



*Advanced Energy Saving  
Compressed Air Solutions*



## **Rotary Screw Air Compressors**

**Variable Speed Drive**

22kW-55kW - SCR EPM Series

High efficiency - Permanent Magnet Drive

## Affordable High Efficiency Compressed Air is Here!

### Introducing the Westair SCR EPM - Permanent Magnet Range



The Westair SCR EPM compressor range is the smart choice for business wanting to reduce energy costs.

Until now, variable speed drive air compressors driven by high-efficiency permanent magnet motors have been out of reach of the typical Australian business. Premium priced compressor manufacturers have used them as their "Halo" range, which meant only the largest businesses could justify the capital cost in order to benefit from the significant energy savings on offer.

### An Energy Saving Revolution

Westair recognise that all businesses, regardless of their size and wallets, want to save power, and, to see the financial benefit of any energy saving technology adopted from day one. The new SCR EPM range is the ultimate solution and is set to revolutionise the compressor industry with savings delivered at every turn.

### Unique Benefits of the SCR EPM Range:

#### ✓ Save Up to 60% of Power

- Compared to an equivalent fixed speed compressor.

#### ✓ Pay-Back in as Little as 1-2 years

- The more your air demands fluctuates, the faster the pay-back

#### ✓ More Air per Kilowatt

- New oversized compression air end gives you more air  
- So efficient you may be able to use a lower kW compressor

#### ✓ No Offload Running

- When compressor is up to pressure, it stops with no offload running

#### ✓ Low RPM

- Average of 40-50% lower max RPM than our competitors



## Westair Pneumatic Systems and SCR

Westair Pneumatic Systems and SCR have partnered together to provide Australian industry with advanced energy saving compressed air solutions since 2009.

With one of the most extensive ranges of energy saving solutions available in Australia it includes, scroll air compressors, variable speed drive air compressors and efficient direct-drive fixed speed rotary screw compressors. All ranges are available in either oil-injected or oil-free configurations.

To ensure you receive only the best local support for your Westair SCR compressor, we offer the full range through our Australia wide dealer network of compressed air professionals. SCR has partners growing their compressed air network throughout the world. Their focus on R&D and using top class components from Germany and well known international brand components is your guarantee that you have made the right choice when buying a Westair SCR compressor.

## Save Up To 60% On Your Compressed Power Costs

Many businesses attribute 15-20% of their total energy costs to generating compressed air. When replacing or installing a new air compressor it is therefore smart to consider a high efficiency system.

Compressors are typically sized to satisfy a peak demand, which may only represent an hour or two per day. For the rest of the day the demand can vary significantly.

A fixed speed air compressor trying to meet such a varying demand will continue to run for long periods and produce more air than you need and waste energy.

The Westair EPM range only produces the air you need. When installed into a business with an air demand that varies throughout the day, the savings can be significant, even as high as 60%.

45kw Fixed-Speed v 37kw SCR-EPM producing the same amount of air

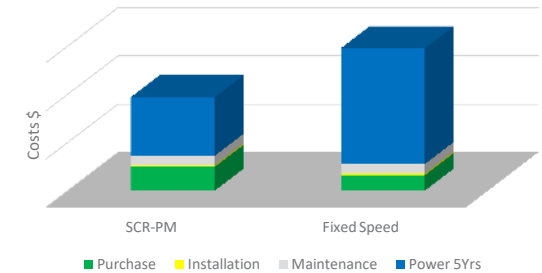


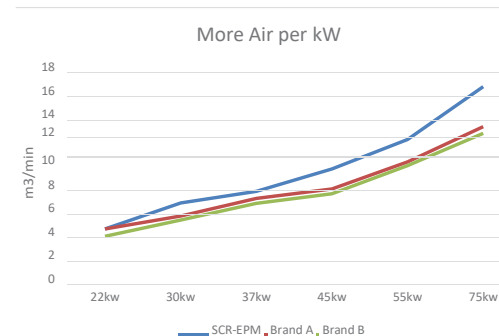
Chart compares the costs of owning a fixed-speed 45kw compressor producing 7.2m<sup>3</sup>/min (254cfm) compared to using a high efficiency 7.2m<sup>3</sup>/min (254cfm) SCR EPM 37kw VSD compressor over just a five-year period, where the fluctuating air demand in a typical workshop, equates to a loaded run time of 30% of the day.

## VSD-Permanent Magnet Efficiency

The Interior Permanent Magnet (IPM) motor uses DC current via an inverter to seamlessly speed up and slow down the compressor to match your air demands. Once up to pressure, the motor stops with no offload running.

AC induction motors found on most VFD compressors are limited the number of times per hour they can stop/start, and therefore, cannot match the efficiency of the IPM motor. The SCR-PM series has an unlimited start-stop ability which can dramatically reduce both total run hours, and power usage

## 10-15% More Air Per Kilowatt



SCR have added a new high efficiency compression air end to the EPM series which delivers 10-15% more air. The size of the air end has also been increased and reaches optimum flow at significantly lower revolutions.

With the extra 10-15% flow available it is possible to use a smaller kW compressor and save power.

Example: If your peak air demand is 7.2m<sup>3</sup>/min (254cfm) at 8 Bar, a Westair SCR50EPM-8 with a 37kw will deliver the air you require. Other compressor companies could suggest a more costly 45kw or even a 55kw variable speed drive compressor to deliver the air to meet your peak demand.

Just another example of how Westair and SCR are committed to delivering *Advanced Energy Saving Compressed Air Solutions*



## SCR- EPM Permanent Magnet Drive Features

22k W - 55 kW High Efficiency Range

### Oversized High Efficiency Airend



- t On average 40-50% lower max RPM than our competitors
- t Increased efficiency by 5-10%
- t Large oversized rotors for low rotational speed
- t Asymmetric rotor profile for increased sealing between rotors
- t Triple lip shaft seals
- t Dual back to back taper rolling bearings
- t Oil seal leak recovery system

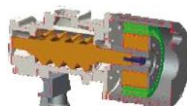
### Highest IPM Motor Efficiency

- t Soft start on main and fan motor
- t Variable range of 30-100%
- t No off load running
- t Can dramatically reduce running hours & power consumption
- t Direct Drive (1:1 ratio) – eliminates gearing or transmission losses

### Special Dual Housing Oil-Cooled Motor

The airend lubricant also cools the motor in a design in which the two housings are incorporated into one, with space left for an oil channel between the inner & outer housing.

This design helps cool the motor more efficiently than the traditional air cooling fan system and reduces power consumption. The airend and motor use a simple morse connection which is easy for installation and dismantlement



### Energy saving features:

- ✓ Oversized low RPM, high efficiency airend
- ✓ Highest IPM motor efficiency, even out performing IE3 efficiency levels.
- ✓ Superior Inovance Vector VSD control technology for main & fan motor
- ✓ Energy saving touch screen controller



### Inovance Inverter (VSD)



The Inovance inverter has a massive 30-100% variable range which converts AC to DC to control the new IPM motor. According to your air consumption the inverter will automatically adjust the IPM motor to suite your air demand while keeping a stable pressure of 0.1bar.

The fan motor also has its own individual Inovance VSD which modulates the fan speed to keep a constant temperature.

### Energy Saving Touch Screen Controller

- t 7 inch colour screen with button and touch panel
- t Operation screen readings for pressure/ temperature/ power/ frequency/ run hours/compressor status
- t Day time scheduling on/off and pressure (4 different times/pressure allowed per day) to maximise savings
- t Master slave operation (Maximum of 16 compressors)
- t Stop start remote
- t Service intervals/ alarm
- t Date and Time
- t Fault History
- t Monitoring alarms
- t Supports MODBUS RTU protocol



### Seamless Steel & Leak Resistant



t " IJHI-ØPX, MFBL-QSPPG EFTJHO.  
t 3JHJE TUFFM QJQJOH (XJUI IJHI-ØPX DIBSBDUFSJTUJDT)  
t & MJNJOBUFF PJM QSFTTVSF MPTTFT BOE UIFSJTL PGSVQVVSF PS  
oil loss through the normal ageing of traditional flexible, rubber hoses. t " KPIJOUT JO UIF IPTFT FNQMPZ B  
DPNCJOBUIPO PG ØVPSJOF  
o-ring & compression rings to offer a leak-free and vibration free operation.

## Quiet Noise Levels – Reduced by up to 6dB(A)



The large direct-drive, low RPM compression airend and IPM motor, combined with a soft-start variable speed fan and quality acoustic cabinet has significantly reduced noise levels. The new model is up to 6dB(A) quieter than the previous SCR model and is now one of the quietest VSD compressors in this class.

The Work Health and Safety Code of Practice for managing noise at work, states that 85dB(A) is an acceptable noise level for 8 hours continuous exposure. The Westair SCR EPM range is therefore super quiet and perfect for maintaining a safe workplace.

## High Ambient Running



The Westair SCR-PM range has been engineered to perform in even the toughest climates. With an ambient rating of up to 45 Degrees Celcius, the range exceeds the temperature rating of many fixed speed compressors.

## Warranty

All Westair SCR compressors are covered by a generous warranty.

Westair warrant non-service parts for 2 years from date of purchase. The warranty is conditional on the compressor being serviced regularly using genuine Westair-SCR parts. The warranty includes limited, fair and reasonable on-site labour to repair any warranty issue. All Warranties are subject to prior assessment and approval by Westair. Travel costs to site are excluded.

For a full warranty statement please contact Westair.



## Air Treatment – Clean, Dry Air Options

Whenever air is compressed, the humidity in the air becomes more concentrated. If this moisture is not removed then it can affect downstream equipment, your production or your spray paint job. Westair can select the right air treatment solution to suit your needs.

Our range includes:

- ✓ Refrigerated Air Dryers
- ✓ Coalescing Filtration (removes solids and oil vapours to as low as 0.01 micron)
- ✓ Activated Carbon Filters (removes oil odours from the air)
- ✓ Water Separators
- ✓ Vertical Air Receivers
- ✓ Condensate Drain Filtration (adsorbs oil from condensate drains)



## Option: Tank Mounted EPM20- EPM30

For ease of installation and to reduce floor space needed, the EPM20-EPM30 models are available mounted on an optional, economically priced, 366-litre dual tank base (not shown).

The EPM20 and EPM25 models are also available assembled on a 500-litre tank with a "Dry Air Pack" full air treatment system. The system includes a 1 micron pre-filter, a refrigerated air dryer and a 0.01 micron coalescing post treatment filter.

This system removes moisture to a low dew point and also treats the air for contaminants and oil vapour. This high-quality system features metal piping (not hoses), by-pass valves, differential pressure gauges and condensate drain manifold for moisture removal.



## Technical Specifications

Model	Pressure		Motor		Flow		Air Outlet	Dimensions		Noise Level weight dB(A) @ 1m
	bar	Psig	kW	hp	m <sup>3</sup> /min	cfm		LWH (cm)	(kg)	
<b>Base Mount Units</b>										
SCR20EPM-8	8	116	15	20	0.93-2.9	32-102	Rc 1"	120 x 80 x 110	460	66
SCR25EPM-8	8	116	18.5	25	1.05-3.5	37-123	Rc 1"	120 x 80 x 110	480	68
SCR30EPM-8	8	116	22	30	1.26-4.2	44-148	Rc 1"	120 x 80 x 110	650	68
SCR40EPM-8	8	116	30	40	1.8-6.1	63-215	Rc 1-1/2"	130 x 95 x 137	830	68
SCR50EPM-8	8	116	37	50	2.2-7.2	77-254	Rc 1-1/2"	130 x 95 x 137	850	69
SCR60EPM-8	8	116	45	60	2.8-9.3	98-328	Rc 1-1/2"	130 x 103 x 152	890	70
SCR75EPM-8	8	116	55	75	3.4-11.2	120-395	Rc 2"	230 x 135 x 150	1300	76
<b>366 Litre Tank Mounted (T Option)</b>										
SCR20EPM-T-8	8	116	15	20	0.93-2.9	32-102	Rc 1"	133 x 98 x 166	650	
SCR25EPM-T-8	8	116	18.5	25	1.05-3.5	37-123	Rc 1"	133 x 98 x 166	670	
SCR30EPM-T-8	8	116	22	30	1.26-4.2	44-148	Rc 1"	133 x 98 x 166	840	
<b>500 Litre Tank Mounted - Dryer Air Pack (TD Option)</b>										
SCR20EPM-TD-8	8	116	15	20	0.93-2.9	32-102	Rc 1"	197 x 101 x 173	730	
SCR25EPM-TD-8	8	116	18.5	25	1.05-3.5	37-123	Rc 1"	197 x 101 x 173	750	

*Specifications are subject to change*

*Units available in 10 bar*

*Effective volume flow m<sup>3</sup>/min measured in accordance with (ISO 1217/Annex C)*

*Mean noise level measured at a distance of 1 m. Tolerance +- 3dB(A)*

Distributed By:

**COMPRESSOR TECHNOLOGY QUEENSLAND**

**23 – 27 VICTOR STREET BORONIA HEIGHTS**

**P: 07 3133 3527 E: [sales@ctqgroup.com.au](mailto:sales@ctqgroup.com.au)**

**W: [www.ctqgroup.com.au](http://www.ctqgroup.com.au)**

