

W22Xd Flameproof Motors

As a result of intensive research and development, WEG launches its new explosion-proof motor line, the W22X. Incorporating the same innovative concepts of the W22 general purpose motors, the W22X line is an evolution on the market of classified area products offering high efficiency levels, energy saving, low operational costs, extended lifetime, low maintenance and assured safety.



Standard Features

- Output: 1.25 to 330 kW
- Number of Poles: 2, 4, 6 and 8
- Frequency: 50 Hz
- Voltage: 220-240/380-415 V (up to 100 L)
380-415/660 V (from 112 M and up)
- Frames: 71 - 355M/L
- Colour: Premium Efficiency - IE3: RAL 6002 - Green
High Efficiency - IE2: RAL 5009 - Blue

Versions Available

- Premium Efficiency - IE3
- High Efficiency - IE2
- Multi speed motors (Dahlander, Double Winding, etc.)
- 10 and 12 poles

Applications

Pumps, compressors, fans, blowers, conveyors and other sever duty applications in explosive atmospheres classified as Zones 1 and 2, gas groups IIA, IIB or IIC.

Features	Benefits
W22 Platform	Offers on several innovative features of the W22 General Purpose Motors platform
High Efficiency Levels	Even through the EN directive does not cover explosion-proof motors, WEG feels that since the introduction of the ATEX Regulations there has been an increase in demand for high-efficiently hazardous area products. Due to this increase, WEG launches the W22X line with the IE2 efficiency level as standard for all IEC motors
New terminal box	The terminal box was designed with plenty of internal space, allowing easy access and safe handling of the power cables, even when large size cables are required
Wide range of certified accessories	The new W22X line offers a wide range of accessories affording suitability for a wide range of customer specifications, without losing focus on the safety of the application
Easy maintenance	The motor components were carefully designed in order to ensure easy maintenance: <ul style="list-style-type: none"> ■ W22X motors are fitted with bearing caps on the external side of the endshields, for easy bearing inspection ■ The motors also can be supplied with grease nipples and open bearings, which increased the bearing lifetime <ul style="list-style-type: none"> ■ Easy seal change allows higher degree of protection ■ The motor feet are double drilled, facilitating the replacement of motors already installed at the plant ■ The feet still have provisions for dowel pins, making the alignment of motors easier when removed for maintenance from their mounting bases
Zone 21 and 22 certified	To enable a higher functionality to the W22X line, these motors will be also certified for applications in ambients where combustible dusts/fibers may be expected to be present
IIC Group certified	Safety for hydrogen gases family hazardous areas
Protection	Motor suitable to operate in hazardous locations classified as Zones 1 and 2
WISE® insulation system	Increases stator electrical strength and allows the motor operation by frequency inverters, without damage by voltage peaks*

*For more information about Frequency Inverter operation, please see page 23.

Flameproof Motors with Brake

The installation of electric motors where flammable products are continuously handled, processed or stored must comply with the most demanding safety standards in order to guarantee life protection, machines and environment. Following to highest safety standards, WEG explosion-proof motors integrate the high performance of the brakes. An effective solution for equipment where fast safety stops are required, as well as precise positioning with safety in hazardous areas such as Zone 1 and Zone 2.

Standard Features

- Output: 2.2 up to 18.5 kW
- Number of Poles: 2, 4, 6 and 8
- Frequency: 50 Hz
- Voltage: 380-415/660 V
- Frames: 132 S to 160 L
- Colour: High Efficiency - IE2: RAL 5009 - Blue
Standard Efficiency - IE1: RAL 5009 - Blue



Versions Available

- High Efficiency - IE2
- Standard Efficiency - IE1

Applications

Pumps, compressors, fans, blowers, conveyors and other sever duty applications in explosive atmospheres classified as Zones 1 and 2, gas groups IIA or IIB.

Features	Benefits
High performance braking system	Ensures quick and safe stops and accurate load positioning and requires low maintenance
Manual brake release	Possibility to keep the motor free during emergency situations or whenever necessary
Modern flame retention system with robust frame, endshields and T-box	Avoid flame propagation from inside the motor to the external side, guaranteeing safety life protection, machines and environment
W3Seal® sealing system and IPW66 degree of protection	Protect against the ingress of contaminants inside the motor frame
Certification for the use with frequency inverters - T4	Guarantee in speed variation applications and hazardous areas such as
Additional nameplate	Easy identification of the motors in the factory and traceability
Painting Plan for Severe Environments	Special for industrial severe environments, sheltered or not, which may contain
Protection	Motor suitable to operate in hazardous locations classified as Zones 1 and 2
WISE® insulation system	Increases stator electrical strength and allows the motor operation by frequency inverters, without damage by voltage peaks*

*For more information about Frequency Inverter operation, please see page 23.

W22Xtb Dust Ignition Proof Motors

The W22Xtb motor has been specially designed to maximize safety and quality of motors applied in explosive atmospheres – Zone 21 (grain processing, cereals, textile fibers, powder coating, polymers, etc.) Reliability and safety is ensured at the presence of conductive dust suspension (cloud) or dust layer (up to 5 mm), according to IEC standards.



Standard Features

- Output: 0.12 up to 315 kW
- Number of Poles: 2, 4, 6 and 8
- Frequency: 50 Hz
- Voltage: 220-240/380-415 V (up to 100 L)
380-415/660 V (from 112 M and up)
- Frames: 63 to 355M/L
- Colour: Premium Efficiency - IE3: RAL 6002 - Green
High Efficiency - IE2: RAL 5009 - Blue
Standard Efficiency - IE1 - RAL 5010 - Blue



Applications

Sugar refining plants, Breweries, cement plants, textiles, pharmaceutical, chemical, agricultural process industries and other applications in explosive atmospheres classified as Zones 21 and 22.

Features	Benefits
Reduced surface temperature	Safety. Prevents the ignition of combustible dust or fibers in contact with the motor
Conductive material fan	Safety, avoiding sparks that could cause the ignition of the combustible material present on the environment
Degree of Protection IP66	Protect against the ingress of contaminants inside the motor frame
Winding Thermal Protection	Protection the motor at abnormal operating conditions, preserving the designed surface temperature
WISE® insulation system	Increases stator electrical strength and allows the motor operation by frequency inverters, without damage by voltage peaks*

*For more information about Frequency Inverter operation, please see page 23.

W22Xn Non-Sparking Motors

The installation of electric motors where a flammable mixture is not frequently present but may represent risks, must comply with the most demanding safety standards for life protection, machines and environment. Following to the highest safety standards WEG Ex nA/Ex tc motors are flexible to adapt to various applications allowing your company agility during installation, easy operation, low maintenance cost and safety.



Standard Features

- Output: 0.12 kW to 250 kW
- Number of Poles: 2, 4, 6 and 8
- Frequency: 50 Hz
- Voltage: 220-240/380-415 V (up to 100 L)
380-415/660 V (from 112 M and up)
- Frames: 63 to 355M/L
- Colour: Premium Efficiency - IE3: RAL 6002 - Green
High Efficiency - IE2: RAL 5009 - Blue
Standard Efficiency - IE1 - RAL 5010 - Blue



Applications

Pumps, compressors, fans, mills, presses, elevators, machine tools, woodworking, grinders, looms, packaging machines, conveyors, bootling machines and other applications in explosive atmospheres classified as Zones 2 and 22.

Features	Benefits
Certifications	Guarantee of compliance with the tests of the world's most demanding certification bodies
Protection	Dual certification for Zone 2 (gas) + Zone 22 (non-conductive dusts)
Thermal protections	Safety. Two sets of PTC's; one to prevent the ignition of gases present at the explosive atmosphere and other to ensure low motor surface temperature and the ignition of combustible dusts
Premium motor	IE3 efficiency level available for all motors range
WISE® insulation system	Increases stator electrical strength and allows the motor operation by frequency inverters, without damage by voltage peaks*

*For more information about Frequency Inverter operation, please see page 23.