



# 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 and 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**

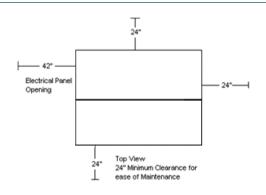
The Powerex air drying system shall be tank mounted with compressor, and shall provide air at a 35-38 degree F pressure dew point. The refrigerated compressed air dryer is non-cycling, direct expansion, using R-134a refrigerant. A constant pressure expansion valve is provided to maintain a 38 degree 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.

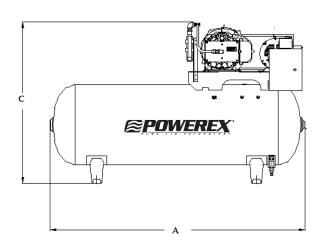
#### **Available Options**

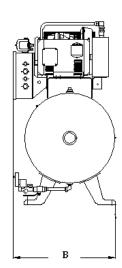
- Motor options
  - TEFC
- Air Receiver options
  - 30, 60, 80, 120 gal. (unit specific)
  - Electric drain
  - No loss drain
  - FDA approved tank lining
- Control Panel options
  - NEMA 4/12
  - High temperature
- Inlet filter options
  - Threaded for remote inlet
- Refrigerant air dryer
- Motor slide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





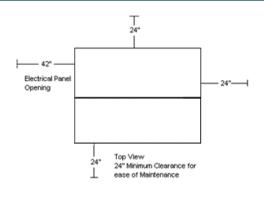


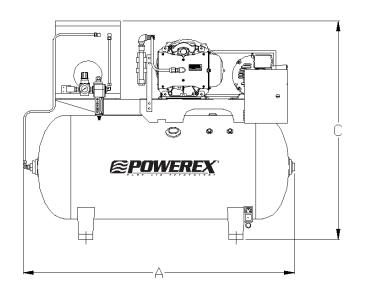
	Tankmount Scroll Air Compressors											
Model	HP <sup>1</sup>	SCFM @ 100 PSIG <sup>3</sup>	Maximum Pressure (PSIG)	Tank Size (gal)	BTU/Hr	dB(A) Level	Sys 208V	tem F. 230V	L.A. 460V	System Weight (lbs)		
STS0301	3	8.8 (7.1)	116 (145)	30	7,635	72	8.5	7.7	3.9	240		
STS1301	3	8.8 (7.1)	116 (145)	30	7,635	72	16.8*	16	-	255		
STS0501	5	15.2 (12.5)	116 (145)	30	12,725	72	14	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	14	12.7	6.3	300		
STS1512	5	15.2 (12.5)	116 (145)	60	12,725	72	24	23	_	315		

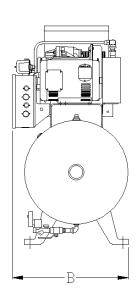
- 1 Actual BHP is less than rated name plate. Contact Powerex for BHP rating.
- 2 3 Year Limited Warranty
- 3 Systems are available with high pressure option. Values for system with high pressure option added are indicated in parentheses. "HP" is to be added to the end of the model number to designate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



Dimensions										
Model	Dim. A	Dim. B	Dim. C	Outlet						
STS0301	46"	21"	35"	1/2"						
STS1301	46"	21"	35"	1/2"						
STS0501	46"	21"	35"	1/2"						
STS1511	46"	21"	35"	1/2"						
STS0302	53"	23"	43"	1/2"						
STS1302	53"	23"	43"	1/2"						
STS0502	53"	23"	43"	1/2"						
STS1512	53"	23"	43"	1/2"						







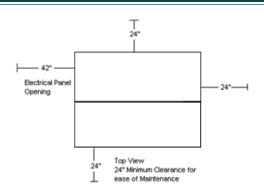
	Tankmount Scroll Air Compressors											
Model	HP <sup>1</sup>	SCFM @ 100 PSIG <sup>3</sup>	Maximum Pressure (PSIG)	Tank Size (gal)	BTU/Hr	dB(A) Level	Sys 208V	tem F.I 230V	A. 460V	System Weight (lbs)		
STS0301	3	8.8 (7.1)	116 (145)	30	7,635	72	8.5	7.7	3.9	320		
STS1301	3	8.8 (7.1)	116 (145)	30	7,635	72	16.8*	16	1	335		
STS0501	5	15.2 (12.5)	116 (145)	30	12,725	72	14	12.7	6.3	345		
STS1511	5	15.2 (12.5)	116 (145)	30	12,725	72	24	23	1	360		
STS0302	3	8.8 (7.1)	116 (145)	60	7,635	72	8.5	7.7	3.9	430		
STS1302	3	8.8 (7.1)	116 (145)	60	7,635	72	16.8*	16	1	445		
STS0502	5	15.2 (12.5)	116 (145)	60	12,725	72	14	12.7	6.3	455		
STS1512	5	15.2 (12.5)	116 (145)	60	12,725	72	24	23	1	470		

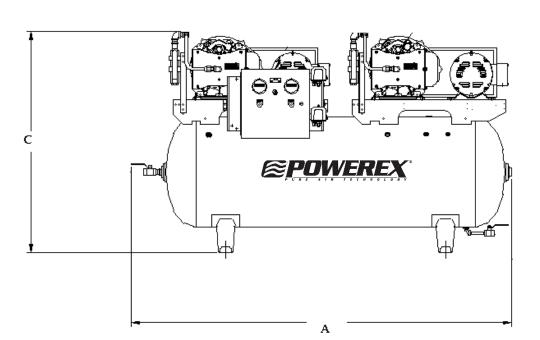
- 1 Actual BHP is less than rated name plate. Contact Powerex for BHP rating.
- 2 3 Year Limited Warranty
- 3 Systems are available with high pressure option. Values for system with high pressure option added are indicated in parentheses. "HP" is to be added to the end of the model number to designate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

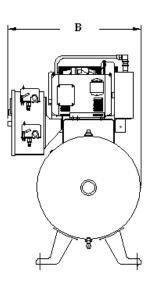


# Scroll Tankmount Duplex - 3-5 HP Pumps

Dimensions										
Model Dim. A Dim. B Dim. C Outle										
STD0303	70"	26"	41"	1/2"						
STD1303	70"	26"	41"	1/2"						
STD0503	70"	26"	41"	1/2"						
STD1513	70"	26"	41"	1/2"						
STD0504	78"	28"	45"	1/2"						
STD1514	78"	28"	45"	1/2"						







	Tankmount Scroll Air Compressors											
	Total Pum		SCFM @	Maximum	Tank		dB(A)	Sys	tem F.	L.A.	System	
Model	System HP	HP <sup>1</sup>	100 PSIG <sup>3</sup>	Pressure (PSIG) <sup>3</sup>	Size (gal)	BTU/Hr	Level	208V	230V	460V	Weight (lbs)	
STD0303	6	3 (2)	17.6 (14.2)	116 (145)	80	15,270	75	17.5	15.8	7.9	570	
STD1303	6	3 (2)	17.6 (14.2)	116 (145)	80	15,270	75	34.1*	32.4	-	570	
STD0503	10	5 (2)	30.4 (25.0)	116 (145)	80	25,450	75	28.4	25.9	12.9	610	
STD1513	10	5 (2)	30.4 (25.0)	116 (145)	80	25,450	75	48.4	46.4	-	642	
STD0504	10	5 (2)	30.4 (25.0)	116 (145)	120	25,450	75	28.4	25.9	12.9	615	
STD1514	10	5 (2)	30.4 (25.0)	116 (145)	120	25,450	75	48.4	46.4	-	726	

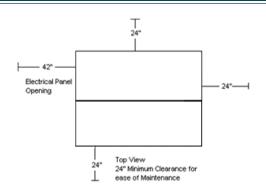
- 1 Actual BHP is less than rated name plate. Contact Powerex for BHP rating.
- 2 3 Year Limited Warranty
- 3 Systems are available with high pressure option. Values for system with high pressure option added are indicated in parentheses. "HP" is to be added to the end of the model number to designate high pressure.

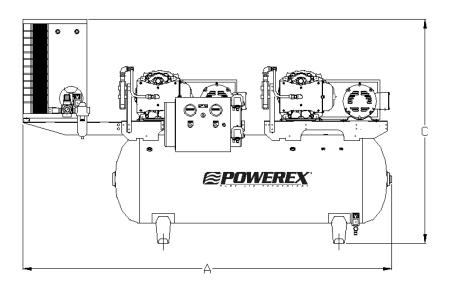
<sup>\*</sup>System is usable at 208 volts, but should not be used at any value below that voltage.

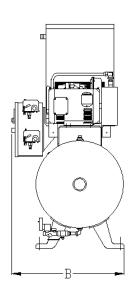


# Scroll Tankmount Duplex – 3-5 HP Pumps with Refrigerated Dryer

Dimensions										
Model	Model Dim. A Dim. B Dim. C									
STD0303	84"	26"	51"	1/2"						
STD1303	84"	26"	51"	1/2"						
STD0503	84"	26"	51"	1/2"						
STD1513	84"	26"	51"	1/2"						
STD0504	87"	28"	55"	1/2"						
STD1514	87"	28"	55"	1/2"						







	Tankmount Scroll Air Compressors											
Tota		Pump	SCFM @	Maximum	Tank		dB(A)	Sys	tem F.	L.A.	System	
Model	System HP	HP <sup>1</sup>	100 PSIG <sup>3</sup>	Pressure (PSIG) <sup>3</sup>	Size (gal)	BTU/Hr	Level	208V	230V	460V	Weight (lbs)	
STD0303	6	3 (2)	17.6 (14.2)	116 (145)	80	15,270	75	17.5	15.8	7.9	660	
STD1303	6	3 (2)	17.6 (14.2)	116 (145)	80	15,270	75	34.1*	32.4	-	660	
STD0503	10	5 (2)	30.4 (25.0)	116 (145)	80	25,450	75	28.4	25.9	12.9	680	
STD1513	10	5 (2)	30.4 (25.0)	116 (145)	80	25,450	75	48.4	46.4	-	680	
STD0504	10	5 (2)	30.4 (25.0)	116 (145)	120	25,450	75	28.4	25.9	12.9	760	
STD1514	10	5 (2)	30.4 (25.0)	116 (145)	120	25,450	75	48.4	46.4	-	760	

- 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.



# 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 and 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.

### **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, 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°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**

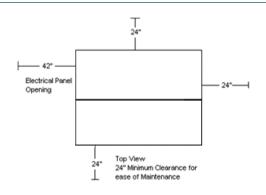
The Powerex air drying system shall be tank mounted with compressor, and shall provide air at a 35-38°F pressure dew point. The refrigerated compressed air dryer is non-cycling, direct expansion, using R-134a refrigerant. A constant pressure expansion valve is provided to maintain a 38°F evaporator temperature. 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.

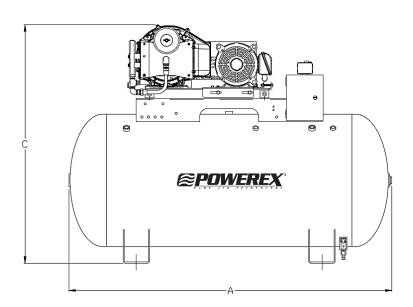
# **Available Options**

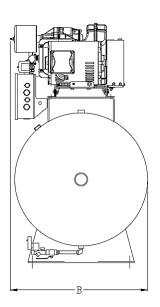
- Motor options
  - TEFC
- Air Receiver options
  - 30, 60, 80, 120 gal. (unit specific)
  - · Electric drain
  - · No loss drain
  - FDA approved tank lining
- Control Panel options
  - NEMA 4/12
  - High temperature
- Inlet filter options
  - · Threaded for remote inlet
- Refrigerant air dryer
- Motor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



Dimensions										
Model Dim. A Dim. B Dim. C Outle										
STS0754	70"	28"	48"	3/4"						
STS10B4	70"	28"	48"	3/4"						
STS0755	73"	31"	54"	3/4"						
STS10B5	73"	31"	54"	3/4"						





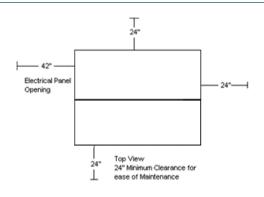


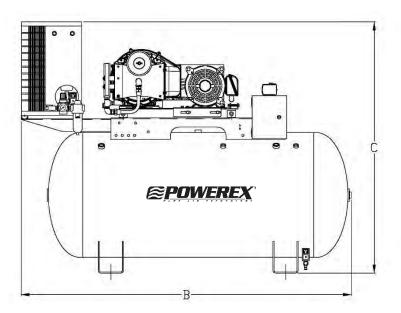
Tankmount Scroll Air Compressors											
	SCFM @		Maximum	Tank Size		dB(A)	Sys	tem F.I	L.A.	System	
MUUUDI I HDT I	100 PSIG	Pressure (gal)		BTU/Hr	Level	208V	230V	460V	Weight (lbs)		
STS0754	7.5	23.1	116	120	19,083	74	19.2	17.3	8.67	810	
STS10B4	10	31.2	116	120	25,444	76	26.5	24.0	12.0	830	
STS0755	7.5	23.1	116	200	19,083	74	19.2	17.3	8.67	1,090	
STS10B5	10	31.2	116	200	25,444	76	26.5	24.0	12.0	1,110	

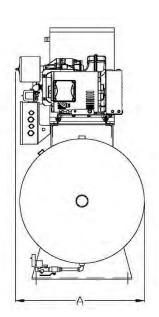
- 1 Actual BHP is less than rated name plate. Contact Powerex for BHP rating.
- 2 3 Year Limited Warranty



Dimensions										
Model	Dim. A	Dim. B	Dim. C	Outlet						
STS0754	28"	78"	54"	1/2"						
STS0755	31"	80"	61"	1/2"						
STS0756	47"	86"	62"	1/2"						
STS10B4	28"	78"	54"	1/2"						
STS10B5	31"	80"	61"	1/2"						
STS10B6	47"	86"	62"	1/2"						







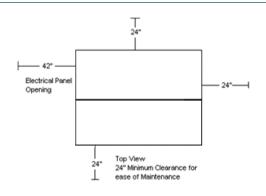
	Tankmount Scroll Air Compressors											
Model	HP <sup>1</sup>	SCFM @ 100 PSIG	Maximum Pressure (PSIG)	Tank Size (gal)	BTU/Hr	dB(A) Level	Sys 208V	tem F.I 230V	L.A. 460V	System Weight (lbs)		
STS0754	7.5	23.1	116	120	19,083	74	19.2	17.3	8.67	800		
STS0755	7.5	23.1	116	200	19,083	74	19.2	17.3	8.67	1,175		
STS0756	7.5	23.1	116	240	19,083	74	19.2	17.3	8.67	1,450		
STS10B4	10	31.2	116	120	25,444	76	26.5	24	12	825		
STS10B5	10	31.2	116	200	25,444	76	26.5	24	12	1,200		
STS10B6	10	31.2	116	240	25,444	76	26.5	24	12	1,475		

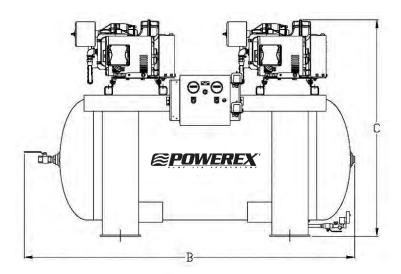
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- 2 3 Year Limited Warranty

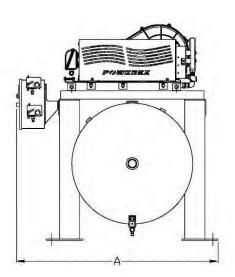


# **Scroll Tankmount Duplex – 7.5-10 HP Pumps**

Dimensions										
Model	Dim. A	Dim. B	Dim. C	Outlet						
STD0754	35"	78"	46"	1"						
STD0755	50"	82"	54"	1"						
STD0756	50"	94"	56"	1"						
STD10B4	35"	78"	46"	1"						
STD10B5	50"	82"	54"	1"						
STD10B6	50"	94"	56"	1"						







Tankmount Scroll Air Compressors											
Model Total System HP	Total	Total Pump	SCFM @	Maximum	Tank		dB(A)	System F.L.A.		System	
	HP <sup>1</sup>	100 PSIG	Pressure (PSIG)	Size (gal)	BTU/Hr	Level	208V	230V	460V	Weight (Ibs)	
STD0754	15	7.5 (2)	46.2	116	120	38,166	77	40.4	36.6	19.3	1,100
STD0755	15	7.5 (2)	46.2	116	200	38,166	77	40.4	36.6	19.3	1,350
STD0756	15	7.5 (2)	46.2	116	240	38,166	77	40.4	36.6	19.3	1,650
STD10B4	20	10 (2)	62.4	116	120	50,888	79	55	50	26	1,150
STD10B5	20	10 (2)	62.4	116	200	50,888	79	55	50	26	1,400
STD10B6	20	10 (2)	62.4	116	240	50,888	79	55	50	26	1,700

- 1 Actual BHP is less than rated name plate. Contact Powerex for BHP rating.
- 2 3 Year Limited Warranty