

23 YEARS



WHO IS TAKING CARE OF THEM NOW?!





# HAZARDOUS AREA 2 SCHEMES

ATEX









# ELECTRICAL & NON-ELECTRICAL ATEX

## ELECTRICAL

- WELL-ESTABLISHED SUPPLY CHAIN FOR ELECTRICAL EQUIPMENT
- KNOWLEDGE THROUGHOUT THE INDUSTRY IS GOOD





# ELECTRICAL & NON-ELECTRICAL ATEX

MECHANICAL EQUIPMENT

- NON-ELECTRICAL AWARENESS IS POOR
- EDUCATION IS A SLOW PROCESS

ENGINEERS DON'T REALISE ATEX COVERS MECHANICAL!
INSPECTORS DON'T REALISE ATEX COVERS MECHANICAL!







ATEX IS A MANDATORY LEGAL REQUIREMENT WITHIN THE EU.

THE DIRECTIVE IS TO PROTECT <u>EMPLOYEES</u> FROM EXPLOSION RISK IN AREAS WITH A POTENTIALLY EXPLOSIVE ATMOSPHERE.





# ATEX 2014/34/EU GUIDELINES

GUIDE TO APPLICATION OF THE DIRECTIVE 2014/34/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 26 FEBRUARY 2014 ON THE HARMONISATION OF THE LAW OF THE MEMBER STATES RELATING TO EQUIPMENT AND PROTECTIVE SYSTEMS INTENDED FOR USE IN POTENTIALLY **EXPLOSIVE ATMOSPHERES** 







## Industrial Fans







RELIANCE ON A DECLARATION OF CONFORMITY.





## ATEX ALLOWS MANUFACTURERS TO SELF-CERTIFY MECHANICAL EQUIPMENT



**ZONE 1 & ZONE 2** 

INTRODUCING AN ELEMENT OF DOUBT









We don't know what we don't know 90kW ATEX Fan rotating at 1450rpm...

Same power as a family car traveling at 70mph on the motorway!

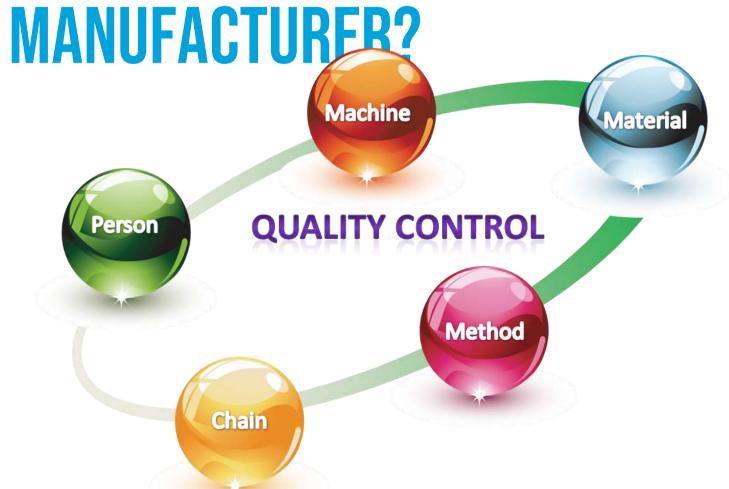
## **ATEX**

## THIS RAISES THE QUESTION...

WHO ARE PRODUCING THESE ATEX PRODUCTS?

WHAT LEVELS OF CONTROL ARE IN PLACE?

WHAT LEVEL OF TECHNICAL EXPERTISE IS AVAILABLE AT THE







## **RECAP**

## DIRECTIVE 2014/34/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 February 2014

on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres (recast)

- (10) Economic operators should be responsible for the compliance of products with this Directive, in relation to their respective roles in the supply chain, so as to ensure a high level of protection of health and safety of persons, especially workers, and, where appropriate, protection of domestic animals and property, and to guarantee fair competition on the Union market.
- Any economic operator that either places a product on the market under his own name or trade mark or modifies a product in such a way that compliance with this Directive may be affected should be considered to be the manufacturer and should assume the obligations of the manufacturer.





## **EXAMPLE OF A QUOTE CAVEAT**

Please note that we have offered a unit or units with ATEX rated motors in the attached quotation. We have attached a copy of the ATEX form which we require completing and returned to us prior to any order being placed. Amendments to the product selection (due to the application requirements) are subject to variations in price and technical design of the product and can only be confirmed once a completed ATEX form is returned.

Please note that under the ATEX directive it is the responsibility of the purchaser / installer to ensure compliance with ATEX directives and ensure safe operation of the unit. We are unable to accept liability for the design and specification of the product in its intended application.

"WE ARE UNABLE TO ACCEPT LIABILITY FOR THE DESIGN AND SPECIFICATION OF THE PRODUCT IN ITS INTENDED APPLICATION"





## **EXAMPLE OF MISLEADING INFORMATION**

## Third party ATEX certified fans





Certified for both Zone 1 & 2 gas and Zone 21 & 22 dust.

Our certification is from TRL Compliance Services Ltd. TRL won ref. 16-0073-006032.

The ATEX Directive was first introduced in 1994 and became law in the UK in 1996. It governs the protective systems and equipment in explosive environments and is known more specifically ATEX 94/9/EC becoming 2014/34/EU on 20th April 2016, but is commonly referred to as the ATEX Directive and is now EU law and any equipment, electrical or mechanical, for installation within the EU member states must now comply where there is a risk of explosion.

All our fans can be manufactured to ATEX standards, including mild steel and stainless steel with the inclusion of naval brass in-between moving parts and ATEX Eexd or Exna motors.

Please contact our trained Engineers for further information on our range of ATEX Centrifugal or Axial flow fans.

Our certification is from TRL Compliance Service Ltd Ref 16-0073-006032

NB Year ATEX certificate number

Sira 09ATEX1234x



Technical Services Aberdeen Ltd The Stables Whitecairns Aberdeenshire AB23 8UH Tel: +44(0)1358 743758

## 1 Day ATEX Foundation Course

### Content

The course comprises 12 Sections.

- 1) Introduction
- 2) Objectives ATEX Directive 94/9/EC
- 3) Abbreviations and definitions
- 4) Scope
- 5) Enforcement
- 6) Conformity assessment procedures
- 7) Equipment groups and categories
- 8) Equipment Marking
- 9) Documentation
- 10) Assemblies
- 11) Responsibilities
- 12) Further information

A competency certificate will be issued on successful completion of the course assessment paper.



## 94/9/EC not 2014/34/EU

Cost of the course £500.00

This company did not know ATEX covered non-electrical equipment







## I want to believe

I want to believe I am asking the experts.

I want to believe what I purchase is certified.



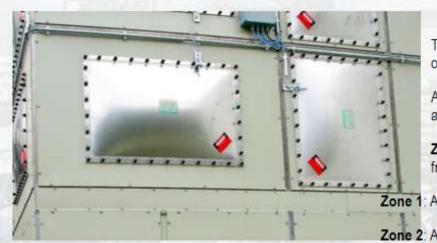
# This company did not know ATEX covered non-electrical equipment



ATEX Directive 1999/92/EC on minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres came into European Law in January 2000 and member states were required to implement the Directive with national regulations by 30th June 2003. In the UK the ATEX Directive has been implemented by the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR).

This is a social Directive, which requires employers to take technical and/or organisational measures appropriate to the nature of the operation in accordance with the following basic principles.

- . the prevention of the formation of explosive atmospheres or where the nature of the activity does not allow that
- the avoidance of the ignition of explosive atmospheres, and
- . the mitigation of the detrimental effects of an explosion so as to ensure the health and safety of workers



The Directive also requires that the specific risks arising from explosive atmospheres are assessed prior to the commencement of work and reassessed when changes occur in the workplace or organisation of work. The assessment must demonstrate that suitable controls to minimise the risk to personnel are in place.

As part of the control of explosion risks the Directive requires that employers classify places where explosive atmospheres may arise and select appropriate work equipment for use in these areas. The following zones are defined for flammable liquids & gases;

Zone 0: A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is present continuously or for long periods or frequently.

Zone 1: A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is likely to occur in normal operation occasionally.

Zone 2: A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only......(continue on



## **Dust Collector**

- fully experienced in the requirements of the ATEX directives and can supply products which ensure you are <u>ATEX compliant</u>
- offers safe and reliable solutions for handling combustible dust and gases. Based
  on the customer's risk evaluation, we recommend suitable equipment for each
  application. The products are <u>designed to comply with the ATEX directives</u>.
- Heavy-duty carbon steel construction and thermal cured powder coatings provide unparalleled strength and durability. collectors exceed OSHA mandates for factory air quality, and when equipped with a <u>explosion vent</u>, they offer the highest combustible dust explosion protection in accordance with NFPA and <u>ATEX</u> <u>standards</u>.

Certificate Number Baseefa04ATEX0103



Issued 02 March 2004 Page 1 of 3

TYPE EXAMINATION CERTIFICATE

Equipment Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC

3 Type Examination Certificate Number: Basecfa04ATEX0103

4 Equipment:

Equipment

Manufacturer:

Address:

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 Basecfa (2001) Ltd. certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of non-electrical equipment of Category 2 intended for use in potentially explosive atmospheres given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in confidential Report No. 03(C)0450

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

#### EN 13463-1:2001 and EN 13463-5:2003

except in respect of those requirements listed at item 18 of the Schedule.

- 10 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- 11 This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment and not to specific items of equipment subsequently manufactured.
- 12 The marking of the equipment shall include the following:

( II 2D c T4 or ( II 3D T4

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa (2001) Ltd. Customer Reference No. 5124

Project File No. 03/0450

This certificate is granted subject to the general terms and conditions of Baseefa (2001) Ltd. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

#### Baseefa (2001) Ltd.

Health and Safety Laboratory Site, Harpur Hill,
Buxton, Derbyshire SK17 9JN
Telephone +44 (0) 1298 28255 Fax +44 (0) 1298 28216
e-mail info@baseefa2001.biz web site www.baseefa2001.biz
Registered in England No. 4305578 at 13 Dovedale Crescent, Buxton,
Derbyshire, SK17 9BJ

KG imboir

R S SINCLAIR DIRECTOR On behalf of Baseefa (2001) Ltd.

- offers dust extraction systems fulfilling the ATEX demands
- •The strength of the dust collector has been proven
- •ATEX compliance is ensured by means of explosion relief doors or panels
- •The risk of an explosion spreading may be prevented by installing safety equipment such as rotary valves, back pressure flaps, etc.
- •Fans are ATEX certified for handling potentially explosive dust

## Equipment Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 13463-1:2001 and EN 13463-5:2003





## INDEPENDENTLY CERTIFIED

#### TYPE EXAMINATION CERTIFICATE

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: Sira 07ATEX6341X Issue: 7

4 Equipment: AXC-EX Axial Fans and AXCBF-EX Bifurcated Fans

5 Applicant:

6 Address:



- 7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- Sira Certification Service certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 2 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

#### EN 14986:2007

EN 13463-1:2001

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

- 10 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- 11 This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.
- 12 The marking of the equipment shall include the following:



II 2 G c T\* ( $Ta = -20^{\circ}C$  to  $+60^{\circ}C$ )

These fans are fitted with a suitably certified, electric motor, whilst this motor is outside the scope of this certificate, the type used affects the final application of the fan, as clarified below:

## **Declaration of conformity**

AXC-EX (nA) Category 3 for apparatus group IIB (Zone 2)

AXCBF-EX (nA) Category 3 for apparatus group IIB (Zone 2)

AXC-EX (e) Category 2 for apparatus group IIB (Zone 1 and 2)

AXCBF-EX (e) Category 2 for apparatus group IIB (Zone 1 and 2)

AXC-EX (d) Category 2 for apparatus group IIB and IIC (Zone 1 and 2)

AXCBF-EX (d) Category 2 for apparatus group IIB and IIC (Zone 1 and 2)

In addition, T\* is equal to temperature classification of the motor.

DIRECTIVE 94/9/EC EN14986:2007

EN 13463-1:2001

This company will still claim to be independently certified to the ATEX directive & EN14986 2017





## OUTDATED STANDARDS ON DECLARATION OF CONFORMITY

# A RANGE OF FANS UNITS THAT COMPLIANT WITH THE HEALTH & SAFETY REQUIREMENTS OF ATEX

EN 13463-9200

Non-electrical equipment for use it potentially explosive atmospheres.

Basical edica and requirements

EN 13463-5:2003

Non-election equipment intended for use in potentially explosive atmospheres. Protection by constructional safety 'c

IT IS IMPERIANT TO NOTE THAT AS OF OCTOBER 31, 2019, THE EN 13463-SERIES OF STANDARDS FOR NON-ELECTRICAL EQUIPMENT <u>NO LONGER PROVIDE CONFORMITY TO THE ATEX DIRECTIVE.</u>





## THE ISSUE WITH ATEX



TO:

NYBORG AS

Sykkylven Norway

Martin Berge

Deres referanse Your reference Martin Berge

Deres dato Your date

Vår referanse Our reference

Jan Sveahaugen

Var dato Our date

04-03-2021

04-03-2021

#### ATEX-certificates new and old standards.

The ATEX certificates does not have any expiry date.

This is by purpose as it's considered that revising certificates every 3rd or 5th year without improving the safety of the products would only add cost to the products without any

In ATEX is the validity controlled through the so called harmonised standards which are published in the official journal of the European Union.

This document tells which revisions of a applicable standards must met and referred in the EU declaration of conformity when placing the product on the EU market.

In reality it means that with the current EU Declaration of conformity we can place the products on the market until 6th July 2021,

after this date is the 2012 revision of EN 60079-0 from 2012 including amendments in 2013 no longer a harmonized standard and the state of the art requirement in ATEX is no longer met.

#### ANNEX II

No	Reference of the standard	Date of withdrawal	
1.	EN 60079-0:2012 + A11:2013, Explosive atmospheres – Part 0: Equipment – General requirements (IEC 60079-0:2011 Modified + IS1:2013)	6 July 2021	





#### EU DECLARATION OF CONFORMITY

The Manufacturer:

ABB Oy Motors and Generators P.O. Box 633

Strömbergin Puistotie 5A FIN - 65101 Vaasa, Finland ABB Sp.z.o.o 27 Placydowska Str. PL-95-070 Aleksandrow Lodzki

Poland

This declaration of conformity is issued under the sole responsibility of the manufacturer.

The products: 3-phase induction motors of series M3AA, M3DP, M3GP, M3HP, M3JP, M3JC, M3JM, M3KP and M3KC as listed in this document on the pages 2...3 having correspondent name plate markings covered by those as listed.

The motors of the declaration described above are in conformity with the relevant Union harmonization

#### Directive 2014/34/EU

The following harmonized standards are applied in relation to which conformity is declared: EN 60079-0/A11:2013(1, EN 60079-1:2014)2, EN 60079-7:2007, EN 60079-7:2015)3, EN 60079-15:2010, EN 60079-31:2014/4 and relevant parts of the EN 60034 -series of standards.

#### Directive 2009/125/EC (ErP of 20th November 2009)

The motors that are marked as IE2, IE3 or IE4 are in conformity with the requirements set in the Commission Regulation (EU) No. 4/2014 of 5 January 2014 amending Regulation (EC) No. 640/2009. Efficiency classes as defined in the standard EN 60034-30:2009.

#### Directive 2011/65/EU

Motors are in conformity with the Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment, Technical documentation based on the standard EN 50581:2012.

The conformity of the end product according to the Directive 2006/42/EC has to be established by the commissioning party when the motor is fitted to the machinery.

Note: Motors have to be installed and maintained according to the relevant standards and instructions of ABB Oy, Motors and Generators. When installed in converter supplied applications, additional requirements must be respected regarding the motor as well as the installation as described in the appropriate dedicated addendum.

Notified Bodies (ExNB): LCIE (0081), Av. Du Général Leclerc. 33, 92266 Fontenay-aux-Roses, France and VTT Expert Services Ltd (0537), Otakaari 7B, 02044 Espoo, Finland

Signed for and on behalf of: ABB Oy, Motors and Generators and ABB Sp.z.o.o

Vaasa, Finland, 2017-03-27 Place and date of issue:

> Harri Mykkänen Vice President

Title









#### 1 ATTESTATION D'EXAMEN CE DE TYPE

- Appareil ou système de protection destiné à être utilisé en 2 atmospheres explosibles (Directive 94/9/CE)
- 3 Numéro de l'attestation d'examen CE de type **LCIE 09 ATEX 3022**
- Appareil ou système de protection :

Moteur asynchrone

Type: M3HP160... (Génération H)

ABB Ov Motors Demandeur: Adresse:

Strombergin Puistotie 5A FIN - 65101 VAASA - Finland

ABB Oy Motors Fabricant:

Strombergin Puistotie 5A FIN - 65101 VAASA - Finland

- Cet appareil ou système de protection et ses variantes éventuelles acceptées sont décrits dans l'annexe de la présente attestation et dans les documents descriptifs cités
- 8 Le LCIE, organisme notifié sous la référence 0081 conformément à l'article 9 de la directive 94/9/CE du Parlement européen et du Conseil du 23 mars 1994, certifie que cet appareil ou système de protection est conforme aux exigences essentielles de sécurité et de santé pour la conception et la construction d'appareils et de systèmes de protection destinés à être utilisés en atmosphères explosibles, données dans l'annexe II de la directive. Les résultats des vérifications et essais figurent dans le rapport confidentiel Nº 91307-582849.
- 9 Le respect des exigences essentielles de sécurité et de santé est assuré par la conformité à :
- EN 60079-0 (2006)

- EN 60079-7 (2007)

- EN 61241-0 (2006)

- EN 61241-1 (2004)
- 10 Le signe X lorsqu'il est placé à la suite du numéro de l'attestation, indique que cet appareil ou système de protection est soumis aux conditions spéciales pour une utilisation sûre, mentionnées dans l'annexe de la présente attestation.
- 11 Cette attestation d'examen CE de type concerne uniquement la conception et la construction de l'appareil ou du système de protection spécifié, conformément à l'annexe III de la directive 94/9/CE.
  - Des exigences supplémentaires de la directive sont applicables pour la fabrication et la fourniture de l'appareil ou du système de protection. Ces dernières ne sont pas couvertes par la présente attestation.
- 12 Le marquage de l'appareil ou du système de protection doit comporter les informations détaillées au point 15.

Fontenay-aux-Roses, le 9 avril 2009

#### EC TYPE EXAMINATION CERTIFICATE

- Equipment or protective system intended for use in potentially explosive atmospheres (Directive 94/9/EC)
- EC type examination certificate number **LCIE 09 ATEX 3022**
- Equipment or protective system

Asynchronous motor

Type: M3HP160... (Generation H)

Applicant: ABB Ov Motors

Strombergin Puistotie 5A

FIN - 65101 VAASA - Finland

Manufacturer: ABB Oy Motors

Strombergin Puistotie 5A Address: FIN - 65101 VAASA - Finland

- This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- LCIE, notified body number 0081 in accordance with article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment or protective system has been found to comply with the essential Health and Safety Requirements relating to the design and construction of equipment and protective systems Intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in confidential report N° 91307-582849.

- Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN 60079-0 (2006)

- EN 60079-7 (2007)

- EN 61241-0 (2006)
- EN 61241-1 (2004)
- 10 If the sign X is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this
- 11 This EC type examination certificate relates only to the design and construction of this specified equipment or protective system in accordance with annex III to the directive

Further requirements of the directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include informations as detailed at 15.

> sponsable de certification ATEX TEX certification manager

Marc GILLAUX

Soul la texte en français peut engager la responsabilité du LCIE. Ce document ne peut en reproduit que ns son intégralité, sans aucune modification

The LCIE's liability applies only on the French text. This document may only be reproduced in its authory and without any change 01-Annexe III\_CE\_typ\_app

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des Imbistries Electriques Thir société de Bureau Verlas - France

RCS Neptorne B 108 365 17 -



### EC TYPE EXAMINATION CERTIFICATE

- Equipment or protective system intended for use in ilisé en potentially explosive atmospheres (Directive 94/9/EC)
  - EC type examination certificate number **LCIE 09 ATEX 3022**
  - A comparative study of the standards; EN 60079-0 (version A11: 2013 and 2012) shows that the products are not concerned by the substantial modifications.
  - A comparative study of the standards; EN 60079-1 (version 2007 and 2014) shows that the products are not concerned by the substantial modifications.
  - For M3AA motor range
  - A comparative study of the standards; EN 60079-31 (version 2009 and 2014) shows that the products are not concerned by the substantial modifications







## WE DON'T KNOW WHAT WE DON'T KNOW

## What is a Harmomised Standard

A harmonised standard is a European standard developed by a recognised European Standards Organisation: CEN, CENELEC, or ETSI. It is created following a request from the European Commission to one of these organisations. Manufacturers, other economic operators, or conformity assessment bodies can use harmonised standards to demonstrate that products, services, or processes comply with relevant EU legislation.

 Manufacturers, can use harmonised standards to demonstrate that products, services, or processes comply with relevant EU legislation.





# WOODCOCK & WILSON

## The Hazardous World of Ex Marking

## The implementation of the EN ISO 80079 standard series in 2016

General Requirements	N/A	Ga, Da Gb, Db Gc, Db	1, 2, 3	0, 20 1, 21 2, 22	80079-36	Applies to all protection concepts
Constructional Safety	Exh	Ga,			Ignition hazard eliminated by good engineering practices	
Control of Ignition Source		Gb, Db	3b, Db 3c,	0, 20 1, 21 2, 22	80079-37	Control equipment fitted to detect malfunctions
Liquid Immersion		Gc, Db				Enclosure filled with liquid to prevent contact with explosive atmosphere

Equipment suitable for use in a Zone 20 is permitted in a Zone 21 or 22

Equipment suitable for use in a Zone 21 is permitted in a Zone 22, but **not** in a Zone 20

Equipment suitable for use in a Zone 22 is **not** permitted in either a Zone 20 or Zone 21

## The Hazardous World of Ex Marking

## The implementation of the EN ISO 80079 standard series in 2016

#### DECLARATION OF CONFORMITY **ATEX Certified Portable Fans**

This Declaration of Conformity is issued for ATEX certified, flame proof, increased safety, portable fans, intended for use in potentially explosive atmospheres, manufactured by Euramco Safety, Inc. as referenced

May 04, 2020 Issue Date:

Euramco Safety, Inc. Manufacturer: 2746 Via Orange Way

Spring Valley, CA 91978 USA

**Equipment Descriptions:** 8\* / 20 cm ATEX Blower Exhauster

12\* / 30 cm ATEX Blower Exhauster EFi75xx EFi120xx 16" / 40 cm ATEX Blower Exhauster 16" / 40 cm ATEX Blower Exhauster

Hazardous Location Rating: II 2 G Ex db eb IIB T6 Gb
II 2 G Ex h IIB T6 Gb

Zone 1, 2

T6, non-mining gases up to 85°C

Certification Number: 0539 DEMKO 09 ATEX 0926969X

IECEx Certification Number: IECEX UL 13.0062X 10 ATEX Q137286 Notification Number:

UL International DEMKO A/S, Notified Body Number 0539 Notified Body:

Borupvang 5A

2750 Ballerup, Denmark

Standards to which

Certificate Applies: EN 60079-0:2018 EN 60079-1:2014

EN 60079-7:2015+A1:2018

EN 14986:2017

Self-Declared Compliance

Directives: 2006/42/EC - Machinery Directive 2014/35/EU - Low Voltage Directive

2014/30/EU - EMC Directive

2011/65/EU - RoHS - Reduction of Hazardous Substances Directive

Euramco Safety, Inc. hereby declares that equipment described above conforms with the protection requirements of ATEX Council Directive 2014/34/EU on the approximation of the laws of the Member States Concerning Equipment and Protection Systems Intended for use in Potentially Explosive Atmospheres.



05/04/2020

Euramoo Group | 2746 Via Orange Way, Spring Valley CA 91978 USA | Ph: +1-619-670-9590 | www.Euramoo.com Page 1 of 1

Listed as Ex h?

To label a fan Ex h it must have its conformity assessment completed to ISO 80079-37:2016

EN14986 section 7.3 marking The marking shall be according to EN ISO 80079-37



# WE DON'T KNOW WHAT WE DON'T KNOW ATEX 2014/34/EU GUIDELINES

GUIDE TO APPLICATION OF THE DIRECTIVE 2014/34/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 26 FEBRUARY 2014 ON THE HARMONISATION OF THE LAW OF THE MEMBER STATES RELATING TO EQUIPMENT AND PROTECTIVE SYSTEMS INTENDED FOR USE IN POTENTIALLY **EXPLOSIVE ATMOSPHERES** 





The objective of these ATEX Guidelines is to clarify certain matters and procedures referred to in Directive 2014/34/EU1 concerning equipment and protective systems intended for use in potentially explosive atmospheres. The Guidelines should be used in conjunction with the Directive itself and with the European Commission's document "The 'Blue Guide' on the implementation of EU product rules"4

- Clarify Certain Matters & Procedures
- The 'Blue Guide' on the implementation of EU product rules





## HAVE WE REVIEWED THIS

# The 'Blue Guide' on the implementation of EU products rules 2016 (2016/C 272/01)

What is a manufacturer's declaration of conformity?

The EU declaration of conformity (EU DoC) is a document in which the manufacturer, or his authorised representative within the European Economic Area (EEA), indicates that the product meets all the necessary requirements of the Union harmonisation legislation applicable to the specific product. The EU DoC shall also contain the name and address of the manufacturer along with information about the product, such as the brand and serial number. The EU DoC must be signed by an individual working for the manufacturer or his authorised representative, and the employee's function shall also be indicated.

Whether a Notified Body has been involved or not, the manufacturer must draw up and sign the EE declaration of conformity.

Indicates that the product meets <u>all the necessary requirements</u> of the Union harmonisation legislation applicable to the specific product





## The 'Blue Guide' on the implementation of EU products rules 2016

(2016/C 272/01)

- 1. carry out the applicable conformity assessment or have it carried out, in accordance with the procedure(s) laid down by the relevant Union harmonisation legislation. Depending on the Union harmonisation act, the manufacturer may be required to submit the product to a third party (usually a notified body) to have the conformity assessment carried out, or to have a quality system approved by a notified body. In any case, the manufacturer bears full responsibility for product conformity;
- 2. draw up the required technical documentation;
- 3. draw up the EU declaration of conformity;
- 4. ensure that procedures are in place for series production to remain in conformity. Changes in product design or characteristics and changes in the harmonised standards or in other technical specifications by reference to which conformity of a product is declared must be adequately taken into account. The kind of action to be taken by the manufacturer depends on the nature of changes in the harmonised standards or other technical specifications, in particular whether these changes are material with regard to the coverage of the essential or other legal requirements and whether they concern the product in question. This might require for instance to update the EU Declaration of conformity, change the product design, contact the notified body (109), etc.;

We must review changes in the standard

**Gap Analysis** 



## **WE DON'T KNOW WHAT WE DON'T KNOW**

ATEX 2014/34/EU
Guidelines

3<sup>rd</sup> edition May 2020

Directive 2014/34/EU is a total harmonisation directive and a "New Approach" directive aligned to the New Legislative Framework. It lays down essential health and safety requirements and leaves it to standards, primarily European harmonised standards, to give technical expression of the relevant requirements contained in the Directive.

Current European Harmonised Standards

For your conformity assessment you must use harmonised standard



#### DNV-GL

### EU-TYPE EXAMINATION CERTIFICATE

- [2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 2014/34/EU
- ATMOSPHERES DIRECTIVE 2014/34/EU

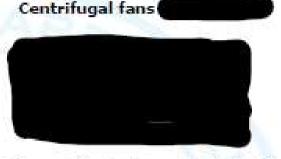
EU-Type Examination Certificate Number: Presafe 17 ATEX 9970 X

Issue 2

[4] Product:

[3]

- 51 Manufacturer:
- [6] Address:



- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV GL Presafe AS, notified body number 2460, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential reports listed in section 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012/A11:2013, EN 60079-7:2015 and EN14986:2017

- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This EU TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- [12] The marking of the product shall include the following:

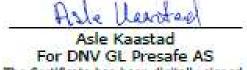
Date of issue:

2020-12-09



Ex eb IIB + H2 T3 Gb





## NOTIFIED BODIES THEY DON'T KNOW WHAT THEY DON'T KNOW

Issued in 2020

Mechanical equipment marking incorrect?

EN14986 section 7.3 marking
The marking shall be according to EN ISO 80079-36



Ex eb IIB + H2 T3 Gb

The fans should be Ex h?





# ODCOCK ODCOCK

## NOTIFIED BODIES THEY DON'T KNOW WHAT THEY DON'T KNOW

Hi Scott, Thank you for your request.

This fan has a special construction.

The entire fan was assessed as electrical equipment according to EN14986.

Your question regarding "h" is a known case and will be included in the next certificate update.

What is to be used from EN-ISO 60079-36 in this case is Ex marking (7.3) and will be: "Ex eb h IIB + H2 T3 Gb"

#### Best Regards/Med Vennlig Hilsen

Jan Borgen
Sales and Marketing Responsible, Ex
DNV GL Presafe AS

Veritasveien 3 1363 Høvik Norway

jan.borgen@dnvgl.com

Mobile +47 920 31 511 | dnvgl.com | LinkedIn HOW CAN THE MECHANICAL STANDARD FOR FANS BE ASSESSED ELECTRICALLY?

**DNV·GL** 

## The Hazardous World of Ex Marking

### EN14986:2017

Design of fans working in potentially explosive atmospheres



### EN80079-36:2016

Explosive atmospheres. Nonelectrical equipment for explosive atmospheres. Basic method and requirements

## EN80079-37:2016

Explosive atmospheres. Nonelectrical equipment for explosive atmospheres. Non-electrical type of protection constructional safety "c", control of ignition sources "b", liquid immersion "k"





#### TYPE EXAMINATION CERTIFICATE

Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

Certificate Number: Sira 09ATEX6230X Issue: 3 Equipment: A range of centrifugal and Axial flow fans

Woodcock and Wilson Ltd Applicant:

Address: Airstream Works

> Blackmoorfoot Road Crosland Hill Huddersfield HD4 7AA

- This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- CSA Group Netherlands B.V. certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of Category 2 and 3 equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN ISO 80079-36:2016

EN ISO 80079-37:2016

EN 14986:2017

- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.
- This Type Examination Certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- The marking of the equipment shall include the following:

II 2G/ 2D/ 3G/ 3D(2 Ex h II(1) T(1) Gb/Gc(2)

Ex h IIIC T(1)°C Db/Dc(2

(1) Equipment group and temperature class are dependent on configuration and rating of drive motor fitted.

(2) Equipment may be marked any combination of EPL "Gb", "Gc", "Db" or "Dc" as appropriate and category 2 and category 3 gas and dust depending on configuration and rating of drive motor fitted.

Project Number 0793

Title: Director of Operations

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CSA Group Netherlands B.V. Utrechseweg 310, 6812 AR, Arnhem, Netherlands

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DQD 544.15 Rev. 2018-11-19





#### SCHEDULE

#### TYPE EXAMINATION CERTIFICATE

Sira 09ATEX6230X Issue 3

#### DESCRIPTION OF EQUIPMENT

A range of metallic fan assemblies for industrial applications, driven by suitably certified electric motors. Each fan is housed within continuous weld fabricated housings with single or double inlet options. The fans are driven by an electric drive motor through either direct connection, in-line connection via a nonslip coupling or belt driven.

The fans may be manufactured with the following material pairings

#### Materials for Rotating and Stationary Parts for Gas Groups IIA & IIB

Material 1	Material 2	
PAGAS (Anti static glass reinforced polyamide) #	Any Steel Alloy or Cast Iron	
Carbon Steel	Naval Brass Sheet, CuZn39Sn	
Austenitic Stainless Steel	Naval Brass Sheet, CuZn39Sn	
Austenitic Stainless Steel *	Austenitic Stainless Steel *	
Aluminium Alloy	Naval Brass Sheet, CuZn39Sn	
Aluminium Alloy	Aluminium Alloy	
Cast Iron	Naval Brass Sheet, CuZn39Sn	
Any Steel Alloy or Cast Iron *	Any Steel Alloy or Cast Iron *	

<sup>\*</sup> Material pairing is acceptable up to and including 5.5 kW motor power, above this vibration monitoring is required. # Material for use in axial flow fans only.

#### Materials for Rotating and Stationary Parts for Gas Groups IIC (Gas mixtures containing Hydrogen)

Material 1	Material 2
PAGAS (Anti static glass reinforced polyamide) #	Any Steel Alloy or Cast Iron
Carbon Steel	Naval Brass Sheet, CuZn39Sn
Aluminium Alloy	Aluminium Alloy or Naval Brass SheetCuZn39Sn
Austenitic Stainless Steel	Naval Brass Sheet, CuZn39Sn
Cast Iron	Naval Brass Sheet, CuZn39Sn

<sup>#</sup> Material for use in axial flow fans only

#### Temperature classes

The following are the maximum temperatures the fans can operate in to achieve the applicable temperature class:

	Fan with bearings	Fan without bearings
T6	N/A	+80°C
T5	+40°C	+95°C
T4	+75°C	+130°C
T3	+140°C	+195°C
T2	+240°C	+295°C
T1	+390°C	+445°C

The range of fans comprise of the following types:-.

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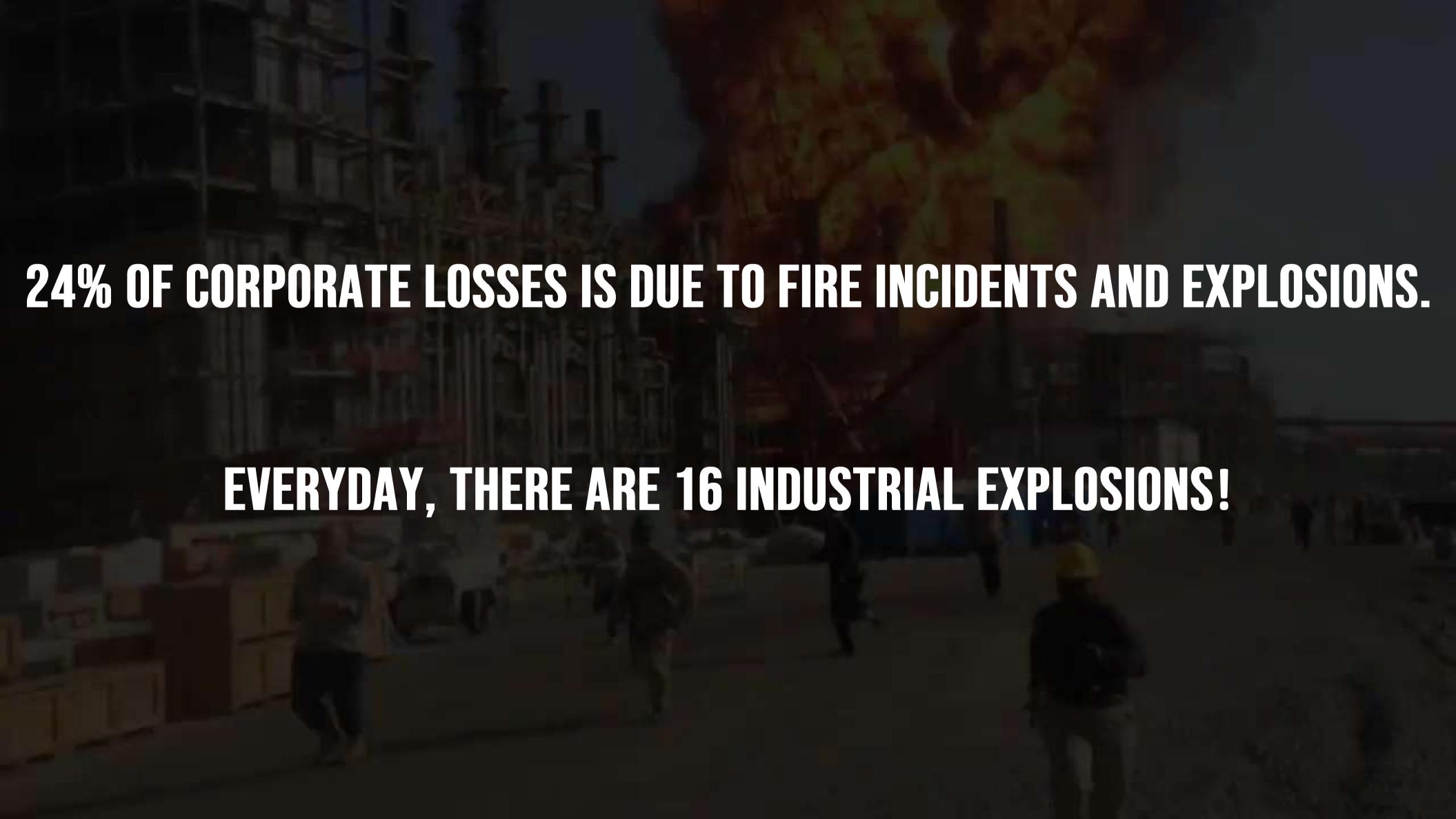
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## 340 MILLION INDUSTRIAL ACCIDENTS...

380,500 INDUSTRIAL FATALITIES PER YEAR...

95% OF ACCIDENTS ARE MECHANICAL FAILURES.

## WE DON'T KNOW WHAT WE DON'T KNOW

## 11. Responsibilities of manufacturers: conformity assessment

Conformity assessment according to the <u>conformity assessment procedures</u> <u>applicable to the product, is the responsibility of the manufacturer only,</u> whether the Directive provides for the involvement of a notified conformity assessment body, or not.



"All manufacturers should know what standards are applicable, because they are placing the products on the market."

"It is the manufacturers responsibility to find out what standards their products should be assessed to"

# IN SUMMARY ARE WE AT RISK?

- NO MENTION OF THE RELEVANT MECHANICAL STANDARD
- REFERENCING ELECTRICAL STANDARD ONLY
- REFERENCING OUTDATED STANDARDS
- MECHANICAL FAILING OF THE PRODUCT TO THE STANDARDS
- NO ASSESSMENT OF ALL THE RELEVANT DOCUMENTS
- IF YOU MISS SOMETHING ITS YOUR FAULT

SELF-CERTIFICATION OR A LODGED TECHNICAL FILE

IF YOU MARK YOUR OWN EXAM

YOU WILL ALWAYS PASS





## ARE WE SITTING ON A TIME BOMB

SELF-CERTIFICATION OR A LODGED TECHNICAL FILE

"WE DIDN'T EXPECT THE UNIT TO FAIL OR SPARK."



## WE DON'T KNOW WHAT WE DON'T KNOW

Who is looking after them now?

How do we all work to the safest solution?
How do we keep future industry safe?
Can we agree on the correct way to work?



Has your company done the best it could to keep people safe?



# WOODCOCK & WILSON



## WE DON'T KNOW WHAT WE DON'T KNOW



## WE JUST BELIEVE IN UNICORNS



## Any Questions





