

# Oil-less Scroll Enclosure Systems



# OIL-LESS SCROLL TECHNOLOGY

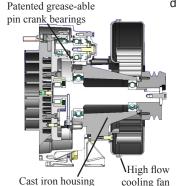


Powerex has led scroll technology since 1991 when we introduced the first completely oil-less scroll air compressor. Our technology and expertise in clean, dry air systems is unmatched. Powerex manufactures compressors, pumps, air receivers, control panels, air dryers, dew point monitors, and more, to provide a total system approach to your air compressor needs. All facilities are ISO9001 registered so you can be assured of the highest quality. The enclosed scroll compressors feature compact footprints, energy efficient operation, low maintenance, and environmentally friendly design, all in one complete package.

#### **TECHNOLOGY & INNOVATION**

The scroll pump has few moving parts making it reliable and easier to maintain. The self lubricating tip seals and absence of a gearbox means the pump is truly 100% oil free. As the leaders in scroll pump technology, our latest

design incorporates several innovative features:



- · Main bearings are housed in durable cast iron instead of aluminum which prevents fretting and premature failure of the bearing race. This pump can be operated at 100% duty with confidence.
- The patented bearing re-grease feature has been improved to allow maintenance from the front side of the pump, cutting service time in half.
- The patented tip seal design yields the highest flow rates and longevity of any other dry scroll compressor.
- The improved efficiency and cooling results in lower operating temperatures.
- Extremely low vibration.
- Industry first 10hp scroll pump improves system efficiency by producing more output using fewer pumps.

#### WhisperAIR<sup>™</sup> SOUND ENCLOSURE CABINET



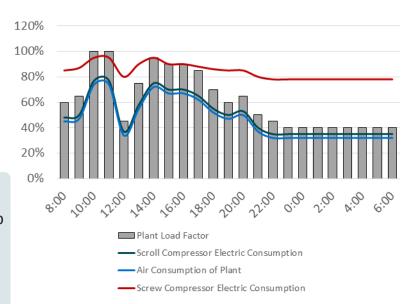
cooling fan

Powerex's trademarked oil-free enclosure systems offer the lowest noise levels in the industry. Each system is packaged in a rigid steel frame with powder coated panels and lined with sound-deadening insulation. The low noise levels are unmatched in the industry and allow installation at the point of use, while the small footprint simultaneously maximizes floor space.

#### **ENERGY EFFICIENCY**

With the Powerex Variable-Pump-Drive system, each compressor pump is automatically staged on/off individually based on actual system demand, maximizing energy efficiency at all usage levels. Lead compressor status will alternate every time a pump is called for - or every 10 minutes, whichever comes first – which maintains equal run hours and extends maintenance intervals.

Redundancy is built into our system with our multiple pump design, eliminating the need to purchase an additional compressor.



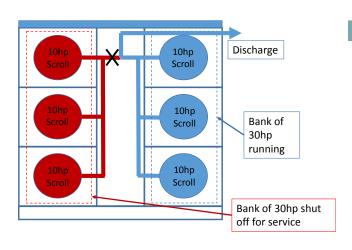
# **SYSTEMS SPECIFICATIONS**

Standard Pressure Models					
Model	HP	Maximum Pressure (PSIG)*	Performance SCFM @ 100 PSIG	Operating Pressure (PSIG)†	
SES02081	2	116	5.7	95-115	
SES03081,2	3	116	8.8	95-115	
SES05081,2	5	116	15.2	95-115	
SED1007	10	116	30.5	90-116	
SET1507	15	116	45.7	90-116	
SED15B7	15	116	46.2	90-116	
SEQ2007	20	116	61	90-116	
SED20B7	20	116	62.4	90-116	
SET2257	22.5	116	69.3	90-116	
SEH3007	30	116	91.5	90-116	
SET30B7	30	116	93.6	90-116	
SEO4007	40	116	122	90-116	
SEQ40B7	40	116	124.8	90-116	
SEH45B7	45	116	138.6	90-116	
SEP50B7	50	116	156	90-116	
SEH60B7	60	116	187.2	90-116	

High Pressure Models						
Model	НР	Maximum Pressure (PSIG)*	Performance SCFM @ 100 PSIG	Operating Pressure (PSIG)†		
SES0308HP <sup>1,2</sup>	3	145	7.1	115-145		
SES0508HP1,2	5	145	12.5	115-145		
SED1007HP	10	145	25	119-145		
SET1507HP	15	145	37.5	119-145		
SEQ2007HP	20	145	50	119-145		
SEH3007HP	30	145	75	119-145		
SEO4007HP	40	145	100	119-145		

<sup>\*</sup>Performance and maximum pressure shown at sea level conditions.

<sup>&</sup>lt;sup>2</sup>Single phase 3 HP units require the installation of an additional 30 gal external tank and 5 HP units will require the installation of additional 60 gal external tank.



## **PUMP BANK ISOLATION – 40-60hp**

40-60hp systems have two isolatable compressor banks to allow for ease of maintenance and service

- Mechanically ball valves
- Electrically motor protector disconnect and circuit breakers
- OSHA-approved service on half capacity while other half is running

 $<sup>{\</sup>it +Operating\ pressure\ range\ adjustable\ (consult\ factory\ for\ parameters)}.$ 

<sup>&</sup>lt;sup>1</sup>Single phase models use motors that require input voltage of 230V.

## **SYSTEMS FEATURES**

#### **3-5 HP SIMPLEX MODELS**

- 3-5 HP systems are UL/CSA certified.
- Integral 13 gallon tank ASME/CRN.
- Inlet filtration with replaceable element.
- Front mounted control panel includes:
  - On/Off switch.
  - · Power on light.
  - High temperature shutdown with indication light.
  - Run time hourmeter.
  - · Pressure gauge.
  - Automatic start/stop operation.
  - Control voltage starter with motor overload protection.
- Internal vibration isolators.
- · Air-cooled aftercooler.
- · ODP Motor.

#### **10-60 HP MULTIPLEX MODELS**

- 10-20 HP systems are UL/CSA certified.
- Inlet filtration with replaceable element.
- · Front mounted control panel includes:
  - On/Off switch.
  - · Power on light.
  - High temperature shutdown with indication on the display.
  - Run time hourmeter for each pump.
  - Maintenance counter with alarm warning display.
  - System pressure display.
  - Full voltage starter with overload protection.
  - General compressor fault with remote contacts.
- · Internal vibration isolators.
- Air-cooled aftercooler for each compressor.
- TEFC Motor.

# **ACCESSORIES & OPTIONS**

- Air receivers 30-600 gal.
- · Desiccant air treatment systems.
- Refrigerated air treatment systems.
- Remote inlet filters.
- Master lead/lag controllers for multiple cabinets.
- NFPA 99 compliant systems.
- Laboratory system packaging.
- CO monitor
- Dewpoint monitor
- 50Hz motors

# **WHY POWEREX?**

Powerex has been designing and packaging systems since 1988 and has built a foundation on engineering, innovation, quality and service to become a leader in both air and vacuum systems. Because of our high level of vertical integration and a full in-house engineering team, Powerex has the ability to customize a system to meet your air or vacuum requirements.

NOVATION QUALITY ENGINEERING SERVICE INNOVATION QUALITY ENGINEERING SERVICE INNOVATION SERVICE



QUALITY ENGINEERING SERVICE INNOVATION QUALITY ENGINEERING SERVICE INFORMATION QUALITY ENGINEERING SERVICE INNOVATION QUALITY

For more information, contact your local Powerex distributor or Powerex sales representative today!



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