

IECEx Guide An Informative Guide comparing various elements of both IECEx and ATEX

INTERNATIONAL ELECTROTECHNICAL COMMISSION SCHEME FOR CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN EXPLOSIVE ATMOSPHERES (IECEX SCHEME)

Brief Comparison between IECEx and ATEX

Introductory Note

Since the introduction of the IECEx On-Line Certificate of Conformity, late 2003, there has been a constant flow of inquires seeking an explanation of the differences between the IECEx Scheme and European ATEX System.

This document aims to provide a brief overview of the differences between the IECEx and the ATEX Systems relating to specific items that are commonly raised.

This document is not a full listing of the differences and the reader is encouraged to consult an appropriate organization, body or individual when in need of a more detailed explanation of such differences.

Likewise, the information contained in this document is for information purposes with the rules of the IECEx Scheme and ATEX system taking precedence at all times.

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Brief Table of Comparison

ITEM	IECEx	ATEX
Organisation / Management	Industry Representatives (Manufacturers, Certification Bodies, Ex Equipment End Users, Regulators, Community interests)	E. U. Commission (Government Regulatory)
Aim	One Single Certificate, for any hazardous area product and Services recognised and accepted worldwide (Market Acceptance)	Covers Equipment, Remove barriers to trade and improve safety for equipment and workers
Validity / Legal	Today: - Products with IECEx Certificate accepted in several countries - Alternatively a single test report (ExTR) can be sent to any IECEx Certifier to issue locally accepted certification	ATEX Directive is Law in all the E. U. Countries (Mandatory application) Limited to Europe
Field of Application	Current: - Electrical and Non electrical products and systems - Gas / Dust Industries - Now Covering SERVICE INDUSTRIES, e.g. Repair and Overhaul	Electrical and non electrical products and systems Gas / Dust Industries Equipment ONLY
Standards Used	International Standards only , e.g. IEC Compliance to Standards is mandatory	Any recognised Standard may be applied provided it meets the Essential Health and Safety Requirements of the Directive. However, the E.U. Commission approves list of Harmonised Standards. Allows for Interpretation
	Comphance to Standards is mandatory	Compliance to Standards not mandatory but is generally used to assess products



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ITEM	IECEx	ATEX
Certification Procedure	ExCBs issue [for Certified Equipment Program]: - ExTR (Product Type) - Ex QAR (production facility quality audit) - IECEx CoC (Certificate of Conformity) ExCBs issue [for Certified Service Facilities Program] - CAR (IEC 60079-19 Compliance Report Form) - FAR (Facilities Audit Report Form) - IECEx CoC (Certificate of Conformity) On-Line Certificate of Conformity System - - Reports are officially registered on IECEx website - Electronic On-Line CoC available for full public view, acts as master controlled version	ExNBs issue
	Common Rules applicable to all applications Rules of Procedure for each Program (IECEx 02, IECEx 03, IECEx 04) Operational Document ODs provide Standard operating procedures to be followed by all ExCBs Technical Decision Sheets Accessible full listing along with all Scheme documents maintained and available via single IECEx website location Single appeals body available Decisions of the Management Committee are binding on all ExCBs, Certificate Holders etc.	



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Conformity Assessment	For IECEx Certified Equipment Program:	Declaration of Conformity by Manufacturer to
	ExTR + QAR = IECEx Certificate of Conformity (CoC) ExTR = IECEx Test Report	declare that he is in possession of necessary documents and reports.
	QAR = IECEx Quality Assessment Report	 Certificate issued by ExNB only for category 1 / 2 and M 1 / 2 electrical
	Applicable to ALL products, no difference between Zones or products	equipment
	CoC issued via Secure IEC Website ensures FULL Public access to issued Certificates	 Self certification allowed for Category 3 and Category 2 Mechanical.
	Self Certification not permitted	
	For IECEx Certified Services:-	Does not cover service facilities.
	FAR + Assessment of Competencies = IECEx Certificate	
	FAR = Facilities Audit Report	
	Applicable to ALL Services	
	CoC issued via Secure IEC Website ensures FULL Public access to issued Certificates	
	Self Certification not permitted	



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Organisms for Certification	All ExCBs and ExTLs are subject to the following assessment: - Initial Peer Assessment by a 3 member IECEx Assessment Team, prior to entry to IECEx - Annual Surveillance of ExCBs and ExTLs - 5 Year re-assessment for all ExCBs and ExTLs Dedicated IECEx Technical Secretariat to manage day to day operations of the IECEx Scheme IECEx Management Committee (ExMC) IECEx Technical Assessment Group (ExTAG)	ATEX Notified Bodies (ExNBs) appointed by individual nomination of the governments of their countries. A common assessment system does not exist. Surveillance of ExNBs dependant upon national governments
	IECEx Conformity Mark Committee (ExMarkCo)	
Manufacturer Surveillance	ExCB maintains the Status of the IECEx Certificate of Conformity based on the outcome of follow up Quality Audits, QARs	ExNBs conduct regular audits of manufacturers
Work place Requirements	Nothing – Refers to National regulations	ATEX Directive 137 contains special requirements for workers and management.
	Putting IECEx and ATEX Together	

The Key Elements:

- Technically Identical Standards for Electrical Equipment since 2005 (very few exceptions)
- When using IEC Standards a single set of Tests and assessments can be used for both IECEx and ATEX, in accordance with the respective rules
- An ATEX EC Type Examination can be based on an IECEx ExTR BUT ATEX documentation alone is not sufficient for IECEx
- QA audits are the same for both IECEx and ATEX.