

TRIPLEX BASE MOUNTED LIQUID RING MEDICAL AIR COMPRESSOR SYSTEMS 20 THROUGH 40 HP



The GENTEC® Corporation continuous duty Medical Air Plant is a base mounted, completely packaged NFPA 99 and NEC compliant system featuring 100% oil-less liquid ring air compressors, U.L. listed electrical control cabinet, an ASME receiver and accessories.

All components are piped and wired to single-point service connections. The only field connections are air intake, air discharge, seal water intake and discharge as well as 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 flat ported, positive displacement, non-pulsating liquid ring air compressors, capable of passing fluids and soft solids directly to waste. **No oil is used in the operation of the compressors. The air is 100% oil-free.**

Compressors are direct driven by 3 phase, 60 cycle, 3550 RPM, NEMA design B motors. Totally enclosed coupling guards are provided.

The system includes a corrosion resistant receiver 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.

The following accessories for each compressor are provided: inlet and discharge check valves, discharge isolation valve, discharge separator/trap, pressure control switch and a seal water line consisting of isolation valve, Y-strainer, solenoid valve, backflow preventer and flow control valve as well as copper tubing with shut-off cock for pressure gauge.

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 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 supplied with forced time alternation in the event a compressor is unable to satisfy the demand in 30 minutes.

Local audible and visual alarms are provided per NFPA 99 for “Backup in use”, high separator water level and high receiver water level. High separator water level will shut down the affected compressor, high receiver water level will shut down the system.

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.

Field adjustable pressure switches are pre-set to operate the lead compressor between 70 PSIG and 90 PSIG, the lag compressor between 65 PSIG and 85 PSIG. The stand-by compressor will automatically start at 60 PSIG if one of the compressors fails to operate.

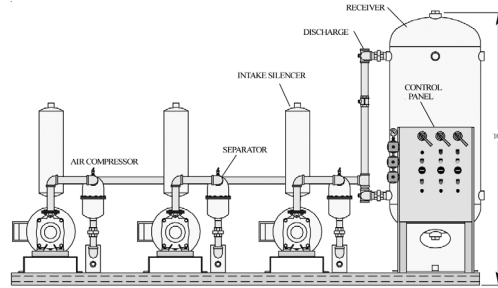
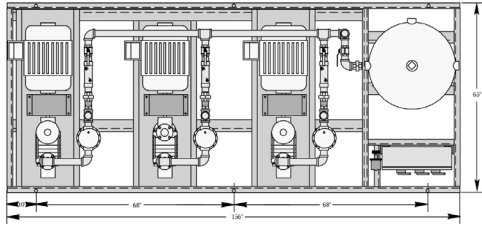
The medical air system is guaranteed for a period of 18 months from the date of start-up or 24 months from the date of shipment (whichever comes first) against defects in design, materials, or construction.

Optional System Accessories

(only checked options will be supplied)

- “Dura-coat” rust protection receiver lining
- Galvanized receiver
- No water flow shut down
- Dual medical air treatment system with refrigerated air dryers
- Dual medical air treatment system with desiccant air dryers

**Triplex Base Mounted Liquid Ring Medical Air Compressor Systems
20 Through 40 HP Layout and Performance Table**



System Model Number	Horsepower		SCFM (Each Compressor)			Water GPM	Intake Conn.	Disch. Conn.	Tank (Gal.)	Dimensions, In.			Weight Lbs.
	Each	Total	50 PSIG	80 PSIG	100 PSIG					L	W	H	
3TWSH20G	20	60	39	37	36	4 ³	2"	2"	200	58	58	102	2940
3TWSH25G	25	75	68	65	-	5 ³	2"	2"	200	65	65	102	3590
3TWSH30G	30	90	68	65	60	5 ³	2"	2"	240	65	65	102	3610
3TWSH40G	40	120	100	96	91	8 ³	2"	2"	240	65	65	102	4220

Notes:

1. Maximum ambient temperature: 100° F. For higher ambient temperatures consult factory.
2. Air receiver will be shipped loose for field installation.
3. Seal water rates are based on "once-through" system.

Power Requirements:

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