



## DUPLEX TANK MOUNTED SCROLL MEDICAL AIR PLANTS WITH DESICCANT AIR DRYERS 2 THROUGH 5 HP

The EMSE CORPORATION continuous duty Medical Air Plant is a tank mounted completely packaged NFPA 99 and NEC compliant assembly featuring 100% oil-less rotary scroll air compressors, a U.L. listed electrical control cabinet, an ASME receiver, dual desiccant air dryers with purge control, dual 0.01 micron pre-filters, dual 0.5 micron after-filters, line pressure regulating valves, dew point monitor, CO monitor and other accessories required to meet and exceed the current code requirements. All components are pre-piped and pre-wired to single-point service connections. The only field connections are air intake, air discharge and power connection at the control panel. All interconnecting copper/brass piping as well as wiring is completed 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 of the rotary oil-less scroll air-cooled design. They are dynamically balanced for very low noise levels and virtually no vibration. **No oil is used in operation of the compressors, so the discharge air is 100% oil-free.** Cooling is provided by built-in radial fan with shroud.

Compressors are V-belt driven by 3 phase, 60 cycle, 3550 RPM, NEMA design B motors. Slide bases for convenient 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 automatic electronic tank drain with manual override.

Also included as standard equipment are air cooled aftercoolers, compressor discharge check valves of bronze construction, safety relief valves, bronze intake and discharge flexible connectors, solenoid unloaders for reliable no-load starting, isolation valves, high discharge temperature shut-down switches, pressure control switches as well as copper tubing with 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. 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 of the pumps is taken out of service due to scheduled maintenance.

Local audible and visual alarms are provided per NFPA 99

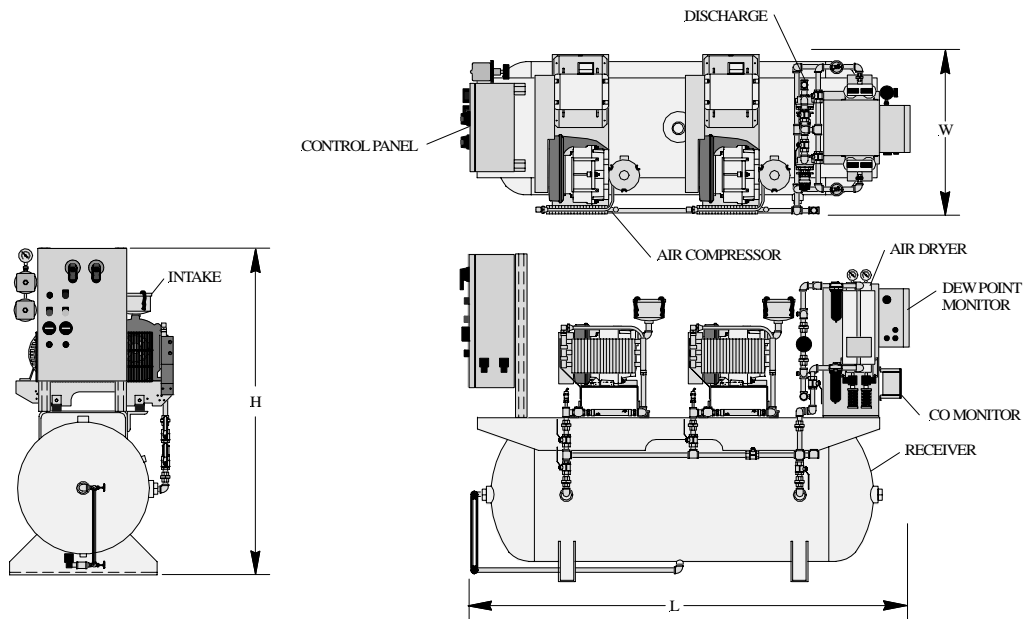


for compressor thermal malfunction and "Backup in use". The alarms include indicating lights as well as the horn. In addition, the thermal malfunction shut-down is provided with a manual reset. The audible alarm can be acknowledged with the "Silence" button. The visual alarm will remain energized until the problem has been corrected. Each alarm function includes a set of dry contacts for connection to the master alarm. All control and alarm functions will remain energized while any compressor in the system remains electrically on-line. Disconnect switches for air dryers are included.

Field adjustable control switches are pre-set to operate the lead compressor between 90 PSIG and 120 PSIG. The lag compressor will automatically start at 85 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.

# **DUPLEX TANK MOUNTED SCROLL MEDICAL AIR PLANTS WITH DESICCANT AIR DRYERS 2 THROUGH 5 HP LAYOUT AND PERFORMANCE TABLE**



System Model Number	Horsepower		Capacity ICFM (Each Pump)		Disch. Conn.	Tank (Gal.)	Dimensions, In.			Weight Lbs.
	Each	Total	75 PSIG	100 PSIG			L	W	H	
3DOXS2PT120D	2	4	7.3	6.7	1/2"	120	82	33	60	900
3DOXS3PT120D	3	6	10.3	9.7	1/2"	120	82	33	60	940
3DOXS5PT120D	5	10	16.9	16.1	1/2"	120	89	34	66	1040

**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