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UNITED KINGDOM CONFORMITY ASSESSMENT UK-TYPE EXAMINATION CERTIFICATE

[2]
Product or Protective System Intended for use in Potentially Explosive Atmospheres
UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1

UK-Type Examination Certificate No.: UL22UKEX2359X Rev. 0

[4] Product: D2 HART7 PST ESD Switchbox, Models DX*-S*C********, DX*-S*1*********

[5] Manufacturer: Topworx Inc.

[6] Address: 3300 Fern Valley Rd., Louisville, KY 40213 USA

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

[8] UL International (UK) Ltd, Approved Body number 0843, in accordance with Regulation 44 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.

The examination and test results are recorded in the confidential report UKRCC-4789971696.1

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

EN IEC 60079-0:2018

EN 60079-1:2014

EN 60079-31:2014

Except in respect of those requirements listed at section 19 of the schedule to this certificate.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.

[11] This UK-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.

[12] The marking of the product shall include the following:

(Ex) II 2 G Ex db IIC T6...T4 Gb

(Ex) II 2 G Ex db IIB+H₂ T6...T4 Gb

 $\langle \xi x \rangle$ II 2 D Ex tb IIIC T85°C ...T135°C Db

Certification Manager

Andrew Moffat

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 UKEx 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 Regulations. 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: 2022-06-21

Approved Body UL International (UK) Ltd Unit 1-3 Horizon Kingsland Business Park Wade

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Schedule UK-TYPE EXAMINATION CERTIFICATE No. UL22UKEX2359X Rev. 0

[15] <u>Description of Product</u>

The Cat. Nos. D2 HART7 PST ESD, Models DX*-S*C*********, DX*-S*1*********** are switchbox monitors. The equipment consists of the DXP/DXS Enclosure. Internal to the enclosure are three boards: The Main Board, the GO-Switch Board, and the Terminal Board.

Temperature range

The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range -40°C to +60°C -40°C to +80°C Temperature class T6, T85°C T4, T135°C

Electrical data

Input to HART module: 24 Vdc max, 20 mA max

Input from External Pilot: 30W max

Input to Switches: 24 Vdc max, 250 mA max

Routine tests

No routine tests required.

[16] Test Report No. (associated with this certificate issue)

US/UL/ExTR19.0102/04.

[17] Specific conditions of use:

- See Drawing ES-08436-1 for information on the flameproof joints.
- The slotted hexagonal head cover screws are not of standard form; they shall only be replaced with identical screws sourced from the equipment manufacturer.
- The hexagonal head cover screws are stainless steel 304, grade A2-70 or A4-80 screws to ISO 35061. The minimum yield stress is 31,000 psi.
- All unused entries must be filled with a suitably certified Ex component blanking plug.

[18] Conditions of certification:

None

[19] Essential Health and Safety Requirements (Regulations Schedule 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

The manufacturer shall inform the approved body concerning all modifications to the technical documentation as described in Annex III to UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1.



[13] [14]

Schedule UK-TYPE EXAMINATION CERTIFICATE No. UL22UKEX2359X Rev. 0

[20] **Drawings and Documents**

Title:	Drawing No.:	Rev. Level:	Date:
Assembly D2 HART 7 ESD PST	CERT-ES-06761-1	AC	2021-04-05
HART7 ESD Module	ES-06762-1	1	2019-09-10
Installation, Operation, Maintenance Manual	ES-08436-1	AB	2022-05-19
Group IIC Base machining	ES-00746-1	3	2008-10-31
Group IIC Lid machining	ES-00747-1	4	2008-11-5
Group IIB+H2 Base Machining	S-S01-0007	27	2018-04-04
Bushing	S-S01-0006	4	2018-03-27
Casting DXP Lid	S-S01-0008	23	2018-04-04
Lower Casting DXP	S-S01-0012	23	2014-12-03
Shaft, Standard	S-S01-0016	11	2012-10-30
Shaft, Namur	S-S01-0017	11	2012-10-30
Lower Casting DXS W/ Ports	S-S01-SS07	15	2011-12-06
Lower Casting DXS W/Out Ports	S-S01-SS12	15	2011-11-29
Assembly Drawing D2 HART Terminal	ES-06634-1	2	2020-01-08
Assembly Drawing D2 HART ESD/PST Switch	ES-06638	1	2019-12-11
Assembly Drawing D2 HART ESD/PST Main Bd	ES-06829-1	1	2019-12-12
O-ring AS-586A-010	S-S01-0037	AC	2020-05-28
O-ring, DXP Flange	S-S01-0065	AC	2020-05-28
Assembly DX Hart 7 – Alternate Construction	ES-08672-1	AC	2020-09-14
Switch Assembly DX HART 7 – Alternate Construction	ES-08671-1	AA	2020-07-27
D2-HART Terminal Board - Alternate Construction	ES-08612-1	AA	2021-01-06
DX PST W/HART7 Go Pill – Alternate Construction	ES-08703-1	AB	2021-03-04
Switch Housing – Alternate Construction	ES-08658-1	AC	2021-07-08
Epoxy Duralco 4525	S-C022	AC	2021-03-09
Name plate Markings DXP/S: ClassI/II Div 1 and IIB +H2	CERT-ES-09036-1	AA	2022-06-04
Name plate Markings DXP/S: Ex db IIC	CERT-ES-09037-1	AA	2022-06-04

