

PRODUCT NOTE

### **Baldor-Reliance® IEEE 841XL**

# Extended reliability for severe duty applications



Our line of 841XL motors are designed to meet and exceed the requirements of IEEE Std. 841-2009. This industry standard was created for the petroleum and chemical industry to improve the reliability, efficiency and performance of Severe Duty motors used in those applications — and has been adopted by other industries with harsh operating environments.

BALDOR · RELIANCE



#### Reliable

Its rugged design and extra- tough features minimize vibration, runs cooler with our patented PLS lubrication system providing low-maintenance service in moist, contaminated, or harsh environments.



#### Easy to install

It's all in the details – from oversized conduit boxes, lead separators, color leads, foot flatness, vertical jack screw holes, dowel pin holes, embossed stainless steel nameplates – this motor has got it all.



#### Safety

From the installation process to operating process – these motors are certified to be used in hazardous locations (Class I, Division 2).



#### **Protection**

Used in some of the harshest environments – the IEEE 841 has all the protection a motors needs with premium sealing and IP56 ratings.



### Rugged

Heavy-duty cast-iron construction, corrosion resistant epoxy finish, and premium efficient electrical designs are backed by a 5-year warranty.



### Globally recognized standards

IEEE 841XL exceeds the IEEE standard 841-2009 and meets NEMA Premium® efficiency standards.

# **IEEE 841XL**



#### **Specifications**

Power range	1 thru 300 Hp
NEMA frame size	143T – L449T
Voltage	460 and 575 volt
Mounting	Foot mounted, C-Face (foot mounted and footless) and vertical p-base
Ingress protection	IP56 (Exceeds the IP55 requirement of IEEE 841)
Bearing	Patented PLS lubrication system for bearing longevity
Sealing	Non-contact, rotating labyrinth seal – DE & ODE
Mechanical design	Durable cast-iron end-shields are machined to close tolerances for exacting alignment of bearings and rotors
	All hardware is hex head, high strength and zinc-plated SAE
	Vertical jacking provisions. 250 frame and above
	Dowel pin holes. 250T frame and above
	Grease inlet and auto relief fittings
Electrical design -	Inverter ready per NEMA MG1 Part 31.4.4.2
	Class F insulation with Class B rise @1.0 service factor
	NEMA Design B torques as a minimum
	Lead lugs
Certification and tests	Class I, Division 2, Groups A, B, C, D with T3 at 1.0SF
	Meets and exceeds IEEE Std. 841-2009
	Meets and exceeds IEEE 45 on nameplate
	Documented final motor test – ships with motor
	Epoxy paint system exceeds 300+ hour salt fog test per ASTMB117
Other IEEE 841 requirements	Foot flatness within 0.005 inches for precision alignment to driven equipment
	Draft angle on top of mounting feet is 1.5° or less to make proper mounting easier
	Vibration limits 0.08 in/s peak velocity
	All internal rotor, stator and shaft surfaces are epoxy coated
	Embossed stainless steel nameplates include all required NEMA data plus actual motor weight and guaranteed minimum efficiency
	5-year warranty
Only from ABB	ABB Ability™ smart sensor for condition monitoring

Red text = specifications go beyond IEEE 841 requirements

ABB Motors and Mechanical Inc. 5711 R.S. Boreham, Jr. Street Fort Smith, AR 72901 Ph: 1.479.646.4711