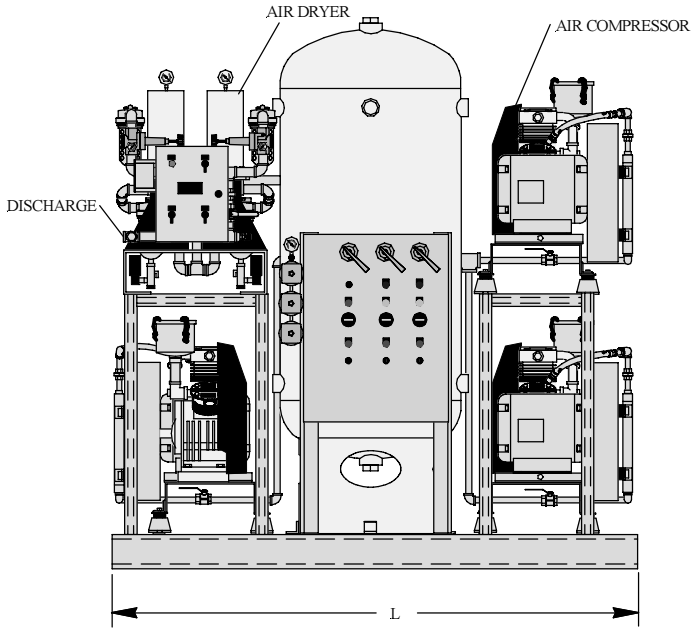
Each compressor includes spring vibration isolators, air cooled aftercoolers, check valves, safety relief valves, intake and discharge flexible connectors, solenoid unloaders, high discharge temperature switches for each cylinder and isolation valves.

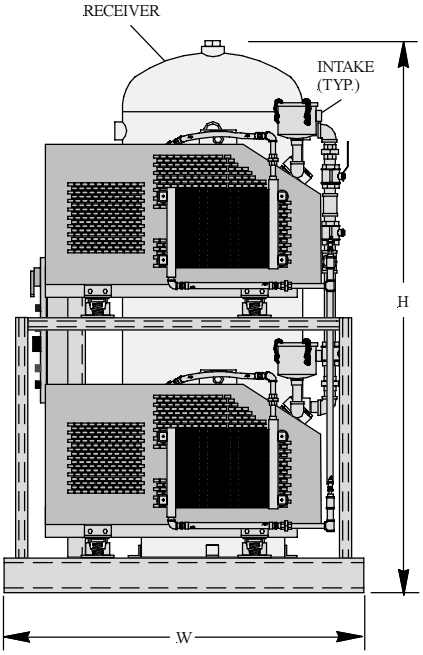
The dryer assembly consists of two banks of air treatment equipment, piped in parallel with valves to by-pass either bank without sacrificing air quality. Each desiccant air dryer is sized for 100% of the system NFPA peak calculated demand. The dryer provides a maximum dew point below the frost point of 0°C (+32°F) per NFPA 99. Purge control automatically minimizes and adjusts the purge air to match the variable air flow. Each dryer is equipped with a 0.01 micron pre-filter with electronic drain and element change indicator, 0.5 micron after-filter with element change indicator and a pressure regulator.
Digital dew point and CO monitors with alarm set points at 39°F and 10 PPM are provided. A "demand check" for maintenance is included per current NFPA 99 for each instrument.

The system includes a UL listed control panel in a NEMA 12 enclosure. The panel includes the following 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 omits that unit from the cycle, alternating between the remaining compressors. The system reverts to normal automatic alternation when the condition is corrected. The system is also supplied with forced time alternation if 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, "Backup in use", high dew point and high CO. The alarms include indicating lights and a horn. The thermal malfunction shut-down is provided with 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 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 switches are set to operate the lead compressor from 90 PSIG to 110 PSIG, the lag compressor from 85 PSIG to 105 PSIG. The stand-by compressor automatically starts at 80 PSIG if one compressors fails to operate.
The Medical Air Plant is guaranteed by the manufacturer for a period of 12 months from start-up or 18 months from date of shipment (whichever comes first) against defects in design, materials, or construction. The compressors are guaranteed for 36 months from the date of shipment.

TRIPLEX STACK MOUNTED "X" SERIES MEDICAL AIR PLANTS WITH DESICCANT AIR DRYERS 10 THROUGH 15 HP LAYOUT AND PERFORMANCE TABLE







System Model Number	Horsepower Each	Horsepower Total	Capacity SCFM (Each Pump) 50 PSIG	Capacity SCFM (Each Pump) 100 PSIG	Disch. Conn.	Tank (Gal.)	Dimensions, In. L	Dimensions, In. W	Dimensions, In. H	Weight Lbs.
3TOX10PS200D	10	30	39.2	35.0	1"	200	88	60	88	3460
3TOX15PS200D	15	45	57.0	53.5	1"	200	88	60	88	3590

Note: Maximum ambient temperature: 100°F. For higher ambient temperatures consult factory.

Power Requirements:

(Three) _____ HP Motors, 3 Phase 60 Hertz ☐ 208 v ☐ 230 v ☐ 460 v