



### INDUSTRIAL ENDURANCE SERIES<sup>™</sup> LARGE NEMA<sup>®</sup> AND IEC<sup>®</sup> AC LOW & MEDIUM VOLTAGE MOTORS

JANUARY 2022 | NORTH AMERICA, LATIN AMERICA



fra Regal Rexnord

# ENDURANCE SERIES

LARGE, ROBUST MOTORS FOR HEAVY DUTY AND EXTREME APPLICATIONS

### The Marathon<sup>®</sup> Endurance Series<sup>™</sup> motors are the right choice for applications demanding ruggedness and high reliability.

Users recognize the value of Marathon<sup>®</sup> motors and their ability to support multitude applications with high efficiency and longer performance. Every Marathon Endurance Series<sup>™</sup> Motor is backed by more than 100 years of manufacturing experience, plus state-of-the-art engineering and production, along with comprehensive service, starting in the earliest planning stages of your motor.

#### **STANDARD FEATURES**

**Conduit box** is large size and built of cast iron or fabricated steel. IEC<sup>®</sup>\* frame medium voltage motors feature termination connections on standoff insulators (optional on NEMA<sup>®</sup>\* frame motors).

**End turn** bracing yields long life and is designed to minimize the effects of coil fatigue from frequent starts, yet it allows for thermal expansion under full load temperatures.

**Corrosion protection** against the effects of hostile atmospheres eases hardware removal for regular maintenance inspections. All large motor rotors are epoxy-coated for added protection against chemical attack. The motor nameplate is stainless steel.

Anti-friction bearings are normally used in applications where high radial or axial thrust loading is common. The bearing chamber and lubrication system are designed with an ample grease supply, safely extending maintenance intervals. Sleeve bearing is optional on IEC frames.

\*The following trademarks are not owned by or under the control of Regal Rexnord Corporation: NEMA is a trademark or tradena of National Electrical Manufacturers Association; IEC is a trademark or trade name of International Electrotechnical Commission.

#### **ROBUST CONSTRUCTION FOR DEMANDING APPLICATIONS**



## MotoR

## A HISTORY OF RELIABILITY

Since 1913, the name Marathon has been associated with highly reliable electric motors.

Today, Marathon<sup>®</sup> Motors raises the bar with the Endurance Series<sup>™</sup> of large AC medium voltage motors. With capabilities up to 10,000 horsepower, our unique stock program delivers fast lead time through 2500 horsepower motors.

- ODP (Open Dripproof)
- WPI (Weather Protected Type I)
- WPII (Weather Protected Type II)
- •TEFC (Totally Enclosed Fan Cooled)
- •TEAAC (Totally Enclosed Air-to-Air Cooled)
- •TEWAC (Totally Enclosed Water-to-Air Cooled)

IEC<sup>®</sup>\* designs in WPI, WPII and TEAAC enclosures have fabricated steel modular-type construction consisting of a basic reinforced fabricated steel plate lower frame and cast iron bearing brackets, and a unique "top hat" kit to complete the enclosure and selected ventilation scheme.

ODP and TEFC enclosures feature cast iron frames and brackets with horsepower ratings through 1750 (ODP) and 2500 (TEFC) and voltages from 460 through 13.2kV. Rotor construction options include die cast aluminum (lower HP, LV) and fabricated copper bar with brazed end rings.

\*IEC is a trademark or trade name of International Electrotechnical Commission and is not owned by or under the control of Regal Rexnord Corporation.

# ENDURANCE SE

### LARGE AC MOTORS - NEMA®\* FRAME





Features	ODP OPEN DRIP-PROOF	WPI Weather Protected Type 1	WPII Weather Protected Type 2	<b>TEFC</b> Totally Enclosed Fan Cooled		
Frame sizes	5008-5810	5008-5810	5008-5810	5009-5813		
Maximum horsepower	1750			500		
Frequency	60 or 50 HZ					
Voltage	380 through 4160					
Poles	2-6 Pole					
Efficiency grade	Premium per NEMA Table 20-2					
Insulation system	Class F or H(LV), MAX GUARD® Class F, VPI(MV), MAXGUARD					
Frame construction	Cast Iron					
Ingres protections	IP23 IP24		IP24	IP55 or IP56		
Service factor	1.15 at 60Hz					
Starting type	ACL (DOL), Wye-Delta, VFD					
Bearing type	Antifriction ball			Antifriction ball or roller		
Terminal box	NEMA Type 2					
Protection	100Ω stator RTDs					
Space heater	120VAC single phase					
Paint	RAL 5011 Blue					

\*The following trademarks are not owned by or under the control of Regal Rexnord Corporation: NEMA is a trademark of National Electrical Manufacturers Association, Inpro/Seal is a trademark of Dover Corporation.

OPTIONAL ACCESSORIES

- Axial or Radial BlowersEncoders
- Brakes
- Shaft Grounding Devices
- 100 OHM Platinum Bearing Rtds
- Vibration DetectorLightning Arrestors

• Current Transformers

- Surge Capacitors
- Low Noise Enclosure
- Inpro/Seal<sup>®</sup>\*





# RIES<sup>M</sup> MOTORS

#### LARGE AC MOTORS - IEC®\* FRAME



Features	<b>ODP</b> Open Drip-Proof	WPI Weather Protected Type 1	WPII Weather Protected Type 2	<b>TEFC</b> Totally Enclosed Fan Cooled <sup>1</sup>	<b>TEAAC</b> Totally Enclosed Air-To-Air	
Frame sizes		355-710		355-560	355-710	
Maximum horsepower		7500		2500 6500		
Frequency	60 or 50 Hz					
Voltage	2300 through 13.8kV			380 through 13.8kV	2300 through 13.8kV	
Poles	4-12 Pole			2-8 Pole	4-12 Pole	
Efficiency grade	Premium through 2500 HP, per NEMA®* Table 20-C					
Insulation system	Class F, VPI MAX GUARD®					
Frame construction	Fabricated Steel			Cast Iron	Fabricated Steel	
Ingres protections	IP23 IP24 IP55			55		
Service factor	1.15 at 60Hz and 1.0 at 50HZ"					
Starting type	ACL (DOL), Wye-Delta, VFD					
Bearing type		355-630 Ball, 710 Sleeve		2P : 355-450 Ball 2P: 500-560 Sleeve 4P & above: Ball	355-630 Ball, 710 Sleeve	
Terminal box	NEMA Type 2 upto 4160V, above this voltage is quoted case by case					
Protection	100Ω stator RTDs, Bearing RTDs					
Space heater	120VAC single phase					
Paint	RAL 5014 Blue					

#### Note: 2P-60HZ OR VFD motor need quote case by case.

\*The following trademarks are not owned by or under the control of Regal Rexnord Corporation: IEC is a trademark or trade name of International Electrotechnical Commission; NEMA is a trademark or tradename of National Electrical Manufacturers Association; Inpro/Seal is a trademark of Dover Corporation.

#### OPTIONAL ACCESSORIES

• Axial or Radial Blowers

• Encoders

• Brakes

Shaft Grounding DevicesVibration Detector

• Lightning Arrestors

- Current Transformers
- Surge Capacitors
- Low Noise Enclosure
- Inpro/Seal<sup>®</sup>\*



## ENDURANCE SERIES MOTORS

### FRAME SPECIALTY MOTORS



Features	<b>LN-ODP</b> Low Noise Open Drip Proof	<b>TEWAC</b> Totally Enclosed Air-To-Water	<b>LN-ODP</b> Low Noise Open Drip-Proof	<b>TEAAC</b> Silenced Totally Enclosed Air-To-Air		
Frame sizes	5008-5810	355-710	355-560			
Max. horsepower	1750	7500	4750	4000		
Frequency	60 or 50 Hz	60 or 50 Hz	50 Hz			
Voltage	380 through 4160	2300 through 13.8kV	2300 through 10kV			
Poles	2-6 Pole	2-12 Pole	2 Pole			
Efficiency grade	Premium through 2500 HP, per NEMA®* Table 20-C					
Insulation system	Class F or H(LV), MAX GUARD® Class F, VPI(MV), MAX GUARD	Class F, VPI, MAX GUARD				
Frame construction	Cast iron	Fabricated steel				
Ingres protections	IP23	IP54	IP23 IP55			
Service factor	1.15 at 60Hz	1.15 at 60Hz and 1.0 at 50HZ	1.0 at 50Hz			
Starting type		ACL (DOL), Wye-Delta, VFD				
Bearing type	Antifriction ball	2P : 355-450 Ball, 2P:500-560 Sleeve 4P & above: Ball	355-450 Ball, 500-560 Sleeve			
Terminal box	NEMA Type 2	NEMA Type 2 upto 4160V, above this voltage's is quoted case by case				
Protection	100Ω stator RTDs	100 $\Omega$ stator RTDs, bearing RTDs				
Space heater	120VAC single phase					
Paint	RAL 5011 blue	RAL 5014 blue				

\*The following trademarks are not owned by or under the control of Regal Rexnord Corporation: IEC is a trademark or trade name of International Electrotechnical Commission; NEMA is a trademark or tradename of National Electrical Manufacturers Association; Inpro/Seal is a trademark of Dover Corporatio

OPTIONAL ACCESSORIES

- Encoders • Brakes
- Shaft Grounding Devices
- Lightning Arrestors
- Vibration Detector
- Current Transformers
- Low Noise Enclosure
- Surge Capacitors
- Inpro/Seal<sup>®</sup>\*



## WE PROVIDE OVER **700 POSSIBLE** CONFIGURATIONS

## Our wide variety of features include: • LOW & MEDIUM VOLTAGE • 300-2500HP • 2, 4 AND 6 POLE

• NEMA®\*AND IEC®\* FRAMES • ODP, WPI, WPII • TEFC AND TEAAC

#### STOCK AND MODIFICATION PROGRAM

All configurations can be ready for use in as early as 4 weeks!

CATEGORY	MODIFICATION DESCRIPTION	<b>5008-50</b> 13	5808-5810	355	400	450	500	560
Altitude/Ambient rerate	Change nameplate markings	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Balance/Vibration	lance/Vibration Precision balance to 0.08"/sec		OPT	OPT	OPT	OPT	OPT	OPT
Bearing - Insulated	Install insulated bearing ODE	OPT	OPT	STD	STD	STD	STD	STD
Conduit Box	Oversized terminal box	STD	STD	STD	STD	STD	STD	STD
Conduit Box	NEMA Type 2 terminal box	STD	STD	STD	STD	STD	STD	STD
Cable gland	Install cable gland	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Condensation hole/Breather - Term. box	Install breather in terminal box	OPT <sup>1</sup>	OPT <sup>1</sup>	OPT	OPT	OPT	OPT	OPT
Coupling	Install customer-supplied half coupling	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Differential pressure switch	Install differential pressure switch - WPII	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Filter - WPII	Galvanized	OPT	OPT	STD	STD	STD	STD	STD
Filter - WPII	Stainless steel	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Frame/Base	Dowel pin holes	STD	STD	STD	STD	STD	STD	STD
Frame/Base	Vertical jacking provision	STD	STD	STD	STD	STD	STD	STD
Frequency	Frequency rerate to 50 Hz	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Grease/Lubrication/Fittings	Contact factory for high or low temp grease	STD	STD	STD	STD	STD	STD	STD
Grounding	Terminal Box	STD	STD	STD	STD	STD	STD	STD
Grounding	On-Frame Grounding	STD	STD	STD	STD	STD	STD	STD
Internal corrosion protection	Corrosion resistant coating	STD	STD	STD	STD	STD	STD	STD
Leads	Longer leads - spliced	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Low noise - ODP and WPI	Low noise hood installation	OPT	OPT	N/A	N/A	N/A	N/A	N/A
Mounting	F1 to F2 Conversion	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Packaging	Export Packaging	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Protection - Thermal	Resistance Temp Detectors	STD	STD	STD	STD	STD	STD	STD
Protection - Thermal	Thermistors	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Protection - Thermal	Thermostats	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Protection - Thermal	Thermistor control module	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Service Factor	Rerate Service Factor	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Shaft Seals	Labyrinth seals	OPT	OPT	STD	STD	STD	STD	STD
Shaft Seals	Inpro/Seals <sup>®</sup> *	OPT <sup>1</sup>	OPT <sup>1</sup>	OPT	OPT	OPT	OPT	OPT
Shaft Seals	Lip seals - Oil	OPT <sup>1</sup>	OPT <sup>1</sup>	OPT	OPT	OPT	OPT	OPT
Space Heater	Install 120V space heaters	STD	STD	STD	STD	STD	STD	STD
Testing	Contact factory	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Vibration	Install vibration detector	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Weatherproofing/Special Service	Division 2 Hazarous Location	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Weatherproofing/Special Service	Tropical Anti-Fungus Treatment	OPT <sup>1</sup>	OPT <sup>1</sup>	OPT	OPT	OPT	OPT	OPT

STD - standard feature on motor

OPT - optional feature on motor

<sup>1</sup> - Not available on 5008-5810 ODP/LN-ODP/WPI/WPII motors

\*The following trademarks are not owned by or under the control of Regal Rexnord Corporation: IEC is a trademark or trade name of International Electrotechnical Commission; NEMA is a trademark or tradename of National Electrical Manufacturers Association; Inpro/Seal is a trademark of Dover Corporation.





#### Industrial Solutions Regal Rexnord

100 East Randolph Street Wausau, WI 54402-8003 Phone: 715-675-3359 Fax: 715-675-8026 regalrexnord.com

The proper selection and application of products and components, including assuring that the product is safe for its intended use, are the responsibility of the customer. To view our Application Considerations, please visit <a href="https://www.regalrexnord.com/Application-Considerations">https://www.regalrexnord.com/Application-Considerations</a>.

To view our Standard Terms and Conditions of Sale, please visit <u>https://www.regalrexnord.com/Terms-and-Conditions-of-Sale</u> (which may redirect to other website locations based on product family).

The following trademarks are not owned by or under the control of Regal Rexnord Corporation: NEMA is a trademark or tradename of National Electrical Manufacturers Association; IEC is a trademark or trade name of International Electrotechnical Commission; Inpro/Seal is a trademark of Dover Corporation.

"Regal Rexnord" is not indicative of legal entity.

Regal Rexnord, Endurance Series, Marathon, MAX GUARD are trademarks of Regal Rexnord Corporation or one of its affiliated companies ©2019, 2022 Regal Rexnord Corporation, All Rights Reserved. MCB21045E • Form# SB0251E marathon Motors 1000 YEARS SINCE 1913



Sign up to stay updated with our Industrial motors news http://eepurl.com/g8-fsz

