ATEX Designation

**TYPE OF IONIZATION PROTECTION**

<table>
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<tr>
<th>Type of ignition protection</th>
<th>Explosion protection principles and methods</th>
<th>General requirements</th>
<th>Special requirements for Group I</th>
<th>Ex i, Ex ia, Ex ma or Ex Da or a suitable combination of these</th>
<th>Zone 2</th>
<th>Zone 3, Zone 4</th>
<th>Zone 0</th>
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**ZONE CLASSIFICATION**

- **Category Gb**
  - Zone 0
  - Zone 1
  - Zone 2
- **Category IIC**
  - Zone 0
  - Zone 1
  - Zone 2

**EXPLOSION GROUP**

- Group I: equipment intended for use in mining and oil and gas production
- Group II: equipment intended for use in other areas

**TEMPERATURE CLASSES**

- **G Group**
  - T1: >850°C
  - T2: >500°C
  - T3: >300°C
  - T4: >135°C

- **Temperature protection level**
  - EPL = EXPLOSION PROTECTION LEVEL
  - For Group I: EPL = T1, T2, T3, T4
  - For Group II: EPL = T1, T2, T3, T4

**MAXIMUM PERMITTED TEMPERATURES**

- Maximum permitted temperature for equipment and component temperature of the explosion group.

**NOTE**

- Equipment for use in the Ex-area must meet the requirements of the applicable standards and directives.
- The application of the directive 2014/34/EU (ATEX) and the EN 60079 series of standards is mandatory for equipment intended for use in the Ex-area.
- The equipment must be labeled with the CE mark and the ATEX symbol.
- The certificate number issued by notified bodies must be provided on the equipment.
- The safety-related technical documentation must be provided by the manufacturer.
- The equipment must be marked with the individual ATEX marking.
- Equipment must be periodically inspected and tested.
- Equipment must be decommissioned when it is no longer safe or fails to meet the requirements.

**Additional condition**

- Equipment can be used without specific restrictions if they are suitable for the operation and do not present any risk to health and safety.
- The equipment must comply with the essential safety requirements.
- The equipment must be marked with the CE mark.

**MEANING OF THE MARKS**

- CE: Conformity with all applicable EU Directives
- ATEX: Equipment intended for use in potentially explosive atmospheres
- Gb: Zone 0, Zone 1, Zone 2
- Zone 3, Zone 4
- IIC: Group II
- IP: Protection degree
- T1, T2, T3, T4: Temperature protection level
- M1: Very high safety measure
- M2: High safety measure
- M3: Normal safety measure
- M4: Minimum safety measure

**EXTRACTION:**

- **Ex ia**
  - Zone 0
  - Zone 1
  - Zone 2
- **Ex ma**
  - Zone 0
  - Zone 1
  - Zone 2
- **Ex Da**
  - Zone 0
  - Zone 1
  - Zone 2

**NOTIFIED BODIES IN EUROPE (incomplete)**

- CEP GmbH: Germany
- TÜV Rheinland: Germany
- Intertek: Germany
- Bureau Veritas: Germany

**WATER PROTECTION**

- **Protection degree**
  - 1: protected
  - 2: protected against water spray
  - 3: protected against high pressure water jet

**NOTES:**

- Equipment must be marked with the individual ATEX marking.
- Equipment must be periodically inspected and tested.