

# X Purge System Certificates

**ML499**

**PART B**

**Important Note**

Refer to the system manual for applicable certificates.

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**EU Authorised Representative:**  
ExpoPharma Engineering Services Ltd  
46 Eastcote Drive, Little Island,  
Co. Cork, T45 WR68, Ireland.  
E EUAR@expopharma.ie

**Manufacturer:**  
Expo Technologies Ltd  
Unit 2, The Summit, Hanworth Road,  
Sunbury-on-Thames, TW16 5DB, U.K.  
E sales@expoworldwide.com

## EU Declaration of Conformity



**This is to declare that the products listed below are manufactured in conformity with the following EU Directives under the sole authority of Expo Technologies Ltd:**

**Expo Technologies MiniPurge Interface Units Type MIU/e1, MIU/e2 and MIU/e1-MO**

### **Electromagnetic Compatibility Directive 2014/30/EU**

Clause 1.1.3 Equipment covered by other specific Community Directives: Compliance with the Essential Health and Safety Requirements has been assured to conform to the following list of Standards:

**EN IEC 60079-0:2018**

**EN 60079-7:2015**

**EN 60079-31:2014**

Clause 1.1.4 Inherently benign equipment: the electrical equipment associated with the MIU/e are Ex d switch(es) certified under EPS 14ATEX1766X and used within the MiniPurge Control system. These switches are terminated inside the MIU/e at Ex e terminal(s) certified under DEMKO 14ATEX1388U and are not capable of generating or contributing to electromagnetic emission. These switches are capable of operating without degradation in the presence of electromagnetic disturbance in their intended environment.

### **Low Voltage Directive 2014/35/EU**

MiniPurge Interface Units MIU/e are intended for use in potentially explosive atmospheres (Hazardous Areas) and are therefore excluded from the Low Voltage Directive. Electrical safety conforms to EN 61010:2010

### **Pressure Equipment Directive 2014/68/EU**

MiniPurge Interface Units MIU/e are classified as not higher than category I under Article 13 of this Directive and intended for use in potentially explosive atmospheres (Hazardous Areas) and are therefore excluded from the Pressure Equipment Directive.

### **ATEX Directive 2014/34/EU**

MiniPurge Interface Units MIU/e are designed to conform to the ATEX Directive in fulfilment of the Essential Health & Safety requirements of Annexe II, in compliance with:

**EN IEC 60079-0:2018**

**EN 60079-7:2015+A1:2018**

**EN 60079-31: 2014.**

MiniPurge Interface Units MIU/e are certified by ExVeritas, Units 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, United Kingdom, LL13 9UZ, under EU Type Certification ExVeritas 19ATEX0542X in compliance with:

**EN IEC 60079-0:2018**

**EN 60079-7:2015+A1:2018**

**EN 60079-31: 2014.**

MiniPurge Interface Units MIU/e are manufactured under Production QAN Sira 99ATEXM043, issued by CSA Group (Netherlands) B.V. (EU Notified Body No. 2813).

Technical documentation and assessments are in the Expo Technologies confidential technical file SC027.

For and on behalf of Expo Technologies Ltd

John Paul De Beer  
Managing Director

Date 2<sup>nd</sup> November 2021

SC027-CE.v9 MIU/e EU DoC



**Manufacturer:**  
Expo Technologies Ltd  
Unit 2, The Summit, Hanworth Road,  
Sunbury-on-Thames, TW16 5DB, U.K.  
E sales@expoworldwide.com

## UK Declaration of Conformity



This is to declare that the products listed below are manufactured in conformity with the following UK Product Regulations under the sole authority of Expo Technologies Ltd

**Expo Technologies MiniPurge Interface Units Type MIU/e1, MIU/e2 and MIU/e1-MO**

**Electromagnetic Compatibility Regulations 2016 (SI 2016/1091)**

**Clause 1.1.3 Equipment covered by other specific Regulations:** Compliance with the Essential Health and Safety Requirements has been assured to conform to the following list of Standards:

**EN IEC 60079-0:2018**

**EN 60079-7:2015**

**EN 60079-31:2014**

**Clause 1.1.4 Inherently benign equipment:** the electrical equipment associated with the MIU/e are one or more Ex d switch(es) used within the MiniPurge Control system and terminated inside the MIU/e at terminals suitable for the intended use. These circuits are not capable of generating or contributing to electromagnetic emission. These switches can operate without degradation in the presence of electromagnetic disturbance in their intended environment.

**Electrical Equipment (Safety) Regulations 2016 (SI 2016/1101)**

Mini Interface Units MIU/e are intended to be used in potentially explosive areas (hazardous areas) and are therefore excluded from the Regulation.

**Pressure Equipment (Safety) Regulations 2016 (SI 2016/1105)**

Mini Interface Units MIU/e are classified as not higher than Category I under article 13 of this Regulation and also intended for use in potentially explosive atmospheres and are therefore excluded from this Regulation.

**Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres Regulations, UKSI 2016:1107 (as amended) - Schedule 3A Part 1**

Mini Interface Units MIU/e are designed to conform to the above Regulations in fulfilment of the Essential Health & Safety requirements of Annex II and in compliance with:

**EN IEC 60079-0:2018**

**EN 60079-2:2014**

**EN 60079-31:2014**

Mini Interface Units MIU/e are certified under UK Type-Examination Certificate CSAE 21UKEX1051X by CSA Group Testing UK Ltd. (UK Conformity Assessment Body No. 0518) in compliance with:

**EN 60079-0:2012 + A11:2013**

**EN 60079-2:2014**

**EN 60079-31:2014**

Mini Interface Units MIU/e are manufactured under Production Quality Assurance Notification CSAE 21 UKQAN 0005, issued by CSA Group Testing UK Ltd. (UK Conformity Assessment Body No. 0518).

Technical documentation and assessments are in the Expo Technologies confidential technical file SC027.

For and on behalf of Expo Technologies Ltd

John Paul De Beer  
Managing Director

Date 15<sup>th</sup> December 2021



**UNITED KINGDOM CONFORMITY ASSESSMENT  
UK TYPE EXAMINATION CERTIFICATE**

**Product intended for use in Potentially Explosive Atmospheres  
UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1**

- 1 Type Examination Certificate Number: **ExVeritas 21UKEX1051X** Issue: **0**
- 2 Product: **MiniPurge Interface Units MIUe**
- 3 Manufacturer: **Expo Technologies Ltd**
- 4 Address: **Unit 2, The Summit, Hanworth Road, Sunbury on Thames, Surrey, TW16 5DB, UK**

This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

ExVeritas Limited Approved Body number 2585, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), 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 Schedule 1 of the Regulations.

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

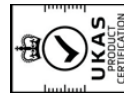
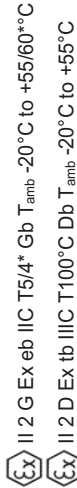
**EN IEC 60079-0: 2018 EN IEC 60079-7: 2015+A1: 2018 EN 60079-31: 2014**

Except in respect of those requirements listed at section 16 of the schedule to this certificate.

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.

This TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the equipment shall include the following:



No. 8613

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

The status of this certificate can be verified at [www.exveritas.com](http://www.exveritas.com)

For help or assistance relating to this certificate, contact [info@exveritas.com](mailto:info@exveritas.com).

ExVeritas, Units 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, United Kingdom LL13 9UZ.

ExVeritas® is a registered trademark, unauthorised use will lead to prosecution.

**Schedule**

13 Description of Product

The MiniPurge Interface Units are part of a series of IP66 rated enclosures that are used as Junction Boxes. The construction of the boxes has been assessed under the component certificate EXV19ATEX0454U. A permitted content of the boxes is specified on drawing SD7623. The current rating and maximum voltage for each terminal box is specified on the label and the general assembly drawings. Three types of boxes have been covered by this certificate:

- MIUe1 – 7A, 400V, IP66 assembly drawing SD7851
- MIUe2 – 7A, 400V, IP66 assembly drawing SD7850
- MIUer/IMO – 2A, 400V, IP66 assembly drawing SD7861

14 Descriptive Documents

14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
EXV3380A	2022-01-19	0	Initial issue of the Prime Certificate

14.2 Compliance Drawings:

Title:	Drawing No.:	Rev. Level:	Date:
MIUe Permitted Contents	SD7623	2	02/10/19
MIU User Instructions	SD7644	3	02/10/19
MiniPurge Interface Unit	SD7850	3	02/10/19
MIUe Interface Unit	SD7851	3	02/10/19
MIU with manual override	SD7861	3	02/10/19
MIUe CERTIFICATION LABEL UKCA	SD8514	1	04/10/2021

15 Specific Conditions of Use

15.1 Special Conditions for Safe Use

- Cable glands, breathers, drains and plugs shall be appropriately ATEX certified types, suitable for the cable and conditions for use and installed in accordance with their manufacturers' instructions. They shall maintain the IP66 rating of the enclosure.

15.2 Routine tests

- None

16 Essential Health and Safety Requirements (Regulations Schedule 1)

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

The manufacturer shall inform ExVeritas of any modifications to the design of the product described by this schedule.

Certificate: **ExVeritas 21UKEX1051X** Issue **0**

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For help or assistance relating to this certificate, contact [info@exveritas.com](mailto:info@exveritas.com).

ExVeritas, Units 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, United Kingdom LL13 9UZ.

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**1 EU - Type Examination Certificate**

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

Certificate Number: EXVeritas 19ATEX0542X Issue: 1

Equipment: MiniPurge Interface Units MIUe

Manufacturer: Expo Technologies Ltd

Address: Unit 2, The Summit, Hanworth Road, Sunbury on Thames, Surrey, TW16 5DB, UK

This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

ExVeritas, Notified Body number 2804, in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems for use in potentially explosive atmospheres given in Annex II to the Directive

Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with the following Standards and section 16 of this certificate:

EN IEC 60079-0: 2018 EN 60079-7: 2015+A1: 2018 EN 60079-31: 2014

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.

This EU-Type Examination Certificate relates only to the design, construction, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. 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.

The marking of the equipment shall include the following:

II 2 G Ex eb IIC T5/4 \* Gb T<sub>amb</sub> -20°C to +55/60\* °C  
 II 2 D Ex tb IIIC T100°C Db T<sub>amb</sub> -20°C to +55°C



On behalf of ExVeritas



Peter Lauritzen  
Managing Director

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

The status of this certificate can be verified at [www.exveritas.com](http://www.exveritas.com)

For help or assistance relating to this certificate, contact [info@exveritas.com](mailto:info@exveritas.com).

ExVeritas A/S, Sevevmsmindevej 6, 4420 Regstrup, Denmark.

ExVeritas® is a registered trademark, unauthorised use will lead to prosecution.



**13 Description of Equipment or Protective System**

The Minipurge Interface Units are part of a series of IP66 rated enclosures that are used as Junction Boxes. The construction of the boxes has been assessed under the component certificate EX19ATEX0454U. A permitted content of the boxes is specified on drawing SD7623. The current rating and maximum voltage for each terminal box is specified on the label and the general assembly drawings. Three types of boxes have been covered by this certificate:

- MIU/e1 – 7A, 400V, IP66 assembly drawing SD7851
- MIU/e2 – 7A, 400V, IP66 assembly drawing SD7850
- MIU/e1MO – 2A, 400V, IP66 assembly drawing SD7861

**13.1 Details of change:**

The following changes are introduced in issue 1 of the certificate:

- Transfer of the certificate from ExVeritas UK, Notified Body number 2585 to ExVeritas Denmark, Notified Body number 2804. Certificate number remains unchanged.

**14 Descriptive Documents**

14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R2328/A1	17 <sup>th</sup> Oct 2019	0	Initial issue of the Prime Certificate
EXV3094A	12 <sup>th</sup> Jan 2021	1	Issue of the first variation, see section 13.1.

**14.2 Compliance Drawings:**

**Issue 0**

Title:	Drawing No.:	Rev. Level:	Date:
MIU/e Permitted Contents	SD7623	2	02/10/19
MIU IECEx & ATEX Certificate label	SD7624	4	02/10/19
MIU User Instructions	SD7644	3	02/10/19
Minipurge Interface Unit	SD7850	3	02/10/19
Minipurge Interface Unit	SD7851	3	02/10/19
MIU with manual override	SD7861	3	02/10/19

**15 Conditions of Certification**

**15.1 Special Conditions for Safe Use**

- Cable glands, breathers, drains and plugs shall be appropriately ATEX certified types, suitable for the cable and conditions for use and installed in accordance with their manufacturers' instructions. They shall maintain the IP66 rating of the enclosure.

**15.2 Conditions for Use (Routine tests)**

- None
- Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1.

The manufacturer shall inform the Notified Body of any modifications to the design of the product described by this schedule.

Certificate: EXVeritas 19ATEX0542X


Issue 1

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

For help or assistance relating to this certificate, contact [info@exveritas.com](mailto:info@exveritas.com).

ExVeritas A/S, Sevevmsmindevej 6, 4420 Regstrup, Denmark.

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## IECEX Certificate of Conformity

**Certificate No.:** IECEX EXV 19.0057X

**Date of issue:** 2019-11-12

**Manufacturer:** EXPO Technologies Limited  
Unit 2, The Summit  
Hanworth Road  
Surrey TW16 5DB  
United Kingdom

**Additional manufacturing locations:**

Page 2 of 3

Issue No: 0

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex 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 the identified documents, was found to comply with the following standards


IEC 60079-0:2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-31:2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7:2015 Edition:5.0	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

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:**  
GB/EX/EXTR19.0059/00

**Quality Assessment Report:**  
GB/SIR/QAR07.0012/15



## IECEX Certificate of Conformity

**Certificate No.:** IECEX EXV 19.0057X

**Status:** Current

**Date of Issue:** 2019-11-12

**Applicant:** EXPO Technologies Limited  
Unit 2, The Summit  
Hanworth Road  
Surrey TW16 5DB  
United Kingdom

**Equipment:** Minipurge Interface Units MIUe

**Optional accessory:**

Page 1 of 3

Issue No: 0

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)

**Type of Protection:** Increased Safety Ex 'eb' Protection by Enclosure Ex 'tb'


**Marking:** Ex eb IIC T5/4° Gb Ta = -20°C to +55/60° °C  
\*Manual override (MO) models exempt  
Ex tb IIIC T100°C Db Ta = -20°C to +55°C


**Approved for issue on behalf of the IECEX Certification Body:** Sean Clarke CEng MSc FIET

**Position:** Certification Manager

**Signature:** (for printed version)

**Date:**





Certificate issued by:  
ExVeritas Limited  
Units 16-18 Abenbury Way  
Wrexham Ind. Est.  
Wrexham LL 139JZ  
United Kingdom

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.



Annex to: IECEx EXV 19.0057X Issue 0

**Manufacturer's documents:**

Title:	Drawing No.:	Rev	Sheets	Date:
MIU/e Permitted Contents	SD7623	2	1 of 1	02/10/19
MIU IECEx & ATEX Certificate label	SD7624	4	2 of 2	02/10/19
MIU User Instructions	SD7644	3	3 of 3	02/10/19
Minipurge Interface Unit	SD7850	3	1 of 1	02/10/19
Minipurge Interface Unit	SD7851	3	1 of 1	02/10/19
MIU with manual override	SD7861	3	1 of 1	02/10/19



# IECEX Certificate of Conformity



Certificate No.: IECEx EXV 19.0057X  
 Date of issue: 2019-11-12  
 Page 3 of 3  
 Issue No: 0

**EQUIPMENT:**  
 Equipment and systems covered by this Certificate are as follows:

The Minipurge Interface Units are part of a series of IP66 rated enclosures that are used as Junction Boxes. The construction of the boxes has been assessed under the component certificate IECEx EXV 19.0010U. A permitted content of the boxes is specified on drawing SD7623. The current rating and maximum voltage for each terminal box is specified on the label and the general assembly drawings. Three types of boxes have been covered by this certificate:

- MIU/e1 – 7A, 400V, IP66 assembly drawing SD7851
- MIU/e2 – 7A, 400V, IP66 assembly drawing SD7850
- MIU/e1/MO – 2A, 400V, IP66 assembly drawing SD7861

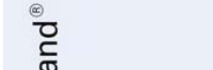
**SPECIFIC CONDITIONS OF USE: YES as shown below:**

- Cable glands, breathers, drains and plugs shall be appropriately IECEx certified types, suitable for the cable and conditions for use and installed in accordance with their manufacturers' instructions. They shall maintain the IP66 rating of the enclosure.

**Annex:**

EXV 19.0057X IECEx Annex.pdf





**TÜVRheinland**  
Precisely Right.

# Certificado de Conformidade

*Certificate of Compliance • Certificado de Conformidade*

**Certificado N.º:** TÜV 12.1463  
*Certificate No. • Certificado N.º:*

**Revisão:** 03  
*Review • Revisión:*

**Emitted em:** 27/10/2021  
*Issued • Emitido:*

**Válido até:** 28/09/2024  
*Valid until • Válido hasta:*

**Lista de Modelos**

Marca <i>Brand • Marca</i>	Modelo <i>Model • Modelo</i>	Descrição <i>Description • Descripción</i>	Código de Barras GTIN <i>GTIN Barcode • Código de Barras GTIN</i>
Expo Technologies	MIU/e	UNIDADE DE INTERFACE MINIPURGE	Não existente

**Especificações:**

As unidades de interface MiniPurge modelo MIU/e fazem parte de uma série de invólucros utilizados como caixas de ligação fabricados em aço inoxidável ou aço carbono modelo PEZE pela Expo Technologies Ltd (Certificado de conformidade IECEX ITS 08.0043U). O conteúdo das caixas de ligação está especificado no desenho SD7623.

As unidades de interface MiniPurge incluem três modelos de caixas de ligação:

- MIU/e1
- MIU/e2
- MIU/e1/IMO

A tensão máxima das caixas de ligação é de 400 V.

O número máximo de conectores dentro da caixa terminal:

- MIU/e1 é de 18
- MIU/e2 é de 33
- MIU/e1/IMO é de 13.

A corrente máxima para a caixa de ligação (por conector):

- MIU/e1 é 7 A
- MIU/e2 é 7 A
- MIU/e1/IMO é 6 A

**Análise e ensaios realizados:**

As análises e os ensaios realizados encontram-se no relatório de análise nº CC\_121463/03.

**Documentação descritiva do produto:**

- Relatório de ensaios Intertek nº GB/ITS/EXTR10.0029/00 de 26/08/2010.


Documento	Descrição	Rev.	Data
SD7850	Minipurge Interface Unit	2	10/12/2013
SD7851	Miniature Interface Unit	2	10/12/2013
SD7861	MIU with Manual Override	2	10/12/2013
SD7623	MIU/e Permitted Contents	1	19/08/2010
SD7624	MIU IECEX & ATEX Certificate Label	3	06/02/2014
SD7644	MIU User Instructions	2	06/02/2014
SD7648	MIU/e TUV Certification Label	5	02/07/2015
SD7653	MIU/e Portuguese Handbook Extracts	4	02/07/2015

Para confirmar sua autenticidade acesse <https://ivv.cdds.digital/check/55201365798236466>

Continuamos a trabalhar em direção aos objetivos, na forma do art. 19, da Lei nº 10.406, de 10 de janeiro de 2002 - Código Civil.

10, § 1.º da Medida Provisória nº 2.200-2, de 24 de agosto de 2001, e alterações em suas disposições produzidas com a utilização do processo de Certificação Digital disponibilizado pelo CPT-Brasil.

Endereço Escritório: Av. Quarenta e Nove, 767 - Vila Hamburguesa - São Paulo - SP - CEP: 05319-000  
CNPJ: 01.950.467/0001-65 - Tel.: 55 11 3514.5700 - [www.tuv.com.br](http://www.tuv.com.br) - [MS-002142@tuv.com.br](mailto:MS-002142@tuv.com.br)



**TÜVRheinland**  
Precisely Right.

# Certificado de Conformidade

*Certificate of Compliance • Certificado de Conformidade*

**Certificado N.º:** TÜV 12.1463  
*Certificate No. • Certificado N.º:*

**Revisão:** 03  
*Review • Revisión:*

**Emitted em:** 27/10/2021  
*Issued • Emitido:*

**Válido até:** 28/09/2024  
*Valid until • Válido hasta:*

**Produto:**  
*Product • Producto:*

UNIDADE DE INTERFACE MINIPURGE  
MIU/e

**Solicitante:**  
*Applicant • Solicitante:*

EXPO TECHNOLOGIES LTD,  
Unit 2, The Summit  
Hanworth Road, Sunbury on  
Thames, TW16 5DB, UK

**Fabricante:**  
*Manufacturer • Fabricante:*

EXPO TECHNOLOGIES LTD,  
Unit 2, The Summit  
Hanworth Road, Sunbury on  
Thames, TW16 5DB, UK

**Fornecedor / Representante Legal:**  
*Supplier / Legal Representative • Proveedor / Representante Legal:*

Não aplicável.

**Normas Técnicas / Regulamento:**  
*Standards / Regulation • Normas / Reglamento:*

ABNT NBR IEC 60079-0:2020;  
ABNT NBR IEC 60079-7:2018;  
ABNT NBR IEC 60079-31:2014;  
ABNT NBR IEC 60529:2017;  
Portaria INMETRO nº 179 de 18/05/2010.

**Modelo de Certificação:**  
*Certification Model • Modelo de Certificación:*

Modelo com Avaliação do Sistema de Gestão da Qualidade do Fabricante e Ensaios no Produto, conforme cláusula 6.1 do Regulamento de Avaliação da Conformidade, anexo à Portaria nº 179 do INMETRO, publicada em 18 de maio de 2010.

**Laboratório, N.º do Relatório de Ensaio e Data:**  
*Laboratory, Test Report No. and Date • Laboratorio, N.º del Informe de Prueba y Fecha:*

Intertek Testing & Certification Ltd.  
GB/ITS/EXTR10.0029/00 de 26/08/2010.

**Relatório de Auditoria e Data:**  
*Audit Report and Data • Informe de Auditoría y Fecha:*

Auditoria realizada em 07/05/2019 - PO-0260-19.

**Notas:**  
*Notes • Añotación:*

"A validade deste Certificado de Conformidade está atrelada à realização das avaliações de manutenção e tratamento de possíveis não conformidades de acordo com as orientações do OCP previstas no RAC específico. Para verificação da condição atualizada de regularidade deste Certificado de Conformidade deve ser consultado o banco de dados de produtos e serviços certificados do INMETRO".  
Este certificado está vinculado à proposta 27127343, de 21/09/2021.

Para confirmar sua autenticidade acesse <https://ivv.cdds.digital/check/55201365798236466>


Continuamos a trabalhar em direção aos objetivos, na forma do art. 19, da Lei nº 10.406, de 10 de janeiro de 2002 - Código Civil.

10, § 1.º da Medida Provisória nº 2.200-2, de 24 de agosto de 2001, e alterações em suas disposições produzidas com a utilização do processo de Certificação Digital disponibilizado pelo CPT-Brasil.

Endereço Escritório: Av. Quarenta e Nove, 767 - Vila Hamburguesa - São Paulo - SP - CEP: 05319-000  
CNPJ: 01.950.467/0001-65 - Tel.: 55 11 3514.5700 - [www.tuv.com.br](http://www.tuv.com.br) - [MS-002142@tuv.com.br](mailto:MS-002142@tuv.com.br)




Igor Moreno  
Local Field Manager



**TÜV Rheinland**  
Precisely Right.

## Certificado de Conformidade

*Certificate of Compliance • Certificado de Conformidade*




**Certificado N.º: TÜV 12.1463**  
Certificate No. • Certificado N.º:  
**Emitted em: 27/10/2021**  
Issued • Emitido:

**Revisão: 03**  
Review • Revisão:  
*Valida until • Válido hasta:*  
**28/09/2024**

**Natureza das revisões/Data**  
*Natura of Reviews/Date*  
*Naturaleza de las revisiones/Fecha*


**Revisão 00:**  
**28/09/2010 – Certificação Inicial;**  
**25/04/2012 – Adequação do Certificado AEX-13099 à Portaria nº 179;**  
**16/09/2015 – Revalidação.**  
**25/08/2018 – Revalidação.**  
**27/10/2021 – Revalidação.**

Para confirmar sua autenticidade acesse <https://tuv.ddds.digital/check/55201365798236466>



Digital Identity TÜV RHEINLAND DO BRASIL LDA  
Original Approval  
DN: c=BR, o=CPC-Brasil, ou=SP, ou=Sao Paulo, ou=Army,  
ou=TUV RHEINLAND DO BRASIL LTD, o11950467000165  
Location: Sao Paulo/SP/BR  
Date: 27.10.2021, 20:55:47 +0000


100.13.1463 - Rev.03 - 27/10/2021 - Pagina 4 de 4  
Endereço Escritório: Av. Quarenta Fábri, 767 - Via Humbergauer - São Paulo - SP - CEP: 05319-000  
CNPJ: 01.950.467/0001-65 - Tel.: 55.11.3514.5700 - [www.tuv.com.br](http://www.tuv.com.br) - IN-0002142 Rev.5



**TÜV Rheinland**  
Precisely Right.

## Certificado de Conformidade

*Certificate of Compliance • Certificado de Conformidade*



**Certificado N.º: TÜV 12.1463**  
Certificate No. • Certificado N.º:  
**Emitted em: 27/10/2021**  
Issued • Emitido:

**Revisão: 03**  
Review • Revisão:  
*Valida until • Válido hasta:*  
**28/09/2024**

**Marcação:**

As unidades de interface MiniPurge modelo MIU/e foram aprovadas nos ensaios e análise, nos termos das normas adotadas, devendo receber a marcação, levando-se em consideração o item observações.


**MIU/e1 e MIU/e2**  
**Ex e IIC T5 Gb**  
**Ex tb IIIC T100°C Db IP66**  
**-20 °C ≤ T<sub>a</sub> ≤ +55 °C**  
**Ex e IIC T4 Gb**  
**-20 °C ≤ T<sub>a</sub> ≤ +60 °C**

**MIU/e1/MO**  
**Ex e IIC T5 Gb**  
**Ex tb IIIC T100 °C Db IP66**  
**-20 °C ≤ T<sub>a</sub> ≤ +55 °C**  
**U<sub>n</sub> = (conforme modelo)**  
**I<sub>n</sub> = (conforme modelo)**

**Observações:**

- Este Certificado de Conformidade é válido para os produtos de modelo e tipo idêntico ao protótipo ensaiado. Qualquer modificação de projeto ou utilização de componentes e materiais diferentes daqueles descritos na documentação deste processo, sem autorização prévia da TÜV Rheinland, invalidará o certificado.
- É de responsabilidade de o fabricante assegurar que os produtos estejam de acordo com as especificações do protótipo ensaiado, através de inspeções visuais e dimensionais.
- Os produtos devem ostentar, na sua superfície externa e em local visível, a Marca de Conformidade e as características técnicas da mesma de acordo com as especificações da ABNT NBR IEC 60079-0 / ABNT NBR IEC 60079-7 / IEC 60079-31 e Regulamento de Avaliação de Conformidade, anexo à Portaria nº 179 do INMETRO, publicada em 18 de Maio de 2010. Esta marcação deve ser legível e durável, levando-se em conta possível corrosão química.
- Os produtos devem ostentar, em lugar visível e de forma indelevel, a seguinte advertência:  
**"ATENÇÃO – NÃO ABRA QUANDO ENERGIZADO"**
- Os prensa-cabos e os bujões para fechar as aberturas não utilizadas devem ser certificados e compatível com o grau de proteção da unidade de interface, adequados para as condições de uso e corretamente instalados.
- As atividades de instalação, inspeção, manutenção, reparo, revisão e recuperação dos produtos são de responsabilidade do usuário e devem ser executadas de acordo com os requisitos das normas técnicas vigentes e com as recomendações do fabricante.
- Para fins de comercialização no Brasil, as responsabilidades da linha "e" do item 10.1 da Portaria 179 de 18 de maio de 2010, é do representante legal, do importador ou do usuário.

Para confirmar sua autenticidade acesse <https://tuv.ddds.digital/check/55201365798236466>



Digital Identity TÜV RHEINLAND DO BRASIL LDA  
Original Approval  
DN: c=BR, o=CPC-Brasil, ou=SP, ou=Sao Paulo, ou=Army,  
ou=TUV RHEINLAND DO BRASIL LTD, o11950467000165  
Location: Sao Paulo/SP/BR  
Date: 27.10.2021, 20:55:47 +0000

100.13.1463 - Rev.03 - 27/10/2021 - Pagina 4 de 4  
Endereço Escritório: Av. Quarenta Fábri, 767 - Via Humbergauer - São Paulo - SP - CEP: 05319-000  
CNPJ: 01.950.467/0001-65 - Tel.: 55.11.3514.5700 - [www.tuv.com.br](http://www.tuv.com.br) - IN-0002142 Rev.5



CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

No.: 2020312303000422

**Applicant Address**  
EXPO Technologies Limited  
Unit 2, The Summit, Hanworth Road, Sunbury on Thames Surrey  
TW16 5DB, United Kingdom

**Manufacturer Address**  
EXPO Technologies Limited  
Unit 2, The Summit, Hanworth Road, Sunbury on Thames Surrey  
TW16 5DB, United Kingdom

**Production Factory Address**  
EXPO Technologies Limited  
Unit 2, The Summit, Hanworth Road, Sunbury on Thames Surrey  
TW16 5DB, United Kingdom

**Product Model/Type**  
MIU/e1, MIU/e2, MIU/e1/MO

**Ex marking**  
Ex e IIC T5/T4 Gb, Ex ID A21 IP66 T100°C

**Reference Standards**  
GB3836.1-2010, GB3836.3-2010, GB12476.1-2013,  
GB12476.5-2013

**Certification mode**  
Type Test + Initial Factory Inspection + Post-Certification Surveillance

The product(s) is verified and certified according to CNCA-C23-01: 2019 *China Compulsory Certification Implementation Rule on Explosion Protected Electrical Product and CNEX-C2301-2019 Guideline of China Compulsory Certification Implementation Rule on Explosion Protected Electrical Product.*

See Annex for the detailed product information (1 page).

Issued on: 2020-11-04  
Valid to: 2025-11-03

The validity of this certificate is maintained through the regular supervision of the issuing authority during the validity period.

Where any discrepancy arises between the English translation and the original Chinese version, the Chinese version shall prevail.

Director:

**CNEX**  
C C C

Nanyang Explosion Protected Electrical Apparatus Research Institute Co., Ltd.

中国认可  
CNAS  
PRODUCT  
CNAS C2308-P

http://www.ccc-cnex.com  
ccc.china-ex.com

Address: No. 20, North Zhongjing Road, Nanyang, Henan, P. R. China  
Tel: 0377-63239734

P. C.: 473008  
Email: ccc@cn-ex.com

CN 0000297



CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION (Annex)

No.: 2020312303000422

Page 1 of 1

**Product information:**

1. This certificate covers the following models:  
- MIU/e1, MIU/e2, MIU/e1/MO

**Parameters:**  
MIU/e1, MIU/e2: 7A, 400V, IP66  
MIU/e1/MO: 2A, 400V, IP66

**Ex marking:**  
MIU/e1, MIU/e2: Ex e IIC T5/T4 Gb, Ex ID A21 IP66 T100°C (Ta: -20°C...+55/60°C)  
MIU/e1/MO: Ex e IIC T5 Gb, Ex ID A21 IP66 T100°C (Ta: -20°C...+55°C)

- Producers should organize production in accordance with the technical documents approved by the certification body.
- Specific conditions of safety use:
  - Cable glands, breathers, drains and plugs shall be appropriately certified types, suitable for the cable and conditions for use and installed in accordance with their manufacturers' instructions. They shall maintain the IP66 rating of the enclosure.
  - See instruction for other information.
- 3. Certificate related report(s):
  - Type test report: CQST2009C580
  - Factory inspection report: CN2020Q010175
- 4. Certificate change information: None

Issued on: 2020-11-04

Director:

**CNEX**  
C C C

Nanyang Explosion Protected Electrical Apparatus Research Institute Co., Ltd.

中国认可  
CNAS  
PRODUCT  
CNAS C2308-P

http://www.ccc-cnex.com  
ccc.china-ex.com

Address: No. 20, North Zhongjing Road, Nanyang, Henan, P. R. China  
Tel: 0377-63239734

P. C.: 473008  
Email: ccc@cn-ex.com





**EU Authorized Representative:**  
ExpoPharma Engineering Services Ltd  
46 Eastcote Drive, Little Island,  
Co. Cork. T45 WR68 Ireland.  
E EUAR@expopharma.ie

**Manufacturer:**  
Expo Technologies Ltd  
Unit 2, The Summit, Hanworth Road,  
Sunbury-on-Thames, TW16 5DB, U.K.  
E sales@expoworldwide.com

## EU Declaration of Conformity



This is to declare that the products listed below are manufactured in conformity with the following EU Directives under the sole authority of Expo Technologies Ltd:

### Electronic Timer Modules Type ETM-IS\*\*\_\*\*\*

The ETM-IS is a powered electronic timer module designed to be powered by a battery or power supply. The battery pack contains a non-rechargeable battery. The timer settings are controlled by two BCD switches. Connections from the timer to a switch to enable timing and a solenoid valve which is used to terminate the timing cycle are provided. The solenoid valve is supplied with the timer and battery or power supply (certified separately). Four LED's are used to indicate the status of the timer circuit.

### Low Voltage Directive 2014/35/EU

Electronic Timer Modules Type ETM-IS\*\*\_\*\*\* are intended for use in potentially explosive atmospheres (Hazardous Areas) and are therefore excluded from the Low Voltage Directive.

### ATEX Directive 2014/34/EU Equipment for explosive atmospheres

Electronic Timer Modules Type ETM-IS\*\*\_\*\*\* are designed to conform to the ATEX Directive in fulfilment of the essential health and safety requirements set out in Annex II, and in compliance with:

**EN 60079-0: 2018**

**EN 60079-11: 2012**

Electronic Timer Modules Type ETM-IS\*\*\_\*\*\* are certified by FM Approvals Europe Ltd. One Georges Quay Plaza, Dublin, Ireland. D02 E440, under EU Type-Examination Certificate FM10ATEX0003, in compliance with:  
**EN 60079-0: 2012 + A11:2013**      **EN 60079-11: 2012**

Electronic Timer Modules Type ETM-IS\*\*\_\*\*\* are rated and shall be marked as follows:

Group II Category 1 G



Group II Category 1 D



Electronic Timer Modules Type ETM-IS\*\*\_\*\*\* are manufactured under Production Quality Assurance Notification SIRA 99 ATEX M043, issued by CSA Group Netherlands B.V. (CSA), Notified Body No 2813.

Signed for and on behalf of Expo Technologies Ltd.,

John Paul De Beer  
Managing Director

Date 2<sup>nd</sup> November 2021  
Confidential Assessment file reference SC039



**EU-TYPE EXAMINATION CERTIFICATE**

- 1 **Equipment or Protective systems intended for use in Potentially Explosive Atmospheres - Directive 2014/34/EU**
- 2 **EU-Type Examination Certificate No:** FM10ATEX0003X
- 3 **Equipment or protective system:** Electronic Timer Module ETM-IS\*\*-\*\*\*
- 4 **Name of Applicant:** Expo Technologies Ltd  
**Address of Applicant:** Unit 2, The Summit  
Hanworth Road  
Sunbury on Thames  
TW16 5DB  
United Kingdom
- 5 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.
- 6 FM Approvals Europe Ltd, notified body number 2809 in accordance with Article 17 of Directive 2014/34/EU of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- 7 The examination and test results are recorded in confidential report number:  
3036907EC dated 12<sup>th</sup> November 2010  
EN60079-0:2012+A11:2013, and EN 60079-11:2012
- 8 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:  
EN60079-0:2012+A11:2013, and EN 60079-11:2012
- 9 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- 10 This EU-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 2014/34/EU. 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.
- 11 The marking of the equipment or protective system shall include:  
II 1 G Ex ia IIC T\* Ga  
II 1 D Ex ia IIC T\* Da  
\* See Description



II 1 G Ex ia IIC T\* Ga  
II 1 D Ex ia IIC T\* Da  
\* See Description

Digitally signed by  
Richard Zammit  
DN: cn=Richard Zammit,  
o=FM Approvals Europe  
Limited, email=richard.zammit@fmapprovals.com,  
c=IE

**Richard Zammit**  
**Certification Manager, FM Approvals Europe Ltd.**

Issue Date: 13<sup>th</sup> March 2019

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

FM Approvals Europe Ltd, One Georges Quay Plaza, Dublin, Ireland, D02 E440  
T: +353 (0) 1761 4200 E-mail: [alex@fmapprovals.com](mailto:alex@fmapprovals.com) [www.fmapprovals.com](http://www.fmapprovals.com)

F ATEX 020 (Mar2019) Page 1 of 3



**SCHEDULE**

to EU-Type Examination Certificate No. FM10ATEX0003X

- 13 **Description of Equipment or Protective System:**  
The ETM-IS is a powered electronic timer module. The Timer module is designed to be supplied from either a self contained battery pack or an IS certified Power Supply. The battery pack contains a non-rechargeable battery together with current limiting resistors. The timer settings are controlled by two BCD switches located on the main part of the timer. Connections from the timer to a solenoid valve and switch are also provided. The solenoid is supplied as part of the timer circuit. Four LED's are used to indicate the status of the timer circuit.  
The Timer module and Solenoid Valve are designed to be installed within another enclosure.  
**Electronic Timer Module ETM-ISab-cde**  
a = sub module  
1 = Timer Module powered by Expo Battery Pack  
2 = Timer module powered by IS power supply  
3 = Expo IS Battery Pack  
4 = Expo IS remote Battery Pack  
5 = Timer module powered by E.P.P.S.  
  
b = Mounting Style  
1 = Plate mounted  
2 = Panel mounted  
  
c = LED connection  
1 = LED's on Timer surface  
2 = LED's on flying leads  
  
de = Maximum Time  
d = Reference Value 1 to 9  
e = Multiplying digit 1, 2, 3 or 4  
  
The input parameters for the power supply option are;  
Ui = 11.1V Ii = 340 mA Pi = 2.613 W (non linear) Ci = 363 nF Li = 0  
  
The input parameters for the E.P.P.S. option are;  
Ui = 10.8V Ii = 3.28 A Pi = 1.46 W Ci = 363 nF Li = 0  
  
The temperature class is depended on the ambient temperature;  

Ambient Temperature Class	Group II	Group III
Tamb = -20 °C to +60 °C	T4	T101 °C
-20 °C to +59 °C	T5	T100 °C
-20 °C to +44 °C	T6	T85 °C

  
**Specific Conditions of Use:**  
1. The Electronic Timers shall not be used where UV light or radiation may impinge the Electronic Timer System.  
2. The Electronic Timer shall be installed within an enclosure which provides protection against impact.  
3. The Enclosure shall be metallic providing a minimum IP20.  
4. For light alloy enclosures, materials shall not contain, by mass, more than 7.5% in total of magnesium, titanium and zirconium. Where more than 10% in total of aluminium, magnesium, titanium and zirconium the user shall take special precautions to avoid ignition hazard due to impact or friction.  
  
14 **Essential Health and Safety Requirements:**  
The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.  
  
**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**  
FM Approvals Europe Ltd, One Georges Quay Plaza, Dublin, Ireland, D02 E440  
T: +353 (0) 1761 4200 E-mail: [alex@fmapprovals.com](mailto:alex@fmapprovals.com) [www.fmapprovals.com](http://www.fmapprovals.com)  
F ATEX 020 (Mar2019) Page 2 of 3

**Blueprint Report**  
**Expo Technologies Ltd (1000002806)**

Class No - 3610

**Expo Technologies Ltd (1000002806)**

Class No 3610

Original Project I.D. 3036907

Certificate I.D. FM10ATEX003X

Drawings	Revision Level	Drawing Title	Last Report	Electronic Drawing
EPC-8000-114	1	Electronic Timer Main PCB Layout	3049400	Yes (msw6)
EPC-8000-115	1	Electronic Timer Battery Main PCB Layout	3036907	Yes (pdf)
EPC-8000-116	1	Electronic Timer Battery Connector PCB Layout	3036907	Yes (pdf)
EPC-8000-117	1	Electronic Timer BCD PCB Layout	3049400	Yes (msw6)
EPC-8000-147	1	Electronic Timer Battery Pack PCB	3049400	Yes (zip_hhm)
EPC-8B00-010	3	Timer Module Parts List	16-Oct-14	Yes (pdf)
EPC-8B00-011	1	Battery Pack Parts List	3049400	Yes (msw6)
EPC-8B00-015	1	ETM-IS31-001 Battery Pack Parts List.doc	3049400	Yes (msw6)
SD7607	3	Electronic Timer Schematic	RR20982	Yes (pdf)
SD7608	3	Electronic Timer Module - Design Document.doc	3055146	Yes (msw6)
SD7610	3	Timer Module Schematic	3049400	Yes (pdf)
SD7611	5	Electronic Timer ELECTRONIC TIMER - BLOCK DIAGRAM	RR20982	Yes (pdf)
SD7620	5	Electronic Timer ATEX / IECX CERTIFICATION LABEL	RR20982	Yes (pdf)
SD7621	4	Electronic Timer - FM (USA, Canada) Label	RR20982	Yes (pdf)
SD7622	5	Electronic Timer - Manual Extracts	3055146	Yes (msw6)
SD7642	2	Electronic Timer - Model Number designation	RR20982	Yes (pdf)
SD7835	5	Electronic Timer Installation	RR20982	Yes (pdf)
SD7841	1	Electronic Timer Assembly	3036907	Yes (pdf)
SD7842	4	Electronic Timer Interconnection	RR20982	Yes (pdf)
SD7848	3	Electronic Timer - Encapsulation	3055146	Yes (msw6)
SD7898	3	Electronic Timer	3049400	Yes (pdf)
SD8005	1	Electronic Timer System Certification Label.doc	3049400	Yes (msw6)
SD8222	2	Electronic Timer Assembly.pdf	3049400	Yes (pdf)
SD8225	1	Description of proposal changes for E-timer	RR20982	Yes (pdf)
SD8236	1	EPPS - Timer with EPPS Assembly	RR20982	Yes (pdf)
Timer Module	1	EPPS - IS Barrier Schematic	RR20982	Yes (pdf)
		General files of Timer PWM	3036907	Yes (zip_hhm)

**SCHEDULE**

to EU-Type Examination Certificate No. FM10ATEX0003X

**16 Test and Assessment Procedure and Conditions:**

This EU-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Europe Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Europe Ltd's ATEX Certification Scheme.

**17 Schedule Drawings**

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

**18 Certificate History**


Details of the supplements to this certificate are described below:

Date	Description
12 <sup>th</sup> November 2010	Original Issue.
30 <sup>th</sup> January 2013	Supplement 1: Report Reference: 3036907rev130109 dated 25 <sup>th</sup> January 2013. Description of the Change: 1. Change of address 2. Addition of IS power Supply option.
22 <sup>nd</sup> October 2013	Supplement 2: Report Reference: 3049400 dated 18 <sup>th</sup> October 2013 Description of the Change: Addition of ETM-IS31-001 battery pack module. (This corresponds to a =3. No change to the model code.)
08 <sup>th</sup> December 2014	Supplement 3: Report Reference: 3036907rev141016 dated 04 <sup>th</sup> December 2014 Description of the Change: Change to Valve part number and update of Valve certificate number (DEKRA 11ATEX0273X).
20 <sup>th</sup> July 2015	Supplement 4: Report Reference: 3055146 dated 15 <sup>th</sup> July 2015 Description of the Change: Update to the standards used.
25 <sup>th</sup> November 2016	Supplement 5: Report Reference: RR206511 dated 23 <sup>rd</sup> November 2016 Description of the Change: Change of T-Class due to solenoid. Updated certificate to EU format.
24 <sup>th</sup> July 2017	Supplement 6: Report Reference: RR20982 dated 22 <sup>nd</sup> June 2017 Description of the Change: Addition of EPPS pneumatically powered generator (this corresponds to a =5 in model number).
13 <sup>th</sup> March 2019	Supplement 7: Description of the Change: Certificate transferred from FM Approvals Ltd., notified body no. 1725, to FM Approvals Europe Ltd., notified body no. 2809.

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

FM Approvals Europe Ltd, One Georges Quay Plaza, Dublin, Ireland, D02 E440  
 T: +353 (0) 1761 14200 E-mail: [info@fmapprovals.com](mailto:info@fmapprovals.com) [www.fmapprovals.com](http://www.fmapprovals.com)





## IECEX Certificate of Conformity

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

Issue No. 6  
Page 1 of 5

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**Certificate No.:** IECEX FME 10.0001X

**Status:** **Current**

**Date of Issue:** **2017-07-24**

**Applicant:** **Expo Technologies Ltd**  
 Unit 2, The Summit  
 Henworth Road  
 Sunbury on Thames  
 TW16 5DB  
**United Kingdom**

**Equipment:** **Electronic Timer Module ETM-1S**

**Optional accessory:**

**Type of Protection:** **Intrinsic Safety**

**Marking:**  
 Ex ia IIC T4 Ga Ta = -20°C to +60°C  
 Ex ia III C T101°C Da Ta = -20°C to +60°C  
 Ex ia IIC T5 Ga Ta = -20°C to +59°C  
 Ex ia III C T100°C Da Ta = -20°C to +59°C  
 Ex ia IIC T6 Ga Ta = -20°C to +44°C  
 Ex ia III C T85°C Da Ta = -20°C to +44°C

**Certificate history:**  
 Issue No. 6 (2017-07-24)  
 Issue No. 5 (2016-11-25)  
 Issue No. 4 (2015-07-20)  
 Issue No. 3 (2014-12-08)  
 Issue No. 2 (2013-10-22)  
 Issue No. 1 (2013-01-30)  
 Issue No. 0 (2010-11-05)

---

**Approved for issue on behalf of the IECEX**  
 Certification Body:

**Position:** Mick Gower  
 Certification Manager

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

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

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

Test Report	GB/FM/EXTR10.0006/001	GB/FM/EXTR10.0006/002
	GB/FM/EXTR10.0006/003	GB/FM/EXTR10.0006/004
	GB/FM/EXTR10.0006/005	GB/FM/EXTR10.0006/006


**Quality Assessment Report**  
 GB/SIROAR07.0012/10

---


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 the Official IECEX Website.

**Certificate issued by:**

**FIM Approvals Ltd**  
 1 Windsor Drive  
 SL4 1RS Windsor  
 United Kingdom



Member of the FIM Global Group



## IECEX Certificate of Conformity

Issue No. 6  
Page 2 of 5

---

**Certificate No.:** IECEX FME 10.0001X

**Date of Issue:** **2017-07-24**

**Manufacturer:** **Expo Technologies Ltd**  
 Unit 2, The Summit  
 Henworth Road  
 Sunbury on Thames  
 TW16 5DB  
**United Kingdom**

**Additional Manufacturing location(s):**

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex 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 electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

**IEC 60079-0: 2011**  
 Edition 6.0  
 Explosive atmospheres - Part 0: General requirements


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

*This Certificate does not indicate compliance with electrical 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	GB/FM/EXTR10.0006/001	GB/FM/EXTR10.0006/002
	GB/FM/EXTR10.0006/003	GB/FM/EXTR10.0006/004
	GB/FM/EXTR10.0006/005	GB/FM/EXTR10.0006/006

**Quality Assessment Report**  
 GB/SIROAR07.0012/10



**IECEX Certificate  
of Conformity**

Issue No. 6  
Page 3 of 5

Certificate No: IECEX FME 10.0001X  
Date of Issue: 2017-07-24

**Schedule**

**EQUIPMENT:**  
*Equipment and systems covered by this certificate are as follows:*

The ETM-IS is battery powered electronic timer module. The Timer module is designed to be supplied from a self contained battery pack or separately certified AIS power supply. This battery pack contains a non-rechargeable battery together with current limiting resistors. The timer settings are controlled by two BCD switches located on the main part of the timer. Connections from the timer to a solenoid valve and switch are also provided. The solenoid is supplied as part of the timer circuit. Four LEDs are used to indicate the status of the timer circuit. The Timer module and Solenoid Valve are designed to be installed within another enclosure.

a = sub module 1 = Timer Module powered by Expo Battery Pack  
 2 = Timer module powered by IS power supply  
 3 = Expo IS Battery Pack  
 4 = Expo IS Battery Pack  
 5 = Timer module powered by E.P.P.S.  
 b = Mounting Style 1 = Plate mounted  
 2 = Panel mounted  
 c = LED connection 1 = LED's on Timer surface  
 2 = LED's on flying leads  
 d = Maximum Time d = Reference Value 1 to 9  
 e = Multiplying digit 1, 2, 3 or 4

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

1. The Electronic Timer shall not be used where UV light or radiation may impinge the Electronic Timer System.
2. The Electronic Timer shall be installed within an enclosure which provides protection against impact.
3. The Enclosure shall be metallic providing a minimum ingress protection of IP20.
4. For light alloy enclosures, materials shall not contain, by mass, more than 7.5% in total of magnesium, titanium and zirconium. Where more than 10% in total of aluminium, magnesium, titanium and zirconium the user shall take special precautions to avoid ignition hazard due to impact or friction.



**IECEX Certificate  
of Conformity**

Issue No. 6  
Page 4 of 5

Certificate No: IECEX FME 10.0001X  
Date of Issue: 2017-07-24

**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

Issue 6: Addition of EPPS pneumatically powered generator.

IECEX Certificate of Conformity



Certificate No: IECEX FME 10.0001X Issue No: 6  
Date of Issue: 2017-07-24 Page 5 of 5

Additional Information:

<b>Electronic Timer Module ETM-Sub-cde</b>
s = sub module
1 = Timer Module powered by Expo Battery Pack
2 = Timer module powered by IS power supply
3 = Expo IS Battery Pack
4 = Expo IS remote Battery Pack
5 = Timer module powered by E.P.P.S
b = Mounting Style
1 = Plate mounted
2 = Panel mounted
c = LED connection
1 = LED's on Timer surface
2 = LED's on flying leads
de = Maximum Time
d = Reference Value 1 to 9
e = Multiplying digit 1, 2, 3 or 4



# CERTIFICATE OF CONFORMITY

- HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS**
- Certificate No:**  
FM16CA0176X
- Equipment:**  
(Type Reference and Name)  
Electronic Timer Module ETM-IS\*\*-\*
- Name of Listing Company:**  
Expo Technologies Ltd
- Address of Listing Company:**  
Unit 2, The Summit  
Hanworth Road  
Subbury on Thames  
TW16 5DB  
United Kingdom
- The examination and test results are recorded in confidential report number:  
3036907 dated 21<sup>st</sup> October 2010
- FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:  
  
CAN-CSA C22.2 No. 157:1992 (R2012), CAN-CSA C22.2 No. 61010-1:1992 (R1999)
- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
- Equipment Ratings:**  
  
Intrinsically safe for Class I, II and III, Division 1, Groups A, B, C, D, E, F, and G, indoor hazardous (Classified) locations. Temperature Class T6 at Ta = +44 °C, T5 at Ta = +59 °C and T4 at Ta = 60 °C.

**Certificate issued by:**

*J.E. Marquardt*

J.E. Marquardt  
Manager, Electrical Systems

23 November 2016  
Date

To verify the availability of the Approved product, please refer to [www.approvalsguide.com](http://www.approvalsguide.com)

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

FM Approvals LLC, 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA  
T: +1 (781) 781 762 4300 F: +1 (781) 781 762 9375 E-mail: [info@fmapprovals.com](mailto:info@fmapprovals.com) [www.fmapprovals.com](http://www.fmapprovals.com)

F 348 (Mar 16)

Page 1 of 3



# SCHEDULE

Canadian Certificate Of Conformity No: FM16CA0176X

- The marking of the equipment shall include:  
  
Class I Division 1, Groups A, B, C, D;  
Class II, Division 1, Groups E, F, G,  
Class III, Division 1;  
T4 Ta = -20°C to +60 °C; T5 Ta = -20°C to +59 °C T6 Ta = -20°C to +44 °C
- Description of Equipment:**  
**General** - The Timer module is designed to be supplied from either from a self contained battery pack or from an intrinsically safe power supply. The battery pack contains a non-rechargeable battery together with current limiting resistors.  
**Construction** - The Timer module and Solenoid Valve are designed to be installed within another enclosure.  
**Ratings** - Input Parameters for when a = 2  
Ii = 340 mA  
Ui = 11.1V  
Pi = 2.613 W (non linear)  
**Electronic Timer Module ETM-ISab-cde**  
IS / I, II, III / I / ABCDEFG / T\* Ta = -20°C to \*  
  
a = sub module  
1 = Timer Module powered by Expo Battery Pack  
2 = IS Power Supply  
3 = Expo IS Battery Pack  
4 = Expo IS remote Battery Pack  
  
b = Mounting Style  
1 = Plate mounted  
2 = Panel mounted  
  
c = LED connection  
1 = LEDs on Timer surface  
2 = LEDs on flying lead  
d = Maximum Time  
e = Reference Value 1 to 9  
e = Multiplying digit 1, 2, 3 or 4  
  
\*T4 Ta = +60°C  
T5 Ta = +59°C  
T4 Ta = +44°C
- Specific Conditions of Use:**  
  
1. The Electronic Timer shall not be used where UV light or radiation may impinge the Electronic Timer System.  
  
**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

FM Approvals LLC, 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA  
T: +1 (781) 781 762 4300 F: +1 (781) 781 762 9375 E-mail: [info@fmapprovals.com](mailto:info@fmapprovals.com) [www.fmapprovals.com](http://www.fmapprovals.com)

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Page 2 of 3



**SCHEDULE**

Canadian Certificate Of Conformity No: FM16CA0176X

- 2. The Electronic Timer shall be installed within an enclosure which provides protection against impact.
- 3. The Enclosure shall be metallic providing a minimum IP20.
- 4. For light alloy enclosures, materials shall not contain, by mass, more than 7.5% in total of magnesium, titanium and zirconium. Where more than 10% in total of aluminium, magnesium, titanium and zirconium the user shall take special precautions to avoid ignition hazard due to impact or friction.

**14. Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals Canadian Certification Scheme.

**15. Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

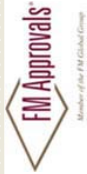
**16. Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
21 <sup>st</sup> October 2010	Original issue.
25 <sup>th</sup> January 2013	Supplement 1: Report Reference: 3036907/RR130109 Dated 25 <sup>th</sup> January 2013 Description of the Change: Addition of IS Power Supply.
18 <sup>th</sup> October 2013	Supplement 2: Report Reference: – 3049400 dated 18 <sup>th</sup> October 2013 Description of the Change: Additional cell types for the battery pack and alternate power source.
23 <sup>rd</sup> November 2016	Supplement 3: Report Reference: – RR206511 dated 23 <sup>rd</sup> November 2016 Description of the Change: Change in T-Class.

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

FM Approvals LLC, 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA  
 T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: [information@fmaprovals.com](mailto:information@fmaprovals.com) [www.fmaprovals.com](http://www.fmaprovals.com)  
 F 348 (Mar 16)



# CERTIFICATE OF CONFORMITY

- HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
- Certificate No:**  
FM16US0373X
- Equipment:**  
(Type Reference and Name)  
Electronic Timer Module ETIM-S\*\*-\*
- Name of Listing Company:**  
Expo Technologies Ltd
- Address of Listing Company:**  
Unit 2, The Summit  
Hanworth Road  
Sanbury on Thames  
TW16 5DB  
United Kingdom
- The examination and test results are recorded in confidential report number:  
3036907 dated 21<sup>st</sup> October 2010
- FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:  
FM Class 3600-2011, FM Class 3610-2010, FM Class 3810-2005, ANSI/ISA 60079-0-2009, ANSI/ISA 60079-11:2011
- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
- Equipment Ratings:**  
Intrinsically safe for Class I, II and III, Division 1, Groups A, B, C, D, E, F, and G indoor hazardous (Classified) locations. Temperature Class T6 at Ta = +44 °C, T5 at Ta = +59 °C and T4 at Ta = 60 °C.

**Certificate issued by:**

*J.E. Marquardt*  
J.E. Marquardt  
Manager, Electrical Systems

23 November 2016  
Date

To verify the availability of the Approved product, please refer to [www.approvalsguide.com](http://www.approvalsguide.com)

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

FM Approvals LLC, 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA  
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: [info@fmapprovals.com](mailto:info@fmapprovals.com) [www.fmapprovals.com](http://www.fmapprovals.com)

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# SCHEDULE

US Certificate Of Conformity No: FM16US0373X

- The marking of the equipment shall include:  
Class I Division 1, Groups A, B, C, D;  
Class II, Division 1, Groups E, F, G,  
Class III, Division 1;  
T4 Ta = -20°C to +60 °C; T5 Ta = -20°C to +59 °C T6 Ta = -20°C to +44 °C
- Description of Equipment:**  
**General** - The Timer module is designed to be supplied from either from a self contained battery pack or from an intrinsically safe power supply. The battery pack contains a non-rechargeable battery together with current limiting resistors.  
**Construction** - The Timer module and Solenoid Valve are designed to be installed within another enclosure.  
**Ratings** - Input Parameters for when a = 2  
UI = 11 .1V  
II = 340 mA  
PI = 2.613 W (non linear)  
**Electronic Timer Module ETIM-Sub-ode**  
IS / I, II, III, / I, ABCDEFG, / T, Ta = -20°C to \*  
a = sub module  
1 = Timer Module powered by Expo Battery Pack  
2 = IS Power Supply  
3 = Expo IS Battery Pack  
4 = Expo IS remote Battery Pack  
b = Mounting Style  
1 = Plate mounted  
2 = Panel mounted  
c = LED connection  
1 = LEDs on Timer surface  
2 = LEDs on flying lead  
de = Maximum Time  
d = Reference Value 1 to 9  
e = Multiplying digit 1, 2, 3 or 4  
\*T4 Ta = +60°C  
T5 Ta = +59°C  
T4 Ta = +44°C
- Specific Conditions of Use:**  
1. The Electronic Timer shall not be used where UV light or radiation may impinge the Electronic Timer System.  
**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

FM Approvals LLC, 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA  
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**SCHEDULE**

US Certificate of Conformity No: FM16US0373X

- 2. The Electronic Timer shall be installed within an enclosure which provides protection against impact.
- 3. The Enclosure shall be metallic providing a minimum IP20.
- 4. For light alloy enclosures, materials shall not contain, by mass, more than 7.5% in total of magnesium, titanium and zirconium. Where more than 10% in total of aluminum, magnesium, titanium and zirconium the user shall take special precautions to avoid ignition hazard due to impact or friction.

**14. Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

**15. Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

**16. Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
21 <sup>st</sup> October 2010	Original Issue.
25 <sup>th</sup> January 2013	Supplement 1: Report Reference: 3036907RR130109 Dated 25 <sup>th</sup> January 2013 Description of the Change: Addition of IS Power Supply.
18 <sup>th</sup> October 2013	Supplement 2: Report Reference: - 3049400 dated 18 <sup>th</sup> October 2013 Description of the Change: Additional cell types for the battery pack and alternate power source.
23 <sup>rd</sup> November 2016	Supplement 3: Report Reference: - RR206511 dated 23 <sup>rd</sup> November 2016 Description of the Change: Change in T-Class.

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

FM Approvals LLC, 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA  
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: [information@fmaprovals.com](mailto:information@fmaprovals.com) [www.fmaprovals.com](http://www.fmaprovals.com)

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Electronic Switch UKEX Certificate - 07-2511 CML 21UKEX1805X



**UK Type Examination Certificate CML 21UKEX1850X Issue 0**

**United Kingdom Conformity Assessment**

- 1 Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) – Schedule 3A, Part 1
- 2 Equipment Limit switch type 07-2511-\*\*\*\*/\*\*\*\* and Position switch type 07-291\*-\*\*\*\*/\*\*\*\*
- 3 Manufacturer BARTEC GmbH
- 4 Address Max-Eyth-Strasse 16  
97980 Bad Mergentheim  
Germany

- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, United Kingdom, Approved Body Number 2503, in accordance with Regulation 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.
- 7 The examination and test results are recorded in the confidential reports listed in Section 12. If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to specific conditions of use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This UK Type Examination certificate relates only to the design and construction of the specified equipment. Further requirements of the Regulations apply to the manufacturing process and supply of the product. These are not covered by this certificate.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:  
EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-3:2014 EN 60079-31:2014

- 10 The equipment shall be marked with the following:  
 Refer to attached certificate EPS 14 ATEX 1766 X, Issue 1 for specific marking of explosion protection symbols.  
Refer to attached certificate EPS 14 ATEX 1766 X, Issue 1 for marked code and ambient temperature range.

L. A. Brisk  
Certification Officer

This certificate shall only be copied in its entirety and without change  
[www.CMLEx.com](http://www.CMLEx.com)



CML 21UKEX1850X  
Issue 0

- 11 Description For product description refer to attached certificate EPS 14 ATEX 1766 X, Issue 1.
- 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	21 Sep 2021	R14443A/00	Issue of the prime certificate. EPS 14 ATEX 1766 X, Issue 1 is attached and shall be referred to in conjunction with this certificate.

- Note: Drawings that describe the equipment are listed or referred to in the Annex.
- 13 Conditions of Manufacture For conditions of manufacture, refer to attached certificate EPS 14 ATEX 1766 X, Issue 1. Any routine tests/verifications required by the ATEX certification shall be conducted.
- 14 Specific Conditions of Use For specific conditions of use, refer to attached certificate EPS 14 ATEX 1766 X, Issue 1.

UK Type Examination Certificate – Equipment MM  
Version: 6.0 (MM) Approved Approved

This certificate shall only be copied in its entirety and without change  
[www.CMLEx.com](http://www.CMLEx.com)



**Certificate Annex**

**Certificate Number** CML 21UKEX1850X  
**Equipment** Limit switch type 07-25\*1-\*\*\*/\*\*\* and Position switch type 07-29\*1-\*\*\*/\*\*\*  
**Manufacturer** BARTEC GmbH

The following documents describe the equipment defined in this certificate:

**Issue 0**

For drawings describing the equipment, refer to attached certificate EPS 14 ATEX 1766 X. In addition to the drawings listed on EPS 14 ATEX 1766 X, the following drawings include the additional marking required for this UK Type Examination certification:

Drawing No	Sheets	Rev	Approved date	Title
01-2910-610001	1 of 1	-	17 Sep 2021	Kennzeichnung/Marking
01-2511-610004	1 of 1	-	17 Sep 2021	Kennzeichnung/Marking

This certificate shall only be copied in its entirety and without change  
[www.CMLEx.com](http://www.CMLEx.com)

1 of 1

UK Type Examination Certificate – Equipment MM  
Version: 6.0 (MM) / Approval: Approved



**EU - Type Examination Certificate**

(1) Equipment and protective systems intended for use in potentially explosive atmospheres – Directive 2014/34/EU

(2) EU - Type Examination Certificate Number

(3) **EPS 14 ATEX 1 766 X**

(4) Limit switch type 07-2511-\*\*\*\* and Position switch type 07-2911-\*\*\*\*

(5) Manufacturer: BARTEC GmbH

(6) Address: Max-Eyth-SträÙe 16  
97980 Bad Mergentheim  
Germany

(7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.  
(8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, certifies that this equipment 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 of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 141TH0090.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013 EN 60079-1:2014  
FPrEN 60079-0:2017 (IEC 60079-0:2017) EN 60079-31:2014

(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 annex to this certificate.

(11) This EU - Type Examination Certificate relates only to the design and examination of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.

(12) The marking of the equipment shall include the following:

II 2G Ex db IIC T6, T5 Gb  
 II 2D Ex Ib IIC T80°C, T95°C Db



Certification department of explosion protection



Nuremberg, 2018-06-22

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH, EPS 17 ATEX 1 766 X, Revision 1.



**Annex**

(13) EU - Type Examination Certificate EPS 14 ATEX 1 766 X

(14) Description of equipment:

The limit switch type 07-2511-\*\*\*\* and 07-2581-\*\*\*\* as well as the position switch type 07-2911-\*\*\*\* is used as equipment or utility power switch for signal and control circuits. The connection is made by cemented hose cables. The position switch is designed with a guard (protective enclosure) which protects against the risk of high mechanical hazards according to the EN 60079-0, Table 13b, group II.

Electrical data:

Type	max. Rated current <sup>(1)</sup>	max. Rated voltage
07-2511-****; 07-2581-****	AC 2 A	AC 400 V
07-2511-5****; 07-2581-5****	AC 7 A	AC 250 V
07-2911-****; 07-2915-****	DC 0,5 A	DC 250 V
07-2917-****	DC 7 A	DC 30 V
07-2511-3****; 07-2581-3****	0,4 A	30 V
07-2511-6****; 07-2581-6****		
07-2913-****; 07-2916-****		

Number of hose cables<sup>(1)</sup>: 1 or 2  
Cross section<sup>(1)</sup>: 0,5 mm<sup>2</sup> up to 1,5 mm<sup>2</sup>  
Ambient temperature range<sup>(1)</sup>: Max. -60 °C ≤ T<sub>a</sub> ≤ +75 °C (T6),  
Max. -50 °C ≤ T<sub>a</sub> ≤ +90 °C (T5)

<sup>(1)</sup> = type depending values

The classification of a specific temperature class depends on ambient temperature, current load, cable type and cross section. These data are defined on the marking plate and they are also provided by the manufacturer within the technical documents and instruction manual.

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH, EPS 17 ATEX 1 766 X, Revision 1.



EU-Type Examination Certificate EPS 14 ATEX 1 766 X

Rev. 0

- 16) Reference number: 14TH0090
- 17) Special conditions for safe use:

The limit switch and position switch shall be used within its operating range and rating according to manufacturer's documents and marking.

The limit switch shall be installed that it is protected by a guard against the risk of high mechanical danger, which meets at least the requirements of IEC 60079-0, Table 13 b), group II. Resistance to light exposure is fulfilled by the housing material according to EN 60079-0.

The specific installation standards and manufacturer's instructions must be respected.


- 18) Essential health and safety requirements:  
Met by compliance with standards.



Nuremberg, 2018-06-22

Page 3 of 3  
Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH, EPS 17 ATEX 1766 X, Revision 1.

BUREAU VERITAS  
Consumer Products Services Germany GmbH  
Thurn-und-Taxis-Strasse 19, 90411 Nuremberg, Germany  
Phone: +49 40 74041-0  
cps-nuremberg@de.bureauveritas.com  
www.bureauveritas.de/cps



**IECEX Certificate  
of Conformity**

Certificate No: IECEX EPS 14.0092X Issue No: 1  
Date of Issue: 2016-06-20 Page 2 of 4  
Manufacturer: **BARTEC GmbH**  
Max-Eyth-Strasse 16  
97980 Bad Mergentheim  
Germany

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex 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 apparatus and any acceptable variations to it specified in the schedule of this certificate and the 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 60079-1 : 2014-06** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition: 7.0  
**IEC 60079-31 : 2013** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition: 2

*This Certificate does not indicate compliance with electrical 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: DE/EPSE/EXTR14.0093/001  
Quality Assessment Report: DE/TUN/0AR06.0017/06



**IECEX Certificate  
of Conformity**

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

Certificate No.: IECEX EPS 14.0092X Issue No.: 1  
Status: **Current** Issue No. 1 (2016-06-20)  
Date of Issue: 2016-06-20 Issue No. 0 (2014-12-03)  
Page 1 of 4  
Applicant: **BARTEC GmbH**  
Max-Eyth-Strasse 16  
97980 Bad Mergentheim  
Germany

Equipment: **Limit switch type 07-25\*1-\*\*\*\*/\*\*\*\* and Position switch type 07-291\*-\*\*\*\*/\*\*\*\***

Optional accessory:


Type of Protection: **"db", "tb"**  
Marking: Ex db IIC T6; T5 Gb  
Ex tb IIC T8\* C; T95\* C Db

Approved for issue on behalf of the IECEX Certification Body: Holger Schaefer  
Position: Certification manager

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 the Official IECEX Website.

Certificate issued by:  
**Bureau Veritas Consumer Products Services Germany GmbH**  
Businesspark A86  
88942 Türkheim  
Germany









中国国家强制性产品认证证书



证书编号: 2020322304000843

认证委托人名称: 博太科防爆设备(上海)有限公司  
认证委托人地址: 上海市闵行区浦江高科技园F区新骏环路188号7号楼101、401

生产者名称: BARTEC GmbH  
生产者地址: Max-Eyth-Str. 16 97980 Bad Mergentheim Germany  
生产企业名称: BARTEC GmbH  
生产企业地址: Max-Eyth-Str. 16 97980 Bad Mergentheim Germany

产品名称: 限位及行程开关  
系列、规格、型号: 07-25系列, 07-291系列  
标 准: GB 3836.1-2010, GB 3836.2-2010, GB 12476.1-2013, GB 12476.5-2013

上述产品符合强制性产品认证实施规则 CNCA-C23-01:2019 的要求, 特发此证。  
发 证 日 期: 2020 年 8 月 28 日 有 效 期 至: 2025 年 8 月 27 日  
首次发证日期: 2020 年 8 月 28 日

证书有效期内本证书的有效性依据发证机构的定期监督获得保持。

本证书的相关信息可通过国家认监委网站 www.cnca.gov.cn 查询



批 准:

*(Signature)*



上海仪器仪表自控系统检验测试所有限公司

http://www.sitiis.com.cn 中国·上海·漕宝路103号200233 电话: +86 21 64510844

S 0000882



CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION



CERTIFICATE NO: 2020322304000843

APPLICANT: BARTEC Explosion Proof Appliances (Shanghai) Co. Ltd  
ADDRESS: New Building 7,101, 401 No. 188, Xinjun Ring Rd., Shanghai  
Pujiang Hi-Tech Park(Pu Dong Area), Minhang  
District, Shanghai China

MANUFACTURER: BARTEC GmbH  
ADDRESS: Max-Eyth-Str. 16 97980 Bad Mergentheim Germany  
FACTORY: BARTEC GmbH  
ADDRESS: Max-Eyth-Str. 16 97980 Bad Mergentheim Germany

PRODUCTNAME: Limit and Position Switch  
SERIES/SPECIFICATION/MODEL: 07-25 Series, 07-291 Series  
STANDARDS: GB 3836.1-2010, GB 3836.2-2010, GB 12476.1-2013, GB 12476.5-2013

This is to certify that the above mentioned product(s) complies with the requirements of implementation rules for compulsory certification (REFNO. CNCA-C23-01:2019).

Valid from: August 28, 2020 Valid until: August 27, 2025

Date of original certification: August 28, 2020

The validity of this certificate is subject to positive result of the regular follow up inspection by issuing certification body until the expiry date.

This certificate is available through CNCA's website: www.cnca.gov.cn



APPROVAL:

*(Signature)*

Xu JianPing



Shanghai Inspection and Testing Institute of Instruments and Automation Systems Co., Ltd.

http://www.sitiis.com.cn Building 9, 103 Cao Bao Road, Shanghai 200233, China Tel: +86 21 64510844

S 0000517



# 中国国家强制性产品认证证书



证书编号: 2020322304000843

## 附件

产品名称:

限位及行程开关

型号规格:

07-25 **a** - **b** **c** **d** **e** / **f** **g** **h**, 其中  
**a** 代表外壳类型, 可选代码为: 1, 8  
**b** 代表应用环境, 可选代码为: 1, 3, 5, 6, 7, 8  
**c** 代表导线长度, 可选代码为: 0'9  
**d** 代表1号腔室触点类型, 可选代码为: 1, 2, 3, 4, 6, 7  
**e** 代表2号腔室触点类型, 可选代码为: 0, 1, 2, 3, 4, 6, 7, A, B, C, D  
**f, g, h, i** 为与防撬无关代码

防爆标志:

07-291 **a** - **b** **c** **d** **e** / **f** **g** **h**  
**a** 代表应用环境, 可选代码为: 1, 3, 5, 6, 7, 8  
**b** 代表材料保护外壳, 可选代码为: 1  
**c** 代表导线长度, 可选代码为: 0'9  
**d** 代表1号腔室触点类型, 可选代码为: 1, 2, 3, 4  
**e** 代表2号腔室触点类型, 可选代码为: 1, 2, 3, 4  
**f, g, h, i** 为与防撬无关代码  
Ex d IIC T6/T5 Gb, Ex tD A21 T80°C/195°C

电气参数:

最大额定电压 AC 400V, DC 250V, 最大额定电流 AC 7A, DC 7A.

批准:



### 上海仪器仪表自控系统检验测试所有限公司

<http://www.sitiilas.com.cn>

中国·上海·漕宝路103号200233

电话: +86 21 64510844

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ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ

ПРИЛОЖЕНИЕ

К СЕРТИФИКАТУ СООТВЕТСТВИЯ № ЕАЭС КУ С-DE-AH07.B.04162/22

Серия RU № 0782238

Переклюатели миниатюрные типа 07-151-***-***	Ех d I МВ U Ех d I СС Gb U	Диапазон эксплуатационной температуры: от -20 °С до +100 °С от -55 °С до +100 °С от -60 °С до +100 °С в зависимости от исполнения	400 В переменного тока, 2,0 А; 250 В переменного тока, 7,0 А; 250 постоянного тока, 0,5 А; 30 В постоянного тока 7,0 А или 0,4 А (согласно эксплуатационной документации изготовителя и заводской табличке с маркировкой)
Переклюатели миниатюрные типа 07-150-***-***	Ех d I МВ U Ех d I СС Gb U	Диапазон эксплуатационной температуры: от -60 °С до +100 °С (в зависимости от используемых проводки и исполнения)	1,0 А; 30 В постоянного тока, 3,0 А или 0,4 А; 15 В постоянного тока, 5,0 А или 1,0 А;
Переклюатели миниатюрные типа 07-290-***-***	Ех d I СС Т5 Gb X Ех d I СС Т6 Gb X	-60 °С ≤ Тв ≤ +90 °С для Т5 -60 °С ≤ Тв ≤ +75 °С для Т6	250 В переменного тока, 5,0 А или 0,4 А;
Переклюатели контактные типа 07-251-***-***	Ех d I СС Т5 Gb X Ех b I СС Т5 Gb X Ех d I СС Т6 Gb X Ех b I СС Т6 Gb X	-60 °С ≤ Тв ≤ +90 °С для Т5 60 °С ≤ Тв ≤ +75 °С для Т6	400 В переменного тока, 2,0 А; 250 В переменного тока, 7,0 А; 250 В постоянного тока, 0,5 А; 30 В постоянного тока, 7,0 А; 30 В постоянного тока, 0,4 А;
Переклюатели контактные типа 07-296-***-***	Ех d I СС Т6 Gb X Ех b I СС Т6 Gb X	-20 °С ≤ Тв ≤ +60 °С Максимальная эксплуатационная температура до 90°С	250 В переменного тока, 5,0 А; 230 В постоянного тока, 0,16 А
Переклюатели контактные типа 07-296-***-***	Ех d I СС Т5 Gb X Ех b I СС Т5 Gb X Ех d I СС Т6 Gb X Ех b I СС Т6 Gb X	-20 °С ≤ Тв ≤ +65 °С для Т5 -20 °С ≤ Тв ≤ +75 °С для Т6 Диапазон эксплуатационной температуры: от -20 °С до 90°С	250 В переменного тока, 0,25 А

Остальные технические и электрические характеристики согласно руководству по эксплуатации на конкретный тип переклюателей, которые прилагаются к изделию.

Выраженность переклюателей гермовых типа 07-211-\*\*\*-\*\*\* обеспечивается выполнением требований ТР ТС 012/2011, ГОСТ 31610.0-2014 (IEC 60079-0:2011) и видом взрывозащиты "герметизация компаундом "nb" по ГОСТ Р МЭК 60079-18-2012.

Выраженность переклюателей гермовых типа 07-151-\*\*\*-\*\*\*, переклюателей климатических типа 07-150-\*\*\*-\*\*\* и типа 07-250-\*\*\*-\*\*\* обеспечивается выполнением требований ТР ТС 012/2011, ГОСТ 31610.0-2014 (IEC 60079-0:2011) и видом взрывозащиты взрывонепроницаемая оболочка "d" по ГОСТ IEC 60079-1-2011.

Выраженность переклюателей контактных типа 07-251-\*\*\*-\*\*\*, переклюателей позиционных типа 07-291-\*\*\*-\*\*\*, переклюателей прещищенных типа 07-295-\*\*\*-\*\*\* и типа 07-296-\*\*\*-\*\*\* обеспечивается выполнением требований ТР ТС 012/2011, ГОСТ 31610.0-2014 (IEC 60079-0:2011) и видами взрывозащиты взрывонепроницаемая оболочка "d" по ГОСТ IEC 60079-1-2011, с зашитой от воспламенения пыли оболочками «b» по ГОСТ IEC 60079-31-2013.

Вынесен изготовителем в конструкцию и техническую документацию изменений, влияющих на выраженность и соответствие переклюателей требованиям ТР ТС 012/2011, возможно только по согласованию с органом по сертификации ООО «Центр Сертификации «ВЕЛЕС».

Данный сертификат подтверждает соответствие требованиям взрывобезопасности ТР ТС 012/2011 и не рассматривает любые другие виды безопасности при эксплуатации переклюателей.

3. Оборудование соответствует требованиям:

Руководитель (уполномоченное лицо) органа по сертификации  
Эксперт (эксперт-аудитор)  
(эксперт (эксперты-аудиторы))



Галина Александровна  
М.П. Галина Александровна  
Дмитрий Олегович  
М.П. Дмитрий Олегович

ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ

ПРИЛОЖЕНИЕ

К СЕРТИФИКАТУ СООТВЕТСТВИЯ № ЕАЭС КУ С-DE-AH07.B.04162/22

Серия RU № 0782239

- ТР ТС 012/2011 Технический регламент Таможенного союза «О безопасности оборудования для работы во взрывоопасных средах».
- ГОСТ 31610.0-2014 (IEC 60079-0:2011) Взрывоопасные среды. Часть 0. Оборудование. Общие требования.
- ГОСТ IEC 60079-1-2011 Взрывоопасные среды. Часть 1. Оборудование с видом взрывозащиты "взрывонепроницаемая оболочка "d".
- ГОСТ Р МЭК 60079-18-2012 Взрывоопасные среды. Часть 18. Оборудование с видом взрывозащиты "герметизация компаундом "nb".
- ГОСТ IEC 60079-31-2013 Взрывоопасные среды. Часть 31. Оборудование с зашитой от воспламенения пыли оболочками «b».

4. Маркировка

- Маркировка, наносимая на электрооборудование, должна включать следующие данные:
  - 4.1 Наименование предприятия-изготовителя или его зарегистрированный товарный знак;
  - 4.2 Обозначение типа оборудования;
  - 4.3 Порядковый номер оборудования по системе нумерации предприятия-изготовителя;
  - 4.4 Эк-маркировку согласно таблице 2.1;
  - 4.5 Номер сертификата соответствия;
  - 4.6 Единый знак ЕАС обращения продукции на рынке Таможенного союза;
  - 4.7 Специальный знак взрывобезопасности **EX** в соответствии с ТР ТС 012/2011;
  - 4.8 Другие данные, которые отразит изготовитель, если это требуется технической документацией (диапазон температур окружающей среды, степень защиты оболочки и т.д.)
- Согласно пункту 29.10 ГОСТ 31610.0-2014 на малотабричным электрооборудовании и на Ex-компонентах с ограниченной поверхностью маркировка может быть сокращена.

5. Специальные условия применения и шкала ограничений

- 5.1 Специальные условия применения для переклюателей гермовых типа 07-211-\*\*\*-\*\*\*:  
Переклюатели выполнены с постоянно присоединенными проводниками. Присоединение свободных концов проводников переклюателей должно осуществляться либо за пределами взрывоопасной зоны, либо с помощью сертифицированного электрооборудования, соответствующего требованиям одного из стандартов на виды взрывозащиты, перечисленных в ГОСТ 31610.0-2014 (IEC 60079-0:2011).
- Переклюатели должны быть установлены таким образом, чтобы они были защищены от УФ-света и ударов, а постоянно подключенные кабели имели соответствующие концевые заделки и были защищены от ударов. Выключатели должны питаться от цепи, ограничивающей ток по 0,5 А максимум.

- 5.2 Шкала ограничений для переклюателей взрывоопасных типа 07-151-\*\*\*-\*\*\*:  
Переклюатели взрывоопасных должны применяться в пределах своего рабочего диапазона температур и номинальных значений, указанных в эксплуатационной документации изготовителя и на заводской табличке с маркировкой.

Переклюатель истраиваемый должен быть усиленным и должен соответствовать требованиям взрывозащиты, перечисленных в ГОСТ 31610.0-2014 (IEC 60079-0:2011). Ссылка на стандарты на виды взрывозащиты, перечисленных в ГОСТ 31610.0-2014 (IEC 60079-0:2011), должна быть к воздействию УФ-света маркировкой.

Руководитель (уполномоченное лицо) органа по сертификации  
Эксперт (эксперт-аудитор)  
(эксперт (эксперты-аудиторы))



Галина Александровна  
М.П. Галина Александровна  
Дмитрий Олегович  
М.П. Дмитрий Олегович









EU Authorised Representative: ExpoPharma Engineering Services Ltd 3003 Euro Business Park, Little Island, Co. Cork, T45 HY02, Ireland. E: EUAR@expopharma.ie

Manufacturer: Expo Technologies Ltd Unit 2, The Summit, Hanworth Road, Sunbury-on-Thames, TW16 5DB, U.K. E: sales@expoworldwide.com

# UK Declaration of Conformity



Under the sole authority of Expo Technologies Ltd, we hereby declare that the Electro Pneumatic Power Supply (EPPS) models EPW-EPPS-000, -001 & -002 are manufactured in conformity with the following UK Regulations and Standards:

**Electromagnetic Compatibility Regulations 016 (SI 2016/1091)**

The EPPS was designed to comply with EMC Regulations through application of emissivity and susceptibility tests under EN 61000-6-4:2007 +A1:2011 and EN 6100-6-2:2005. Test results are recorded under Intertek Report No. 102569070LHD-001 (May 2016)

**Electrical Equipment (Safety) Regulations 2016 (SI 2016/1101)**

EPPS units are intended for use in potentially explosive atmospheres (Hazardous Areas) and are therefore excluded from this Regulation.

**Pressure Equipment (Safety) Regulations 2016 (SI 2016/1105)**

EPPS units are classified as not higher than Category 1 under article 13 of this Regulation and also intended for use on potentially explosive atmospheres and are therefore excluded from this Regulation.

**Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres Regulations UKSI 2016:1107 (as amended by UKSI 2019:696) - Schedule 3A Part 1**

EPPS units are designed to conform to the above Regulations in fulfilment of the Essential Health & Safety requirements of Annexe II and in compliance with:


**EN IEC 60079-0:2018    EN 60079-1:2014    EN 60079-11:2012    EN 60079-34:2014**

EPPS units are certified under UK Type-Examination Certificate No. UL 21UKEX2242X by UL International (UK) Limited, UK Conformity Assessment Body number 0843, in compliance with:

**EN IEC 60079-0:2018    EN 60079-1:2014    EN 60079-11:2012    EN 60079-34:2014**

EPPS units are manufactured under Production Quality Assurance Notification CSAE 21UKQAN0005, issued by CSA Group Testing UK Limited, UK Conformity Assessment Body No. 0518.

EPPS units shall be marked as follows:

0518  **II 2 (1) G    Ex db [ia Ga] IIC T6 Gb**  
**II 2 (1) D    Ex tb [ia Da] IIIC T65°C Db**

Technical documentation and assessments are in the Expo Technologies confidential technical file SC040 EPPS

For and on behalf of Expo Technologies Ltd

John Paul De Beer  
Managing Director

Date 30<sup>th</sup> September 2021



**EU Authorised Representative:**  
ExpoPharma Engineering Services Ltd  
3003 Euro Business Park, Little Island,  
Co. Cork, T45 HY02, Ireland.  
E: EUAR@expopharma.ie

**Manufacturer:**  
Expo Technologies Ltd  
Unit 2, The Summit, Hanworth Road,  
Sunbury-on-Thames, TW16 5DB, U.K.  
E: sales@expoworldwide.com

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**II 2 (1) D    Ex tb [ia Da] IIIC T65°C Db**

Technical documentation and assessments are in the Expo Technologies confidential technical file SC040 EPPS

For and on behalf of Expo Technologies Ltd

John Paul De Beer  
Managing Director

Date 30<sup>th</sup> September 2021





Schedule

EU-TYPE EXAMINATION CERTIFICATE No.

DEMKO 17 ATEX 1795X Rev. 1

[13]

[14]

[18]

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.



Additional Information



The trademark will be used as the company identifier on the marking label.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.

Accredited by DANAK under registration number 7011 to certification of products.

# IECEX Certificate of Conformity

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Certificate No: IECEX UL 17.0016X Issue No: 1

Date of Issue: 2018-05-11 Page 2 of 5

Manufacturer: **Expo Technologies Limited**  
 Unit 2 The Summit  
 Hanworth Road  
 Sunbury on Thames  
 Surrey  
 TW16 5DB  
**United Kingdom**

Additional Manufacturing Location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex 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 apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2014-06</b> Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-11 : 2011</b> Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
<b>IEC 60079-31 : 2013</b> Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

This Certificate **does not** indicate compliance with electrical 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/ULJEXTR17.0016/01  
 Quality Assessment Report: GB/SIR/QAR07.0012/12

# IECEX Certificate of Conformity

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Certificate No: IECEX UL 17.0016X Issue No: 1

Status: **Current** Issue No. 1 (2018-05-11)  
 Issue No. 0 (2017-05-19)

Date of Issue: 2018-05-11 Page 1 of 5

Applicant: **Expo Technologies Limited**  
 Unit 2 The Summit  
 Hanworth Road  
 Sunbury on Thames  
 Surrey  
 TW16 5DB  
**United Kingdom**

Equipment: **EPSS, Mobile EPW-EPPS-000, EPW-EPPS-001, EPW-EPPS-002**

Optional accessory:

Type of Protection: **Flameproof "db", Intrinsic safety "ia", Dust "tb"**

Marking: Ex db [Ia Ga] IIC T6 Gb  
 Ex tb [Ia Da] IIC T65°C Db  
 -50°C to +65°C

Approved for issue on behalf of the IECEX Certification Body: **Katy A. Holdredge**


Position: **Senior Staff Engineer**

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

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

This certificate and schedule may only be reproduced in full.  
 This certificate is not transferable and remains the property of the issuing body.  
 The Status and authenticity of this certificate may be verified by visiting the Official IECEX Website.

Certificate issued by:



**UL LLC**  
 333 Pfingsten Road  
 Northbrook, IL 60062-2098  
 United States of America



IECEX Certificate of Conformity



Certificate No: IECEX UL 17.0016X Issue No: 1  
Date of Issue: 2018-05-11 Page 4 of 5

**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

Issue 1: Update of drawing list, rating and model nomenclature.

IECEX Certificate of Conformity



Certificate No: IECEX UL 17.0016X Issue No: 1  
Date of Issue: 2018-05-11 Page 3 of 5

**Schedule**

**EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

These devices are the electro pneumatic power supplies (EPPS), electric generators for use in hazardous locations, providing intrinsically safe outputs for connection to intrinsically safe devices. The EPPS flameproof protection method comprises of a cylindrical main body that houses a generator and I.S. Barrier with a lead seal and shaft joint which completes the flameproof enclosure. The dust ignition protection by enclosure comprises of the cylindrical main body with a lead seal and cowling. These devices use a limited amount of compressed air, 4 bar max, to provides intrinsically safe output

Please see Annex for additional information.

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

- The EPPS shall be installed within an enclosure which provides protection against impact. The enclosure must have a minimum IP20 rating.
- The flameproof joints are not intended to be repaired, contact Expo for further information.

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**Expo Technologies USA**

Expo Technologies Inc.  
9140 Ravenna Road Unit #3  
Twinsburg,  
OH 440878, USA  
T: +1 440 247 5314  
F: +1 330 487 0611  
E: sales.na@expoworldwide.com

**Expo Technologies UK**

Expo Technologies Ltd.  
Unit 2 The Summit, Hanworth Road  
Sunbury-On-Thames,  
TW16 5DB, UK  
T: +44 20 8398 8011  
F: +44 20 8398 8014  
E: sales@expoworldwide.com

**Expo Technologies China**

Qingdao Expo M. & E. Technologies Co. Ltd  
617 Shillin Er Road  
Jimo District, Qingdao,  
266200 China  
T: +86 532 8906 9858  
F: +86 532 8906 9858  
E: qingdao@expoworldwide.com

**[www.expoworldwide.com](http://www.expoworldwide.com)**