

EU-TYPE EXAMINATION CERTIFICATE



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

EU-Type Examination Certificate Number: **DEMKO 17 ATEX 1795X Rev. 2**

Product: **Electro Pneumatic Power Supplies (EPPS)**

Manufacturer: **Expo Technologies Limited**

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

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

UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. **US/UL/ExTR17.0016/02.**

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

EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-11:2012 EN 60079-31:2014

If the sign "X" is placed after the certificate number, it indicates that the product 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 and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by the certificate.

The marking of the product shall include the following:

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

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2017-05-19

Re-issued: 2021-09-22

Notified Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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[13]

[14]

Schedule

EU-TYPE EXAMINATION CERTIFICATE No.

DEMKO 17 ATEX 1795X Rev. 2

[15]

Description of Product

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.

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 2Temperature range

The ambient temperature range is -50 °C to +65 °C.

Electrical data

Input Pressure Rating: 4.0 bar (58 psi)

Input Pressure Temperature: 65°C max

The output entity parameters assigned to the models are as follows:

Output Entity Parameters		
EPW-EPPS-000	EPW-EPPS-001	EPW-EPPS-002
U _o : 10.8 V	U _o : 14.3 V	U _o : 7.0 V
I _o : 3.28 A	I _o : 1.085 A	I _o : 3.316 A
P _o : 1.46 W	P _o : 1.942 W	P _o : 1.885 W
L _o : 3.10 uH	L _o : 30.00 uH	L _o : 3.03 uH
C _o : 2.14 uF	C _o : 0.68 uF	C _o : 15.7 uF

Routine tests

Routine tests according to EN 60079-1 cl. 16 are not required.

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

[17]

Specific conditions of use:

- 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.

[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

may be used as the company identifier on the marking label.



[13]

[14]

Schedule
EU-TYPE EXAMINATION CERTIFICATE No.
DEMKO 17 ATEX 1795X Rev. 2

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.

