

SyMAX™ IHP

VARIABLE SPEED PERMANENT MAGNET AC INTEGRAL HORSEPOWER MOTOR

Designed for compressors, pumping, material handling, mixers, air moving, commercial and industrial machinery and other applications requiring a mission critical motor.

The SyMAX™ IHP motor incorporates a radial flux design which delivers high torque, ultra high efficiency and increased power density, providing system maximization.



SPECIFICATIONS

- Totally enclosed, fan cooled (TEFC)
- Ultra-Efficient™ IE4 (above NEMA Premium)
- Torque: 10-100 lb/foot, 13.5-135 Nm
- 230 & 460V AC three-phase input, 60 Hz
- NEMA 182-286T and optional IEC 112-180 frames
- IP55-rated enclosure
- Interior Permanent Magnet (IPM)
- C-Face and rigid base
- UL and cUL recognized component
- CSA Certified
- CE Mark

FEATURES

- MAX GUARD® insulation system
- Cast-iron (182-286T) construction
- Suitable for use on a PWM permanent magnet drive in variable or constant torque mode
- F1, F2 or F3 terminal box configuration
- Omni-mount™ 360° mounting
- Continuous duty at 40°C ambient
- Three year warranty

BENEFITS

- Provides commercial and industrial users with the highest efficiencies available
- Performance Matched™ to today's state-of-the-art PWM permanent magnet drives
- High dynamic response due to a lower torque-to-inertia ratio than equivalent induction motors
- Incredible system maximization when used to eliminate gear boxes, sheaves and belts and chains in applications
- Lower operating temperatures
- Decreased vibration
- Sensor-less feedback is possible when used with open-loop permanent magnet drives, mitigating reliability issues and costs associated with encoders
- Durable cast-iron construction provides long life in the most strenuous environments
- IP55 protection for mission critical applications requiring a higher degree of protection against the entry of dust and other contaminants

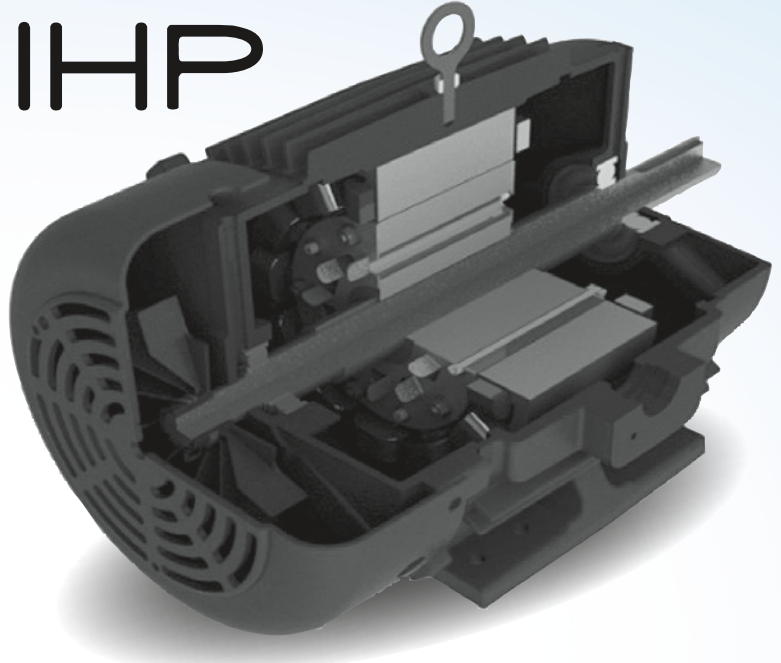
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MAXIMIZE ENERGY SAVINGS WITH THE NEW LINE OF ULTRA-EFFICIENT™ MOTORS

SyMAX™ IHP

SyMAX™ defines the next generation of power

SyMAX™ IHP is a permanent magnet AC (PMAC) motor that is Performance Matched™ with today's state-of-the-art PWM permanent magnet drives. SyMAX™ IHP incorporates a radial flux design which delivers high torque, ultra high efficiency and increased power density, providing incredible system maximization. Due to its innovative permanent-magnet design, SyMAX™ IHP is inherently more efficient than traditional induction motors, providing the highest efficiencies available. It meets IE4 efficiencies with 15 percent fewer losses than the equivalent NEMA Premium motor.



Designed for Mission Critical applications

The SyMAX™ IHP motor is lighter than a typical induction motor and features a totally enclosed fan cooled (TEFC) construction with shielded bearings and shaft seal. It also features the patented MAX GUARD® insulation system which combines corona resistant magnet wire and a unique low stress winding configuration to deliver long, dependable motor life in the most strenuous environments. The motor's IP55-rated enclosure also makes it perfect for applications in industries that require a higher degree of protection against the entry of dust, water and other contaminants.

Outstanding performance

The SyMAX™ IHP motor offers outstanding performance compared to an equivalent induction motor. It has a very high torque-to-inertia ratio and offers a higher dynamic response resulting in consistent and repeatable machine performance. Its radial flux design delivers high torque providing the potential to eliminate gearboxes, sheaves and belts and chains in certain applications.

Neo rare earth magnets for energy savings and two-year return on investment

Shallowly embedded and fully encased for long life, the SyMAX™ IHP motor's neo rare earth magnets allow for significant energy savings. These permanent magnets make the SyMAX™ IHP motor inherently more efficient than traditional induction motors and perfect for commercial and industrial machinery, pumping, air moving and other applications requiring Ultra-Efficient™ permanent-magnet high-power density.

Annual Energy Savings	
8¢/kWh*	up to \$216
12¢/kWh*	up to \$325

*Amount of savings cited is compared to energy costs for an equivalent EPAAct 10HP, 1800 RPM induction motor and is based on 12 months per year use. Individual results may vary.

Easy installation and operation; drive neutral

The SyMAX™ IHP motor is designed as a drop-in replacement for an equivalent induction motor and is suitable for use on a VFD with constant torque from zero to base speed.

Demonstrated industry leadership

The SyMAX™ IHP motor is built by the same company that invented the electronically commutated motor which is used in millions of heating air-conditioning systems over the past 20 years.



Replaceable ball-bearing construction means longer life and easy replacement.



Durable cast-iron construction provides long life in the most strenuous environments.

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