

# EU-TYPE EXAMINATION CERTIFICATE



[1]

[2]

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

[3]

EU-Type Examination Certificate Number: **DEMKO 18 ATEX 1943X Rev. 0**

[4]

Product: **EP Series Immersion Heaters**

[5]

Manufacturer: **Hotstart Inc., a Washington Company**

[6]

Address: **5723 E. Alki Avenue, Spokane, WA 99212 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 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. **4787866221.12.1**

[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**

[10] 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.

[11] 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.

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

 **II 2 G Ex db IIB T3 GB**

**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:** 2018-04-18

**Notified Body**

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark  
Tel. +45 44 85 65 65, [info.dk@ul.com](mailto:info.dk@ul.com), [www.ul.com](http://www.ul.com)



## Schedule

### EU-TYPE EXAMINATION CERTIFICATE No.

DEMKO 18 ATEX 1943X Rev. 0

[13]

[14]

[15] Description of Product

The EP Series of Immersion heaters are immersion heaters that consist of a flameproof housing, a coupler and heating elements. The housing is internally threaded for a cover and is provided with NPT conduit entries for supply connections. The coupler is located on the opposite side of the cover and provides the means to attach the heating elements. The heating elements are resistance heating elements and vary in length and power rating depending on the model.

Nomenclature for EP Series Immersion Heaters:

E 060 3 3 E - 25 H V - 00  
I II III IV V - VI VII VIII - IX

I - E series Element

II - Wattage

005 - 500W 007 - 750W 010 - 1000W 015 - 1500W  
017 - 1700W 020 - 2000W 025 - 2500W 030 - 3000W  
040 - 4000W 045 - 4500W 050 - 5000W 060 - 6000W  
075 - 7500W 080 - 8000W 090 - 9000W 100 - 10000W  
110 - 11000W 120 - 12000W 150 - 15000W 170 - 17000W  
180 - 18000W 200 - 20000W 210 - 21000W 240 - 24000W  
270 - 27000W 300 - 30000W 330 - 33000W 360 - 36000W

III - Voltage

1 - 120V 2 - 240V 3 - 360V 4 - 480V 5 - 575V  
6 - 208V/240V/480V 7 - 277V 8 - 208V 9 - 120V/208V/240V  
0 - 415V A - 400V B - 200V C - 220V D - 600V  
E - 440V F - 120V/240V G - 690V

IV - Phase

1 - 1 Phase  
3 - 3 Phase

V - Construction

E - Explosion Proof

VI - Watt Density (Watt per Square Inch)

05: 1 - 7.4WSI 10: 7.5 - 12.4WSI 15: 12.5 - 17.4WSI  
20: 17.5 - 22.4WSI 25: 22.5 - 27.4WSI 30: 27.5 - 24.9WSI  
30: 27.5 - 34.9WSI 40: 35 - 44.9WSI 50: 45 - 74.9WSI  
C0: 75 - 124.9WSI C5: 125 - 174.9WSI

VII - Thermostat

N: No Thermostat 4: 40-60°F 6: 60-80°F 8: 80-100°F  
1: 100-120°F 2: 120-140°F H: 140-160°F T: Thermocouple  
R: 8in. RTD J: 165-205°F

VIII - Burr Type

V - V-Clamp A - 2" NPT Aluminium S - 2" NPT Steel B - 2" NPT Stainless Steel

IX - Special Options

00 - No Special Options  
0x - Sequential number starting with 01 used to define options within a custom configuration

Temperature range

The ambient temperature range is -40°C to +40°C.

Routine tests

Routine overpressure tests in accordance with EN60079-1:2014 shall be conducted on the RTD Elements in accordance with clause 16.3, at a pressure of 13.5bar for a duration of not less than 10 seconds. There shall be no sign of damage, deformation or rupture that will invalidate the concept of protection.

[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:

- Do not attempt to repair flameproof joints. Incorrectly repaired joints may be compromised. Contact HOTSTART for flameproof joint details.

[18]

Essential Health and Safety Requirements

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

Additional information

The EP Series Immersion Heaters have in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529: 1991/A1 2000.

[13]

[14]

**Schedule**  
**EU-TYPE EXAMINATION CERTIFICATE No.**  
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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.