





Whisper Quiet

# INTRODUCING THE NEW SILENT SCROLL-X SERIES Scroll Compressor



GCROLL SX 7.5

3



# SILENT SCROLL-X SERIES Scroll Compressor

Westair are pleased to introduce the latest in advanced compressed air technology. The new Scroll-X oil injected scroll compressor is whisper quiet, energy saving, direct drive, vibration free and is extremely reliable with minimal moving parts and long running duty cycles.

The new Westair Scroll-X silent scroll compressor is designed to replace the noisy, vibrating piston compressor and suits any air application that requires an air usage duty cycle of up to 85%. A piston compressors maximum duty cycle is 40 to 50%.

# FEATURES INCLUDE:

- 3 15 kW
- 8 bar max pressure
- 13 CFM to 62 CFM
- Direct drive
- Single or three phase option
- Energy saving intelligent micro controller
- Schneider electrical components

- SKF bearings in airend and motor
- Air receiver complies with Australian Standard AS1210
- MEPS 2 Registered motors
- Overload and temperature safety protection
- Large oversized coolers designed for Australian conditions
- Seamless steel used on all oil pipes
- Genuine long term warranties

### **ADVANTAGES :**

- Affordable price
- Whisper quiet operation
- Lower energy costs
- Reliable performance
- Long duty cycle
- Minimal moving parts
- Direct drive (no belts)
- No vibration
- · Control and monitoring systems
- Compact design
- No loss power transmission
- Low maintenance costs



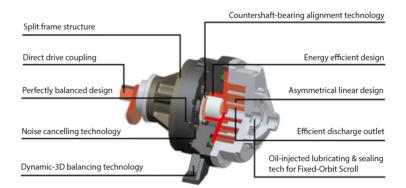


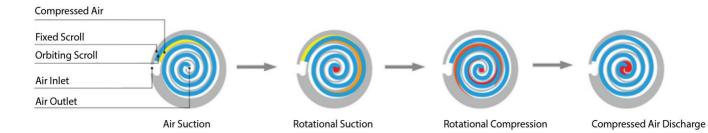


# **PRIMARY STRUCTURE**



# WORKING PRINCIPLE





04 **WestAir** 

## HOW A SCROLL-X SERIES WORKS

Unlike reciprocating technology with many moving parts, the Scroll-X scroll compressor has one orbiting scroll and one fixed scroll. The orbiting scroll is coupled to the crankshaft in orbit rather than rotated. The orbiting motion creates a series of air pockets traveling between the two scroll plates.

On the outer portion of the scroll, the pocket draws in the air then moves it to the centre of the scroll, where it's discharged. As the air moves in the increasing smaller inner pocket, the pressure increases to the desired discharged pressure. The Scroll-X is oil injected which lubricates and regulates the temperature of the scroll which enables long running duty cycles to be achieved.

### WHY CHOOSE A SCROLL COMPRESSOR?



#### SCROLL COMPRESSOR

- ✓ Silent operation
- ✓ Vibration free
- ✓ 85% duty cycle
- ✓ 15-20% more efficient
- ✓ 70% less moving parts
- ✓ Direct drive

VS

### **PISTON COMPRESSOR**

- × Noisy
- × Heavy vibration
- $\times$  40-50% max duty cycle
- × 30% efficiency loss
- × 70% more moving parts
- × Belt driven

# INTELLIGENT PATENTED MICRO CONTROLLER

The intelligent patented micro PLC controller is very user friendly. It has signals for pressure, temperature, volts and current, which monitor the running of the compressor. With a secured code, setting up or changing parameters in the system can be achieved easily using the buttons on the display.

## THE DISPLAY HAS READINGS FOR:

- Amps and volts .
- Service intervals
- Pressure
- Temperature
- Current
- On load and off load hours
- **Reverse anti-rotation**
- Date and time
- Fault history
- Multiple monitoring alarms



### **CONTROLLER OPTIONS:**

- **Remote Stop/Start**
- Master slave operation
- **RS485** Connection



# SCROLL-X 15 KW ENERGY SAVING TWIN PUMP



Twin pump features only applies to SX15 models

The Scroll-X 15 kW has exceptional power saving ability with its twin pump rotational system. The 15 kW Scroll-X has 2 x 7.5 kW pumps set in a master/slave operation.

When your air demand is low (under 31 CFM) only one pump will run, come off load and stop. If your air demand increases at different times throughout the day, the second pump will activate/run when needed.

The intelligent micro controller will switch the pumps over from master/slave with every hour run on each pump. This keeps each pump with the same service running hours.

The twin pump design gives you a breakdown backup system. If an issue arises, you can easily switch off one pump via the micro controller and continue using the other.

# SCROLL-X TD ALL IN ONE UNIT

The SX Scroll all in one unit is a compact design that consists of the scroll compressor, air receiver, refrigeration air dryer, pre & post air filters, stainless steel bypass system and condensate manifold.

#### STAINLESS STEEL BYPASS

The airline installation design includes a stainless steel bypass and condensate manifold system which saves you money on installation costs.

#### AIR DRYER EASY TO REMOVE

The refrigeration air dryer is NOT integrated with the scroll compressor and is fitted with a stainless steel bypass, so if any issues arise with the dryer it is easily removed without interrupting your air supply.

#### **COMPACT FOOTPRINT**

Small compact footprint which helps increase the usage of your valuable floor space.

#### **PRE & POST FILTRATION**

Pre and post filters are fitted with the refrigeration dryer to give an air quality of 0.01 micron, which is classed as instrument quality air.

#### WASTE CONDENSATE

Waste condensate is neatly piped into to a manifold which comes out of one exit point to be fitted to either an oil water separator or waste oil container.



Stainless steel bypass system



# WESTAIR SCROLL-X SERIES OPTIONS

### **SX BASE MOUNT**

• Available in 3-15 kW



### **SX-T TANK MOUNTED**

- Available in 3-15 kW
- 200L / 270L tank





# SX-TD ALL IN ONE UNIT

- Available in 5.5-15 kW (24-62 CFM)
- Complete with dryer, pre and post filters and stainless steel bypass system
- Condensate manifold
- 320L/ 360L tank



# **TECHNICAL SPECIFICATION**

Scroll-X Base Mount	SX-3S	SX-3	SX-4	SX-5.5	SX7.5	SX15
Capacity CFM	13		18	24	31	62
Power HP / KW	4 / 3		5 / 4	7.5 / 5.5	10 / 7.5	20 / 15
Power Supply	240V	415V/ 50Hz				
Dimensions mm	850 x 550 x 700			1000 x 6	1200 x 750 x 950	
Weight KG	170			210	220	420
Noise Level dBa	57 <sup>+3</sup>			59 <sup>+3</sup>		62 <sup>+3</sup>

Scroll-X Tank Mounted	SX-3S-T	SX-3-T	SX-4-T	SX-5.5-T	SX7.5-T	SX15-T
Capacity CFM	13		18	24	31	62
Power HP / KW	4 / 3		5 / 4	7.5 / 5.5	10 / 7.5	20 / 15
Power Supply	240V	415V/ 50Hz				
Tank L	200			270		
Dimensions mm	850 x 550 x 1280			1000 x 600 x 1450 1200 x 750 x 165		
Weight KG	210			290	300	480
Noise Level dBa	57 <sup>+3</sup>			59 <sup>+3</sup>		62 <sup>+3</sup>

Scroll-X All in One Unit	SX-5.5-TD	SX7.5-TD	SX15-TD		
Capacity CFM	24	31	62		
Power HP / KW	7.5 / 5.5	10 / 7.5	20 / 15		
Power Supply	415V/ 50Hz				
Tank L	320		360		
Dimensions mm	1600 x 800 x 1450		1800 x 970 x 1600		
Weight KG	330		520		
Noise Level dBa	59	)+3	62 <sup>+3</sup>		

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