

GENERAL

The Powerex Scroll tank mounted system is designed to provide clean, dry air for industrial applications where the quality of the compressed air is critical. This package shall have V-belt drive/s, OSHA compliant belt guard/s, safety relief valve, check valve/s, pressure gauge and pressure switch/es.

AIR COMPRESSOR SYSTEM

The package shall include one or two oil-less scroll air compressor and associated equipment, one ASME tank, and one optional magnetic starter/alternating control panel. The only field connections required will be system discharge, power connection at the control panel and dryer, and condensate drain connection. The dryer and electric drain require standard 115V outlet. All interconnecting piping and wiring shall be included and operationally tested prior to shipment. A refrigerated air dryer system is optional (simplex units will have mounted dryers; on duplex units the dryer will be separate from the unit).

OILLESS SCROLL COMPRESSOR PUMP

The compressor/s shall be belt driven oil-less rotary scroll single stage, air-cooled oil-less construction with absolutely no oil needed for operation. The rotary design shall not require any inlet or exhaust valves and shall be rated for 100% continuous duty. Direct drive compressors shall not be used. Tip seals shall be of a composite PTFE material and be rated for 8,000 hours operation. Compressor bearings shall be external to the air compression chamber and shall all be serviceable for extended compressor life. Bearing maintenance shall not be required until 8,000 run hours. Compressors with bearings that are not accessible for service have a limited life span and shall not be accepted. Compressors shall have an integral radial flow fan for cooling and shall not require additional electrical cooling fans. Each compressor shall have an air-cooled aftercooler.

MOTORS

Each compressor shall be belt driven by a 3600 RPM, 2 pole, ODP NEMA construction motor. OSHA approved belt guards shall be provided. Motor shall not operate in the service factor. Optional motors include TEFC.

MOTOR SLIDE BASE

Maintenance feature designed for easy adjustment of belt tension from the motor side on the basemount assembly.

- Robust single screw linear belt tension adjustment
- Custom compact design

AIR RECEIVER

The system shall include an ASME rated air receiver, rated for 200 PSI MAWP. The tank shall be equipped with a pressure gauge, safety relief valve, discharge shut-off valve, and manual tank drain.

Optional drain valves include: 1) 115V "No-loss" type automatic tank drain*, or 2) 115V automatic solenoid timer drain

AIR-COOLED AFTERCOOLERS

Air-cooled aftercoolers shall be provided for each compressor and shall be sized to provide an approach temperature of 20 degrees F. Each unit shall be constructed of copper tubing and shall be installed

on the tank.

AIR FILTER

The standard inlet filter screens directly into the pump inlet and is a pleated element. Optional items include threaded inlet housings for remote piping.

OPTIONAL CONTROL PANEL

SIMPLEX - The system shall include a UL listed magnetic starter in a NEMA 1 enclosure with full voltage motor starter with overload protection.

DUPLEX - The system shall include a UL listed magnetic starter in a NEMA 1 enclosure with full voltage motor starter with overload protection, an alternator, 120 volt transformer, fused primary and secondary circuits, elapsed time indicators, and maintenance switch (left/auto/right). Control panels shall be UL 508A listed and labeled.

OPTIONAL REFRIGERANT AIR DRYER

The Powerex air drying system shall be tank mounted with compressor, and shall provide air at a 35-38 degree F pressure dew point. The refrigerated compressed air dryer is non-cycling, direct expansion, using R-134a refrigerant. A constant pressure expansion valve is provided to maintain a 38 degree F evaporator temperature. The dryer is self-regulating for large load swings, and includes a 3 micron filter/separator with automatic condensate drain. Refrigerated dryers are to be powered from a separate supply, not through the compressor controls. Option also includes a .01 micron after filter, a pressure regulator and an installed automatic solenoid timer drain. Simplex units will have mounted dryers; for duplex units, dryer is separate from unit.

AVAILABLE OPTIONS

- Premium Warranty
- Motor options
 - TEFC
- Air Receiver options
 - 120, 200, 240 gal. (unit specific)
 - Electric drain
 - FDA approved tank lining
- Control Panel options
 - NEMA 4/12
 - High temperature
- Inlet filter options
 - Threaded for remote inlet
- Refrigerant air dryer (Simplex only)
- Vibration mounting pads