

[1]

EU-TYPE EXAMINATION CERTIFICATE



[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. 1**

[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 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 Annex II to the Directive.

The examination and test results are recorded in the confidential report no. **US/UL/ExTR18.0080/01.**

[9]

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

EN IEC 60079-0:2018

EN 60079-1:2014

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10]

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

[11]

This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance to the Directive 2014/34/EU. 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 (marking is provided in the Schedule as a part of item 15, if applicable):

II 2 G Ex db IIB T3 GB

Certification Manager

Thomas Wilson

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

Re-issued: 2024-07-25

Notified Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com



Accredited by DANAK under registration number 7011 to certification of products.

Form-ULID-000217 (DCS:00-IC-F0056-1) – Issue 29.0

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[13]

[14]

Schedule EU-TYPE EXAMINATION CERTIFICATE No. DEMKO 18 ATEX 1943X Rev. 1

[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:

<u>E</u>	<u>060</u>	<u>3</u>	<u>3</u>	<u>E - 25</u>	<u>H</u>	<u>V - 00</u>
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	J - 230V	

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 - 34.9WSI
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 Steel	A - 2" NPT Aluminium	S - 2" NPT Steel	B - 2" NPT Stainless Steel	C - V-Clamp Stainless Steel
M - M60 X 2 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.



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[13]

Schedule

[14]

EU-TYPE EXAMINATION CERTIFICATE No. DEMKO 18 ATEX 1943X Rev. 1

[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.



The trademark marking label.

will be used as the company identifier on the

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.