

**SCR<sup>PM</sup> Permanent Magnet**  
Energy Saving Series  
Rotary Screw Compressor

# INTRODUCING THE NEW SCR PM

(Permanent magnet) VSD compressor...

The SCR PM compressor has a massive variable range that goes down to 25% of the compressors total output. If you are using less air than the SCR PM's lowest variable range, the compressor will instantly stop when up to pressure and soft starts up again when the air reaches the PM's set on load pressure. This eliminates off load running which is the largest cause of wasted energy on rotary screw compressors. The no offload running can be easily achieved due to the highly efficient European made IPM motor which has unlimited starts per hour unlike conventional motors. Not only does this save you money on your energy bills but reduces your service intervals and maintenance costs.

## An Energy Saving Revolution!

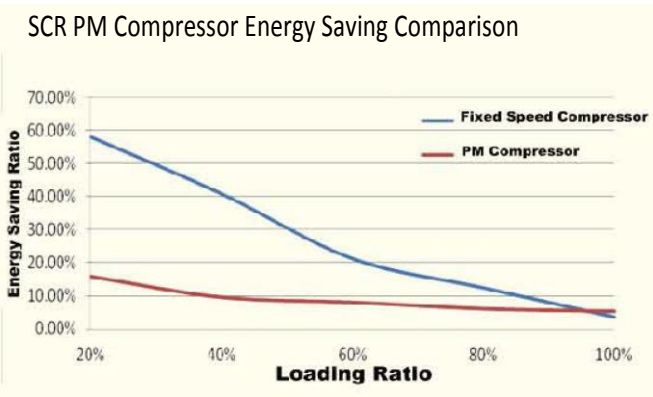
SCR are the leading innovators of compressor technology bringing out their new highly efficient PM VSD range to Australia. This game changing compressor is set to revolutionise the compressor industry. The SCR Permanent Magnet series can reduce your energy consumption by over 40%!

No offload running!



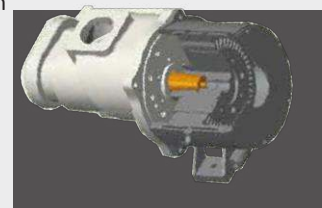
## Energy saving features:

- No off-load running (can dramatically reduce total run hours)
- Highest IPM motor efficiency, even out performing IE3 efficiency levels
- Superior Inovance Vector VSD control technology for main & fan motor
- Variable range of 25-100%
- Soft start on main and fan motor
- High Efficiency Airend
- Touch screen controller allowing you to schedule on/off times and set different pressures throughout the day/night to maximise savings
- IPM motor has no cooling fan due to being linked with the compressors oil cooling system, which in turn reduces load/amp draw on motor.
- Direct Drive (1:1 ratio) – No gearing or transmission loss
- No control solenoid

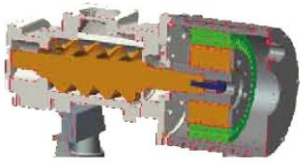


## Interior Permanent Magnet (IPM) Motor Technology

- Higher than IE3 efficiency rating
- European manufactured
- Energy saving Special Dual Cooling system
- Unlimited motor starts
- Compact design
- resistance operating temperature of 180°C
- Free bearing and grease maintenance
- Direct connection (no gearing)
- Low noise
- Minimal vibration



## 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.

## High Efficiency Airend

- Increased efficiency by 5-10%
- Large oversized rotors for low rotational speed
- Asymmetric rotor profile for increased sealing between motors
- Triple lip shaft seals
- Dual back to back taper rolling bearings
- Oil seal leak recovery system
- Low noise
- Direct Drive – No gearing or belts
- Oil and Air Leak free design



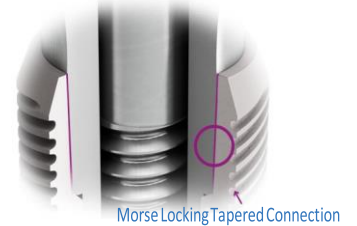
## Inovance Inverter (VSD)



The Inovance inverter has a massive 25-100% 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.

## Special Morse Connection



The Airend and motor use a morse connection which is easy for installation and dismantlement.

## 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
- Service intervals/ alarm
- Date and Time
- Day time scheduling on/off and pressure (4 different times/pressure allowed per day)
- Stop start remote
- Master slave operation (Maximum of 16 compressors)
- Fault History
- Monitoring alarms
- Supports MODBUS RTU protocol
- Power outage start-up



## 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.

## SCR PM-TD ALL IN ONE UNIT

The new SCR PM-TD All in One Unit is a compact design that consists of the 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.

### COMPACT FOOTPRINT

Small compact footprint maximises 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.

### AIR DRYER EASY TO REMOVE

The refrigeration air dryer is NOT integrated with the compressor and is fitted with a bypass. If any issues arise with the dryer, it can be easily removed without interrupting your air supply.

Stainless Steel Bypass System



### 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.



## SCR PM Series Options

- SCR PM Base Mount
- SCR PM-T Tank Mount with twin tank 366L (22KW model only)
- SCR PM-TD All in one unit (22 KW model only)

## TECHNICAL SPECIFICATIONS

MODEL	KW	HP	M <sup>3</sup> /MIN	CFM	BAR	Tank (L)	AIR OUTLET SIZE	DIMENSIONS (mm)	WEIGHT (KG)	NOISE LEVEL *DbA
SCR30PM-8	22	30	3.6	127	8	N/A	Rc 1"	1200 x 800 x 1100	520	70
SCR30PM-10			3.5	124	10			1330 x 980 x 1660	710	
SCR30PM-T-8			3.6	127	8	366L		1970 x 1010 x 1730	790	
SCR30PM-TD-8			500L							

Model	KW	HP	M <sup>3</sup> /MIN	CFM	BAR	AIR OUTLET SIZE	DIMENSIONS (mm)	WEIGHT (KG)	NOISE LEVEL *DbA
SCR50PM-8	37	50	6.3	222	8	Rc 1-1/2"	1300 x 900 x 1270	770	73
SCR50PM-10			5.8	205	10				
SCR60PM-8	45	60	8.0	282	8	Rc 1-1/2"	1300 x 900 x 1270	810	75
SCR60PM-10			7.1	251	10				
SCR75PM-8	55	75	10.1	357	8	Rc 2"	1800 x 1200 x 1550	1510	79
SCR75PM-10			8.5	300	10				
SCR100PM-8	75	100	13.3	470	8	Rc 2"	1800 x 1200 x 1550	1550	79
SCR100PM-10			11.8	417	10				

KW	HP	M <sup>3</sup> /MIN	CFM	BAR	DN	*dBA
Kilowatt	Horse power	Cubic meter per minute	Cubic feet per minute	Pressure system	Diameter nominal	At 1 metre