



## DUPLEX TANK MOUNTED "X" SERIES MEDICAL AIR PLANTS WITH DESICCANT AIR DRYERS 1.5 THROUGH 5 HP

The EMSE CORPORATION continuous duty Medical Air Plant is a completely packaged NFPA 99 and NEC compliant assembly featuring 100% oil-less air compressors, U.L. listed control cabinet, ASME receiver, duplex desiccant air dryers with purge control, duplex 0.01 micron pre-filters and 0.5 micron after-filters, duplex regulators, dew point monitor, CO monitor and all the accessories required to meet and exceed the current code requirements. 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 all control and power wiring.

The medical air compressors are oil-less, reciprocating and air-cooled. Connecting rods and bearings are sealed for life-time lubrication. **No oil is used in operation of the compressors. The air is 100% oil-free.** Cooling is provided by radial fan and 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 a corrosion resistant receiver tank of ASME construction 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.

Also included are air cooled aftercoolers, check valves, safety relief valves, intake and discharge flexible connectors, solenoid unloaders for no-load starting, isolation valves, high discharge temperature switches, pressure switches, and a shut-off cock for gauge and switches. 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. The panel is equipped with a multiple position selector switch for selection of normal operation (automatic alternation) or manual selection of lead and lag pumps if one pump is out of service for scheduled maintenance.

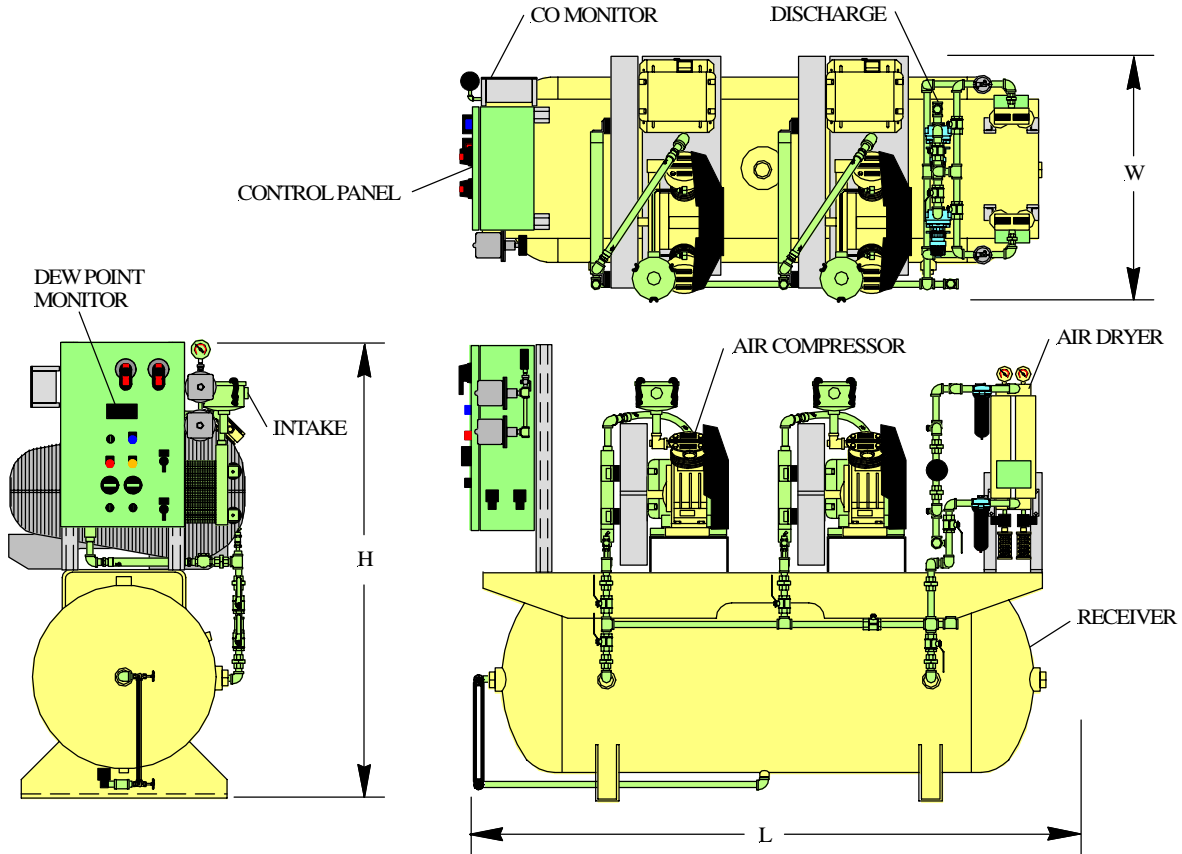


Local audible and visual alarms are provided per NFPA 99 for compressor thermal malfunction and "Backup in use". The alarms include indicating lights and a horn. The thermal malfunction shut-down is provided with a manual reset. The audible alarm can be cancelled with the "Silence" button. The visual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

Field adjustable control switches are pre-set to operate the lead compressor between 80 PSIG and 100 PSIG. The lag compressor will automatically start at 75 PSIG if the lead compressor 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.

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LAYOUT AND PERFORMANCE TABLE**



System Model Number	Horsepower		Capacity SCFM (Each Pump)		Disch. Conn.	Tank (Gal.)	Dimensions, In.			Weight Lbs.
	Each	Total	50 PSIG	100 PSIG			L	W	H	
3DOX1.5PT80D	1.5	3	6.7	5.2	1/2"	80	82	30	60	930
3DOX2PT120D	2	4	9.2	7.6	1/2"	120	82	33	60	950
3DOX3PT120D	3	6	12.1	10.1	1/2"	120	82	33	60	1090
3DOX5PT120D	5	10	20.9	17.9	1/2"	120	89	34	66	1130

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

**Power Requirements:**

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