



SAVE TIME AND COST WITH GLOBAL CERTIFICATION SERVICES FOR EXPLOSIVE ATMOSPHERE EQUIPMENT

Several regions have local hazardous locations (HazLoc) requirements, which can evolve over time, making it difficult to navigate the certification landscape. Relying on one trusted source with the expertise of explosion protection certification for both electrical and non-electrical equipment allows you to focus on keeping the wheels of your business turning.

Hazardous Locations Markings

UL and C-UL Certifications

North America, Gulf of Mexico and other parts of the world – UL's certification brand is widely recognized across North America, as well as other parts of the world.

Evaluation & Testing:

- **Ordinary Location/Safe Area Requirements** – Certification for risks associated with shock, fire and personal injury.
- **Hazardous Location/Explosion Protection Requirements** – Certification based on area classification and explosion protection methods for either Division or Zone installations. A hazardous locations certified product must comply with both ordinary location and hazardous locations requirements in accordance with US ANSI and CAN Standards.

Production Control:

- In accordance OSHA and SCC regulations, four production inspections per year at a minimum.

DIVISION MARKINGS

ABC Manufacturing Inc.
12300 N. East St.
Chicago, IL 60600
XPBOX112233
120VAC 5A 60Hz
-40°C ≤ T_{amb} ≤ +60°C
Serial No. 71150808

UL LISTED
E123456

PROCESS CONTROL EQUIPMENT FOR HAZARDOUS LOCATIONS
CLASS I, DIVISION 1, GROUPS B, C AND D T5
CLASS II, DIVISION 2, GROUPS F AND G, T100°C

Area Classification

Material Type Likelihood of Presence Material Properties Temperature Class

ZONE MARKINGS

ABC Manufacturing Inc.
12300 N. East St.
Chicago, IL 60600
XPBOX112233
120VAC 5A 60Hz
-40°C ≤ T_{amb} ≤ +60°C
Serial No. 71150808

UL LISTED
E123456

PROCESS CONTROL EQUIPMENT FOR HAZARDOUS LOCATIONS
Class I, Zone 1, AEx d IIC T5 Gb
Zone 21, AEx tb IIB T100°C Db
Ex d IIC T5 Gb
Ex tb IIB T100°C Db

Area Classification

Explosion Protection Group Equipment Protection Level

Protection Type Temperature Class

Hazardous Locations Markings (continued)

European Union ATEX Certification

Hazardous locations or Explosion protected equipment intended for installation in the European Union must comply with the ATEX directive, European Directive 2014/34/EU, The ATEX directive ensures the free movement of goods throughout the European Union by harmonizing compliance procedures.

UL is an accredited Notified Body and Ex Testing Laboratory for equipment based on the 60079 and 13463 series of standards.

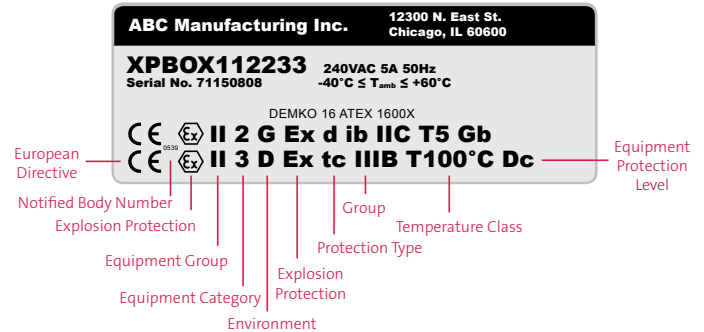
Evaluation & Testing:

- **Ordinary Location/Safe Area Requirements** - The CE mark is a self-declaration marking indicating that equipment conforms to applicable directives which vary depending on the product type. UL can assist in preparing a technical file to demonstrate compliance and declaration of conformity.
- **Hazardous Locations/Explosion Protection Requirements** – The ATEX product marking demonstrates compliance to the ATEX directive as follows:
 - Essential health and safety is covered in the Annex II of the ATEX directive, requiring manufacturers to establish principles of integrated explosion safety from all electrical and non-electrical ignition sources. Demonstrating compliance to these requirements is done by following the harmonized European standard series EN 13463.
 - EU Type Examination Certificate for Category 1 (electrical and mechanical) and Category 2 (electrical) equipment requires a Notified Body verifies equipment has met the relevant applicable provisions of the ATEX directive to issue an EC Type Examination Certificate. For Category 2 (mechanical) and Category 3 (electrical and mechanical), an EC Type Examination Certificate is not required; however, manufacturers may self-declare conformity which can be validated by UL.

Production Control:

- Quality Assessment in accordance with EN ISO/IEC 80079-34 is required by the directive for the facilities producing equipment which will result in a Notified Body issuing a Quality Assurance Notification (QAN). Audits are required every 18 months.

ATEX MARK EXAMPLE



IECEx System

The IECEx System is intended to facilitate international trade for equipment and services used in explosive atmospheres, while maintaining required levels of safety and is a data exchange program. Certification is based on the 60079 and 80079 series of standards.

UL is approved under the IECEx system as an Ex Certification Body (ExCB) and Ex Testing Laboratory (ExTL) for equipment, services facilities, and mark licensing based on the 60079 and 80079 series of standards facilitated by TC31 committee.

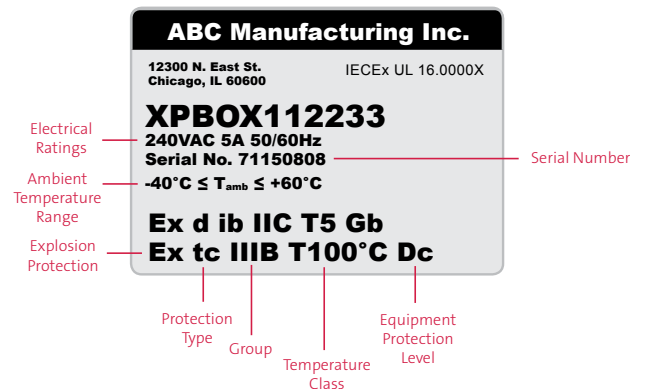
Evaluation & Testing:

- IECEx Certification and marking is based on the IEC 60079 and ISO 80079 series of standards.

Production Control:

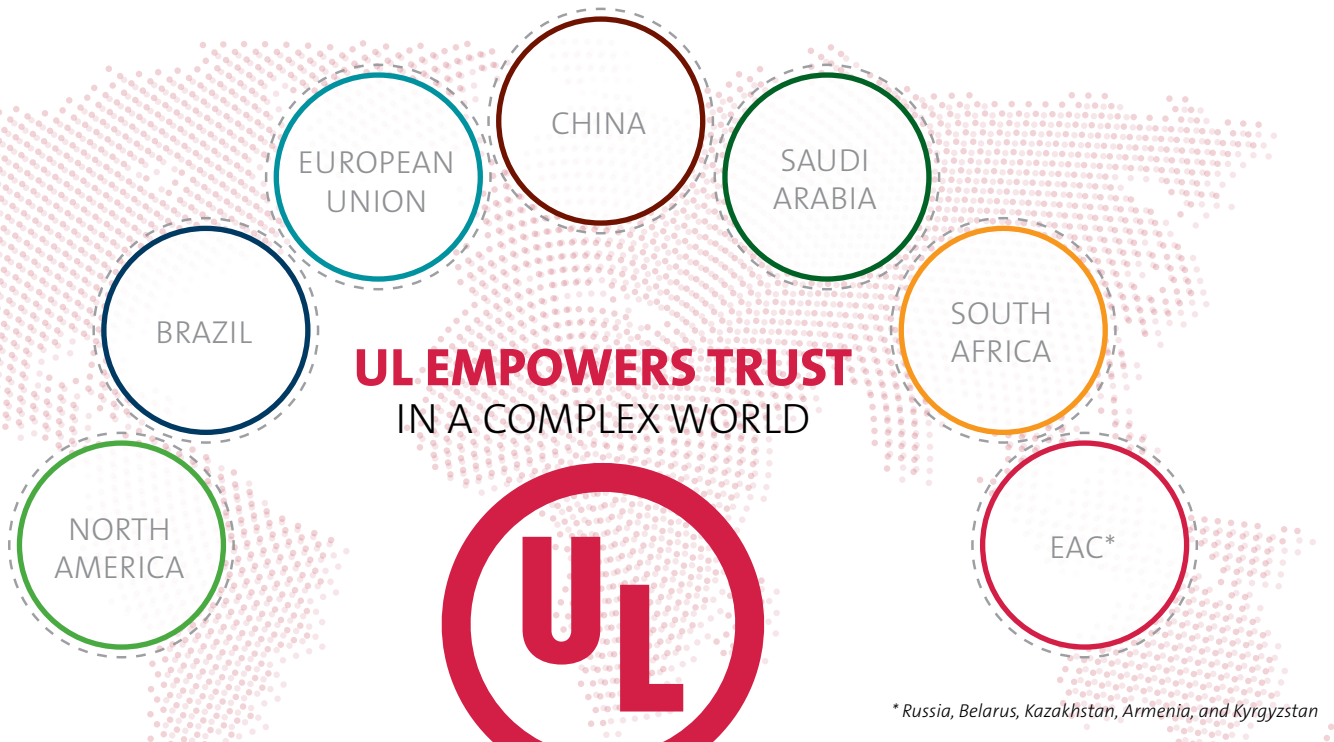
- Quality Assessment in accordance with ISO/IEC 80079-34 is required for the facilities producing equipment which will result in ExCB issuing a Quality Assessment Report (QAR).

IECEx MARK EXAMPLE



Total Certification Solution for Explosion Protection

Leverage UL's relationship with local agencies around the world to gain market acceptance with UL certification and a UL issued test report for ATEX, IECEx, CB and CB EMC (if applicable) to obtain local certification.



UL's Hazardous Location Certification Process

1 - PREPARE APPLICATION



- Product information
- Applicable Protection Methods (if available)
- Desired geographic regions for market access
- Desired timeframe and type of service

2 - APPLY ONLINE



Manufacturer requests quote via HazLoc@ul.com or the UL HazLocApp, contact us button.

3 - DISCOVERY CALL



UL will contact you to review the request, define project scope and develop a certification solution and quotation.

4- PROJECT INITIATED



Quote is accepted, a project is established and a UL Engineer will contact you.



Why choose UL?

With over 100 years of experience in explosion protection, UL drives global research and standards to continually advance and meet ever-evolving product safety, performance and interoperability needs. UL's global network of technical experts and state-of-the-art facilities, along with our longstanding relationships with regulatory authorities, partner laboratories and industry technical leaders, helps manufacturers gain the compliance credentials they need to compete in a more complex global supply chain.

Knowledge You Can Trust – our experienced staff will advise you from the initial design stage of product development through testing and production. Our experts can assist you in understanding the certification requirements for your specific markets. UL Hazardous Locations Engineering staff participate and lead over 31 standards writing committees and are working with industry to develop and maintain safe standards.

Speed & Efficiency – our cost-effective systems and state-of-the-art facilities cut through the red tape and help accelerate your time to market. [ATEX certificates](#) are online 24/7 for your convenience.

Single Source Provider – UL meets all of your compliance needs and, by bundling safety, performance and interoperability services, also helps save you valuable time and money.

Global Reach & Access – our global network of expert engineers helps you understand the various national and global requirements for your specific market application.

To learn more, call 1.877.854.3577, visit us at UL.com/hazloc or email: hazloc@ul.com.