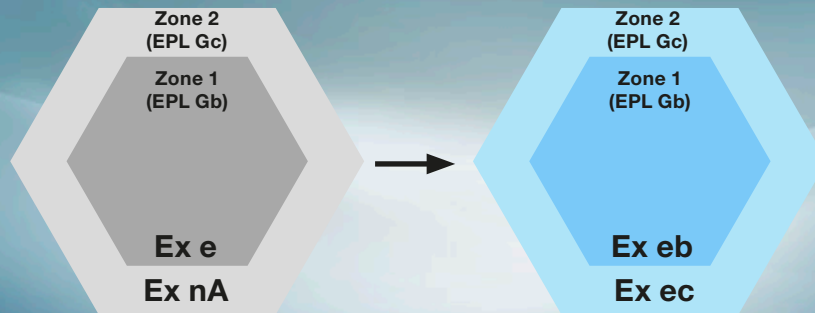


WEG ALIGNED WITH THE LATEST Ex MARKING FOR MOTORS DESIGNED FOR HAZARDOUS AREAS



As a global supplier for the Oil, Gas & Petrochemical industry, WEG is in full compliance with the new increased safety (Ex ec and Ex eb) marking, according to IEC/EN 60079-7:2015, including the product certificates IECEx, ATEX and INMETRO.

Changes to the IEC Standards

The updated standard IEC 60079-7:2015 (Equipment protection by increased safety “e”) has incorporated the requirements of IEC 60079-15:2010 (Equipment protection by type of protection “n”), obliging new marking for electric motors, as indicated below:

| | From | To |
|--------------------|--------------------------------------|--|
| Marking | Ex nA | Ex ec |
| Type of protection | Non sparking | Increased safety Level of protection “ec” |
| Zone | 2 (EPL Gc) | 2 (EPL Gc) |
| Standards | IEC 60079-15:2010 / EN 60079-15:2010 | IEC 60079-7:2015 / EN 60079-7:2015 |

| | From | To |
|--------------------|------------------------------------|--|
| Marking | Ex e | Ex eb |
| Type of protection | Increased safety | Increased safety Level of protection “eb” |
| Zone | 1 (EPL Gb) | 1 (EPL Gb) |
| Standards | IEC 60079-7:2006 / EN 60079-7:2007 | IEC 60079-7:2015 / EN 60079-7:2015 |

Modifications to Electric Motors

Electric motor manufacturers are required to update their product certificates and apply the new equipment marking accordingly. It is important to stress, however, that there is no impact on the motors performance or technical requirements as a consequence of this new marking.

For motors already manufactured, in operation or in stock, no additional actions or replacement is necessary.

New orders, however, will be supplied with marking according to the new standards.

Users, contractors and OEMs should be made aware of these new standards / equipment marking, in order to update their specifications and documentation requirements accordingly.

The Oil, Gas & Petrochemical industry recognizes “increased safety” protection as synonymous with products operating in Zone 1.

It is important to note, however, that whilst the new standard updates refer to equipment protection by increased safety “e”, those products having a level of protection “ec” (EPL “Gc”) are not permitted to operate in Zone 1.

WEG’s product portfolio is in full compliance with these new requirements as follows:



WEG Product Portfolio for Hazardous Areas

Flameproof Enclosures – Level of Protection “db” (EPL Gb)

- Low and medium voltage
- Cast iron frame enclosure
- Degree of protection up to IP66
- Optional Increased Safety Terminal Box - Level Protection “eb”
- Intended for operation in hazardous area Zone 1 and Zone 2
- Gas group IIA and IIB (IIC optional)
- Temperature class T3 and T4 (T5 and T6 under request)

Increased Safety – Level of Protection “eb” (EPL Gb)

- Low voltage (medium voltage under request)
- Cast iron or steel frame enclosure
- Degree of protection up to IP66
- Intended for operation in hazardous area Zone 1 and Zone 2
- Gas group IIA, IIB and IIC
- Temperature class T3 (T4 under request)

Increased Safety – Level of Protection “ec” (EPL Gc)

- Low and medium voltage
- Cast iron or steel frame enclosure
- Degree of protection up to IP66
- Optional Increased Safety Terminal Box - Level Protection “eb”
- Intended for operation in hazardous area Zone 2
- Gas group IIA, IIB and IIC
- Temperature class T3 (T4 and T5 under request)

Pressurized Enclosure – Level of Protection “pxb” (EPL Gb) and “pzc” (EPL Gc)

- Low and medium voltage
- Cast iron or steel frame enclosure
- Degree of protection up to IP66
- Optional Increased Safety Terminal Box – Level Protection “eb”
- Intended for operation in hazardous area Zone 1 and Zone 2
- Gas group IIA, IIB and IIC
- Temperature class T3 and T4 (T5 under request)

Dust Ignition Protection – Level of Protection “tb” (EPL Db) and “tc” (EPL Dc)

- Low and medium voltage
- Cast iron or steel frame enclosure
- Degree of protection up to IP66
- Intended for operation in hazardous area Zone 21 and Zone 22
- Dust group IIIA, IIIB and IIIC
- Maximum surface temperature T125 °C or T160 °C (other temperatures under request)

Note: synchronous machines can be provided with the specified type of protection (Ex ec, Ex pxb, Ex pzc, Ex tb or Ex tc) for operation in gas (Zone 1&2) or dust (Zone 21&22) environments.



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