

37-160 kW Premium Efficiency Nirvana Oil Free Rotary Screw Compressor



Unleashing the full potential of True variable frequency drive technology

If you have a critical oil-free application requiring the lowest operating cost, you can't afford to take chances with a compressor system that delivers anything but the absolute highest quality air, reliability, and efficiency. Not a problem with an Ingersoll Rand Nirvana – the world's first true variable-speed drive (VSD) oil-free compressor system.

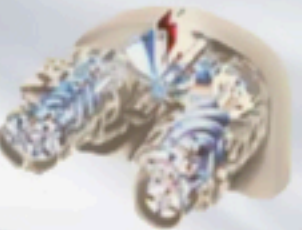


All standard Nirvana features+



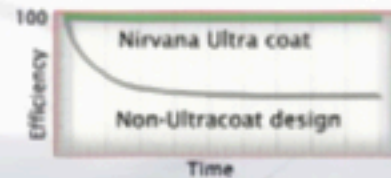
Reliable airend coupled with HPM motor

- Fewer rotating parts than any other rotary air compressor in its class
- Constant and high efficiency HPM motor
- Ingersoll Rand's time-proven, reliable and efficient two-stage oil-free airend



Advanced two stage airend design

- Time proven oil-free 2-stage airend combined with innovative, market leading Nirvana HPM motor
- Rotors coated with UltraCoat - the most durable rotor coating available



Unmatched efficiency through the life of compressor

- UltraCoat has no degradation for the most air delivered per input power



UltraCoat

- Ingersoll Rand's exclusive UltraCoat rotor and housing coating process uses a mechanical and chemical bond to insure the thinnest coating with the tightest possible grip.
- UltraCoat has proven to be unmatched in its performance
- UltraCoat delivers longer life and 10% energy savings

Nirvana Advantage

Limitless starts and stops

Nirvana is designed to start and stop limitlessly to meet your compressed air demands while never going above full-load amps. HPM motor technology also has unmatched efficiency throughout the turn-down range, providing savings no matter what your demand profile requires.

No wasted energy

The Nirvana HPM motor requires less power at start-up, never operates at more than full-load amps, and shuts down immediately at minimum speed to avoid wasted energy. Nirvana ensures constant pressure throughout the entire operating range. At start-up, induction motors require a power surge of up to twice full-load current in order to overcome initial inertia. They also run unloaded when demand is below minimum, reducing efficiency and driving up energy costs.

Proven airends

Our rotary-screw airends deliver full potential through unparalleled rotor profile accuracy and repeatability. Stainless-steel rotors are used in the demanding second stage for maximum corrosion resistance. UltraCoat surface coating is also applied to the rotors and all housing surfaces for unmatched durability and performance.

Simpler and more reliable

The Nirvana HPM motor has fewer moving parts, and flanges directly onto the compressor drive shaft, making the motor more reliable and 100% maintenance-free. Its bearing-free design eliminates the need for greasing or replacing motor bearings. The HPM motor is also designed to operate continuously in temperatures up to 115° F (46° C).



A revolutionary motor coupled with advanced controls and proven compressor technologies

| Model (HPM Style) | Nominal kW | Free Air Delivery m ³ /min (cfm) | | | Length mm | Width mm | Height mm | Weight kg |
|-------------------|------------|---|------------|------------|-----------|----------|-----------|-----------|
| | | 7 bar g | 8.6 bar g | 10.3 bar g | | | | |
| IRN37K-OF | 37 | 5.66(200) | 5.07(179) | 4.50(159) | 2080 | 1120 | 2030 | 1632 |
| IRN45K-OF | 45 | 6.71(237) | 6.20(219) | 5.61(198) | 2080 | 1120 | 2030 | 1632 |
| IRN55K-OF | 55 | 9.37(331) | 8.47(299) | 7.62(269) | 2080 | 1320 | 1950 | 2045 |
| IRN75K-OF | 75 | 12.32(435) | 11.33(399) | 10.42(369) | 2080 | 1320 | 1950 | 2045 |
| IRN90K-OF | 90 | 15.40(544) | 13.70(484) | 12.10(428) | 2570 | 1830 | 2440 | 3222 |
| IRN110K-OF | 110 | 18.80(664) | 17.10(604) | 15.40(544) | 2570 | 1830 | 2440 | 3222 |
| IRN132K-OF | 132 | 22.30(787) | 20.40(720) | 18.60(657) | 2570 | 1830 | 2440 | 3222 |
| IRN160K-OF | 160 | 25.60(904) | 24.40(862) | 22.80(805) | 2570 | 1830 | 2440 | 3222 |

(1) FAD (Free Air Delivery) m³/min are ratings of full package performance in accordance with CAGI-PNEUROP acceptance test standard Pv2CPTC2 or ISO 1217: 1996 Annex C.
 (2) For detailed technical specifications please refer to our technical offer.