### Labelling of explosion proof equipment according to ATEX 2014/34/EU

**Classification and labelling of hazardous locations**

<table>
<thead>
<tr>
<th>Hazardous locations</th>
<th>Classification of hazardous locations</th>
<th>Product classification</th>
<th>Equipment protection level (EPL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable medium</td>
<td>Zone 0: Continuously, for long periods or frequently</td>
<td>Product group: II</td>
<td>Product category: Ga</td>
</tr>
<tr>
<td></td>
<td>Zone 1: Likely to occur</td>
<td></td>
<td>3G</td>
</tr>
<tr>
<td></td>
<td>Zone 2: Infrequently and for short periods only</td>
<td></td>
<td>2G</td>
</tr>
<tr>
<td>Gases, mists, vapours</td>
<td>Zone 0: Continuously, for long periods or frequently</td>
<td>Product group: II</td>
<td>Product category: Da</td>
</tr>
<tr>
<td></td>
<td>Zone 21: Likely to occur</td>
<td></td>
<td>1D</td>
</tr>
<tr>
<td></td>
<td>Zone 22: Infrequently and for short periods only</td>
<td></td>
<td>2D</td>
</tr>
</tbody>
</table>

**Dusts**

<table>
<thead>
<tr>
<th>Classification of hazardous locations</th>
<th>Product group: II</th>
<th>Product category: Db</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 0: Continuously, for long periods or frequently</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zone 20: Likely to occur</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zone 21: Infrequently and for short periods only</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Protection principle**

<table>
<thead>
<tr>
<th>Type of protection</th>
<th>Code</th>
<th>Symbol</th>
<th>To use in zone</th>
<th>CENELEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flameproof enclosure</td>
<td>Ex</td>
<td>db</td>
<td>db</td>
<td>EN 60079-1</td>
</tr>
<tr>
<td>Increased safety</td>
<td>Ex</td>
<td>eb</td>
<td>eb</td>
<td>EN 60079-7</td>
</tr>
<tr>
<td>Intrinsic safety</td>
<td>Ex</td>
<td>ia</td>
<td>ia</td>
<td>EN 60079-11</td>
</tr>
<tr>
<td>Pressurised apparatus</td>
<td>Exp</td>
<td>gb</td>
<td>gb</td>
<td>EN 60079-2</td>
</tr>
<tr>
<td>Encapsulated moulding</td>
<td>Ex</td>
<td>mb</td>
<td>mb</td>
<td>EN 60079-8</td>
</tr>
<tr>
<td>Oil immersion</td>
<td>Ex</td>
<td>ob</td>
<td>ob</td>
<td>EN 60079-6</td>
</tr>
<tr>
<td>Powder filling</td>
<td>Ex</td>
<td>qb</td>
<td>qb</td>
<td>EN 60079-5</td>
</tr>
<tr>
<td>Protection “n”</td>
<td>Ex</td>
<td>nc</td>
<td>nc</td>
<td>EN 60079-15</td>
</tr>
<tr>
<td>Protection by enclosure</td>
<td>Ex</td>
<td>tb</td>
<td>tb</td>
<td>EN 60079-31</td>
</tr>
</tbody>
</table>

**Explosion group**

- **IIA**
  - Ammonia
  - Methane
  - Ethene
  - Propane
- **IIB**
  - Ethanol
  - Cysteine n-Butane
  - Fuel oil n-Hexane
- **IIC**
  - Aostal-de-hyde
  - Ethyl glycol
  - Carbon hydrogen
  - Ethyl ether

**Examples depending on**

- **Temperature class**
  - T1 < 50°C
  - T2 < 100°C
  - T3 < 135°C
  - T4 < 150°C
  - T5 < 300°C
  - T6 < 85°C

**Temperature class**

- T6: 85°C

**Notified bodies**

- **0152**: PTB (Germany)
- **0158**: EXAM (Germany)

**Example:**

- **Ex**
  - II 2 G Ex db IIIC T6 Gb
  - **Ex**
  - II 2 D Ex tb IIIC T80°C Db

**Protection principle**

- **Type of protection**
  - Flameproof enclosure
  - Increased safety
  - Intrinsic safety
  - Pressurised apparatus
  - Encapsulated moulding
  - Oil immersion
  - Powder filling
  - Protection “n”
  - Protection by enclosure

- **Code**
  - Ex
  - db
  - Gb
  - IIIC
  - T6
  - Gb
  - IIIC
  - T80°C

- **Symbol**
  - Ex
  - db
  - Gb
  - IIIC
  - T6
  - Gb
  - IIIC
  - T80°C

- **CE**
  - 0158

**Further information**

- **Ingress Protection EN 60529**
- **IP**
  - Protection against solids/dust
  - Protection against water

**For use under special conditions**

- **X**
  - For use under special conditions
  - This part is an Ex component and certified as such and is therefore not suitable for use on its own
  - CE conformity is achieved by incorporation into equipment