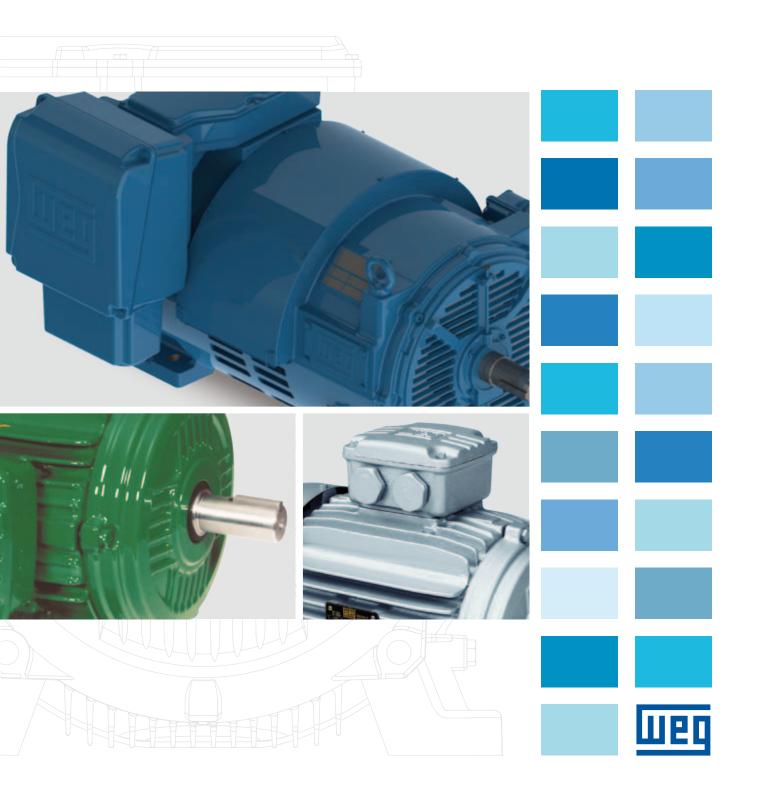
# **Motors**

# LV Product Lines Asian Market





# General purpose IEC - Cast iron frame

Three phase asynchronous motor, with high technology, easy to adapt to the most application types, allowing to your company agility during installation, easy operation and low maintenance cost. The project is according to IEC34 standards, which guarantees higher energy savings. The motors are available in the following versions:

- IE1
- IE2
- IE3
- Suitable for the use with Frequency Inverters.



### **Features**

- Output: 0,12 up to 355kW
- Poles: 2, 4, 6 and 8
- Frame: 63 up to 355 M/L
- Three-phase multivoltage, IP55, 50Hz or 60Hz
- Totally Enclosed Fan Cooled (TEFC)



Pumps, fans, crusher, conveyors, machine tools, milling machines, centrifugal machines, presses, elevators, looms, grinders, woodworking, cooling, packaging equipment, other severe duty application.



Features	Benefits
WISE® Insulation System	Increase the electrical strength of the stator, allowing the motor to operate with frequency inverters.
Efficiency	IE3 efficiency motor, guarantee a fast return of investment.
Painting Plan for Industrial Environments	Suitable for the use in slightly severe and sheltered environments, with low average humidity, regular temperature variations.
Cast Iron Frames	More strength for your application.
Ventilation System	Uniform refrigeration of the motor with significant temperature reduction in the external surface and bearings, guarantee high performance and energy saving to your application.
Customization	Product suitable to meet the most demanded applications in the industry.

# Aluminum Frame - Multi-mounting

WEG Aluminum frame motors with removable base were specially designed to meet market requirements in reference to mounting flexibility once they allow all mounting positions.

The foot mounting system offers great flexibility and it quite simply allows changing on the mounting configuration without requiring any machining or modification on the motor feet.

Motor terminal box can be rotated at 90 degrees allowing motor leads to be connected on any motor side. Besides that, these motors are fully interchangeable with existing cast iron frame motors. Stock flexibility due to the fact that just one motor is required with mounting possibility on all positions.



### **Features**

- Output: 0,12 up to 37kW
- Poles: 2, 4, 6 and 8
- Frames: 63 up to 200M/L
- Three-phase, IP55, TEFC, 50Hz or 60Hz

## **Applications**

Pumps, air conditioning systems, fans, cranes, compressors, conveyor belts, machine tools, winding machines, drawing machines, centrifugals, presses, hoists, overhead cranes, elevators, looms, grinders, woodworking, injectors, extruders, roller tables, cooling towers, packaging machines, etc.



Features	Benefits
Multimounting	Flexible and easy to change mounting configurations without the necessity of machining operations or additional changes to the motor feet.
Aluminum Frame	Better thermal dissipation
WISE® Insulation system	Increase the electrical strength of the stator, allowing the motor to operate with frequency inverters.
Painting Plan for Industrial Environments	Suitable for the use in slightly severe and sheltered environments, with low average humidity, regular temperature variations.
Ventilation System	Uniform refrigeration of the motor with significant temperature reduction in the external surface and bearings, guarantee high performance and energy saving to your application.
Customization	Product suitable to meet the most demanded applications in the industry.



# Brake motor

In order to have a company working with high performance it is necessary to have equipments working according to its needs. WEG brake motor is perfect to equipments where fast safety stops are required, positioning and time saving. WEG braking solutions allows synergy in the production process, helping with agility and safety. WEG brake motors are available in the following versions:

- IE1
- IE2
- Suitable for the use with Frequency Inverters.



### **Features**

- Output: 0,12 up to 37kW
- Poles: 2, 4, 6 and 8
- Frame: 63 up to 200L
- Three-phase, IP55, TEFC, 50Hz or 60 Hz
- Cast Iron Frame or Aluminum Frame



These motors can be used on any machine that requires quick stops and time savings during installation: machine tools, looms, packing machines, gates, wood machines, cranes, other severe duty applications.



Features	Benefits
High performance braking system	Guarantee precision braking, fast and safe with easy maintenance.
Manual brake release	Possibility to keep the motor free during emergency situations or whenever necessary.
WISE® Insulation System	Increase the electrical strength of the stator, allowing the motor to operate with frequency inverters.
Painting Plan for Industrial Environments	Suitable for the use in slightly severe and sheltered environments, with low average humidity, regular temperature variations.
Ventilation System	Uniform refrigeration of the motor with significant temperature reduction in the external surface and bearings, guarantee high performance and economy to your application.
Customization	Product suitable to meet the most demanded applications in the industry.

# Ex d - Explosion Proof Ex de - Explosion Proof with increased safety terminal box

The instalation of electric motors where flamable products are continuously handled, processed or storage, must comply with the most demanded safety standards in order to guarantee protection of life, machines and environment. Following to the highest safety standards WEG explosion proof motors are made of robust construction, modern system of flame retention with joint parts carefully designed, precision machining in the T-box eliminating imperfections in the joint parts and fixation with high mechanical strengh bolts.



### **Features**

- Output: 0,37 up to 330kW
- Poles: 2, 4, 6, 8 and two speed
- Frame: 90S up to 355 M/L
- Three-phase, IP55, TEFC, 50Hz or 60 Hz

### **Applications**

Pumps, fans, crushers, conveyors, machine tools, milling machines, centrifugal machines, presses, elevators, looms, grinders, woodworking, cooling, packaging equipment, other severe duty applications.



Feature	Benefits
Modern flame retention system with robust frame, end shields and T-box.	Avoid flame propagation from inside the motor to the external side, guaranteeing safety protection to the life, machines and environment.
Certification	According to ATEX, SABS, INMETRO, among others.
Additional nameplate for the use with frequency inverters.	Easy identification of the conditions of operation temperature (speed and torque range)
Painting Plan for Severe Environments	Special for industrial severe environments, sheltered or not, which may contain SO2, steam, solid contaminants and high humidity.
Customization	Product suitable to meet the most demanded applications in the industry.



# Ex nA Non Sparking

The instalation of electric motors where a flamable mixture is not frequently present but may represent risks, must comply to the most demanded safety standards for the protection of life, machines and environment.

Following to the highest safety standards WEG Ex nA motors are flexible to adapt to various applications allowing to your company agility during instalation, easy operation, low maintenance cost and safety.



### **Features**

- Output: 0,12 up to 315kW
- Poles: 2, 4, 6 and 8
- Frame: 63 up to 355 M/L
- Three-phase multivoltage, IP55, 50Hz or 60Hz
- Totally Enclosed Fan Cooled (TEFC)

### **Applications**

Pumps, fans, milling applications, centrifugal machines, presses, elevators, machine tools, woodworking, grinders, looms, cooling, packaging machines, conveyors, wash, bottling machines and other applications in hazardous areas classified as Zone 2.



Features	Benefits
Reduced motor external surface temperature	Do not allow gas ignition in contact with the motor
Certification	According to ATEX, IECEx, INMETRO, among others
WISE® Insulation System	Increase the electrical strength of the stator, allowing the motor to
	operate with frequency inverters.
Painting Plan for Severe Environments	Special for industrial severe environments, sheltered or not, which
	may contain SO2, steam, solid contaminants and high humidity.
Flexibility	Product suitable to meet the most demanded applications in
	the industry.









# **Smoke Extraction**

Assure safety where a large concentration of people in commercial and industrial facilities is present is one of the main concerns of designers and company owners during the project of shopping centers, factories, warehouses, covered parking lots, tunnels and other places which concentrate a large number of people. The Smoke motors are certified\* for high temperatures and guarantee a rapid smoke and heat extraction and delay in fire propagation, allowing free access to the emergency exits.



### **Features**

- Output: 0.12 up to 315kW
- Poles: 2, 4, 6 and 8
- Frames: 63 up to 355 M/L
- Three-phase, IP55, TEFC, 50Hz or 60 Hz.



### **Applications**

Large buildings, shopping malls, factories, warehouses, enclosed parking lots, other ventilation systems.

	F200	F300	F400
Duty	S1 – 40°C	S1 – 40°C	S1 – 40°C
	S2* – 200°C – 2 hours	S2* – 300°C – 1 hour	S2* – 400°C – 2 hours
Insulation Class	Ins. Class F; Temp. Rise 80K Ins. Class H; Temp. Rise 80K or 105K		
Standard	EN 12101-3		
Pole / Frame sizes	2, 4/2 pole (frame sizes 80 up to 315S/M)		
available	4, 6, 8, 8/4, 6/4 pole (frame sizes 80 up to 355M/L)		
Construction	TEFC or TEAO (foot or flange mounted / pad mounted for frame sizes 80 up to 250)		

<sup>\*</sup> Continuously rated for normal ambient and emergency duty at rated temperature and time.

Features	Benefits
WISE® Insulation System	Increase the electrical strength of the stator, allowing the motor to operate with frequency inverters.
Painting Plan for Industrial Environments	Suitable for the use in slightly severe and sheltered environments, with low average humidity, regular temperature variations.
Cast Iron Frame	More strength for your application
Ventilation System	Uniform refrigeration of the motor with significant temperature reduction in the external surface and bearings, guarantee high performance and energy saving to your application.
Customization	Product suitable to meet the most demanded applications in the industry.



# General purpose - NEMA

WEG General purpose motors are built according NEMA specifications and designed for operation in moist or dusty atmospheric conditions without affecting their useful life.

Premium Efficiency WEG motors are tested according to IEEE 112std., method 'B' and their efficiency values are certified by UL Labs (CSA C390) and NEMA Design 'B' and maintain exceedingly high breakdown and locket rotor torque while providing the highest rated efficiency levels.



### **Features**

- Output: 1 up to 500HP
- Poles: 2, 4, 6, 8 and two speed
- Frame: 143T up to 586/7T
- Painting: Synthetic enamel alkyd resin base
- Totally Enclosed Fan Cooled (TEFC)

## **Applications**

Chemical plants, compressors, pulp and paper mills, crushers, refineries, pumps, steel mills, fans, cement mills, packaging equipment.



Features	Benefits
WISE® Insulation System	Increase the electrical strength of the stator, allowing the motor to operate with frequency inverters.
Painting Plan for Industrial Environments	Suitable for the use in slightly severe and sheltered environments, with low average humidity, regular temperature variations.
Cast Iron Frames	More strength for your application.
Ventilation System	Uniform refrigeration of the motor with significant temperature reduction in the external surface and bearings, guarantee high performance and energy saving to your application.
Customization	Product suitable to meet the most demanded applications in the industry.

# W40

The W40 motor is a general purpose line designed for environments where dirt and moisture are minimal. The W40 cast iron frame is designed to provide maximum ventilation and heat dissipation, offering low vibration levels, high mechanical stiffness and durability. Widely used in applications as compressors, pumps, fans and blowers, the W40 line meets or exceeds the efficiency levels determined by the International Standards and the minimum efficiency level programs in force worldwide.



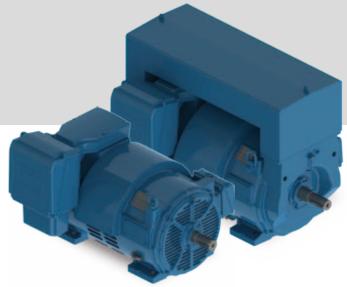
## **Features**

- Output: 440 up to 1500kW
- Poles: 2 and 4
- Frame: 400J/H and 450K/J
- Frequency: 50Hz or 60Hz
- Degree of protection: IP23 (for frame 400J/H)

IP24 (for frame 450K/J)

## **Applications**

Pumps, fans, kneader and mixer machines, cutter and sawing machines, pressing machines, industrial equipments, conveyors, blowers, screw compressors, cranes, packaging equipment.



Features	Benefits
High performance	Due to its open enclosure, the motor design features higher rated output levels in comparison with totally enclosed motors, resulting in the most cost-effective option for the driven equipment
Compact construction	One of the most compact High Voltage machines available on the market
Additional terminal box for accessories fitted with two spare magazines	Thermal detectors and space heaters leads are connected in different terminal boxes, avoiding any possible signal interference and providing easy and safe connections
WISE® Insulation System	Increase the electrical strength of the stator, allowing the motor to operate with frequency inverters.



# W22 Quattro

The W22 Quattro is a hybrid motor fitted with a squirrel cage rotor, making it suitable for direct on line start, and high energy permanent magnets assuring synchronous operation and high efficiency operation.

W22 Quattro line was developed for users who consider energy saving a priority. It is an environmentally friendly motor that due to its very efficient performance will demand less energy from the grid. That will translate into a low total cost of ownership and the reduction of  $\mathrm{CO}_{\mathrm{2eq}}$  emissions.



### **Features**

- Output: 0.37 kW to 7.5 kW
- Number of Poles: 4 and 6
- Frequency: 50Hz or 60Hz
- Voltage: 230/440 or 400/690 V
- Frames: 80 to 132M/L
- Colour: RAL 6021 Green

## **Applications**

Compressors, elevators, pumps, fans, exhausters, conveyors, electrical vehicles, textile industry machines and other applications where speed variation, high efficiency, low noise levels and reduced volume are mandatory.



Features	Benefits
IE4 Efficiency level	The motor efficiency meets the impending IE4 levels, offering energy savings and reduction in ${\rm CO_2}$ emissions.
Rotor fitted with permanent magnets	Motor extended lifetime, higher output / frame size ratio, higher efficiency, higher power factor and reduced bearing and overall motor temperature.
Reduced bearing temperature	Low bearing temperature – extended life and less maintenance
Easy start	No need for sensors/encoder in applications with frequency inverters

# W22 Magnet

The rotor fitted with permanent magnets ensures high performance, reduces the noise levels as well as ensures higher efficiency levels when compared with high efficiency motor ratings. The motors operate at lower temperatures, hence extending lubrication intervals and increasing bearing lifetime.

The W22 Magnet motors allow more output levels per frame size, requires less floor space for installation. These motors are fed by WEG frequency inverter and supplies constant torque over a wide speed range.



### **Features**

Output: 11 kW to 160 kW

■ Speed range: 180 to 3600 rpm

■ Voltage: 400 V

Frames: 132S to 250S/M

■ Colour: 091A.3145 - Gray

## **Applications**

Compressors, elevators, pumps, fans, exhausters, conveyors, electrical vehicles, textile industry machines and other applications where speed variation, high efficiency, low noise levels and reduced volume are mandatory.



Features	Benefits
IE4 Efficiency level	The motor efficiency meets the impending IE4 levels, offering energy savings and reduction in ${\rm CO_2}$ emissions.
Rotor fitted with permanent magnets	Motor extended lifetime, higher output / frame size ratio, higher efficiency, higher power factor and reduced bearing and overall motor temperature.
Synchronous operation	Easy speed synchronization with multiple motors fed by the same variable frequency inverter
Wide speed range with constant torque	Ensures operation at lower speeds with the same performance, without requiring a forced ventilation kit, demanding less floor space for motor and MCC installation
WISE® Insulation System	Increases stator electrical strength and allows the motor operation by frequency inverters.

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For those countries where there is not a WEG own operation, find our local distributor at www.weg.net.



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