



BLUE CHIP SERIES® XRI® | 56/140 FRAME

HAZARDOUS DUTY® MOTORS

REGAL®

HAZARDOUS DUTY® DIVISION 1

EXPLOSION PROOF MOTOR

Regal has been a pacesetter in the design and production of explosion proof motors for over 50 years. Our Hazardous Duty® family of motor products continues to lead the motor industry in efficiencies and performance in the toughest of industrial applications.

Each Marathon® motor is a combination of features and materials carefully engineered to provide a reliable, efficient, and long lasting motor. Our Blue Chip Series® XRI® Severe Duty explosion proof motor incorporates all cast iron construction for extreme environments, while our rolled steel 56/140 motors are lightweight and durable. These motors are suitable for use on fans, blowers, pumps and compressors that require an explosion proof rating.

Additional designs and mounting configurations are available.



56 frame rolled steel C-Face Footed



56 frame rolled steel C-Face Footless



Cast iron C-Face Footed



Cast iron C-Face Footless

BLUE CHIP SERIES® XRI®

SEVERE DUTY EXPLOSION PROOF MOTOR

Marathon® Blue Chip Series XRI® Severe Duty explosion proof motors meet or exceed NEMA Premium®* efficiency levels when high performance counts. The Blue Chip Series XRI motor boasts one of the highest overall efficiency levels and offers features that perform in the most extreme environments.

A full Class F insulation system with a low Class B temperature rise substantially improves both insulation and lubrication life.

FEATURES

- **Construction** - Cast iron frame, end brackets, and fan cover, epoxy coating on external surfaces; brass drain and breather
- Epoxy paint for extreme environments where contaminants may cause premature motor failure.
- **IP54** - Enclosure protection against dust and water
- **Max Guard® Motor Insulation System** - Class F with Class B temperature rise at 1.0 service factor
- **Bearing System** - Oversized bearings with bearing caps, L-10 life of 100,000 hours for direct coupled loads
- **Hardware** - Zinc dichromate hardware
- 100% copper windings with low loss steel laminations
- **Inverter Rated** - Variable and constant torque rated
- **BCP™ Bearing Current Protection** - Mounted internally



*NEMA Premium is the trademarks of the National Electrical Manufacturers Association and is not owned or controlled by Regal Beloit Corporation.

56/140 FRAME

EXPLOSION PROOF MOTOR

Marathon® 56/140 frame explosion proof motors are designed and built tough for a variety of hazardous locations: petroleum refineries, chemical processing plants and granaries to name a few.

Our 56/140 frame explosion proof motors are available in single and three phase and from 1/12 through 2 horsepower in Class I Groups C & D, Class II Groups F & G (Group E available on 143-145 frame). Mounting configurations include: rigid base, C-Face Footless, C-Face Footed, resilient and through-bolt designs.

FEATURES

- Construction - Rolled steel frame, end brackets
- Corrosion resistant polypropylene fan and fan cover are non-sparking
- Powder paint for extreme environments
- Explosion proof conduit box included
- Thermostat or automatic thermal protection
- Double sealed ball bearings
- Meets UL* temperature code T3B
- Full class F insulation system with low Class B temperature rises, substantially improves both insulation and lubrication life.



*UL is the trademark of Underwriters Laboratories LLC.

QUALITY MOTORS THAT RUN IN THE TOUGHEST APPLICATIONS:



| Specifications | Hazardous Duty® Motor Features | XRI® Severe Duty | Severe Duty |
|--------------------------------|--|------------------|-------------|
| Frame Material | Cast Iron (143 - 449) | • | |
| | Rolled Steel (48 - 145) | | • |
| Enclosures | Explosion proof - Fan cooled or Non Vent | • | • |
| Division 1 Area Classification | Class I Groups C & D, Class II Groups F & G | • | • |
| Temperature Code | T3B | • | • |
| Fan (External) | Conductive polypropylene | • | • |
| Fan Guard | Plastic on 48-56, rolled steel on 143T-145T frame | | • |
| | Cast iron on 182T- 449T frame | • | |
| Conduit Box | Cast iron, rotatable to accept conduit from any side | • | • |
| Bearing Protection | BCPT™ Bearing Current Protection | • | |
| Bearings & Lubrication | Shielded ball bearings, C-3 fit with premium grease rated (-30 Deg.C to +150 Deg. C) | • | • |
| Bearing Caps | Cast iron 213T- 449T frame | • | |
| Bearing Lock | C-face motor 48 - 256TC frame | • | • |
| Drains | Corrosion resistant brass drain & breather | • | |
| Slinger | Molded neoprene slinger on shaft end | • | • |
| Voltage | 230/460 volt through 100 HP, 460 Volt 125 HP & above | • | • |
| | 575 volt available | • | • |
| Leads | Lead lugs standard 364T frame & larger | • | |
| | Permanently marked leads with lead separator | • | • |
| Service Factor | 1.15 on sinewave, 1.0 on VFD power | • | |
| | 1.0 on sinewave (1.0 on VFD as noted) | | • |
| Insulation | MAX GUARD® Class F insulation system | • | |
| | Corona resistant magnet wire | • | • |
| Nameplate | Stainless steel, includes NEMA®* nominal efficiency & power factor | • | • |
| Agency Listings | CSA certified under file nos. LR47504 and LR21839 | • | • |
| | UL listed under file no. E12044 | • | • |
| Epoxy Finish | Internal corrosion resistant epoxy | • | |
| Paint | Powder paint on 48-145T | • | • |
| | Epoxy paint over primer on 182T-449T | • | |
| Ground | Ground lug provision in conduit box (182T & larger) | • | |
| Balance | Special balance maximum .08 in/sec. | • | |
| Inverter Rated | Nameplated 10:1 Variable torque/ up to 10:1 Constant torque (see product catalog or website for specific rating) | • | |
| Warranty | First of 24 mo. from date of first use / 30 mo. From date of mfg. | | • |
| | First of 36 mo. from date of first use / 42 mo. From date of mfg. | • | |
| Motor Testing | Actual test data supplied with each motor | • | |

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APPLICATION CONSIDERATIONS

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