

System Description:

One piece 1 - 5 HP duplex oil-less reciprocating medical air package. Tank mount system is NFPA99 compliant and is designed for single point connections. All systems are tested prior to shipping. This system includes vibration isolation pads and inlet and discharge threaded flex lines (shipped loose with the package). Also provided are Operation and Maintenance Manuals on DVD and one hard copy.

Package Details:

This one piece tank mount system is pre-plumbed and pre-wired for single point connections and includes:

- (2) Reciprocating air cooled oil-less air compressors, with air cooled aftercoolers, automatic separator drains and high temperature discharge switch,
- (2) Air inlet filters with connections for remote intake.
- (2) Premium Efficient TEFC electric motors,
- (1) ASME tank with interior corrosion resistant lining, 3 valve bypass, sight gauge, electric/automatic tank drain with manual drain valve and pressure safety valve,
- (2) Desiccant air dryers with isolation valves,
- (2) Filter banks including pre-filters with differential indicators and auto drains, 2-stage final filters with differential indicators and pressure regulators with oxygen cleaned gauges,
- (1) Carbon monoxide monitor with audible/visual alarm and contacts for remote alarm,
- (1) Dew point monitor with audible/visual alarm and contacts for remote alarm,
- (1) NFPA compliant duplex Nema 12 control panel.

Reciprocating Air Compressor Pump:

The compressor is a reciprocating, oil-less, air cooled, 2-stage design (5 HP and above), with two way cooling through a dedicated cooling fan and fan flywheel. It has PTFE piston rings and permanently sealed lower end bearings. Robust inter-stage cooling ensures a long life for this reliable pump.

Electric Motor/Drive:

Each compressor is belt driven by a Premium Efficiency

1,750 RPM totally enclosed, fan-cooled (TEFC) electric motor with a rigid base. Each dedicated motor shall be 208-230/460 volt, 3 phase with a 1.15 service factor.

Vibration Isolation:

Seismically restrained vibration isolators shall connect each pump and motor assembly to the base frame on the receiver/tank.

Air Receiver:

The 200 psi air receiver/tank is ASME approved. Tank includes 3 valve bypass, sight gauge, electric/automatic solenoid tank drain with manual drain valve, pressure safety valve and has an interior corrosion resistant lining

Desiccant Air Dryers, Filters & Regulators:

Duplex dryers and filter/regulator banks include:

- (2) Desiccant dryers sized to meet the rated flow capacity while maintaining pressure dew point in accordance with NFPA99. Each dryer assembly is isolated with full port ball valves for easy isolation and maintenance. Dryers are equipped with demand control purge saver,
- (2) 0.01 micron pre-filters with differential indicators and auto drains,
- (2) 2-stage final filters with a first stage rating of 0.03 micron, a second stage rating of 0.03 micron and a differential indicator,
- (2) Pressure regulators,
- (2) Oxygen clean gauges.

Dew Point & CO Monitors:

Digital dew point and carbon monoxide monitors are included in the air system. Each monitor comes equipped with dry contacts for remote alarms, audible alarm, large LED visual alarm and adjustable alarm set points.



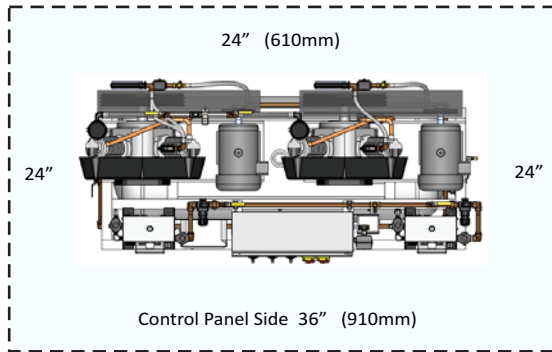
Standard Control Panel:

The system includes a duplex control panel in a Nema 12 enclosure. The control panel is UL 508 listed and is designed to start up immediately after power failure, no boot-up time is required. Panel is configured to operate an NFPA99 complaint medical air system. The duplex panel includes:

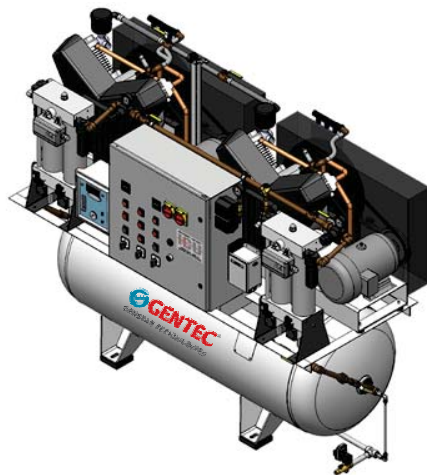
- Individual, through-the-door disconnects for each motor,
- Motor circuit breakers,
- Magnetic starters,
- Adjustable motor overload protection,
- Dual control voltage transformers,
- Alternating circuit,
- Hand-off-auto switches,
- Auto 1-2 pump selector switch,
- Power On lights, High temperature lights, Transformer failure light, Compressor run lights,
- Pressure switches, and
- Alarm contact connection points.

Optional:

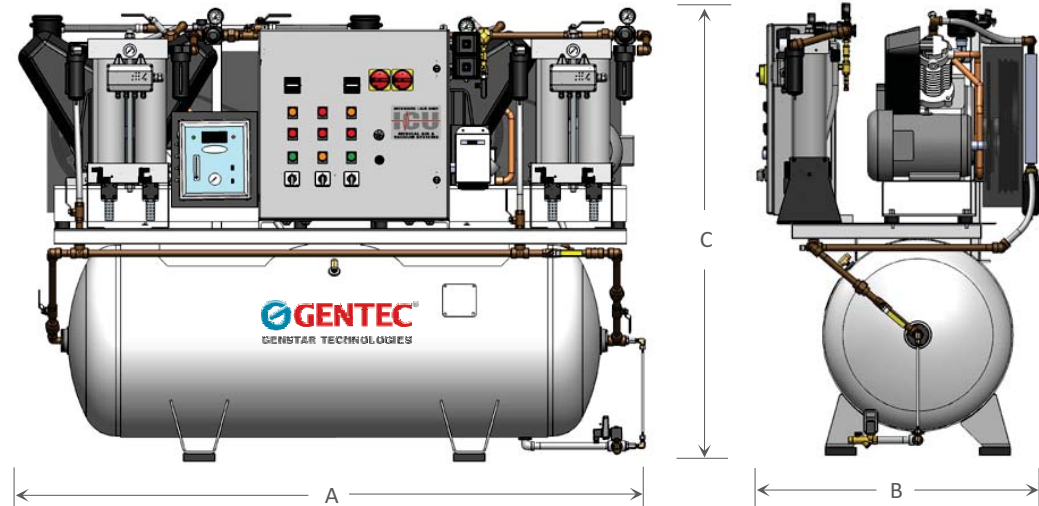
Touch-Screen Interface Control System (HMI/PLC) with system monitoring, multiple protocols for facility automation systems, maintenance alerts and built-in ethernet.



Recommended Minimum Clearances for Equipment Maintenance and Ventilation



Oil-less Reciprocating Medical Air Package Duplex Horizontal Tank Mount 1 - 5 HP, Desiccant



SHOWN: Duplex 5 HP reciprocating compressors mounted on a 120 gallon horizontal A.S.M.E. air receiver with desiccant dryers, filters, regulators, CO and dew point monitors. Includes duplex Nema 12 control panel. Package is NFPA99 compliant.

Technical Data for NFPA99 Compliant Medical Compressed Air System

Model Number	Tank Gals	HP each	HP pkg	SCFM @19" HG		dB(A) Level	BTU per HR	Weight in LBS	Dimensions					Options
				each	pkg				A	B	C	Inlet NPT	Outlet NPT	
GMA27-DTA-H4L-R	120	1.0	2.0	3.40	3.40	69	2,545	750	79.5" (2019mm)	37.0" (940mm)	57.0" (1448mm)	0.75	0.5	Touch Screen PLC Control Interface
GMA27-DTC-H4L-R	120	2.0	4.0	8.30	8.30	69	5,090	760	79.5" (2019mm)	37.0" (940mm)	57.0" (1448mm)	0.75	0.5	Nema 4 weather resistant control panel
GMA27-DTD-H4L-R	120	3.0	6.0	11.30	11.30	71	7,635	875	79.5" (2019mm)	37.0" (940mm)	57.0" (1448mm)	0.75	0.5	Galvanized tank
GMA27-DTE-H3L-R	120	5.0	10.0	18.60	18.60	75	12,725	1225	79.5" (2019mm)	37.0" (940mm)	57.0" (1448mm)	1.00	0.5	



System capacities are shown with reserve compressor as redundant standby, to comply with NFPA 99. Sound levels are indicated in dB(a) and are shown as only one pump running. Data is shown with equipment operating in a maximum ambient room temperature of 105° F and under normal operating conditions.