IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	**IECEx UL 17.0016X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 2	Issue 1 (2018-05-11) Issue 0 (2017-05-19)
Date of Issue:	2021-09-22		

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

Equipment: **Electro Pneumatic Power Supplies (EPPS), Models EPW-EPPS-000, EPW-EPPS-001, EPW-EPPS-002**

Optional accessory:

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

Marking: Ex db [ia Ga] IIC T6 Gb

Ex tb [ia Da] IIIC T65ºC Db

-50ºC to +65ºC

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

Position: **Senior Staff Engineer**

Signature: (for printed version)

Date: 2021-09-22

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 or use of this QR Code.

Certificate issued by:

UL LLC
333 Pfingsten Road
Northbrook IL 60062-2096
United States of America

IECEx Certificate of Conformity

Certificate No.: **IECEx UL 17.0016X** Page 2 of 4

Date of issue: 2021-09-22 Issue No: 2

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

Additional manufacturing locations:

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

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

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 Reports:

US/UL/ExTR17.0016/00 US/UL/ExTR17.0016/01 US/UL/ExTR17.0016/02

Quality Assessment Report:

GB/SIR/QAR07.0012/17

IECEx Certificate of Conformity

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

These devices are 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 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 the cylindrical main body with a lead seal and cowling. These devices use a limited amount of compressed air, 4 bar max, to provide 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.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue 1: Update of drawing list, rating and model nomenclature.

Issue 2: Update to IEC 60079-0 7th Edition. Labels and instructions updated.

Annex:

Annex to IECEx UL 17.0016X Issue 2.pdf

IECEx Certificate of Conformity

Certificate No.: IECEx UL 17.0016X

Issue No.: 2

TYPE DESIGNATION

Nomenclature:

E	P	W	-	E	P	P	S	-	0	0	1
I	II	III		IV	V	VI	VII		VIII	IX	X

I – E – Model Designation Given as E

II – P– Model Designation Given as P

III – W– Model Designation Given as W

IV – E - Electro

V – P - Pneumatic

VI – P - Power

VII – S - Supply

VIII – 0 - Numerical Value Given as 0

IX – 0 - Numerical Value Given as 0

X – Output Entity Parameter Designations Given as 0, 1, or 2

PARAMETERS RELATING TO THE SAFETY

Model	Uo (V)	Io (A)	Po (W)	Lo (µH)	Co (µF)
EPW-EPPS-000	10.8	3.28	1.46	3.10	2.14
EPW-EPPS-001	14.3	1.085	1.942	30.00	0.68
EPW-EPPS-002	7.0	3.316	1.885	3.03	15.7

IECEx Certificate of Conformity

Certificate No.: IECEx UL 17.0016X

MARKING

Marking has to be readable and indelible; it has to include the following indications:

EPPS

Model: EPW-EPPS-000 Serial No. YYYY/NNNNN
Uo=10.8V Io=3.28A Po=1.46W Co=2.14µF Lo=3.10µH
INSTALL TO EXPO DRAWING SD8131

IECEx UL 17.0016X
Ex db [ia Ga] IIC T6 Gb
Ex tb [ia Da] IIIC T65°C Db
T_{amb} -50°C to +65°C

DEMKO 17ATEX1795X
CE 2813 Ex II 2(1) G D

UL 21UKEX2242X
UKCA 0518 Ex II 2(1) G D

Ex db [ia Ga] IIC T6 Gb
Ex tb [ia Da] IIIC T65°C Db
T_{amb} -50°C to +65°C

Expo Technologies Ltd
Sunbury-on-Thames, TW16 5DB, U.K.