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UNITED KINGDOM CONFORMITY ASSESSMENT
UK-TYPE EXAMINATION CERTIFICATE

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

[3] UK-Type Examination Certificate No.: **UL21UKEX2251X Rev. 0**

[4] Product: **Polarization Cell Replacement Unit (PCRH)**

[5] Manufacturer: **Dairyland Electrical Industries Inc.**

[6] Address: **340 Business Park Circle, PO Box 187, Stoughton, WI 53589 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-4790055714.5**

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

EN IEC 60079-0:2018 EN 60079-1:2014

Except in respect of those requirements listed at section 18 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:

 **II 2 G Ex db IIB T6 Gb**

Certification Manager

David Lloyd

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: 2022-01-21

Approved Body

UL International (UK) Ltd Unit 1-3 Horizon Kingsland Business Park Wade Road, Basingstoke RG24 8AH, UK
Phone : +44 (0)1256 312100



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Schedule

UK-TYPE EXAMINATION CERTIFICATE No.

UL21UKEX2251X Rev. 0

[15] Description of Product
 The Polarization Cell Replacement Unit (PCRH) is a solid-state DC isolation/AC grounding (or coupling) device designed for use in conjunction with cathodically protected equipment. It consists of an Ex certified enclosure with two feed thru assemblies that engage the sidewall of the enclosure and form a threaded joint. The feed thru assembly consists of a feed thru stud and feed thru insulating sleeve that are press fit into the feed thru shell engaging the enclosure to form a cylindrical joint. This feed thru provides the connection between the internal capacitor assembly and the external device being grounded/isolated.

Nomenclature:

<u>PCRH</u>	-	<u>3.7kA</u>	-	<u>S</u>	-	<u>ATEX</u>
I		II		III		IV

I – PCRH – Basic Catalog Number

II – AC Fault Current

3.7kA	-	3.7kA rating
5kA	-	5kA rating
10kA	-	10kA rating
15kA	-	15kA rating

III – Blocking Threshold

-S	-	-2/+2 V rating
blank	-	-3/+1 V rating

IV – Designates Hazardous Locations Rating (Optional)

(Blank) – Designation not detailed
 IECEX – IECEX certification
 ATEX – ATEX Certification

Temperature range

The ambient temperature range is -20 °C to +60 °C.

Electrical data

Maximum steady state current rating: 45 A
 Impulse Current Rating: 100kA, 8x20µs waveform

Routine tests

Routine tests according to EN 60079-1 cl. 16 are not required, as the enclosures have been successfully tested at four times the reference pressure.

[16] Test Report No. (associated with this certificate issue)
 US/UL/ExTR14.0041/03

[17] Specific conditions of use:
 Contact Dairyland Electrical Industries for information on the dimensions of the flameproof joints.

[18] Conditions of certification:
 Where ATEX certified Ex Components or Ex Equipment are used, it is the responsibility of the manufacturer to ensure that only Ex Components or Ex Equipment having equivalent UKEx certification are used after the permission to accept such ATEX certified Ex Component or Ex Equipment is withdrawn.

[18] 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.



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Schedule
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[19] Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
PRCH ATEX/IECEx CERTIFIED DRAWING (10 Sheets)	100000	D	2021/02/23
PCRH UKCA CERTIFIED DRAWING (2 Sheets)	100000-UK	A	2021/10/29

Details of Ex Components or Ex Equipment used:

Description:	Manufacturer:	Part No.:	Certificates:	Standards:
Ex Component Flameproof Enclosure XCEX Series	Adalet/Scott Fetzer Co.	XCEX-060804-N4, Group IIB	DEMKO 01 ATEX 0129472U	EN 60079-0:2009 EN 60079-1:2007 EN 61241-0:2006 EN 61241-1:2004

