

# XSD Ultra<sup>®</sup> 841 IEC

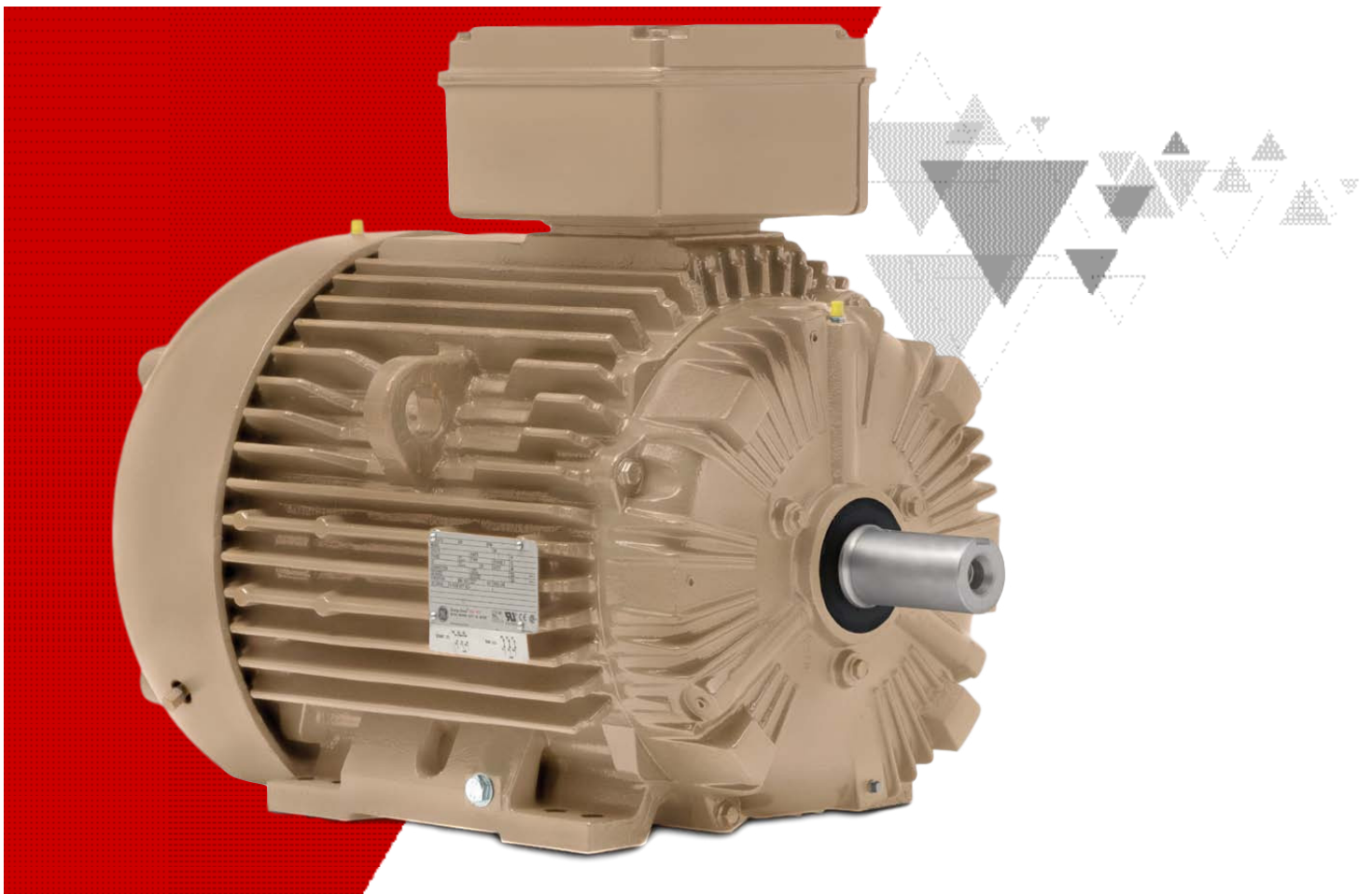
Extra Severe Duty Motors (IP55)

IE3 High Efficient

0.55-220 kW

50 Hz or 60 Hz

200 V - 690 V



# Expect more from your GE motor.

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XSD Ultra 841 IEC motors are built on more than 20 years of industry experience in extra severe duty motor applications. They are specifically designed with features that meet or exceed the intent of IEEE 841-2009, the “gold standard” for the petrochemical and process industries.



## Key Features:

### Efficiency

- IE3 Premium Efficient

### Reliability

- Inverter duty capability
- GEGARD2400™ insulation system
- Six Star Bearing System™
- Low vibration / provisions for vibration monitoring
- Low Class B temperature rise
- Cast iron construction
- 5 Year Warranty

### Safety

- 4-point Cast-in lifting lugs
- Extended grease fittings

## **What is the IEEE 841-2009 standard, and what does this mean for your application?**

Many of the specified materials and components in this standard stem from experience with severely corrosive atmospheres and the necessity for safe, quiet, reliable, high efficiency motors.

## **It means that each XSD Ultra 841 IEC motor delivers even more.**

XSD Ultra 841 IEC vibration standard of 1.4 mm/sec peak is 50% less than IEEE 841-2009 standard of 2.03 mm/sec, plus the total shaft runout does not exceed 0.025 mm for shaft diameters up to 41 mm, and 0.038 mm for those greater than 41 mm for ball bearing machines. These factors help extend the life of the motor and connected equipment.

# Get More For Your Application

Maximizing your investment means getting the most from the motors you choose. More than just getting the job done, motors must be dependable, rugged and built to last. Your application demands the best, and Wolong delivers.



## Industries

- Petrochem / Oil & Gas
- Utilities & Power Generation
- Pulp & Paper
- General Process Industries

## Applications

- Fans, Pumps
- Compressors, Conveyors
- And many others

- The steel reinforced recessed slinger, integrated into the drive end and non-drive end, ensures IP55 protection of the bearing system.
- Low temperature rise designs help increase bearing life, and are on average 15% cooler than the class B 80°C rise specified by the IEEE 841-2009 standard.

- Epoxyester paint system meets the IEEE specification and stands up to the corrosive environments of the petrochemical and process industries.
- The non-hygroscopic, chemical and humidity resistant insulation system ensures long and reliable operations.

- Sound levels of < 90 dBA meet or exceed the requirements set by the IEEE 841-2009 standard.
- A rigorous 5 point test report of each motor ensures the XSD Ultra 841 IEC meets the demanding performance requirements for harsh application environments.

# XSD Ultra 841 IEC motors are built to a higher standard.

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## Six Star Bearing System™

Bearings, the life force of a motor, are what keep the XSD Ultra 841 IEC running smoothly. These features protect and lubricate the bearings, adding to the durability and longevity of the XSD Ultra 841 IEC.

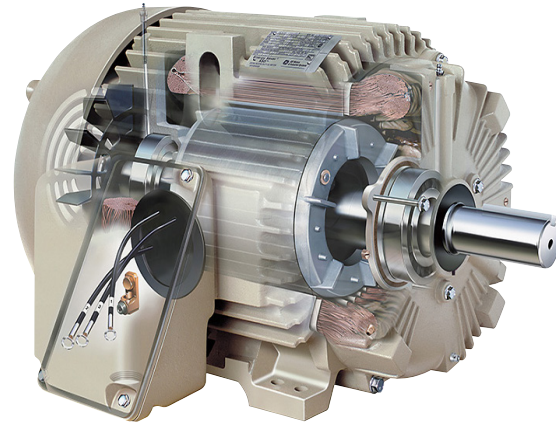
- Oversized bearings on both ends of the motor offer optimum performance.
- Cast-iron bearing caps with gaskets retain lubrication and protect the bearing system from contaminants.

## Safety

- Safer lifting is possible with a four point lifting system versus a single eyebolt. Cast-in lifting lugs eliminate eyebolts that may strip, shear, get lost or be improperly selected.
- Extended grease fittings for easy and safe access.

## IEC Design Electrical Design

- Normal starting torque and low inrush current
- Low temperature rise designs – 15% cooler on average than IEEE standards – increase bearing life
- Overall vibration of 1.4mm/s peak results in smooth, reliable operation and extends bearing life.
- 130,000 hour L10 direct connected and 26,280 hours belted bearing life increases uptime and decreases maintenance costs.
- Full charged lubrication system with a temperature resistant polyurea grease, suitable for a wide temperature range (-40°C to +130°C).



Rotor assembly balanced to ISO 1940 Grade 1.0 for low vibration. The vibration level is 50% lower than the requirement of IEEE 841-2009 Standard and can increase bearing life by as much as 60%.

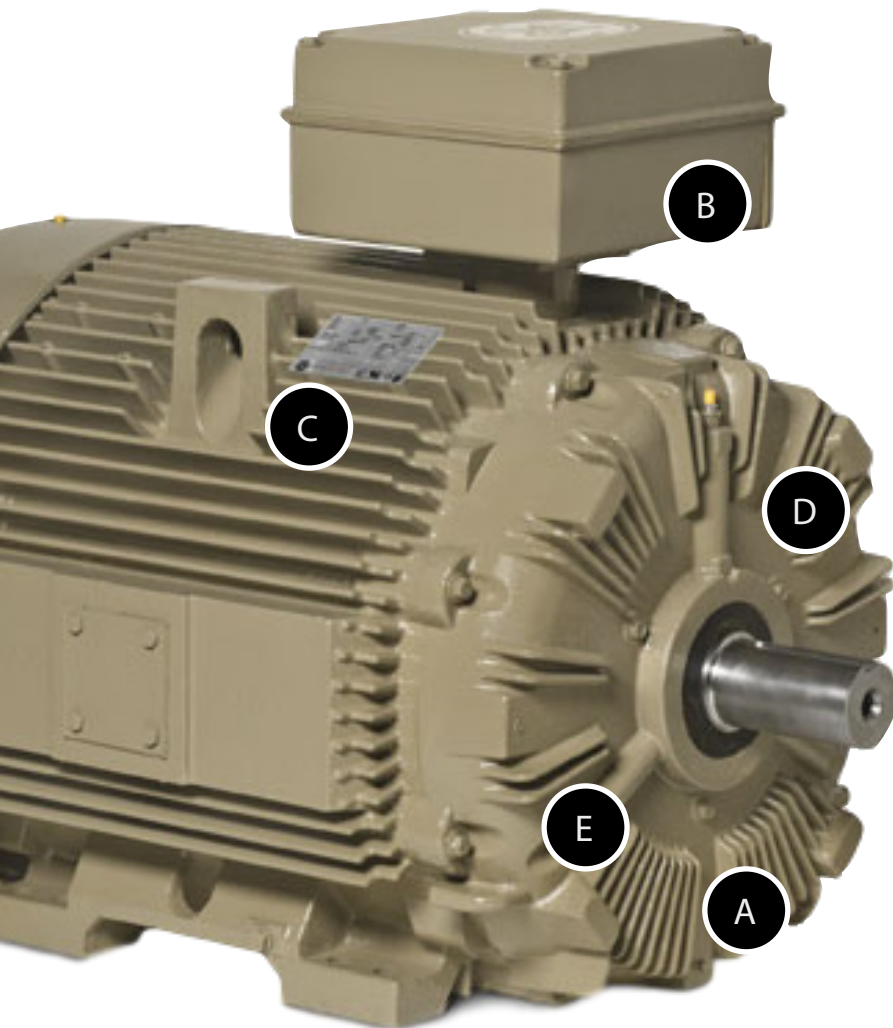
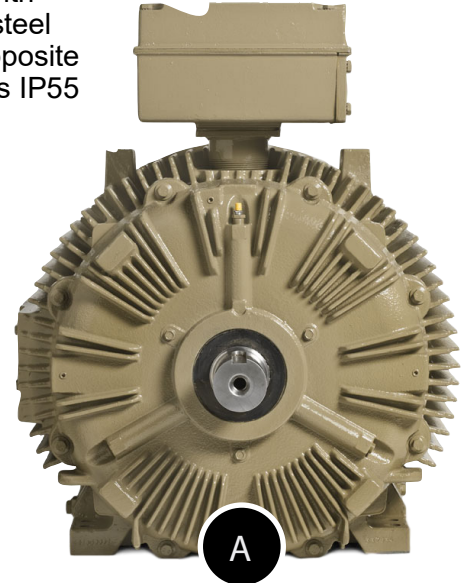


# Severe Duty Construction Gives More Assurance

The XSD Ultra 841 IEC has a rugged, all cast iron construction with corrosion resistant ISO Grade 8.8 metric hardware. A recessed steel reinforced neoprene slinger is used on both the drive end and opposite drive end for better protection from outside elements and ensures IP55 protection.

Terminal block and bronze ground terminal inside the terminal box provides quick and easy connection of the lead wires to the connection block with removable gland plate.

Oversized, gasketed IP-56 conduit box with lead separation gasket and conduit box cover restricts moisture and contaminants from entering the motor.



**Stainless Steel combination breather/drains allow condensation to drain from the motor.**



**Epoxyester paint system provides corrosion resistance inside and out, and meets IEEE 841 paint requirements.**



**Embossed 316 stainless steel nameplate on the motor contains alternate 50Hz data.**



**Finned endshield for improved heat dissipation and long bearing life (IEC 200-280 frames).**



**The XSD Ultra features unique, cast-in vibration pads so users can monitor shaft/bearing vibrations as part of their preventative maintenance program.**

# Premium Efficient motors deliver more bottom line savings.

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## IE3 Premium Efficiency

One of the greatest benefits of the XSD Ultra 841 IEC is its efficiency rating. XSD Ultra 841 IEC motors exceed all IE3 minimum guaranteed efficiency levels and the minimum efficiency levels stamped on the nameplate are guaranteed.

In addition to meeting the IE3 Premium Efficiency Standards, the XSD Ultra 841 IEC motors meet World Zone 2, which includes ATEX, IEC Ex Zone 2 and Class 1, Div. 2, CE Mark. Our Premium Efficient design lowers annual energy cost and extends motor life without any sacrifice in performance.



XSD Ultra 841 IEC motors are the first in the market with IEEE 841 features to meet the demands of the process industry.

# Engineered reliability means more uptime operation.

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## Insulation System

**GEGARD2400™** insulation systems feature Class H insulation materials and exceeds IEC TS 60034-25 requirements by 60% at 400V. All motors are 100% tested to verify the corona inception voltage prior to shipment.

- Trickle treat varnish system provides a reliable and consistent encapsulation of the stator winding and utilizes a fully automated computer controlled process.
- Low temperature rise designs provide more thermal margin than industry-standard designs and maximize the bearing and winding life of the motors.

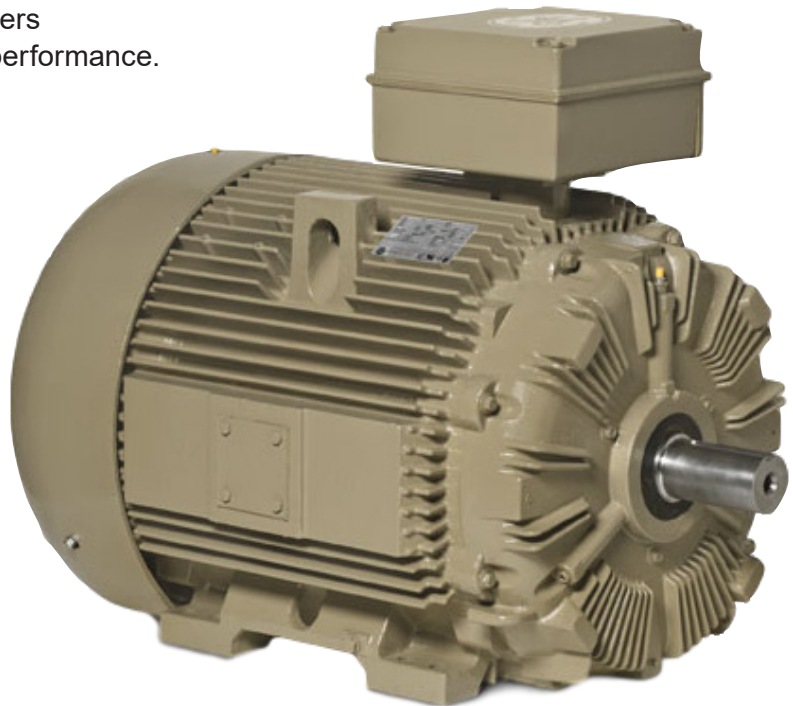
## Optional AEGIS Shaft Grounding Rings

- Variable frequency drive operation for energy savings and reduced operating costs.
- Eliminates bearing currents and failures due to erosion.
- Lifetime guarantee against bearing fluting.

## Better built, better performing, better motors.

**XSD Ultra® 841 IEC Motors—You can expect more.**

5-year manufacturer warranty is standard for the XSD Ultra 841 IEC motors. This comprehensive warranty program covers mechanical, electrical and efficiency performance.



# WOLONG

*Power your future*



[www.wolongamerica.com](http://www.wolongamerica.com)

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GEA18014 (12/2023)