



*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 Air Technique SCR EPM - Permanent Magnet Range



The Air Technique 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 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

Air Technique 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 airend 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



Air Technique and SCR

Air Technique and SCR have partnered together to provide industry with advanced energy saving compressed air solutions.

With one of the most extensive ranges of energy saving solutions available 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 Air Technique SCR compressor, we offer the full range through our 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 Air Technique 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 Air Technique 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

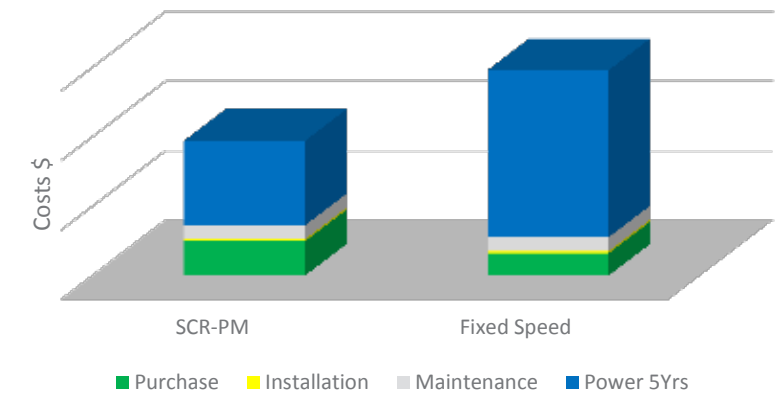


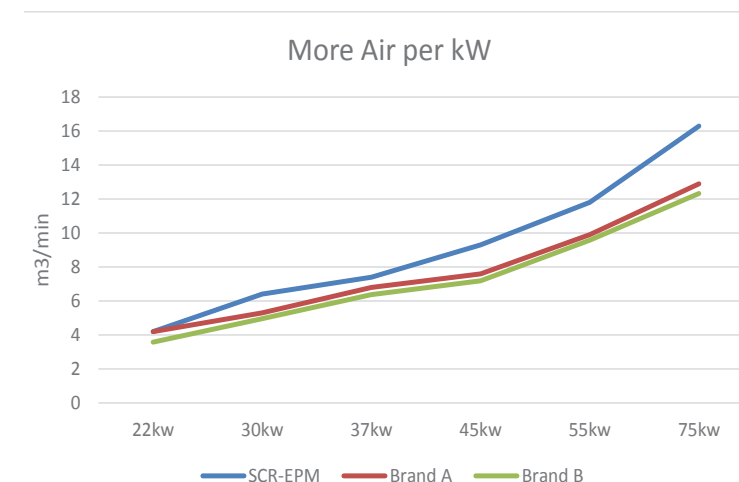
Chart compares the costs of owning a fixed-speed 45kw compressor producing 7.2m³/min (254cfm) compared to using a high efficiency 7.2m³/min (254cfm) SCR EPM 37kw VSD compressor over just a five-year period, where the fluctuating air demand in a typical workshop, equates to a loaded run time of 30% of the day.

VSD-Permanent Magnet Efficiency

The Interior Permanent Magnet (IPM) motor uses DC power 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 airend to the EPM series which delivers 10-15% more air. The size of the airend 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 7.2m³/min (254cfm) at 8 Bar, Air Technique 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 Air Technique and SCR are committed to delivering *Advanced Energy Saving Compressed Air Solutions*



Air Technique SCR- EPM Permanent Magnet Drive Features

22kW - 55 kW High Efficiency Range
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

Oversized High Efficiency Airend



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

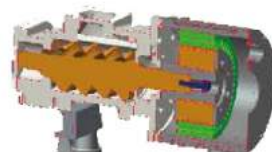
Highest IPM Motor Efficiency

- Soft start on main and fan motor
- Variable range of 30-100%
- No off load running
- Can dramatically reduce running hours & power consumption
- 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



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

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



Seamless Steel & Leak Resistant



- A high-flow, leak-proof design.
- Rigid steel piping (with high-flow characteristics)
- Eliminates oil pressure losses and the risk of rupture or oil loss through the normal ageing of traditional flexible, rubber hoses.
- All joints in the hoses employ a combination of fluorine o-ring & compression rings to offer a leak-free and vibration free operation.