



# ATEX, IECEx, HazLoc & UKCA

## ATEX and IECEx Certification and Test

### Directive 2014/34/EU

Electrical and non-electrical equipment for use in workplaces potentially at risk for explosive atmospheres must ensure a level of security appropriate to the area of installation.

**ATEX Directive** includes in its scope the following type of products:

- **Equipment and Protective Systems** which may be used in potentially explosive atmospheres;
- **Safety devices, controlling devices and regulating devices** intended for use outside potentially explosive atmospheres but which are required for or contribute to the safe functioning of equipment and protective systems, with respect to the risks of explosion;
- **Components** defined as any item essential to the safe functioning of equipment and protective systems but with no autonomous function.

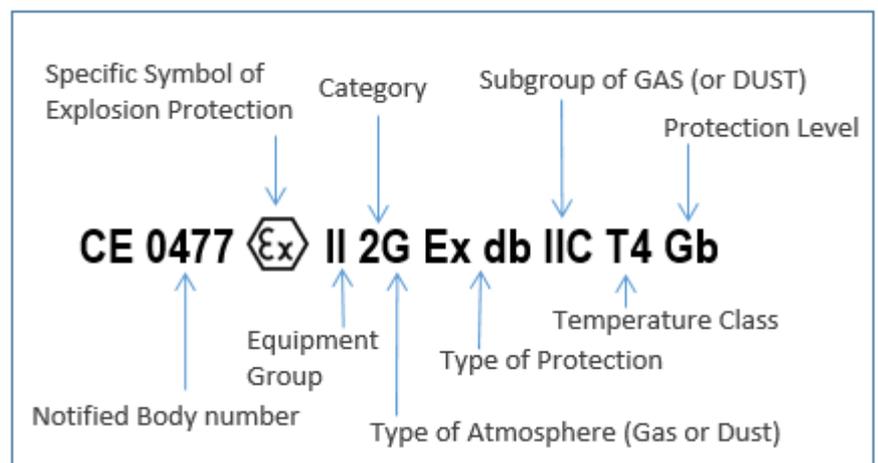
### Eurofins Product Testing Italy

**Notified Body n° 0477** for CE certification in accordance with ATEX Directive 2014/34/EU and **Testing Laboratory** for all types of **Equipment, Protective systems and Safety devices** and the following types of protection:

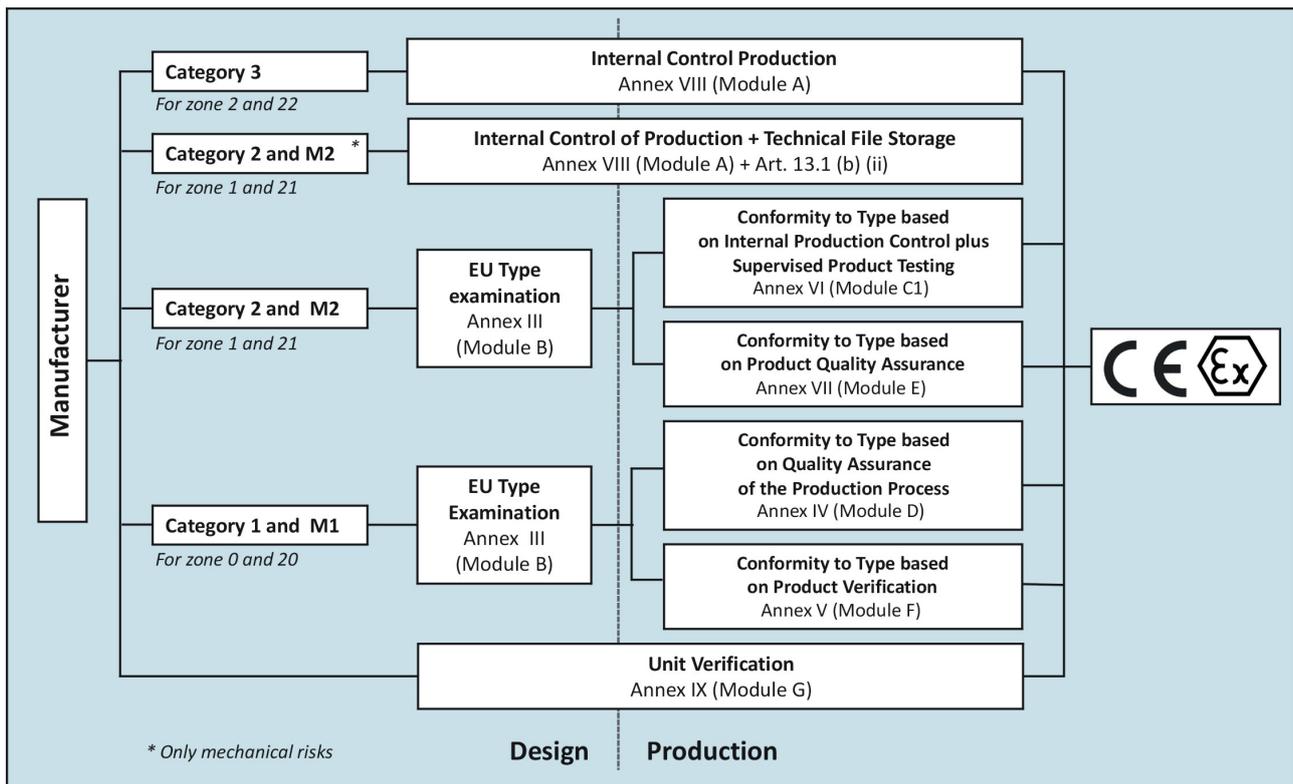
- Flameproof enclosures “d”
- Tight dust enclosures “t”
- Intrinsic safety equipment “i”
- Increased safety equipment “e”
- Encapsulated equipment “m”
- Liquid immersed equipment “o”
- Pressurized enclosures “p”
- Powder filling enclosures “q”
- Equipment with “n” type of protection
- Flow restricted enclosures “fr”
- Equipment protected by constructional safety “c”
- Equipment protected by liquid immersion “k”
- Equipment protected by control of ignition sources “b”



Marking string example



## ATEX Conformity Assessment Procedure



## IECEx Certification Scheme

Eurofins Product Testing Italy is accredited as **Certification Body (ExCB)** and **Testing Laboratory (ExTL)** in the international **IECEx Certification Scheme** for the following standards and types of protection:

- IEC60079: Part 0: Equipment - General requirements
- IEC60079: Part 1: Equipment protection by flameproof enclosures 'd'
- IEC60079: Part 2: Equipment protection by pressurized enclosures 'p'
- IEC60079: Part 5: Equipment protection by powder filling 'q'
- IEC60079: Part 6: Equipment protection by oil immersion 'o'
- IEC60079: Part 7: Equipment protection by increased safety 'e'
- IEC60079: Part 11: Equipment protection by intrinsic safety 'i'
- IEC60079: Part 15: Equipment protection by type of protection 'n'
- IEC60079: Part 18: Equipment protection by encapsulation "m"
- IEC60079: Part 25: Intrinsically safe electrical systems
- IEC60079: Part 26: Equipment with Separation Elements or combined Levels of Protection
- IEC60079: Part 28: Protection of equipment and transmission systems using optical radiation
- IEC60079: Part 31: Equipment dust ignition protection by enclosure 't'
- \*\*IEC/TS60079: Part 42: Electrical safety devices for the control of potential ignition sources for Ex-Equipment. \*\* This TS may be used for testing purposes but not for issuing an IECEx Certificate of Conformity
- IEC/TS60079: Explosive atmospheres - Part 46: Equipment assemblies
- IEC62784: Vacuum cleaners and dust extractors providing equipment protection level Dc for the collection of combustible dusts - Particular requirements
- ISO/IEC80079: Explosive atmospheres - Part 49: Flame arresters - Performance requirements, test methods and limits of use
- ISO80079: Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements
- ISO80079: Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"
- ISO16852: Flame arresters - Performance requirements, test methods and limits for use



## Hazardous Location Certification Scheme

Eurofins Product Testing Italy is a Laboratory qualified by Eurofins E&E North America under the MET NRTL mark to perform tests for the Hazardous Location Certification for North America.



## UKCA

Thanks to the collaboration with the colleagues of Eurofins E&E CML Ltd., Eurofins Product Testing Italy is also able to support its Clients in the achievement of the Ex certification for the United Kingdom market (UKCA Mark).

