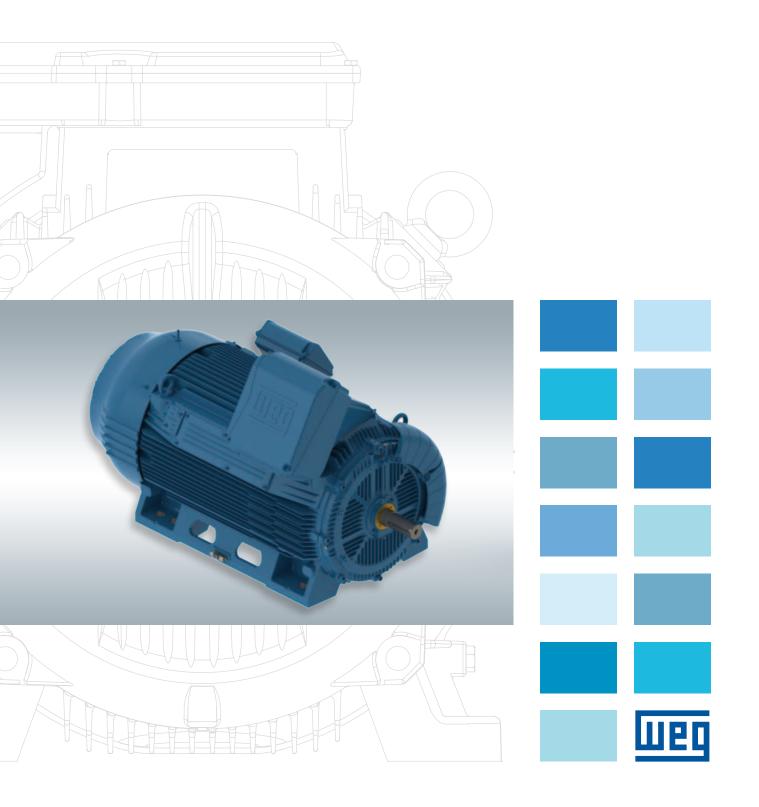
# W50

# Three-phase Electric Motor







#### **Standard Features**

Rated output: 75kW to 1250kW

■ Number of poles: 2 to 12

Frame sizes: 315H/G to 450J/H

Frequency: 50 and 60 Hz

Voltage: 380 to 6600V

■ Service factor: 1,00

Insulation class: F

Degree of protection: IP55

Mounting: B3

Cooling method: TEFC – Totally enclosed fan cooled (IC411)

Frame, endshields, fan cover and terminal box material: 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

■ Vibration Level: Grade A according IEC 60034-14

Lubrication: Mobil Polyrex EM Grease

Painting plan: C5 (I and M) - "High" Durability according ISO 12944

Color: RAL 5009 (Blue)

Dual Voltage Space Heaters

Automatic drain plug

#### **Optional Features**

Other mounting configurations: B35, V1, V5, V6 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 according IEC 60034-14

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

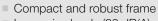
Additional terminal box: For "Y" connection with access to the neutral terminal

Non-contact / contact thermometer with gauge

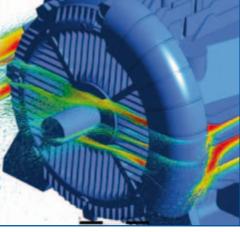
Stainless steel fasteners

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

### Features and benefits

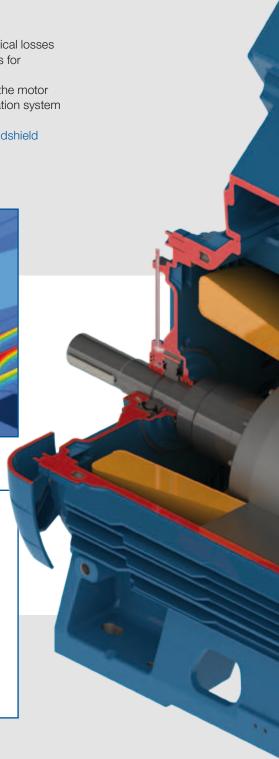


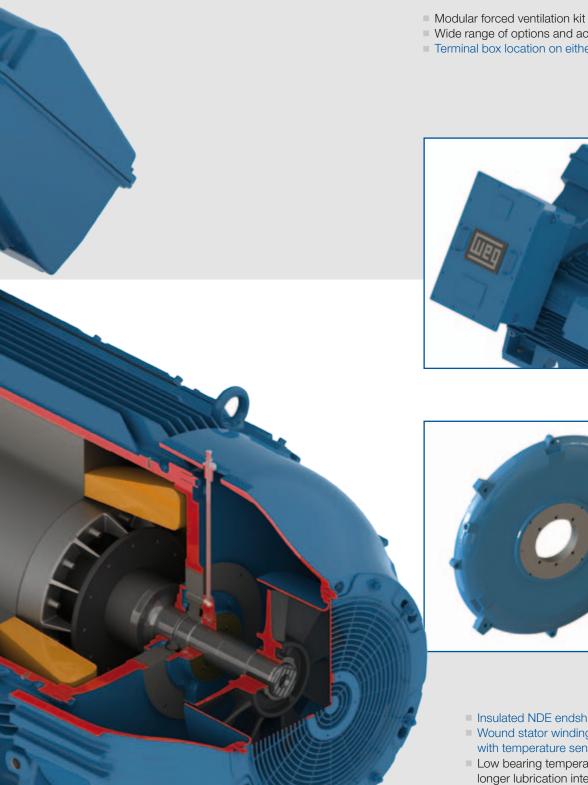
- Low noise levels (82 dB(A) at 3600rpm)
- Optimum efficiencies due to low mechanical losses
- Innovative design of the DE endshield fins for maximum heat dissipation
- Uniform temperature distribution across the motor frame due to the exclusive internal ventilation system
- Easy access to accessories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





- 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





- 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

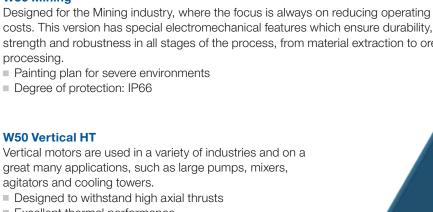


### Dedicated W50 lines

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 Mining**

Designed for the Mining industry, where the focus is always on reducing operating costs. This version has special electromechanical features which ensure durability, strength and robustness in all stages of the process, from material extraction to ore







#### W50Xn

With safety being of paramount importance, WEG developed the W50 Non-Sparking (Ex nA) motors 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 IEC hazardous areas classified as Zone 2, Group II, Temperature class T3
- Compliance with NEC standard requirements regarding hazardous areas, such 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

#### 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









## **Industrial Motors and Gears Limited**

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## **The Quality Choice**

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