



## DUPLEX TANK MOUNTED "L" SERIES INSTRUMENT AIR PLANTS WITH DESICCANT AIR DRYERS, 3 THROUGH 15 HP

The EMSE Corporation Instrument Air Plant is a completely packaged NFPA 99 and NEC compliant assembly featuring extreme duty pressure lubricated air compressors, U.L. listed control cabinet, an ASME receiver, dual desiccant air dryers with purge control, dual 0.5 micron pre-filters, dual charcoal absorbers, dual 0.01 micron after-filters, line pressure regulating valves, dew point monitor and all 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 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 high pressure instrument air compressors are a pressure lubricated, reciprocating, air-cooled design. Connecting rod and crankshaft bearings are pressure lubricated for extended life. Lubricant to all critical parts of the compressor is provided by an oil pump.

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 receiver rated for 250 PSI MWP service. The tank is suspended between heavy duty base supports. It is isolated from the weight of the compressors. 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 are intake filters, check valves, safety relief valves, discharge flexible connectors, isolation valves, 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 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.

Disconnect switches for the air dryers are included.



Local audible and visual alarms are provided per NFPA 99 for "Backup in use" and high dewpoint. The alarms include indicating lights and a horn. The audible alarm can be cancelled with the "Silence" button. The visual alarm remains energized until the problem is corrected. Each alarm function includes contacts for connection to the master alarm. All control and alarm functions remain energized while any compressor remains on-line.

Field adjustable pressure switches are pre-set to operate the lead compressor between 195 PSIG and 210 PSIG. The lag compressor will automatically start at 190 PSIG if the lead compressor fails to operate.

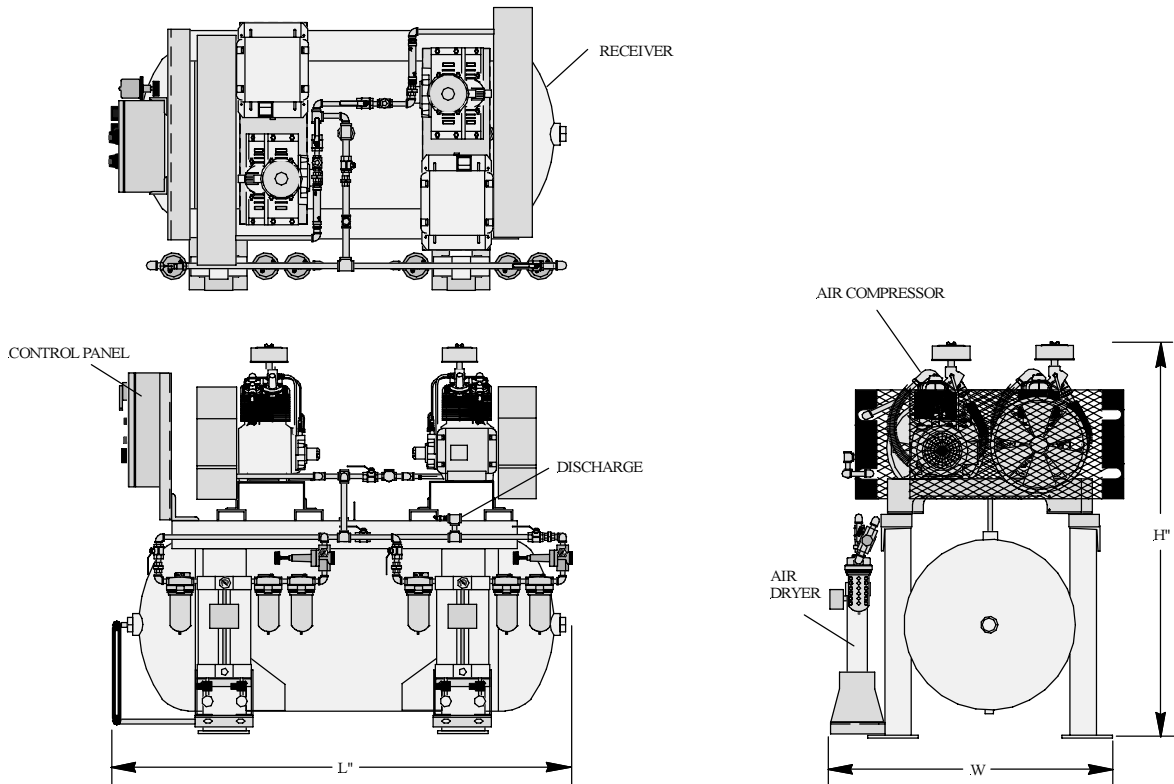
The Instrument Air Plant is guaranteed by the manufacturer for a period of 12 months from the date of start-up or 18 months from the date of shipment (whichever comes first) against defects in design, materials, or construction.

### Optional System Accessories

(only checked options will be supplied)

- Rust protection receiver lining
- Thermal malfunction shut-down with manual reset and alarm lights

# DUPLEX TANK MOUNTED "L" SERIES INSTRUMENT AIR PLANTS WITH DESICCANT AIR DRYERS 3 THROUGH 15 HP LAYOUT AND PERFORMANCE TABLE



System Model Number	Horsepower		Capacity SCFM (Each Pump)		Disch. Conn.	Tank (Gal.)	Dimensions, In.			Weight Lbs.
	Each	Total	180 PSIG	200 PSIG			L	W	H	
3DLC3PT120D	3	6	9.7	9.1	1/2"	120	80	44	64	1330
3DLC5PT120D	5	10	16.5	15.5	1/2"	120	80	44	64	1430
3DLC7.5PT120D	7.5	15	23.5	22.1	1/2"	120	80	44	64	1490
3DLC7.5HPT200D	7.5	15	25.8	24.3	1/2"	200	80	50	70	1930
3DLC10PT200D	10	20	34.8	32.3	3/4"	200	80	50	70	2150
3DLC15PT240D	15	30	49.0	44.8	3/4"	240	94	60	70	2470

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