

# Selectionofequipment

Stepsforsafechoosing

### 1 INTENDED PURPOSE OF EQUIPMENT

- In case the equipment is used as portable, the certificate should state this in the description of equipment.
- If not mentioned it is likely that the unit is not tested or accepted for portable use.
- Portable Ex-luminaire and non-portable Ex-luminaire have different requirements.





### 2 CLASSIFICATION OF EX-AREA

- Compare the equipment certificate with the area classification.
- Examples
- Equipment category 2 = Zone 1 and 2
- EPL marking Gb = Zone 1 and 2

Make sure that the equipment CATEGORY is suitable for the particular Ex-area classification.

### 3 SUBSTANCE EXPLOSION GROUP

- Compare the equipment certification to the explosion group of the substance that is creating the danger of explosion.
- Examples:
  Hydrogen → Explosion group IIC
  Ethylene → Explosion group IIB
  Naphtha → Explosion group IIA

Make sure that the equipment EXPLOSION GROUP is suitable for the particular Ex-area classification.





### 4 TEMPERATURE RATING OF EQUIPMENT

- Compare the equipment certification to the highest acceptable temperature of substance that is creating the danger of explosion.
- Examples:
- Hydrogen → Ignition temp 560 °C = T1
- Ethylene → Ignition temp 425 °C = T1
- Diesel → Ignition temp 230 °C = T3
- Diethyl ether  $\rightarrow$  Ignition temp 195 °C = T4

Make sure the equipment's HIGHEST TEMPERATURE POINT is suitable for the particular Ex-area classification.



# Ex -40 °C - +40 °C

### 5 AMBIENT TEMPERATURE

- Notice the ambient temperature of the application of use.
- Notice also other criteria e.g. heavy mechanical stress and effect of chemicals.

The Ex-certificate is valid between ambient temperatures of -20 °C to +40°C if not otherwise mentioned in the certificate.

## TURN-KEY SOLUTIONS AVAILABLE FOR YOU

- Further questions?
- Atexor is at your disposal

### Wearethereforyou

