

# Process Motors

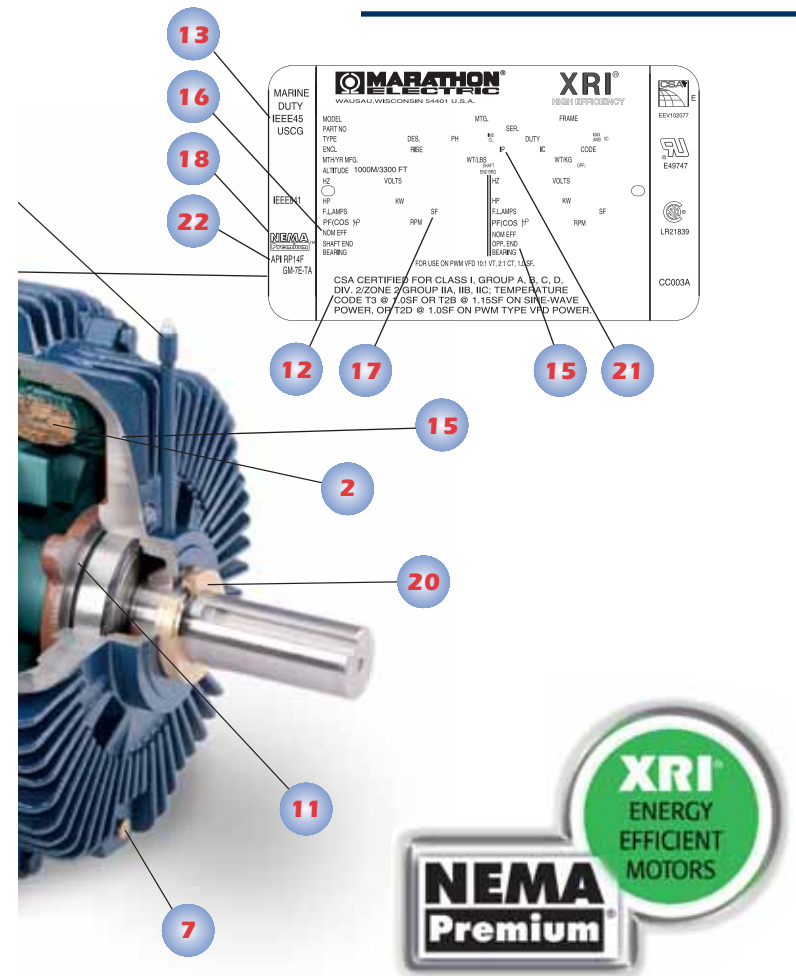


*Motors for the Long Run!*



## Applications in the Process Industries...

### Blue Chip XRI®-Severe Duty Motors...



#### Blue Chip XRI®-SD Features

- 15. AFBMA bearing identification on nameplate
- 16. Guaranteed efficiency is one index below nominal full load efficiency
- 17. 1.25 Service factor (sine wave) available up through 40 HP
- 18. Meets NEMA Premium® efficiency levels

*Three year warranty*

*Actual test and vibration data sent with each motor*

#### Additional Blue Chip XRI®-841 Features

- 19. External grounding provisions
- 20. Inpro/Seal® VBX® Bearing Isolator on drive end shaft
- 21. Meets NEMA MG1-1.26.6 Waterproof specification
- 22. Meets Marine Duty API RP14F for offshore platforms, IP56 Construction

*Five year warranty*

*Actual test data plus two additional vibration tests are supplied with each motors*

The Blue Chip XRI®-SD motors build upon the outstanding features of our Blue Chip XRI® Ultra High efficiency motors. The Blue Chip XRI®-SD motors are engineered, designed, and individually tested to meet the toughest motor applications that the process industries have to offer. The motor incorporates all cast iron construction; frame, fan guard, conduit box, and end shields along with high efficiencies and a premium design that reduce motor losses while increasing motor life and reliability.

The Blue Chip XRI®-SD motors have internal and external epoxy protection for additional corrosion resistance, a lead separator, and an extended grease inlet on both ends, providing a maintenance friendly product.

Marathon's Blue Chip XRI®-SD motor offers a much lower vibration level than the NEMA vibration standard of .15 inches per second velocity. The Blue Chip XRI®-SD is precision balanced to an average vibration of 0.03 inches per second. Every motor is subjected to a complete vibration analysis, the results are tabulated and shipped with each unit.

### Blue Chip XRI®-841 Motors...

Our Blue Chip XRI®-841 motor exceeds the industry's toughest motor standard in the IEEE standard 841, while simultaneously beating the competition hands down when comparing energy efficiency levels.

The Blue Chip XRI®-841 motor is an ultra high efficient motor that meets NEMA Premium® efficiency levels. The Blue Chip XRI®-841 incorporates 100% copper windings, copper-to-copper connections, low-loss electrical grade steel laminations, precision balancing, and epoxy coatings along with a low temperature rise that ensures superior performance in the harshest environments.

All totally enclosed non-vent motors are constructed with Inpro/Seal® VBX® Bearing Isolators on the shaft end while all totally enclosed fan cooled motors have the Inpro/Seals® on both the shaft end and non-drive end. This standard feature prevents bearing contamination and premature failure.

Our MAX GUARD® insulation system combines corona-resistant magnet wire and a unique "low stress" winding configuration with uncompromised quality standards to deliver long, dependable motor life.

# The Blue Chip® Motor Group:

Motors for the Long Run!

Specifications	Features	Blue Chip	XRI	XRI-SD	XRI-841
Enclosures	143-145T frame TENV ▪ 182T-449T frame TEFC	✓	✓	✓	✓
Construction	Cast iron frames and end shields	✓	✓	✓	✓
Fan (External)	Non-sparking polypropylene Non-sparking polypropylene 364T-449T	✓	✓	✓	✓
Fan Guard	Cast iron Polypropylene 182T-286T ▪ Cast iron 324T-449T	✓	✓	✓	✓
Conduit Box	Steel 143T-326T ▪ Cast iron 364T-449T Cast iron, oversized, fully gasketed with NPT threaded opening	✓	✓	✓	✓
Bearings & Lubrication	Shielded ball bearings ▪ Select ratings above 125 HP have roller bearing on drive-end ▪ C-3 fit with premium Mobil Polyrex EM grease (-30°C to +150°C) Zerk fittings Extended grease tubes for regreasing without disassembly	✓	✓	✓	✓
Bearing Caps	Cast iron, 254T-449T frame Cast iron, 444T-449T frame	✓	✓	✓	✓
Drains	Corrosion resistant brass drain and breather Drilled and tapped hole Drain hole 143T-326T ▪ Drilled and tapped hole 364T-449T	✓	✓	✓	✓
Slinger	Molded neoprene slinger on shaft end	✓	✓	✓	✓
Voltage	230/460 volt through 100 HP ▪ 460 volt - 125 HP & above 575 volt available ▪ 230/460 volt available 460 volt or 575 volt, 3 leads	✓	✓	✓	✓
Leads	Lead lugs standard 364T frame and larger Permanently marked leads with lead separator	✓	✓	✓	✓
Service Factor (Sine Wave)	1.15 1.25 (through 40 HP)	✓	✓	✓	✓
Insulation	Non-hygroscopic class F insulation ▪ 449T class H insulation MAX GUARD®	✓	✓	✓	✓
Inverter Duty	Rated for 10:1 VT or 20:1 CT VFD Nameplated for 10:1 VT, 2:1 CT or 10:1 CT VFD	✓	✓	✓	✓
Nameplate	Stainless steel - includes NEMA nom. eff., power factor AFBMA bearing identification plate	✓	✓	✓	✓
Marine Duty	Meets IEEE45 and USCG Meets API RP14F for offshore platforms	✓	✓	✓	✓
Agency Listings	UL recognized file no. E49747 and CSA certified	✓	✓	✓	✓
Division 2	CSA certification nameplate, Class I Groups A, B, C, & D, Temperature code: T2B	✓	✓	✓	✓
Seals	Inpro/Seal® VBX® Bearing Isolators on drive end of TENV and on both ends of TEFC	✓	✓	✓	✓
Epoxy Finish	Internal and external corrosion resistant epoxy	✓	✓	✓	✓
Hardware	Corrosion resistant zinc dichromate plated hex head hardware ▪ Lifting provisions, 182T-449T frame	✓	✓	✓	✓
Ground	Ground lug provision in conduit box External grounding provision	✓	✓	✓	✓
Balance	Special balance average .03 in/sec	✓	✓	✓	✓
Warranty	24 mo. from date of first use.,30 mo. from date of manufacture 36 mo. from date of first use.,42 mo. from date of manufacture 60 mo. from date of first use.,66 mo. from date of manufacture Optional extended warranty	✓	✓	✓	✓
Motor Testing	Actual short commercial test data supplied with each motor Actual short commercial test data plus max. vibration test supplied with each motor Actual short commercial test data plus 2 additional vibration tests are supplied with each motor	✓	✓	✓	✓



**Blue Chip®**  
Meets EPACT and Canadian NRCAN



**Blue Chip XRI® - Ultra High**  
Meets NEMA Premium® Levels



**Blue Chip XRI® - Severe Duty**  
Meets NEMA Premium® Levels



**Blue Chip XRI®-841**  
Meets IEEE 841 Motor Specifications  
Meets NEMA Premium® Levels



For more information contact :



A REGAL-BELOIT COMPANY

P.O. Box 8003 ▪ Wausau, WI 54402

Phone: (715) 675-3311 ▪ Fax: (715) 675-8030

