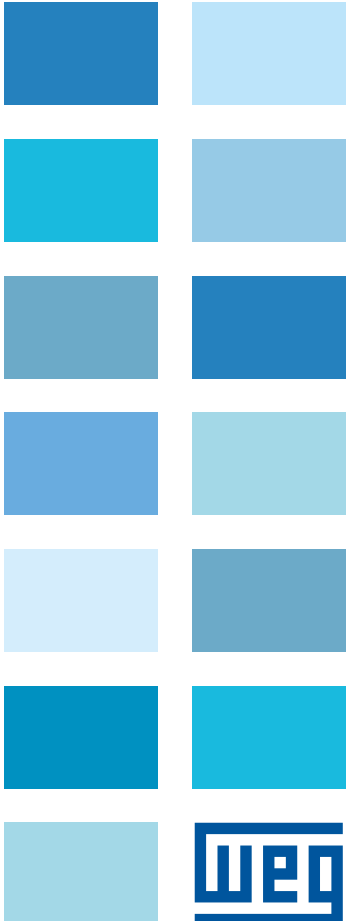


W50

Three-phase Electric Motor

Commercial Catalogue
NEMA Market



W50

WEG W50 motors offer not only **excellent performance**, but comply with the strictest **efficiency** and **safety** criteria in the most severe applications. The compact design provides **high performance**, while their robust frames ensure **low vibration levels**.

The new mechanical concept not only optimizes characteristics like mass and length, but also offers product **versatility** and **reduced maintenance**.



Standard Features

- Rated output: 125HP to 1700HP
- Number of poles: 2 to 12
- Frame sizes: 5009/10 to 7008/09
- Frequency: 60 or 50 Hz
- Voltage: 380 to 6600V
- Service factor: 1,00
- Insulation class: F
- Degree of protection: IP55
- Mounting: F1
- Cooling method: TEFC – Totally enclosed fan cooled (IC411)
- Frame, endshields and fan cover: FC-200 cast iron
- Shaft material: AISI 4140
- Thermal protection:
 - Windings: Pt-100 3 wire, 2 per phase
 - Bearings: Pt-100 3 wire, 1 per bearing
- Grease lubricated ball bearings
- Bearing seal: Taconite labyrinth
- Lubrication: Mobil Polyrex EM Grease
- Painting plan: ISO “C5 High” (I and M) corrosive category
- Color: RAL 5009 (Blue)
- Dual Voltage Space Heaters
- Automatic drain plug

Optional Features

- Other mounting configurations: F2, F3, W11, W12, etc.
- Degree of Protection: IP56, IP65, IP66
- Cooling method: TEBC – Totally enclosed blower cooled (IC 416)
- Surrounding muffler
- Service factor: 1.15
- Bearings:
 - Sleeve bearings
 - Insulated drive end bearing for inverter duty applications
 - Cylindrical roller bearing
 - Shaft grounding brush
 - Bearings designs for vertical mounting normal and high thrust applications
- Seal: INPRO/SEAL®
- Vibration level: Grade B
- Bearing and winding thermal protection: thermistors or thermostats
- Cable glands
- Drip proof canopy for shaft down applications
- Internal tropicalized painting
- Encoder
- Suitable for VFD applications
- Main terminal box in welded steel
- Additional terminal box: For “Y” connection with access to the neutral terminal
- Non-contact / contact thermometer with gauge
- Stainless steel fasteners



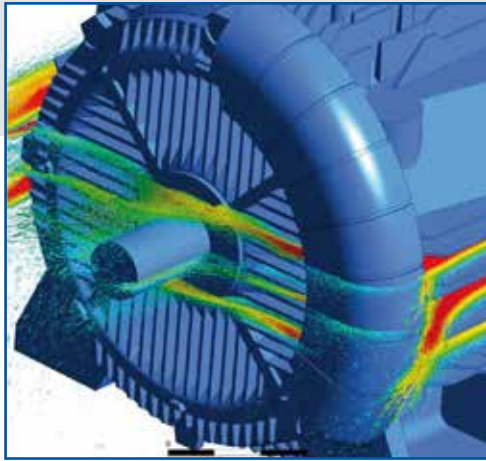
W50: Robust, compact, efficient and reliable in the most severe operating conditions.



Features and benefits

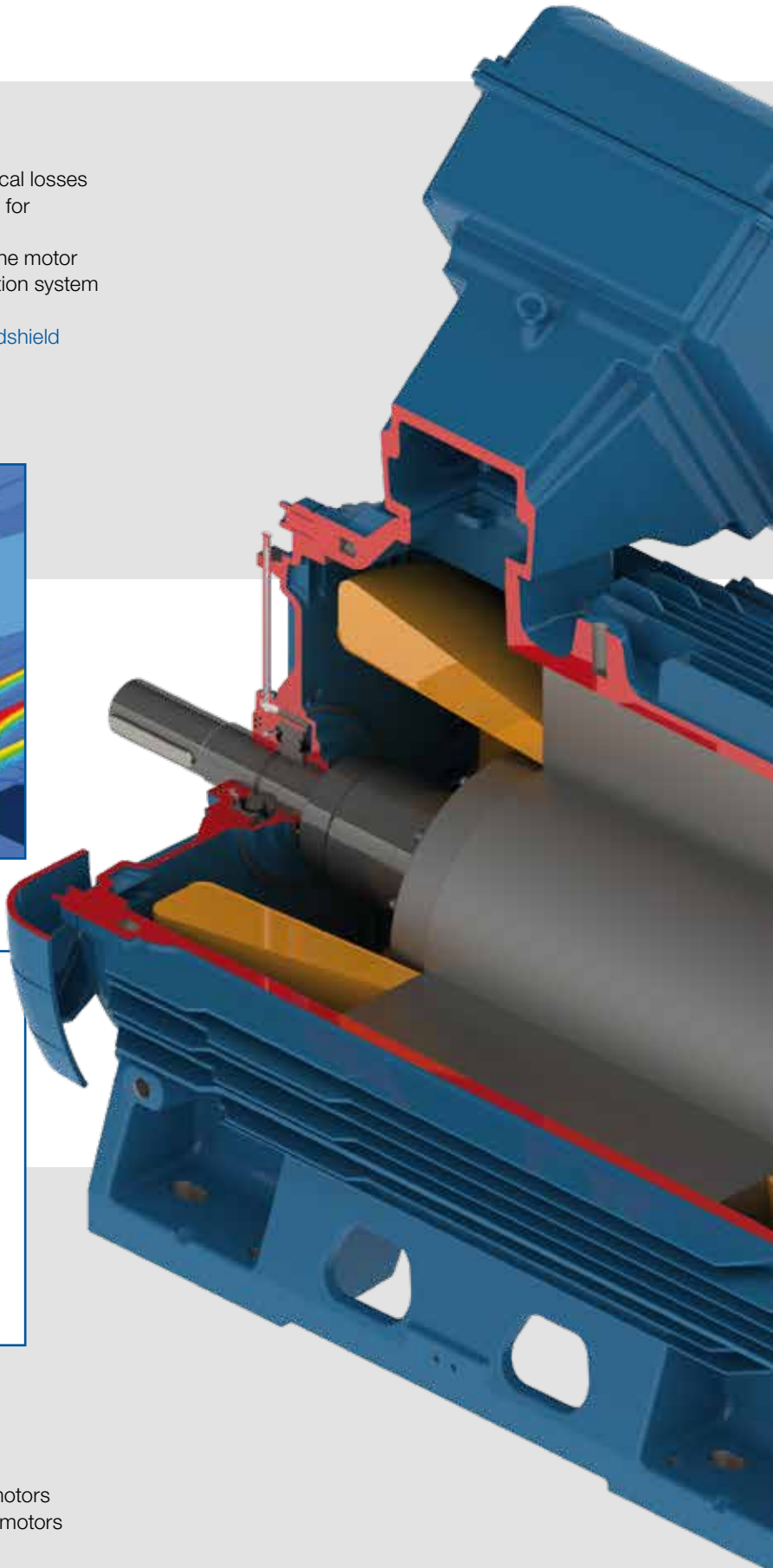
Mechanical Design

- Compact and robust frame
- Low noise levels (82 dB(A) at 3600rpm)
- Optimum efficiencies due to low mechanical losses
- Innovative design of the DE endshield fins for maximum heat dissipation
- Uniform temperature distribution across the motor frame due to the exclusive internal ventilation system
- Easy access to accessories
- State of the art air deflector on the DE endshield ensuring lower bearing temperature



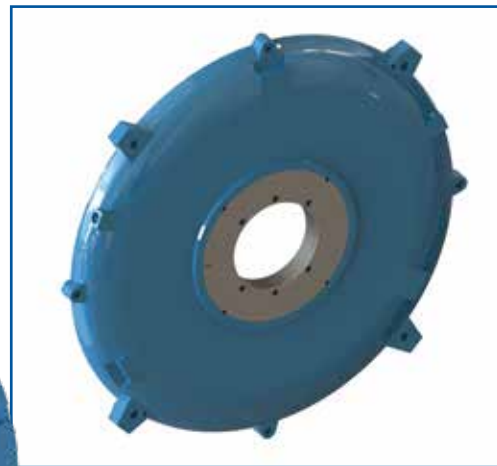
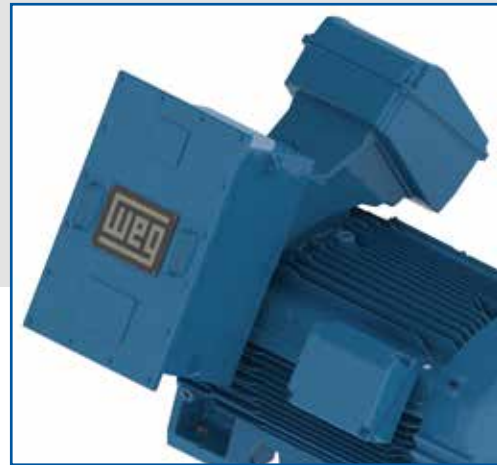
Electrical Performance

- Suitable for VFD applications
- High output/weight ratio
- Low starting current
- WISE® insulation system for low voltage motors
- VPI insulation system for medium voltage motors





- Modular forced ventilation kit
- Wide range of options and accessories
- Terminal box location on either left or right side



- Insulated NDE endshield for all motors
- Wound stator winding and bearings with temperature sensors
- Low bearing temperatures ensure longer lubrication intervals and extended bearing lifetime
- Low vibration levels ensure longer motor lifetime

Versatility

Reliability

Dedicated W50 lines

The W50 motors also feature a number of definite purpose versions, developed to meet specific industry and application requirements, whilst maintaining the need to provide the best solution for the customer.

W50 API 541

The W50 API 541 line was specially developed in accordance with the requirements of the American Petroleum Institute, the World reference in the standardization of equipment for the oil industry.

- Certified for ambient temperatures up to 60°C
- Copper rotor
- Sleeve bearings
- Maximum Is/In of 6.5
- Stainless steel fasteners





W50Xn

With safety being of paramount importance, WEG developed the W50Xn (Class I, Division 2) motor line to operate in hazardous areas. This type of protection is applied to electrical equipment which does not cause ignition of an explosive atmosphere under normal operating conditions.

- Suitable for operation in hazardous areas classified as Class I, Division 2, Groups B, C and D, Temperature class T3.

W50 IEEE 841

The W50 IEEE841 motors are specially suited for Pulp & Paper mills, Steel mills, Petrochemical Plants and diverse demanding applications requiring severe duty long life motors.

- Internal anticorrosive painting
- Guaranteed foot flatness to within 0.005"
- T-type open drain made of stainless steel 304
- INPRO/SEAL[®] bearing seal

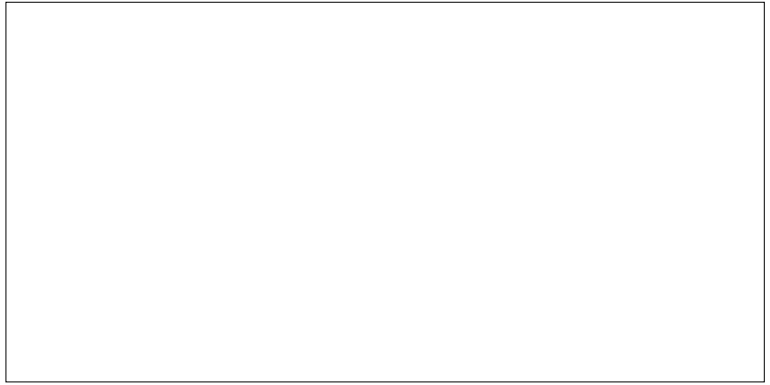


Please contact your authorized distributor:

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WEG Canada / V.J. Pamensky offers the following products, and more! With a full range of IEC/NEMA Global Certifications and a full line of products, WEG can supply the right solution for your needs anywhere in the world. To learn more about WEG's products and solutions or to locate a Distributor near you, please call 1-877-PAMENSKY (726-3675) or visit www.wegcanada.com.

Low Voltage Motors, Single and 3-Phase, 1/8 – 700HP

- General Purpose Motors
- Explosion Proof Motors
- Crusher Duty Motors
- IEC Tru-Metric Motors
- Pump Motors including JP/JM
- P-Base Pump Motors
- Oil Well Pumping Motors
- Pool & Spa Motors
- Brake Motors
- Compressor Duty Motors
- Farm Duty Motors
- Poultry Fan Motors
- Auger Drive Motors
- IEEE 841 Motors
- Stainless Steel Wash Down Motors
- Saw Arbor Motors
- Cooling Tower Motors
- Commercial HVAC Motors
- Pad Mounted Motors
- Vector Duty Motors

Large Electric Motors

- Low Voltage 3-phase motors up to 2,500HP
- Induction Motors up to 70,000HP and 13,200V
- Wound Rotor Systems (including starters) up to 70,000HP and 13,200V
- Synchronous Motors up to 200,000HP and 13,200V
- Explosion proof motors (Ex-d) up to 1,500kW and 11kV
- Ex-n, Ex-e, Ex-p motors

Variable Frequency Drives

- Low Voltage 1/4 to 2500HP, 230V – 480V
- Medium Voltage 500-10,000HP
- Multi-pump systems
- NEMA 4X
- Dynamic braking resistors
- Line and load reactors
- Plug and play technology
- Network communications: Profibus-DP, DeviceNet, Modbus-RTU
- PLC functions integrated
- Complete line of options and accessories

Soft Starters

- 3-1500HP
- Oriented start-up
- Built-in bypass contactor
- Universal source voltage (230-575V, 50/60Hz)
- Network communications: Profibus-DP, DeviceNet, Modbus-RTU
- Complete Line of options and accessories
- MV Soft-starter 3.3kV, 4.16kV: up to 3500HP, Withdrawable Power Stacks, & 8x PT100 Temperature monitoring

Controls

- Mini – Contactors
- IEC Contactors
- Thermal Overload Relays
- Manual Motor Protectors
- Molded Case Circuit Breakers
- Smart Relays
- Enclosed Starters: combination & non-combination,
- Pushbuttons & Pilot Lights
- Timing & Motor Protection Relays
- Terminal Blocks

Custom Panels

- Custom configured to your specification.
- NEMA 1, 12, 3R, 4 and 4X cabinets
- Quick delivery of preconfigured drives and soft starters
- UL 508 certified
- Low Voltage (230-460)
- Made in the U.S.A.
- Generators
- Brushless Synchronous Generators for diesel gen-sets up to 4,200kVA
- Hydro-generators up to 25,000kVA
- Turbo-generators up to 175,000kVA

Power Transformers

- Built and engineered in North America
- Voltages < 345kV
- Ratings 5-250MVA
- Station class, oil filled, round core, copper windings
- Special configurations and designs available! Ask your WEG Sales Representative for details.
- Designed, built, and engineered to ANSI standards.
- Custom Solution Package Sales
- WEG can package any of its products for ease of sale! Enjoy a single point of contact for the entire package of products and assistance from quote through after-sales support. Ask your WEG Sales representative for details.

