



INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

# IECEx Conformity Assessment System Schemes



Mr Mark Amos  
IECEx Secretariat  
March 2024



# Deepwater Horizon oil rig - Gulf of Mexico (2010)





# Causes and effect

Causes (8 of) of Deepwater Horizon disaster can be classified as

- Incorrect or inadequate **equipment** & materials
- **Equipment** failure
- Inadequate **operator** skills
- Safety **alarm system** failure
- Poor **maintenance**



# Managing ALL areas of risk ....

Which is why IECEx certifies

- **Equipment**
- **People** who design, install, inspect, operate, maintain, repair the equipment
- **Organisations** that use **Systems** to manage the above processes and employ competent personnel to work on equipment



# Life Cycle Coverage

Maintenance

Design



Test

**IECEX covers all safety – related aspects of explosion protected equipment over the complete life cycle**

Inspection

Production

Operation

Selection

Installation



06/20/2012



LIVE

# Schemes within the IECEx System

## IECEX System



IECEX Equipment Scheme  
Certification of Ex Equipment



IECEX Conformity Mark License  
Scheme



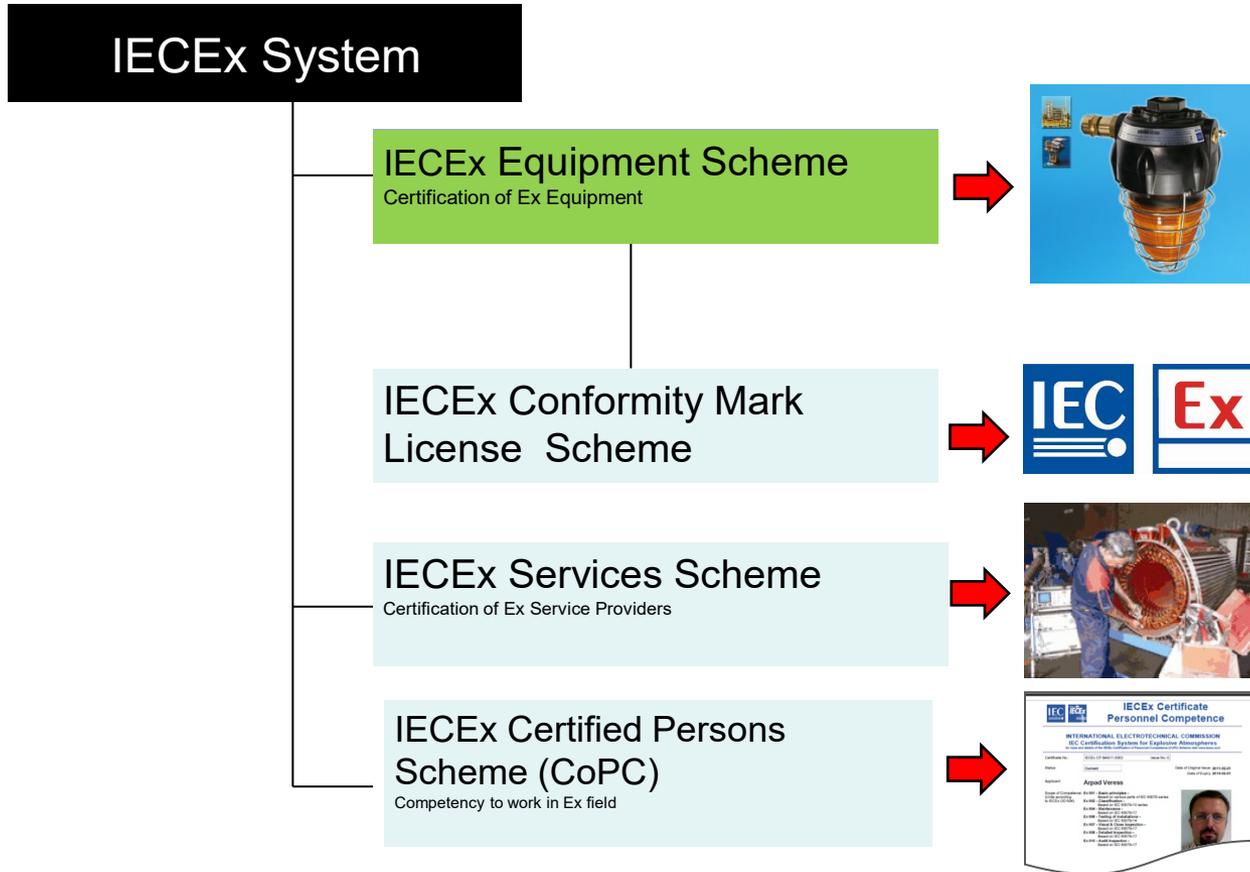
IECEX Services Scheme  
Certification of Ex Service Providers



IECEX Certified Persons  
Scheme (CoPC)  
Competency to work in Ex field (New)



# Schemes within the IECEx System





# IECEX Equipment Scheme

This system provides an:

- **IECEX Technical Report (ExTR)**
- **IECEX Quality Assessment Report (QAR)**
- **IECEX Certificate of Conformity (CoC)**



**To obtain this certificate, the manufacturer prepares his application and submits it to the relevant IECEx Certification Body (ExCB). Samples of the equipment will be tested by the laboratory of the ExCB and a factory inspection will be organized. On-going periodic audits (factory inspections) ensure that the stringent standards are being maintained by the manufacturer, over time.**

## ■ IECEx Technical Report (ExTR)



The **ExTR** demonstrates that a **sample** of ex-production product has been tested to all relevant requirements of all relevant IEC or ISO Standards and that the sample has satisfied all relevant requirements.



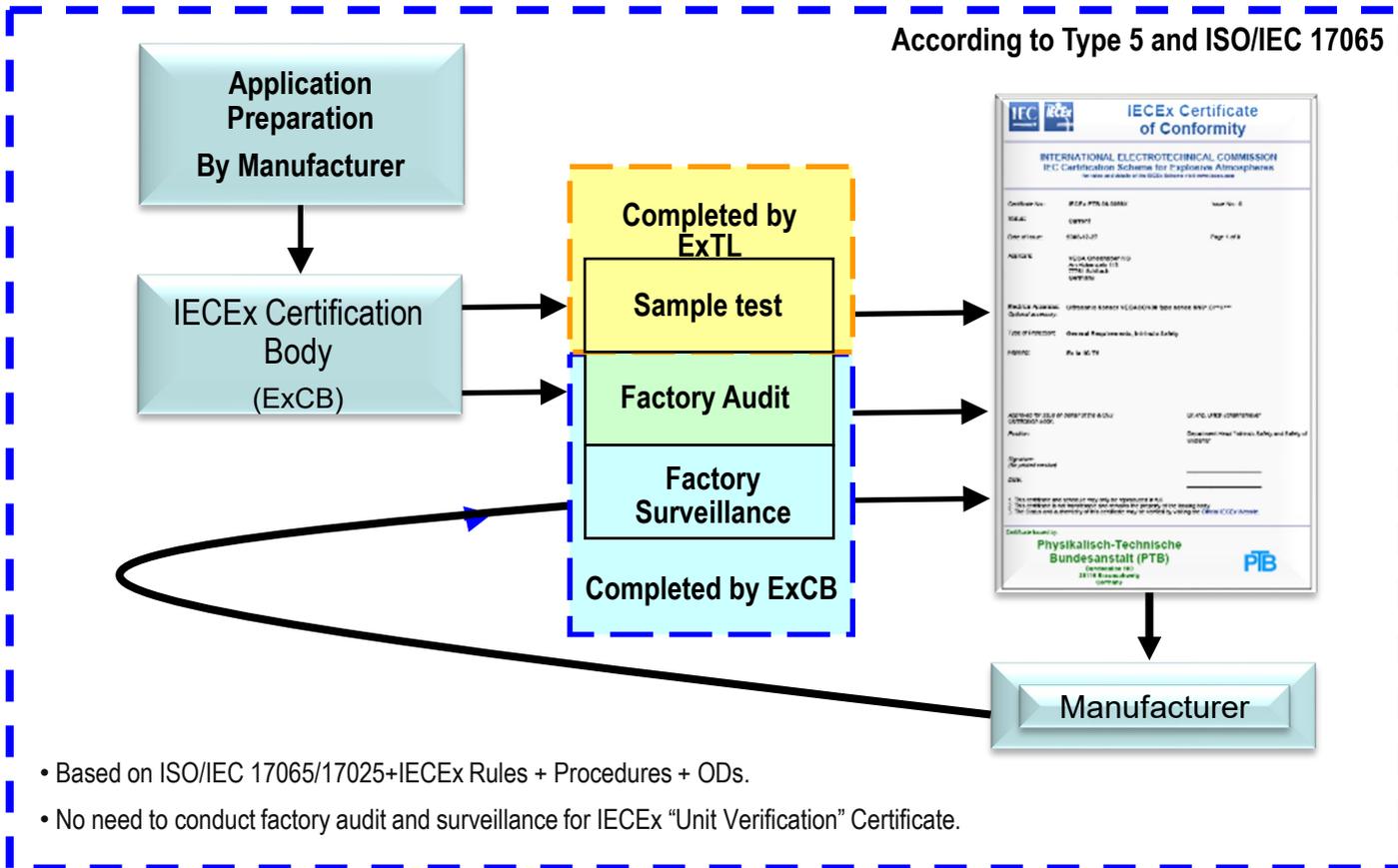
# IECEX Equipment Scheme

## ■ IECEx Quality Assessment Report (QAR)



**The QAR demonstrates that all manufacturing locations where the certified product is manufactured have been audited and have been confirmed as capable of manufacturing product identical in design and performance to the tested sample. The QAR has a three year life and at the end of the three years a full audit is required. Surveillance audits are also conducted during the three year period. The frequency of surveillance audits is determined by ISO 9001 and ISO 80079-34 certification status.**

# Certification Process for Ex Equipment



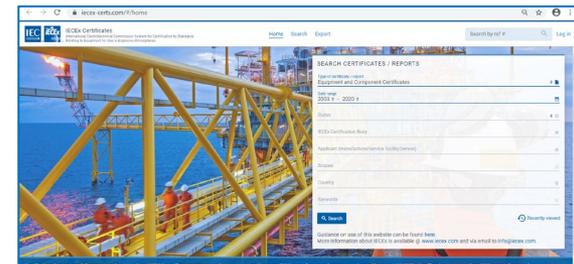


# The IECEx Certificate number MUST appear on product



<https://www.iecex-certs.com/#/deliverables/CERT/3339/view>

Under the IECEx Certified Equipment Scheme, the IECEx Certificate number displayed on the product matches the Certificate Number as shown on the Master version on the IECEx website – *this enables instant verification of claims of IECEx Certification via the IECEx OCS ... more about this later ....*





## 'Standard' IECEx Certificate Number

**IECEX UL 13.0049**

IECEX Certification \_\_\_\_\_

Certificate Issuing Body \_\_\_\_\_

Year of Issue \_\_\_\_\_

Certificate Issued in that year \_\_\_\_\_

IECEX UL 13.0049

Normal Certificate Number

IECEX UL 13.0049X

Conditions of Product Use  
Apply

IECEX UL 13.0049U

Component Certificate

*Certificate Number appears on Product Marking*



# Attachments & Annexes to Certificates

		<b>IECEX Certificate of Conformity</b>	
<b>INTERNATIONAL ELECTROTECHNICAL COMMISSION</b> <b>IEC Certification Scheme for Explosive Atmospheres</b> <small>for rules and details of the IECEx Scheme visit <a href="http://www.iecex.com">www.iecex.com</a></small>			
Certificate No.:	IECEX BAS 08.0111X	Issue No. 1	<b>Certificate history:</b> Issue No. 1 (2010-02-10) Issue No. 0 (2009-02-18)
Status:	Current		
Date of Issue:	2010-02-10	Page 1 of 4	
Applicant:	Hawke International A Division of Hubbell Limited A Member of the Hubbell Group of Companies Oxford Street West Ashton-under-Lyne Lancashire OL7 9NA United Kingdom		
Electrical Apparatus:	PR411 and PR453 Cable Glands		
Optional accessory:			
Type of Protection:	Flameproof, Increased Safety and Dust		
Marking:	Ex d IIC Ex e II Ex ID A21 IP66 (-60°C ≤ ta ≤ +80°C) for the PR453, or +100°C for the PR411		
Approved for issue on behalf of the IECEx Certification Body:	R S Sinder		
Position:	Managing Director		
Signature: (for printed version)	_____		
Date:	_____		
<small>1. This certificate and schedule may only be reproduced in full. 2. This certificate is not transferable and remains the property of 3. The Status and authenticity of this certificate may be verified -&gt; _____</small>			
Certificate issued by:	 Baseefa Rockhead Business Park Staden Lane Buxton Derbyshire SK17 9RZ United Kingdom		

<b>Baseefa</b> Rockhead Business Park Staden lane, Buxton, Derbyshire SK17 9RZ United Kingdom		
ANNEX to IECEx BAS 08.0111X	Issue No. 0	Date: 2009/02/13

Each of the following gland types may be manufactured in brass, stainless steel or aluminum and may be supplied with specified alternative entry thread forms.

#### Variant 0.1 - Type PR 411

The Type PR 411 cable gland is intended for use with an effectively filled circular cable in flameproof applications. For other protection concepts the cable gland is intended for use with effectively filled circular, unarmoured, armoured, steel basket weave armoured or braided (screened) cable and comprises the following components :-

- a. An entry component in the size ranges Os to F (M16 to M75)
- b. A compressible sealing ring
- c. A nylon skid washer
- d. A threaded compression spigot

#### Variant 0.2 - Type PR 453

The Type PR 453 cable gland is intended for use with an effectively filled and circular armoured or braided cable and comprises the following components :-

- a. An entry component, in the size range Os to F (M16 to M75)
- b. A compressible sealing ring
- c. A combined compression spigot and armour clamping cone
- d. A dedicated armour, or braid, clamping ring
- e. A middle nut
- f. An outer seal assembly (sleeve seal and support ring Os-F)
- g. A back nut



**Any Attachments / Annexes to the online certificate contain additional product information, Installation Instructions, Operation Instructions etcetra and MUST always be read with the certificate AND provided with downloaded or printed copies of the Certificate**



# IMPORTANT DEFINITIONS & DIFFERENCES

It is important that you understand some definitions and the differences between them ...

- **Ex Equipment**
- **Ex Component**
- **Assembly**
- **Specific Conditions of Use**
- **Schedule of Limitation**
- **ExTR Summary**
- **QAR Summary**

...we will explore these as we proceed through the presentation  
(further references = IEC 60079-0 and IECEx Rules)



# Registry of Test Reports + Factory Audit Reports

**IECEX**  
INTERNATIONAL ELECTROT  
IEC Certification System for  
for rules and details of the IECEx

ExTR Ref. No.: **US/UL/ExTR19.0045/00**

ExTR Free Ref. No.: **4788143549.4.1**

List of Standards Covered: **IEC 60079-0:2017 Edition:7.0, IEC 60079-11:2013 Edition:6.0, IEC 60079-31:2013 Edition:2, IEC 60079-7:2017 Edition:5.1**

Issuing EXTL: **UL - UL LLC**

Endorsing EXCB: **UL - UL LLC**

Manufacturer: **Eaton's Crouse-Hinds Business  
1201 Wolf St.  
Syracuse, NY 13208**

Location of Manufacturer: **United States of America**

Ex Protection: **Ex ec ia IEC T4 Gc  
Ex ia Db IEC T135°C Db IP66**

Ratings: **Luminaire input 120-277Vac, 50/60Hz, 0.84A  
Controller input 277Vac, 50/60Hz**

Equipment: **LED Luminaires**

Model Reference: **VMV LED Luminaire, Models 3L, 5L, 7L, 9L, and**

Related IECEx Certificates:  
**IECEX UL 19.0039X Issue 0**

Comments:

**IECEX Certificate of Conformity**

Certificate No.: **IECEX UL 19.0039X** Page 2 of 3

Date of issue: **2019-10-11** Issue No: 0

Manufacturer: **Eaton's Crouse-Hinds Business  
1201 Wolf St.  
Syracuse, NY 13208  
United States of America**

Additional manufacturing locations: **Eaton Crouse-Hinds  
1700 Blue Hills Drive NE  
Roanoke, VA 24012  
United States of America**

**COOPER F  
LTD.  
No. 189 Lu  
Changzhou,  
China**

**Eaton Electrical (Australia) Pty Ltd.  
10 Kane Road  
Mascot, NSW 2020  
Australia**

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested in accordance with the IEC Standard list below and that the manufacturer's quality system, relating to the products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx-02 and Operational Documents as amended

**STANDARDS:**  
The equipment and any acceptable variations to it specified in the schedule of this certificate and any identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

This certificate does not indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

**TEST & ASSESSMENT REPORTS:**  
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report: **US/UL/ExTR19.0045/00**

Quality Assessment Reports: **AU/TA/QAR06.0020/11** **GB/BAS/QAR07.0041/09** **US/UL/QAR17.0013/01**

Test Report and Quality Assessment Report

Summaries are connected to the IECEx Certificate on page 2

- 1) Only a Summary Audit Report is s
- 2) Registration p according to the

and Factory

been issued assessment



# Certificates Up-Issued to cover changes

## Changes may include:

- New models added
- Design changes
- New Manufacturing sites added
- Administrative changes (change in company name or address)

AND

- The certificate must always explain why it has been up-issued and what the changes are in the *Details of Certificate Change* field

**IECEX Certificate of Conformity**  
INTERNATIONAL ELECTROTECHNICAL COMMISSION  
IEC Certification System for Explosive Atmospheres  
for rules and details of the IECEX Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX BAS 10.0043X** Page 1 of 4  
Status: **Current** Issue No: 6  
Date of Issue: 2020-01-24

Certificate history:  
Issue 5 (2019-06-19)  
Issue 4 (2017-04-11)  
Issue 3 (2016-07-21)  
Issue 2 (2013-09-13)  
Issue 1 (2011-09-05)  
Issue 0 (2010-10-14)

**IECEX Certificate of Conformity**  
INTERNATIONAL ELECTROTECHNICAL COMMISSION  
IEC Certification System for Explosive Atmospheres  
for rules and details of the IECEX Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX BAS 10.0043X** Page 1 of 4  
Status: **Current** Issue No: 0  
Date of Issue: 2010-10-14

Applicant: **Hyundai Heavy Industries Company Limited**  
Electro Electric Systems Division  
1 Jeonha-Dong  
Dong-Gu  
Ulsan City  
682-792  
Korea, Republic of

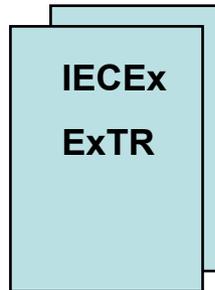
Equipment: **A range of motors of frame size 160 to 200**



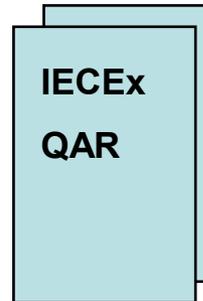
# Certificates for Mass Production OR “one-off” Items

Mass Production

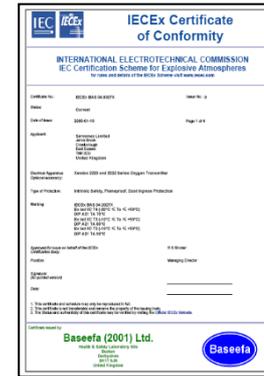
Product Assess/Testing



Factory Audit + surveillance

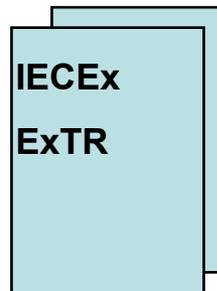


IECEX CoC



“One-Off” or Limited Number Manufacture

Product Assess/Testing





# IECEX “NORMAL” Certificate of Conformity

- Covers “future” mass production runs.
- No limit for the number of units of product
- Do not expire or require up-issue with a change of the Standard(s)
- Test samples must comply with all relevant requirements of all relevant Ex Standards
- Ongoing Factory / factories Quality Management System Assessment is required.
- Will have an “X” suffix to Cert # if there are **Specific Conditions of Use** for the equipment
- Any ANNEXES to the Certificate **MUST** also be read when reading the Certificate

The image shows a sample of an IECEX Certificate of Conformity. The certificate is titled "IECEX Certificate of Conformity" and is issued by the International Electrotechnical Commission (IEC) Certification System for Explosive Atmospheres. The certificate number is IECEX CSA 13.0003X, and the status is Current. The date of issue is 2021-12-21. The applicant is Gevisa S/A, located at Rodovia SP 101 - Campinas- Monte Mor km 3.8, 13001-970 Campinas, SP, Brazil. The equipment is a Range of Pegasus Cage Induction Motors. The certificate includes specific conditions of use, which are highlighted in green. The conditions are: i. Each and every machine is to be subjected to an internal overpressure test of 45 mbar (frame size 500), 49.8 mbar (frame size 800) or 48.0 mbar (frame size 1000) for two minutes, followed by a leakage test at 29.3 mbar for frame size 500, 32.8 mbar for frame size 800 or at 32.0 mbar for frame size 1000. The leakage shall not exceed 15.31 m³/h for frame size 500, 58.94 m³/h for frame size 800 or 8.81 m³/h for frame size 1000. ii. The pressurization and purging system attached to the enclosures must be set to provide the above purge flow rate and time and set to provide a low pressure monitoring system set to a minimum of 2.0 mbar. The certificate also includes a list of annexes, which is highlighted in green. The annex is Annex 01 to IECEX LCIE 21.00016 X issue 00 .pdf. The certificate is page 1 of 4 and has a certificate history showing three previous issues: Issue 3 (2015-01-13), Issue 2 (2013-09-29), and Issue 1 (2013-02-14). The certificate is for a range of Pegasus Cage Induction Motors.

Certificate No.:	IECEX CSA 13.0003X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 4	Issue 3 (2015-01-13)
Date of Issue:	2021-12-21		Issue 2 (2013-09-29)
Applicant:	Gevisa S/A Rodovia SP 101 - Campinas- Monte Mor km 3.8 13001-970 Campinas, SP Brazil		Issue 1 (2013-02-14)
Equipment:	Range of Pegasus Cage Induction Motors		Issue 0 (2013-01-24)

**SPECIFIC CONDITIONS OF USE: YES as shown below:**

i. Each and every machine is to be subjected to an internal overpressure test of 45 mbar (frame size 500), 49.8 mbar (frame size 800) or 48.0 mbar (frame size 1000) for two minutes, followed by a leakage test at 29.3 mbar for frame size 500, 32.8 mbar for frame size 800 or at 32.0 mbar for frame size 1000. The leakage shall not exceed 15.31 m³/h for frame size 500, 58.94 m³/h for frame size 800 or 8.81 m³/h for frame size 1000.

ii. The pressurization and purging system attached to the enclosures must be set to provide the above purge flow rate and time and set to provide a low pressure monitoring system set to a minimum of 2.0 mbar.

Annex:

Annex 01 to IECEX LCIE 21.00016 X issue 00 .pdf



# IECEX “Ex Component” Certificates

.... are for the certification of

*“equipment intended to be part of Ex Equipment which is incomplete, not intended to be used alone, and requires additional evaluation prior to incorporation into Ex Equipment”*

The format & content is the same as a “normal” Certificate of Conformity with the following differences:

- The Certificate # always has a ‘U’ suffix
- Has a special title of “Ex Component Certificate”
- Always Includes a special **Schedule of Limitations** field that contains CRITICAL INFORMATION necessary to correctly apply the Ex Component

The image shows a sample of an IECEX Certificate of Conformity for an Ex Component Certificate. The certificate is titled "IECEX Certificate of Conformity" and "INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres". It is specifically for an "Ex COMPONENT CERTIFICATE". The certificate number is "IECEX BAS 21.0037U". The status is "Current", issued on "2021-12-20". The applicant is "E&S TEC Co, Ltd." from "Korea, Republic of". The Ex Component is "Self-regulating heating cable typed XH\*\*2CT". A note states: "This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0)". A "SCHEDULE OF LIMITATIONS:" section contains seven numbered items detailing specific conditions for use, such as flameproof joints, non-transmission tests, and installation requirements for pilot lamps and selector switches.

Certificate No.:	IECEX BAS 21.0037U	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2021-12-20		
Applicant:	E&S TEC Co, Ltd. 9-8 Dongtansandan 9gil, Dongtan-myeon, Hwaseong-si, Gyeonggi-do, 18487, Korea, Republic of		
Ex Component:	Self-regulating heating cable typed XH**2CT		

**SCHEDULE OF LIMITATIONS:**

1. For details on the flameproof joints, the manufacturer shall be contacted.
2. Non-transmission test of the cylindrical joint of the switch has been conducted by considering the test factor in Table 10 in IEC 60079-1 up to ambient temperature as +70 °C.
3. Pilot lamp & selector switch shall only be installed in flameproof enclosure with the maximum internal volume of 35 liters for Group IIC.
4. Pilot lamp & selector switch shall only be installed in flameproof enclosure with the maximum internal volume of 160 liters for Group IIB+H2.
5. Pilot lamp & selector switch shall only be installed in flameproof enclosure with reference pressure less than 20 bar.
6. Pilot lamp & selector switch shall only be installed in flameproof enclosure with enclosure walls having minimum engagement length of 20 mm for M30 x 1.5.
7. When it is installed in the dust explosive atmosphere, the warning "POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS" shall be applied (For enclosure covered with a non-conductive material, propagation brush discharges shall be avoided).



# IECEX "Unit Verification" Certificates

- An IECEX Unit Verification Certificate (UVC) covers a defined number of products/items that are produced under a single production run.
- IECEX UVCs do NOT cover "future" mass production manufacturing runs.
- UVCs are similar in format and content to other IECEX Certificates BUT
  - Have a different title
  - Require a linked ExTR Summary
  - DO NOT require a linked QAR Summary
  - All requirement of all relevant standards apply.
  - Include a special field for specifying the Serial # of covered units
  - Cannot be up-issued to add units or change any details of models, design, construction, testing etcetra

IECEX Certificate of Conformity	
<b>INTERNATIONAL ELECTROTECHNICAL COMMISSION</b> <b>IEC Certification Scheme for Explosive Atmospheres</b> <small>for rules and details of the IECEX Scheme visit <a href="http://www.iecex.com">www.iecex.com</a></small>	
<b>UNIT VERIFICATION</b>	
Certificate No.:	IECEX ITS 10.0065X <span style="float: right;">issue No.:0</span> <span style="float: right;">Certificate history: .....</span>
Status:	Current
Date of Issue:	2011-02-14 <span style="float: right;">Page 1 of 3</span>
Applicant:	<b>Amot Controls</b> Western Way Bury St. Edmunds Suffolk IP33 3SZ United Kingdom
Electrical Apparatus: Serial number(s) or Unique Identification:	<b>Purge Control Cabinets</b> P00337E1A1 to P00337E1A6 inclusive.



## IECEX UVCs for ASSEMBLIES

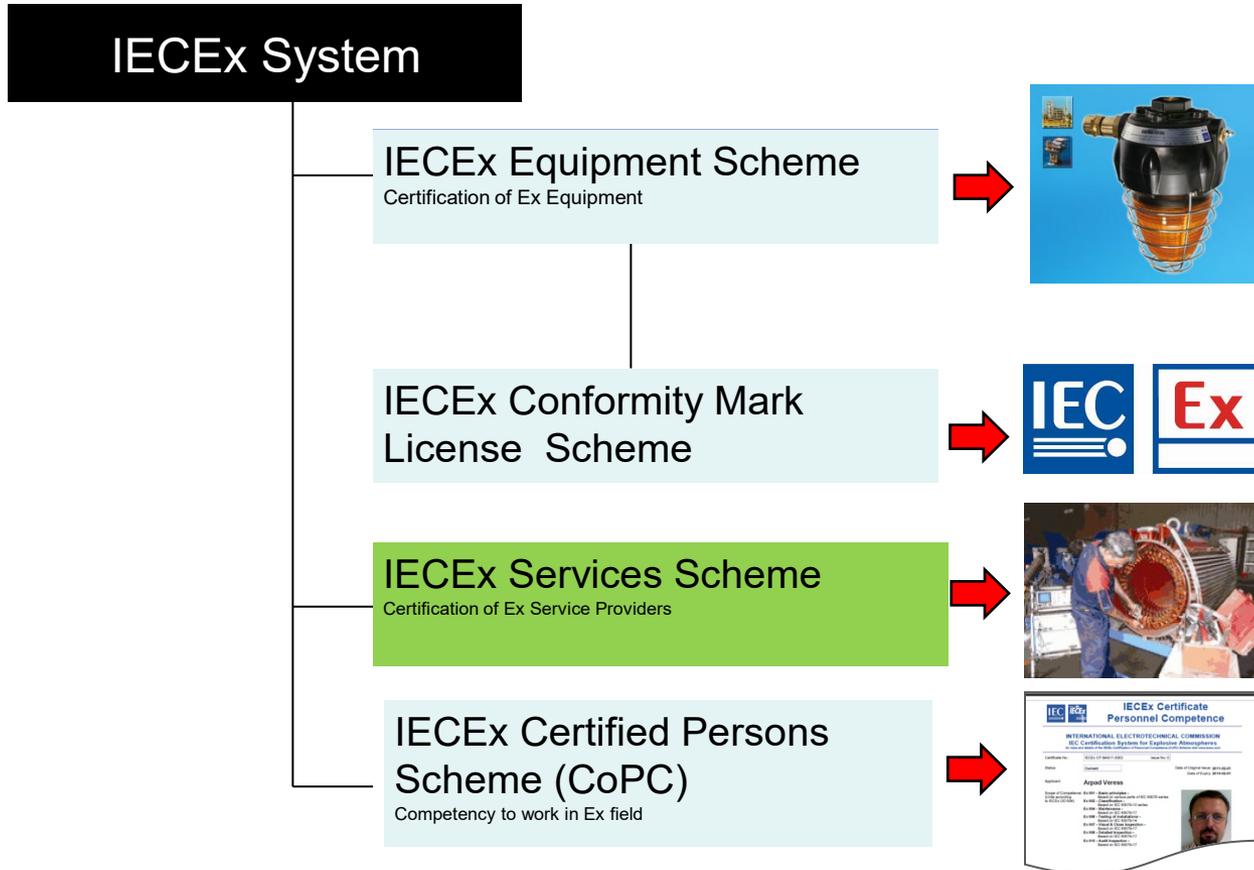
### **IEC TS 60079-46**

Defines an Assembly as

*pre-manufactured combination of Ex Equipment, together with other parts as necessary, that are electrically or mechanically interconnected that are pre-assembled prior to being placed into service at the end-user site, and that can be disassembled and then re-assembled at the end-user site*

and IECEx certification of assemblies is usually done via IECEx Unit Verification Certificates that also cover IEC 60079-0 requirements and ISO 80079-36 requirements (for any non-electrical aspects)

# Schemes within the IECEx System





# IECEX Certified Service Facility Scheme

Certifying providers of

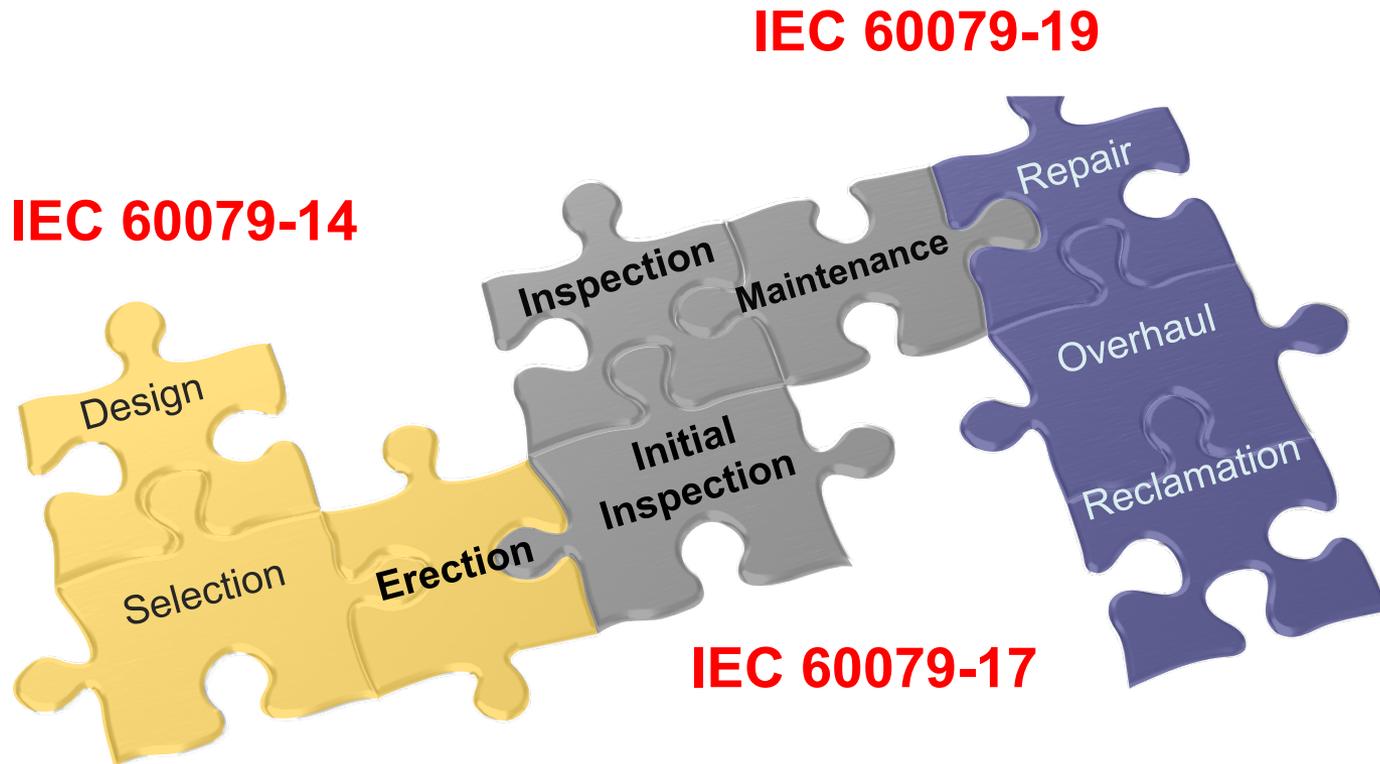
- *Design*
- *Selection*
- *Installation*
- *Inspection*
- *Maintenance*
- *Repair*
- *Overhaul*
- *Reclamation*

services on Ex Equipment





# Relevant IEC "Service" Standards

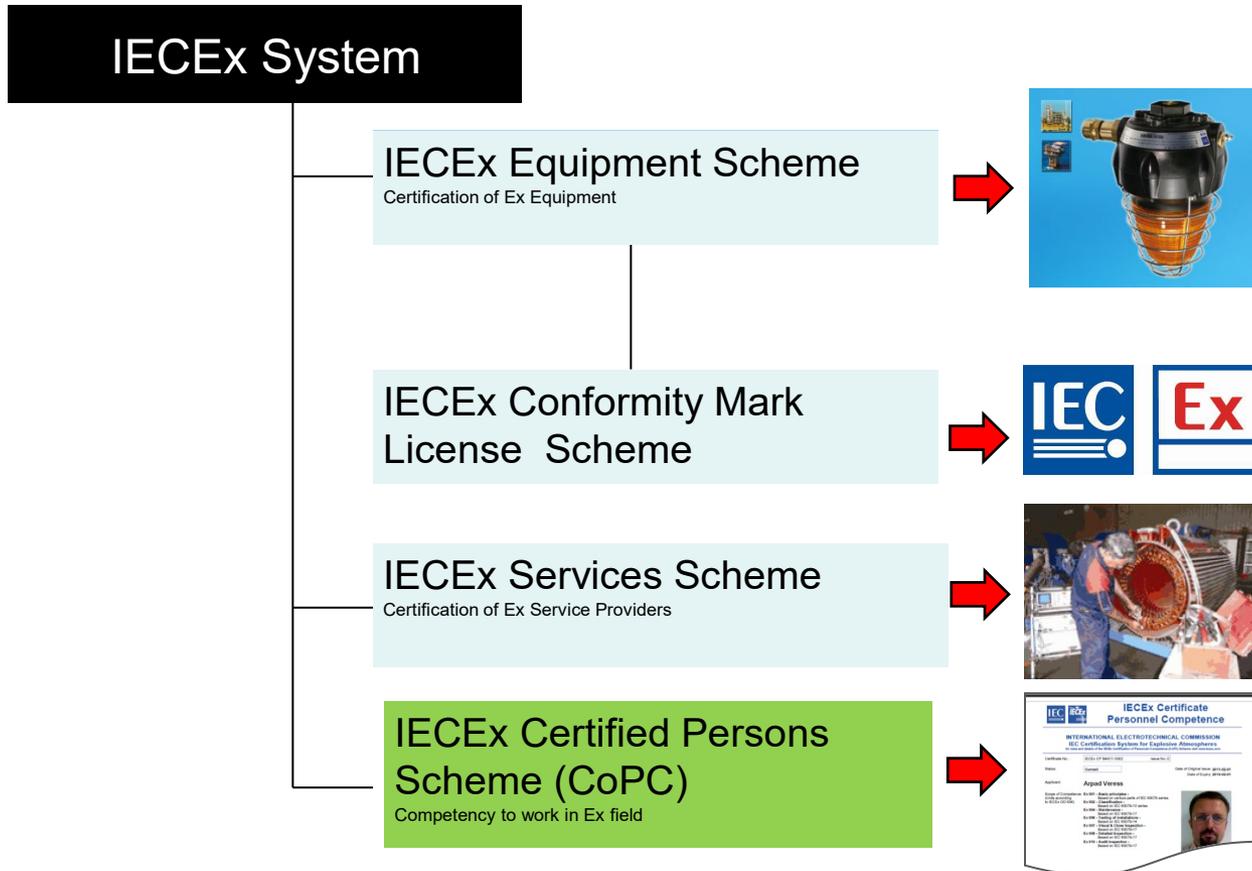




# IECEX Certified Service Facility Scheme

		<b>IECEX CoC Certified Service Facility</b>	
<b>INTERNATIONAL ELECTROTECHNICAL COMMISSION</b> <b>IEC Certification System for Explosive Atmospheres</b> <small>for rules and details of the IECEX Scheme visit <a href="http://www.iecex.com">www.iecex.com</a></small>			
Certificate No.:	<b>IECEX BAS S0001</b>	Page 1 of 1	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 0	Issue 2 (2010-09-18) Issue 1 (2012-07-05) Issue 0 (2008-10-20)
Date of Issue:	2008-10-20		
Applicant:	<b>Dowding and Mills (UK) Limited</b> Lower East Street Middlesbrough Cleveland TS2 1QQ <b>United Kingdom</b>		
Type of Service:	<b>Repair and Overhaul according to IEC 60079-19</b>		
Type of Protection:	<b>Flameproof Enclosure "d", Increased Safety "e", Type of Protection "n"</b>		
Scope of Service:	<b>Repair and Overhaul of Rotating Machines and Enclosures</b>		
Locations covered by this Certificate:			
Facility Audit Report:	<a href="#">GB/BAG/FAR08.0001/00</a>		
<small>This certificate is issued as verification that the Service Facility and associated locations were assessed and found to comply with the IECEX Scheme requirements relating to the type and scope of activities listed above. This certificate is granted subject to the conditions set out in I.1.1.1 of Scheme Rules, I.1.1.2 of IEC and Operations Documents as amended.</small>			
Approved for issue on behalf of the IECEX Certification Body:		<b>R S Sinclair</b>	
Position:		<b>Managing Director</b>	
Signature: (for printed version)			
Date: (for printed version)			
<small>1. This certificate and extracts may only be reproduced in full. 2. This certificate is not transferable and remains the property of the issuing body. 3. The Status and authenticity of this certificate may be verified by visiting <a href="http://www.iecex.com">www.iecex.com</a> or one of the IEC Offices</small>			
Certificate issued by:			
<b>SGS Baseefa Limited</b> Rockhead Business Park Staden Lane, Buxton Derbyshire, SK17 9RZ <b>United Kingdom</b>			

# Schemes within the IECEx System





## What is Competence?

- **Competence = Application** of knowledge and skills to the standards of performance required in the workplace.
- **Competency includes all aspects of work performance and not just specific skills...**
  - Persons must be aware of the hazards in their work area and work safely in their presence
  - Persons must know what they are doing under various scenarios
  - Equipment must be used correctly



# IECEX CoPC Units of Competence

Reference	Title
Unit Ex 000	Basic knowledge & awareness to enter hazardous area site
Unit Ex 001	Apply basic principles in explosive atmospheres
Unit Ex 002	Perform classification of hazardous areas
Unit Ex 003	Install explosion protected equipment & wiring systems
Unit Ex 004	Maintain equipment in hazardous areas
Unit Ex 005	Overhaul & repair of explosion protected equipment
Unit Ex 006	Test electrical installations
Unit Ex 007	Perform visual & close inspection of electrical installations
Unit Ex 008	Perform detailed inspection of electrical installations
Unit Ex 009	Design electrical installations
Unit Ex 010	Perform audit inspection of electrical installations
Unit Ex 011	Hydrogen Safety Systems



# IECEX Certified Persons Scheme



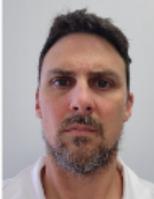
## IECEX Certificate Personnel Competence

**INTERNATIONAL ELECTROTECHNICAL COMMISSION**  
**IEC Certification System for Explosive Atmospheres**  
for rules and details of the IECEX Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:	IECEX CP ACT22.0001	Issue No.:	0
Status:	Current	Date of Original Issue:	2022-11-18
Applicant:	Christopher Harris Australia	Date of Expiry:	2027-11-18

Scope of Competence:  
(Units according to IECEX OD 504)

Ex 001 – Principles of protection in explosive atmospheres knowledge  
Ex 002 - Classification - Based on IEC 60079-10 series  
Ex 009 - Design Electrical Installations - Based on IEC 60079-14



For Detailed Information on Scope Application and any Limitations in accordance with IECEX OD 504 click on PCAR Number below:

PCAR Reference Number:  
[AU/ACT/PCAR22.0001/00](#)

This certificate is issued as verification that the Applicant was assessed and found to comply with the IECEX CoPC Scheme requirements relating to the scope of Competence and referenced Standards listed above. This certificate is granted subject to the conditions as set out in IECEX CoPC Scheme Rules, IECEX 05 as amended.

Approved for issue on behalf of the IECEX  
Certification Body:

Position:

Signature:  
(for printed version)

Date:  
(for printed version)

**David Huddleston**

**General Manager**

1. This certificate and schedule may only be reproduced in full.  
2. This certificate is not transferable and remains the property of the issuing body.  
3. The Status and authenticity of this certificate may be verified by visiting [www.iecex.com](http://www.iecex.com) or use of this QR Code



Certificate issued by:

**Competency Training Australia**  
55 Mica Street  
Carole Park  
Ipswich, Queensland 4300  
Australia



**COMPETENCY  
TRAINING**  
a verbeq company



# IECEX Online Certificate System

(“IECEX OCS”)

<https://www.iecex-certs.com/#/home>

iecx-certs.com/home



**IECEX Certificates**  
International Electrotechnical Commission System for Certification  
to Standards Relating to Equipment for Use in Explosive  
Atmospheres

[Home](#) [Search](#) [Export](#)



SEARCH CERTIFICATE

Type of certificate / report  
Equipment Certificate

Date range  
2003 – 2019

Status

IECEX Certification Body

Applicant (manufacturer/ser

Scopes

Country

Keywords

Contact | IEC offices



# IECEX On-Line Certificate System

## *A tool for you to:*

### *FIND ....*

- Certification Bodies and Test Laboratories
- suppliers of Ex equipment
- competent personnel
- Ex Service Providers

### *CHECK ....*

- Equipment markings
- Certificate details
- Personnel credentials
- Equipment installation requirements



## IECEX OCS – SECURITY FEATURES

- The online version is the MASTER version >>> *Copies as PDF files, printouts etc are UNCONTROLLED and must NOT be trusted as correct, complete or current*
- Certificates issued by ALL ExCBs in the one place >>> *if not on IECEx website – then not issued or valid!*
- Certificate / Report Number automatically generated by system and ALL *Certificate #s begin with “IECEX....”*
- ExCBs can only issue CoCs within their accepted scope via password protected access



# IECEX OCS Content

**IECEX Certificate of Conformity**

INTERNATIONAL ELECTROTECHNICAL COMMISSION  
IEC Certification System for Explosive Atmospheres  
for rules and details of the IECEX Scheme visit [www.ieceex.com](http://www.ieceex.com)

Certificate No.:	<b>IECEX IBE 08.0005X</b>	Page 1 of 4	<a href="#">Certificate history</a>
Status:	<b>Current</b>	Issue No: 4	Issue 3 (2017-07-09) Issue 2 (2016-04-14) Issue 1 (2012-07-27) Issue 0 (2008-10-06)
Date of Issue:	2021-12-20		
Applicant:	<b>PHOENIX CONTACT GmbH &amp; Co. KG</b> Flachsmarktstraße 8 32825 Stummg Germany		
Equipment:	NAMUR Isolating Switch Amplifier MACX MCR(-EX)-SL-xNAM-y(TI-SP) and MACX MCR-EX-SL-NAM-NAM(-SP)		
Optional accessory:			
Type of Protection:	Intrinsic Safety, Type 'ic'		
Marking:	MACX MCR-EX-SL-xNAM-y(TI-SP); [Ex ia Ma] I [Ex ia Ga] IIC [Ex ia Da] IIC Ex ec [ia Ga] IIC T4 Gc MACX MCR-SL-xNAM-y(TI-SP); Ex ec IIC T4 Gc		

Approved for issue on behalf of the IECEX Certification Body: **Alexander Henker**  
Position: **Deputy Head of department Certification Body**

Signature: \_\_\_\_\_  
(for printed version)

Date: \_\_\_\_\_

1. This certificate and schedule may only be reproduced in full.  
2. This certificate is not transferable and remains the property of the issuing body.  
3. The status and authenticity of this certificate may be verified by visiting [www.ieceex.com](http://www.ieceex.com) or use of this QR Code

Certificate issued by:  
**IBEXU** Institut für Sicherheitstechnik GmbH  
Fuchsmühlenweg 7  
09599 Freiberg  
Germany



- Certificates and reports always live and current
- QR Code for instant verification of downloaded copies of Certificates
- Saved, publicly viewable and downloadable as a PDF file
- Provides for Multiple Pages to a Certificate and all Attachments
- Page 1 identifies the CB issuing the Certificate
- All other certificates in the same series visible and accessible by links in the Certificate History field in upper right of page 1
- Online documents are not signed but facility exists where an ExCB is requested to provide signed (but uncontrolled copies)



# IECEX OCS Tools

Multiple search methods

The screenshot shows the IECEX Certificates website interface. On the left, there is an 'EXPORT' section with a dropdown menu for 'Report' (set to 'Certificates type') and 'Certified Persons Certificate'. Below this, there are filters for 'Issue' (set to 'All') and 'Date range' (set to '2003 - 2020'). An 'Export' button is visible. On the right, there is a 'SEARCH' section with a search bar and a 'Search' button. Below the search bar, there are filters for 'Type of certificate / report' (set to 'Certified Persons Certificate'), 'Date range' (set to '2003 - 2020'), 'Status' (set to 'IECEX Certification Body'), 'Applicant (manufacturer/service facility/person)' (set to 'United Kingdom'), and 'Country' (set to 'United Kingdom'). A table of search results is displayed below, showing columns for 'CERTIFICATE NO.', 'STATUS', 'EXCB', 'APPLICANT', 'DATE OF ISSUE', and 'DATE OF EXPIRY'. The table contains 10 rows of data.

CERTIFICATE NO.	STATUS	EXCB	APPLICANT	DATE OF ISSUE	DATE OF EXPIRY
IECEX CP SR02.0008 Issue 0	Current	SIR	Bryan Durn	2020-01-28	2025-01-27
IECEX CP SR02.0008 Issue 0	Current	SIR	Kildersen Thes Kenneth	2019-11-08	2024-11-07
IECEX CP SR02.0001 Issue 0	Current	SIR	Lim Tin Mung	2019-11-07	2024-11-06
IECEX CP SR02.0002 Issue 0	Current	SIR	Hein Zee	2019-11-07	2024-11-06
IECEX CP SR02.0004 Issue 0	Current	SIR	Hu U Thi	2019-11-07	2024-11-06
IECEX CP SR02.0003 Issue 0	Current	SIR	Ho Thi	2019-11-07	2024-11-06
IECEX CP SR02.0005 Issue 0	Current	SIR	Yu Yu Mue Thu	2019-11-07	2024-11-06

Download data to Excel with preset reports

The screenshot shows an Excel spreadsheet with a list of IECEX certificates. The columns are labeled B through O. The data includes certificate numbers, issue dates, expiry dates, status, EXCB, applicant names, and descriptions of the certificates. The spreadsheet is titled 'IECEX-PERSONS (1) [Repaired] - Excel' and is opened by 'Chris Agius'.

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
34	IECEX CP BAS12.0008	1	SGS Baseefa Limited	2018-08-31	2012-08-20	CURRENT	GB	Lee Bonham	Ex 001 - Basic principles - Based on various parts of IEC					
35	IECEX CP BAS12.0008	2	SGS Baseefa Limited	2023-08-01	2012-08-20	CURRENT	GB	Lee Bonham	Ex 001 - Apply basic principles of protection in explosive					
42	IECEX CP BAS10.0002	3	SGS Baseefa Limited	2022-07-18	2010-11-19	CURRENT	GB	Mark Bell	Ex 001 - Apply basic principles of protection in explosive					
43	IECEX CP BAS12.0007	1	SGS Baseefa Limited	2018-09-30	2012-08-02	CURRENT	GB	Mark Russell	Ex 001 - Basic principles - Based on various parts of IEC					
44	IECEX CP BAS12.0007	2	SGS Baseefa Limited	2023-08-01	2012-08-02	CURRENT	GB	Mark Russell	Ex 001 - Apply basic principles of protection in explosive					
52	IECEX CP BAS14.0014	1	SGS Baseefa Limited	2022-10-18	2014-11-10	CURRENT	GB	Kyle Renwick	Ex 001 - Apply basic principles of protection in explosive					
57	IECEX CP BAS15.0006	0	SGS Baseefa Limited	2018-08-31	2015-09-01	CURRENT	GB	Joseph Innes	Ex 001 - Basic principles - Based on various parts of IEC					
58	IECEX CP BAS15.0006	1	SGS Baseefa Limited	2023-08-01	2015-09-01	CURRENT	GB	Ian Harrison	Ex 001 - Apply basic principles of protection in explosive					
70	IECEX CP BAS10.0003	2	SGS Baseefa Limited	2022-06-06	2010-11-19	CURRENT	GB	Dr Martin Killeen	Ex 001 - Apply basic principles of protection in explosive					
96	IECEX CP BAS18.0003	0	SGS Baseefa Limited	2023-03-09	2018-03-09	CURRENT	GB	Andrew Dodd	Ex 001 - Basic principles - Based on various parts of IEC					
108	IECEX CP BAS13.0001	1	SGS Baseefa Limited	2019-06-21	2013-03-15	CURRENT	GB	Andrew Dodd	Ex 001 - Basic principles - Based on various parts of IEC					
109	IECEX CP BAS13.0001	2	SGS Baseefa Limited	2024-07-01	2013-03-15	CURRENT	GB	Andrew Dodd	Ex 001 - Basic principles - Based on various parts of IEC					
157	IECEX CP BAS14.0013	1	SGS Baseefa Limited	2022-06-01	2014-07-15	CURRENT	GB	Richard Graham	Ex 001 - Apply basic principles of protection in explosive					
161	IECEX CP BAS13.0002	0	SGS Baseefa Limited	2016-04-24	2013-04-25	CURRENT	GB	Mike Daddington	Ex 001 - Basic principles - Based on various parts of IEC					
168	IECEX CP BAS10.0002	2	SGS Baseefa Limited	2017-03-18	2010-11-19	CURRENT	GB	Mark Bell	Ex 001 - Basic principles - Based on various parts of IEC					
174	IECEX CP BAS14.0014	0	SGS Baseefa Limited	2017-11-09	2014-11-10	CURRENT	GB	Kyle Renwick	Ex 001 - Basic principles - Based on various parts of IEC					
180	IECEX CP BAS10.0003	1	SGS Baseefa Limited	2017-03-18	2010-11-19	CURRENT	GB	Ian Harrison	Ex 001 - Basic principles - Based on various parts of IEC					
181	IECEX CP BAS13.0003	0	SGS Baseefa Limited	2016-04-24	2013-04-25	CURRENT	GB	Ian Nicholson	Ex 001 - Basic principles - Based on various parts of IEC					
182	IECEX CP BAS13.0003	1	SGS Baseefa Limited	2016-04-24	2013-04-24	CURRENT	GB	Ian Nicholson	Ex 001 - Basic principles - Based on various parts of IEC					
189	IECEX CP BAS13.0006	0	SGS Baseefa Limited	2016-10-09	2013-10-10	CURRENT	GB	Demetrio Flores	Ex 001 - Basic principles - Based on various parts of IEC					



# IECEX OCS Search Results Example

**IECEX Certificates**  
International Electrotechnical Commission System for Certification to Standards  
Relating to Equipment for Use in Explosive Atmospheres

Home Search Export

Search by ref #

[Information about the content and preparation of IECEX Certificates and Reports for each IECEX Scheme can be found in the respective versions of IECEX OD.011](#)

Type of certificate / report  
Equipment and Component Certificates

Date range  
2003  – 2021

Status  
Current

IECEX Certification Body

Issued to (Applicant/Manufacturer/Service Facility/Person)

Scopes

Country

Keywords

49176 result(s) found

CERTIFICATE NO.	STATUS	EXCB	EQUIPMENT	ISSUED TO	DATE OF ISSUE ↓
IECEX KSCP 21.0045X Issue 0	<span>CURRENT</span>	KSCP	Smart Vibration Sensor SVS type	Signallink Co., Ltd.	2021-12-22
IECEX BAS 16.0067 Issue 4	<span>CURRENT</span>	BAS	Model SADPmini2-Ex	Alpha Moisture Systems	2021-12-21
IECEX LCIE 18.0021X	<span>CURRENT</span>	LCIE	Intrinsically Safe Clamp-on Signal Pressure Transducer - Type: CSPT,RA CSPT,RR CSPT,RC	Schlumberger Kishuohiki Kaisha	2021-12-21



**Thank you for  
your attention.**

**Mark Amos**  
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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION