

## Specification

---

### 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 beltguard/s, safety relief valve, check valve/s, pressure gauge and pressure switch/s.

### 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.

### 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 10,000 hours operation or 5,000 hours if high pressure. 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 10,000 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.

### Motor

Each compressor shall be belt driven by a 1750 RPM, ODP NEMA construction motor. OSHA approved belt guards shall be provided. Motor shall not operate in the service factor. Optional motors include TEFC.

### 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, 2) 115V automatic solenoid timer drain, or 3) automatic float style drain.

### Air-cooled Aftercooler

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.

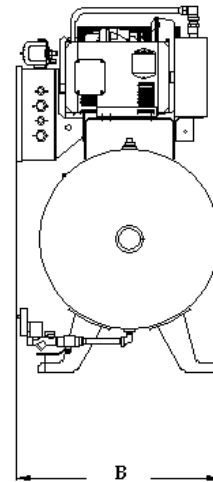
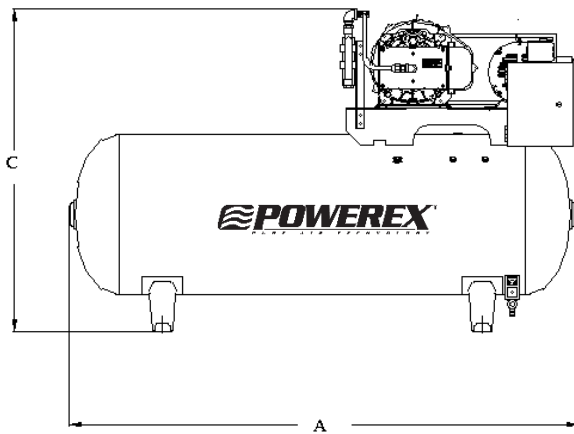
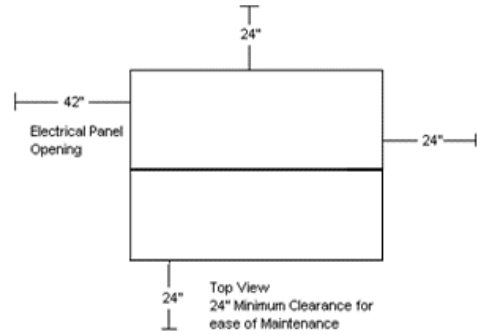
### Optional Refrigerant Air Dryer

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.

### Available Options

- Motor options
  - TEFC
- Air Receiver options
  - 30, 60, 80, 120 gal. (unit specific)
  - Electric drain
  - No loss drain
  - FDA approved tank lining
- Control Panel options
  - NEMA 4/12
  - High temperature
- Inlet filter options
  - Threaded for remote inlet
- Refrigerant air dryer
- Motor slide base (per motor)
- 50 Hz operation
- High Pressure (145 psig operation)

Dimensions				
Model	Dim. A	Dim. B	Dim. C	Outlet
STS0301	40"	21"	36"	3/4"
STS1301	40"	21"	36"	3/4"
STS0501	40"	21"	36"	3/4"
STS1511	40"	21"	36"	3/4"
STS0302	51"	23"	40"	3/4"
STS1302	51"	23"	40"	3/4"
STS0502	64"	23"	41"	3/4"
STS1512	64"	23"	41"	3/4"



Tankmount Scroll Air Compressors										
Model	HP <sup>1</sup>	SCFM @ 100 PSIG <sup>3</sup>	Maximum Pressure (PSIG)	Tank Size (gal)	BTU/Hr	dB(A) Level	System F.L.A.			System Weight (lbs)
							208V	230V	460V	
STS0301	3	8.8 (7.1)	116 (145)	30	7,635	72	8.5	7.7	3.9	240
STS1301	3	8.8 (7.1)	116 (145)	30	7,635	72	16.8*	16	-	255
STS0501	5	15.2 (12.5)	116 (145)	30	12,725	72	18	12.7	6.3	260
STS1511	5	15.2 (12.5)	116 (145)	30	12,725	72	24	23	-	276
STS0302	3	8.8 (7.1)	116 (145)	60	7,635	72	8.5	7.7	3.9	280
STS1302	3	8.8 (7.1)	116 (145)	60	7,635	72	16.8*	16	-	295
STS0502	5	15.2 (12.5)	116 (145)	60	12,725	72	18	12.7	6.3	300
STS1512	5	15.2 (12.5)	116 (145)	60	12,725	72	24	23	-	315

Notes:

- 1 – Actual BHP is less than rated name plate. Contact Powerex for BHP rating.
- 2 – 3 Year Limited Warranty
- 3 – Systems are available with high pressure option. Values for system with high pressure option added are indicated in parentheses. "HP" is to be added to the end of the model number to designate high pressure.
- \* System is usable at 208 volts, but should not be used at any value below that voltage.