



DUPLEX STACK MOUNTED "Q" SERIES MEDICAL AIR PLANTS WITH DESICCANT AIR DRYERS 15 THROUGH 20 HP

The Amico **Alert-2** continuous duty Medical Air Plant is a stack mounted modular NFPA 99 and NEC compliant system featuring 100% oil-less air compressors, a U.L. listed electrical control cabinet, an ASME receiver and redundant twin tower desiccant air dryers with integral purge saver control, pre-filters, after-filters, line pressure regulating valves, safety relief valves, dew point monitor, CO monitor and a test port.

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 stainless steel/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 oil-less reciprocating air-cooled design. The air compressors feature a cast iron crankcase, teflon-composite compression and rider rings, lubricated and totally sealed bearings, stainless steel reed valves, non-asbestos gaskets. **No oil is used in operation of the compressors, so the discharge air is 100% oil-free.** Cooling is provided by a fan type compressor pulley with air shroud.

Compressors are V-belt driven by 3 phase, 60 cycle, 1750 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 for each compressor are spring vibration isolators, air cooled aftercoolers, compressor discharge check valves, safety relief valves, intake and discharge flexible connectors, solenoid unloaders for reliable no-load starting, high discharge temperature shut-down switches for each cylinder and isolation valves.

The dryer assembly consists of two identical banks of air treatment equipment, piped in parallel and provided 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 is designed to provide a maximum dew point below the frost point of 0°C (+32°F) per NFPA 99, 2002 Edition. Built-in purge saver control will automatically minimize and adjust the amount of 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 for particle retention 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 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, "Backup in use", high dew point and high carbon monoxide. 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.

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.

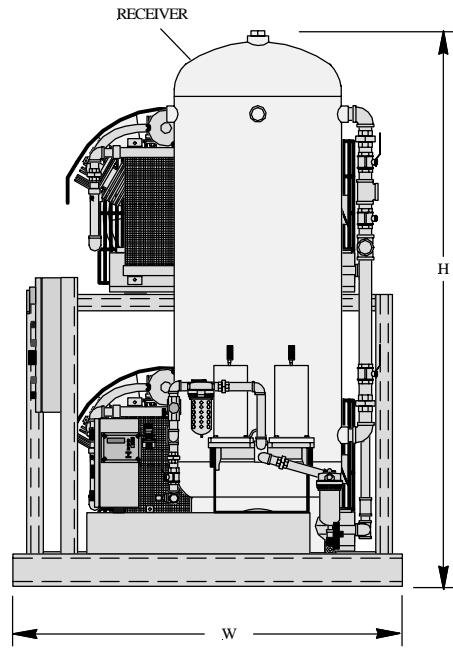
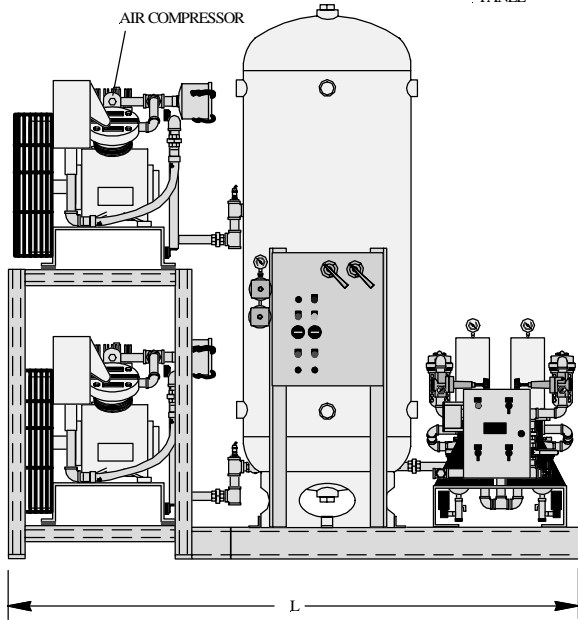
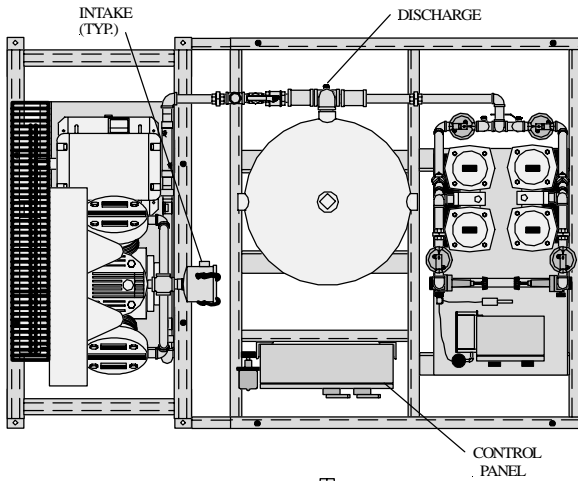
The Medical Air Plant is guaranteed by the manufacturer for a period of 12 months from the date of start-up or 18 months from the date of shipment (whichever comes first) against defects in design, materials, or construction. In addition, the compressors are guaranteed for 36 months from the date of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

Optional System Accessories

(only checked options will be supplied)

Interface to AIMS

DUPLEX MODULAR STACK MOUNTED "Q" SERIES MEDICAL AIR PLANTS WITH DESICCANT AIR DRYERS 15 THROUGH 20 HP 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	
3DOQ15MS240D	15	30	58.3	51.0	1"	240	118	70	94	3840
3DOQ20MS240D	20	40	75.0	65.1	1"	240	118	70	94	3980

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

