



# LARGE AC INDUCTION MOTORS



## CUSTOMER CARE—BUILT ON CUSTOMER INPUT.

Our customer care process revolves around one thing—listening—before, during and after your purchase. LEESON® representatives are ready to assist you 24/7 with product, technical and service support needs.



# TRUST LEESON DESIGN AND MANUFACTURING EXPERIENCE TO DELIVER

## THE PERFECT SOLUTION FOR YOUR APPLICATION.

### MORE THAN 100 YEARS OF LARGE MOTOR EXPERTISE.

For over a century, dedicated LEESON specialists have provided large motor solutions for countless industries and applications. This expertise ensures you receive the best product—stock or custom—for your unique installation. Tap our sales, technical and support teams to configure the perfect solution for your mission-critical application.

### BROAD STOCK PRODUCT PORTFOLIO ENSURES RAPID RESPONSE.

LEESON carries a broad range of stock products across an extensive network of distribution centers to help deliver the right product at the right time. Trust LEESON to deliver solutions that help you stay up and running.

### MODULAR MANUFACTURING DELIVERS APPLICATION SPECIFIC PRODUCTS FASTER.

Our modular manufacturing design approach enables the configuration of products in compressed time frames. Get the product that meets your specifications without compromising features or functionality.

### ACCESSORIES ENABLE CUSTOMIZED SOLUTIONS.

An extensive range of specialized motor accessories helps deliver flexible, application-specific solutions. From overload protection, voltage surge protection to vibration protection, your trusted LEESON representative will help you design the ideal large motor for your needs.

## MISSION CRITICAL— DURABLE, RELIABLE PRODUCTS.

When critical systems must be kept running, organizations worldwide trust our robust large motors to handle the most rigorous applications.



FEATURES	NEMA DRIPPROOF, 449-510 FRAME	NEMA TOTALLY ENCLOSED, 449 FRAME	NEMA TOTALLY ENCLOSED, 5000 FRAME
NEMA Premium efficiencies available	■	■	■
Cast iron construction	■	■	■
Open Conrad radial ball bearings rated for 100,000 hour B-10 life on direct-coupled loads	■	■	■
Roller bearing for belted loads	Optional	Optional	Optional
Oversized, fabricated steel conduit box	Optional	Optional	Optional
Oversized, cast iron conduit box	■	■	■
1.15 Service Factor as available (consult factory)	Optional	Optional	Optional
Class F insulation/random wound coils (typical to LV motors)	■	■	■
Class H insulation/form wound coils (typical to MV motors)	■	■	■
Epoxy, 100% solids, Vacuum Pressure Impregnation (VPI) resin (all MV motors; LV motors 364 frame and larger)	■	■	■
Grease fittings with extended grease tubes	Optional	■	■
Internal and external epoxy finish	—	■	■
Front and rear cast iron bearing caps	—	■	■
Actual test and vibration data included with each order	—	■	■
CSA Certified for Div. 2/Zone 2, Group A, B, C, D and Group IIA, IIB, IIC, ATEX Zone 2 and 22	—	■	■
Temp Code T3 @ 1.0 Service Factor	—	■	■
Temp Code T2C @ 1.0 Service Factor	—	—	■
Temp Code T2B @ 1.15 Service Factor	—	■	■
IEEE-841 features	—	Optional	Optional
Provisions for jacking bolts in all four feet	—	—	■
Rotating shaft seals, Inpro® Smart Rings on each end	—	Optional	■
Provisions for dowel pins in drive end feet	—	—	■
Ground provisions on feet and in the conduit box	—	Optional	■
Frames drilled with four sets of footholes: 5009, 5010, 5011, 5012	—	—	■
Dedicated 5009 frame for vertical applications	—	—	■

## LEESON® LOW VOLTAGE MOTORS—600 VOLTS AND LOWER

	LV ODP	LV TEFC	LV DPFV	LV WPI	LV WP11	LV TEFC	LV TEAAC	LV TEWAC
	NEMA				IEC			
Range	15–600 HP	15–700 HP	25–1250 HP	250–3350 HP	250–3350 HP	250–2150 HP	300–2680 HP	250–3350 HP
Voltage	460V	460V	460V	460V	460V	460V	460V	460V
Pole	2-, 4-, 6-, 8-pole	2-, 4-, 6-, 8-pole	2-, 4-, 6-, 8-pole	2-, 4-, 6-, 8-pole	2-, 4-, 6-, 8-pole	2-, 4-, 6-, 8-pole	2-, 4-, 6-pole	2-, 4-, 6-, 8-pole
Frequency	60 and/or 50 Hertz	60 Hertz	60 and/or 50 Hertz	60 Hertz	60 Hertz	60 Hertz	60 Hertz	60 Hertz
Frame	254–510 NEMA	254–5013 NEMA	364–6805 NEMA	355–630 IEC	355–630 IEC	355–560 IEC	355–630 IEC	355–630 IEC
Protection	IP12 & 23	IP55	IP12 & 23	IP23	IP23	IP55	IP44	IP44
Ambient	40° C	40° C	40° C	40° C	40° C	40° C	40° C	40° C
Insulation	Class F	Class H VPI	Class F	Class F VPI	Class F VPI	Class F VPI	Class F VPI	Class F VPI
Construction	Rolled Steel & Cast Iron	Cast Iron	Cast Iron	Fabricated	Fabricated	Cast Iron	Fabricated	Fabricated
Performance	MG1	MG1	MG1	IEC	IEC	IEC	IEC	IEC
Bearings	Anti-Friction	Anti-Friction	Anti-Friction	Anti-Friction	Anti-Friction	Anti-Friction	Anti-Friction	Anti-Friction
Service Factor	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Inverter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

## INNOVATION. LEADING AN EVOLVING MARKETPLACE.

At LEESON, innovation isn't a department or process. It's simply how we do business. We will continue to design and manufacture the application-specific large motor solutions that meet ever-changing manufacturing marketplace demands.

## GLOBAL STRENGTH. SERVING YOUR NEEDS, EVERYWHERE.

The global market provides our clients with limitless opportunities. Our talented associates provide the local support you need to ensure the large motor product is matched to your unique situation.



### SPECIAL CONFIGURATIONS:

There's more to LEESON large AC induction motor capabilities than what you see here. Contact your local LEESON Electric District Sales Office to discuss your unique application.

#### In some cases:

- HP capability can extend to 5000 HP
- Voltages can extend to 6.6KV & 11KV and higher

### AVAILABLE ACCESSORIES:

- Stator RTDs
- Bearing RTDs
- Space Heaters
- Vibration Detectors
- Split Sleeve Bearings

## LEESON® MEDIUM VOLTAGE MOTORS

	MV ODP	MV TEFC	MV WPI	MV WPII	MV TEFC	MV TEAAC	MV TEWAC
	NEMA		IEC				
Range	125–700 HP	200–750 HP	250–3350 HP	250–3350 HP	250–2410 HP	300–3350 HP	250–3350 HP
Voltage	2300/4000V	2300/4000V	2300/4000V	2300/4000V	2300/4000V	2300/4000V	2300/4000V
Pole	2-, 4-, 6-, 8-pole	2-, 4-, 6-pole	2-, 4-, 6-pole	2-, 4-, 6-pole	2-, 4-, 6-pole	2-, 4-, 6-pole	2-, 4-, 6-, 8-pole
Frequency	60 Hertz	60 Hertz	60 Hertz	60 Hertz	60 Hertz	60 Hertz	60 Hertz
Frame	449T–510U NEMA	5011–5811 NEMA	355–630 IEC	355–630 IEC	355–560 IEC	355–630 IEC	355–630 IEC
Protection	IP23	IP55	IP23	IPW23	IP55	IP44	IP44
Ambient	40° C	40° C	40° C	40° C	40° C	40° C	40° C
Insulation	Class H VPI	Class H VPI	Class F VPI	Class F VPI	Class F VPI	Class F VPI	Class F VPI
Construction	Rolled Steel & Cast Iron	Cast Iron	Fabricated	Fabricated	Cast Iron	Fabricated	Fabricated
Performance	MG1	MG1	IEC	IEC	IEC	IEC	IEC
Bearings	Anti-Friction	Anti-Friction	Anti-Friction	Anti-Friction	Anti-Friction	Anti-Friction	Anti-Friction
Service Factor	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Inverter	Yes	Yes	Yes	Yes	Yes	Yes	Yes

## SUSTAINABILITY.

MATERIAL-CONSERVING,  
ENERGY-SAVING SOLUTIONS.

Sustainability is more than a corporate promise. It's a commitment to smarter, energy-saving designs and the conservation of raw material. Durability is maintained even while reducing material requirements and weight, which translates into reduced costs. At LEESON, everything we do is geared around sustainability in action.

## SIMPLIFICATION.

WE MAKE DOING  
BUSINESS EASIER.

From product configuration to order to production, LEESON is making it easier than ever to do business. The end result? An economical, fast and flexible process that never loses sight of what you expect.



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#### APPLICATION CONSIDERATIONS

The proper selection and application of power transmission products and components, including the related area of product safety, is the responsibility of the customer. Operating and performance requirements and potential associated issues will vary appreciably depending upon the use and application of such products and components. The scope of the technical and application information included in this publication is necessarily limited. Unusual operating environments and conditions, lubrication requirements, loading supports, and other factors can materially affect the application and operating results of the products and components and the customer should carefully review its requirements. Any technical advice or review furnished by Regal Beloit America, Inc. and/or its affiliates ("Regal") with respect to the use of products and components is given in good faith and without charge, and Regal assumes no obligation or liability for the advice given, or results obtained, all such advice and review being given and accepted at customer's risk.

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