

W60

Large AC WPII Stock Motors

Industrial Motors

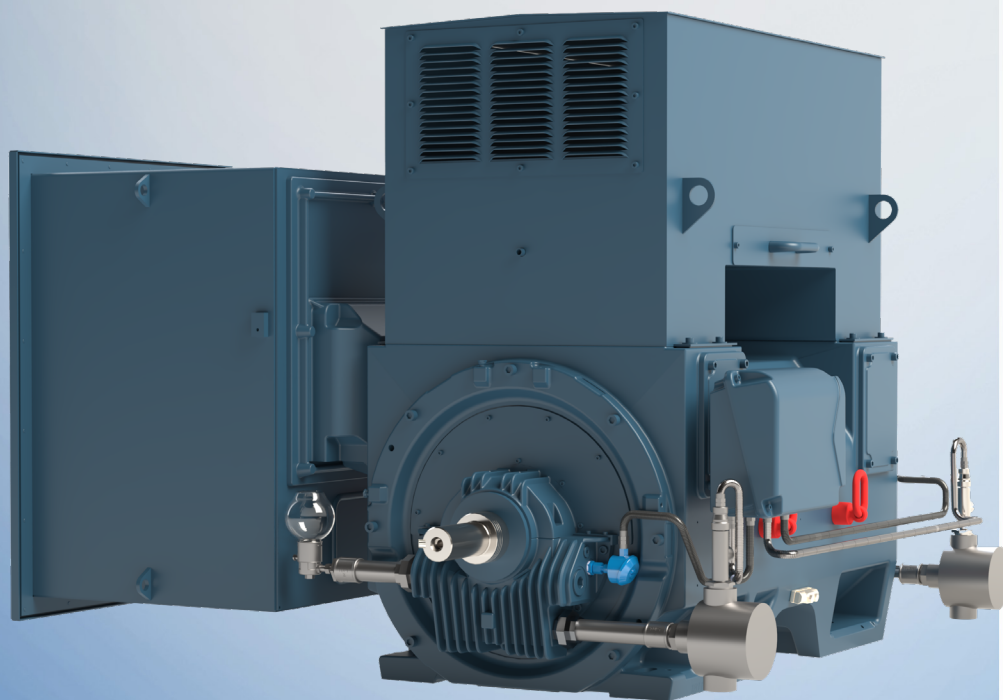
Commercial & Appliance Motors

Automation & Systems

Energy

Transmission & Distribution

Coatings



Driving efficiency and sustainability

USA.UBW.07/2017





COMPACT IN SIZE, GIANT IN PERFORMANCE

The W60 line motors present an optimized and robust design, with excellent power density. The concept allows adjustments that guarantee high performance in environments with the most varied temperature ranges complying with several industrial applications, such as compressors, pumps, fans and mills, and are even capable of speed variation and operation with frequency inverters and soft starters.

The W60 line complies with the most stringent criteria for efficiency, reliability and safety.

BENEFITS



Suitable to operate in severe conditions and aggressive environments



Flexibility in electrical and mechanical design



Suitable for applications with low inrush current and high efficiency



Optimized and robust design with excellent power density



SEGMENTS

The W60 line motors were designed using the most modern computer programs and mathematical tools for numerical, static, dynamic, thermal and electromagnetic simulations and analyses, thus optimizing the design of each component and their respective interactions.

The extensive versatility of the W60 line allows the application of motors in the most diverse segments, such as: oil and gas, mining, power generation, water and wastewater, cement, pulp and paper, sugar and ethanol, steel, among others.



Versatility that allows different configurations



Durability, resistance and robustness



Reduced motor weight, allowing for base optimization and reduced installation costs



W60 – WEG LARGE AC WPII STOCK MOTORS

API Inspired Design. Stock Availability. Zero Compromise.

The WEG W60 Medium Voltage WPII motor line delivers API-style reliability without long lead times. Designed for demanding industrial environments, these motors combine rugged construction, premium materials, and advanced thermal performance to maximize uptime in critical applications.

Ideal for:

- Petrochemical
- Refining
- Heavy process industries

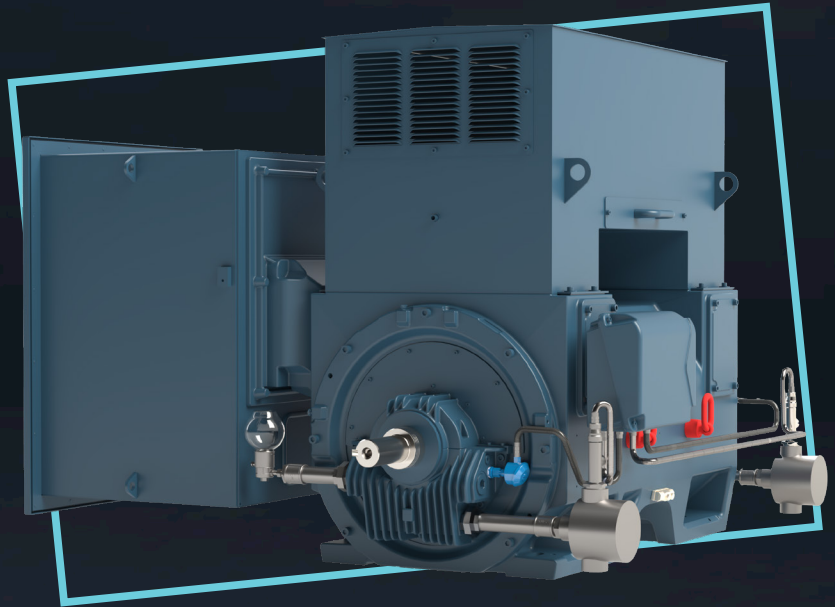
Stocked in Houston, Texas, the W60 series ensures rapid delivery when downtime is not an option.

Why Choose W60?

- API 541 inspired design without custom build delays
- High efficiency ($\geq 95\%$)
- Robust construction
- Fast availability from U.S. inventory
- Designed for reliability, built for uptime

W60 General Features

- Horizontal, Foot Mounted
- Frames: 5010/11, 5810/11 and 6810/11
- Dual Voltage Designs: 2300/4000V
- Two Pole Designs
- WPII Enclosure
- 400 to 2250 HP
- 60 Hz
- Class F Insulation
- F1 Terminal Box (Field Conversion to F2)
- (2) Frame Grounding Pads
- Ambient -20°C to $+40^{\circ}\text{C}$
- Self-Cooled Renk Sleeve Bearings
- Rotor: Fabricated Cooper
- Uni-directional Fan
- Form Wound Stator: Double VPI
- Premium Efficiency $\geq 95\%$
- NEMA Premium Efficiency
- Bearing Immersion Heaters
- IP66 Main and Aux Boxes
- Axial Float Limit 0.500"



Hazardous Location Certification

- CSA Certified
- Class I, Division. 2, Groups B, C, D
- T3 Temp Code
- Class I, Division 2, IIC – T3

Performance Ratings

Across the Line (DOL)

- SF 1.15 Class B Rise @ SF 1.00
- Class F Rise @ SF 1.15

VFD Operation:

- Service factor 1.0
- 10:1 Variable Torque (VT) - Class B rise
- 2:1 Constant Torque (CT) - Class F rise

Note: other features on request.

STOCK MOTOR FEATURES AND MODIFICATIONS

API 541 Design Features

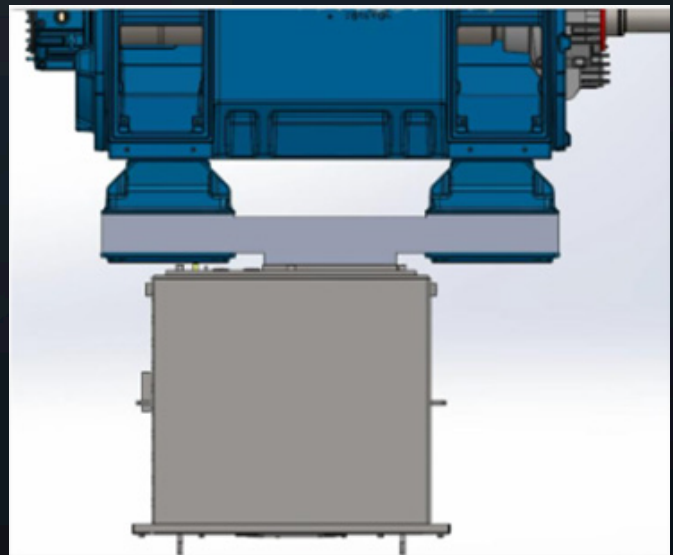
- Continuous duty rated
- ≤85 dBA noise level
- C5 core plating
- Severe-duty paint system
- Platinum RTDs (windings & bearings)
- 120V space heaters
- Insulate bearings (both ends)
- Identical bearings
- IP24 enclosure
- IP55 bearing protection
- Stiff shaft design
- Three plane balancing
- Endshield vibration 0.10 ips
- Vertical jackscrews and dowel holes
- 0.005" foot flatness
- Stainless steel air filters and hardware
- 90% of particles ≥ 10 micron
- Space heaters (frame and main box)
- Starting with 80% Vn
- Provision for shaft grounding
- AISI 4140 series shaft material
- Nonsparking seals
- Rupture plate in main terminal box
- Trico constant level oilers
- Main Terminal Box 90° Rotatable

Available Documentation

- Datasheets and dimension drawings
- 3D models
- Main and auxiliary box drawings
- Connection diagrams
- Performance curves
- Torque / Speed
- Load
- Thermal limit
- VFD operation

Optional Modifications

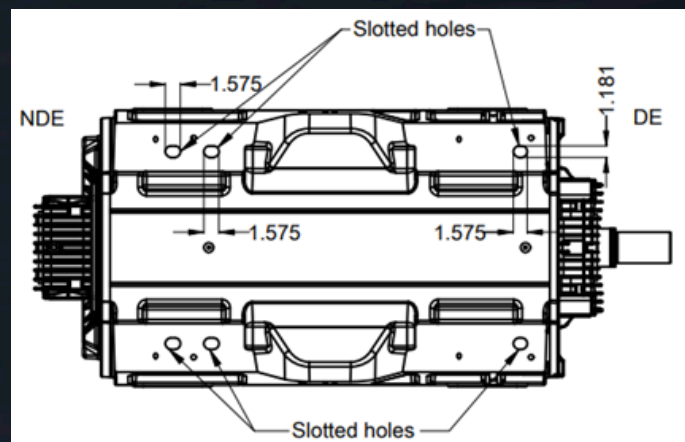
- Pressure differential switch
- Fan rotation
- WEGScan monitoring
- Shaft grounding device (Safe Areas Only)
- Terminal box conversion (F1 to F2)
- Center-mounted terminal box



Flexible Mounting Options

Frame	XBA Dimension (in)
5010/11	14.25 to 15.75
5810/11	16.75 to 17.00
5810/11	16.75 to 17.00
6810/11	18.50

(XBA = DE Mounting Hole to End of Shaft)



ROUTINE FACTORY TEST

- Rotor Balancing
- AC High Potential
- Insulation Resistance
- Stator Winding Resistance
- No Load Vibration Test
- No Load Bearing Temperature Rise
- Direction of Rotation
- Bearing Insulation
- Space Heater Resistance
- Stator RTD Resistance
- Bearing RTD Resistance
- RTD High Potential Test
- Magnetic Center Verification



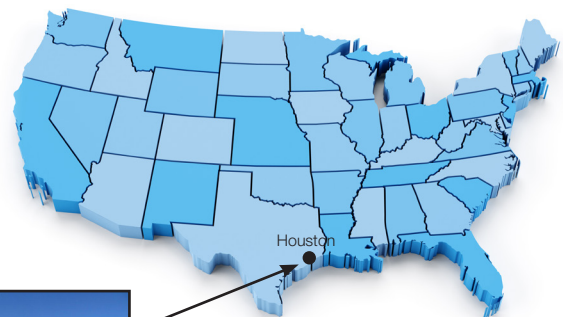
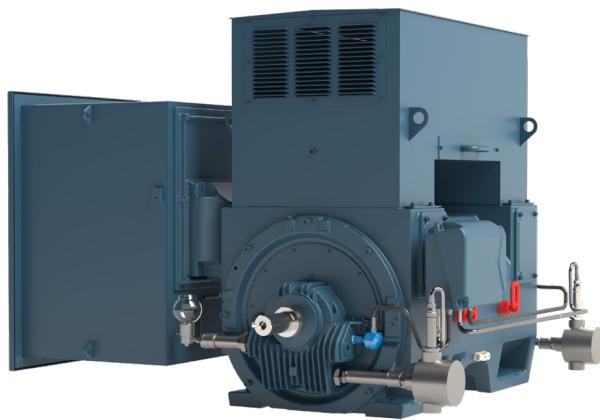
Surge test



Control room

STORAGE AND SPARE PARTS

W60 Stock Motors are located in WEG's Houston Warehouse.



Storage and Readiness

- Climate-controlled Houston warehouse
- Periodic shaft rotation prevents damage
- Space heaters reduce condensation risk
- Pre-shipment inspection performed

Critical spare parts available:

- Bearings
- Oil rings
- Bearing seals
- Bearing RTDs

"Available now from Houston – contact us for immediate shipment."

STOCK MOTOR CATALOG NUMBERS

Stock Motor Overview

- Medium Voltage
- WPII Enclosure
- 3600 RPM
- 2300 / 4000V
- CW & CCW rotation available

Frame	Rating (HP)	Rotation	Catalog Number
5010/11	400	CW	50036WT3X5010-W60C1-R1
	500		50036WT3X5010-W60C1
	600		70036WT3X5010-W60C1-R1
	700		70036WT3X5010-W60C1
	800		90036WT3X5010-W60C1-R1
	900		90036WT3X5010-W60C1
5810/11	900		100036WT3X5810-W60C1-R1
	1000		100036WT3X5810-W60C1
L5810/11	1250		150036WT3X5810-W60C1-R1
	1500		150036WT3X5810-W60C1
6810/11	1750		175036WT3X6810-W60C1
	2000		225036WT3X6810-W60C1-R1
	2250		225036WT3X6810-W60C1
5010/11	400	CCW	50036WT3X5010-W60C2-R1
	500		50036WT3X5010-W60C2
	600		70036WT3X5010-W60C2-R1
	700		70036WT3X5010-W60C2
	800		90036WT3X5010-W60C2-R1
	900		90036WT3X5010-W60C2
5810/11	900		100036WT3X5810-W60C2-R1
	1000		100036WT3X5810-W60C2
L5810/11	1250		150036WT3X5810-W60C2-R1
	1500		150036WT3X5810-W60C2
6810/11	1750		175036WT3X5810-W60C2
	2000		225036WT3X6810-W60C2-R1
	2250		225036WT3X6810-W60C2

Note: ("R1"), indicates rerate design to lower horsepower capability.



WEG's scope of solutions is not limited to the products and solutions presented in this brochure.

Contact WEG for information on additional products and solutions.

**For WEG's worldwide
operations visit our website**



www.weg.net



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Information contained herein is subject to change without notice.