



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx UL 18.0071X

Issue No: 0

Certificate history:

[Issue No. 0 \(2018-04-18\)](#)

Status: **Current**

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Date of Issue: **2018-04-18**

Applicant: **HOTSTART Inc., a Washington Company**
5723 East Alki Avenue
Spokane Valley, WA 99212
United States of America

Equipment: **EP Series Immersion Heaters**

Optional accessory:

Type of Protection: **Flameproof "db"**

Marking:

Ex db IIB T3 Gb

-40°C to +40°C

*Approved for issue on behalf of the IECEx
Certification Body:*

Katy A. Holdredge

Position:

Senior Staff Engineer

*Signature:
(for printed version)*

Date:

2018-04-18

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](#).

Certificate issued by:

UL LLC
333 Pfingsten Road
Northbrook IL 60062-2096
United States of America





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Manufacturer: **HOTSTART Inc., a Washington Company**
5723 East Alki Avenue
Spokane Valley, WA 99212
United States of America

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-1 : 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[US/UL/ExTR18.0080/00](#)

Quality Assessment Report:

[US/UL/QAR18.0007/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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.

Please see Annex for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

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

Annex:

[Annex to IECEx UL 18.0071X Issue 0.pdf](#)



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TYPE DESIGNATION

Nomenclature:

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



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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



PARAMETERS RELATING TO THE SAFETY

Maximum Voltage = 690 VAC

Maximum Power = 36kW

MARKING

Marking has to be readable and indelible; it has to include the following indications:

 <p>HOTSTART SPOKANE, WA. 99212</p>	 <p>UL US LISTED E474204 HEATER FOR USE IN HAZARDOUS LOCATIONS</p>	CAT. NO. _____	S/N _____ YEAR _____
		CLASS I DIV.1 GP C&D T3A CLASS I ZONE 1 GP IIB T3 IECEX UL 18.0071X DEMKO 18 ATEX 1943X REV. 0 CE 0539 @II 2 G Ex db IIB T3 Gb & Ex db IIB T3 Gb AMBIENT TEMP. -40C +40C IP66 NEMA TYPE 4 350 PSI [2.41 MPa]	WATTS: _____ VOLTS: _____ AMPS: _____ PHASE: _____

CAUTION: TO REDUCE RISK OF IGNITION OF HAZARDOUS ATMOSPHERES, DISCONNECT FROM SUPPLY CIRCUIT BEFORE OPENING ENCLOSURE, KEEP TIGHTLY CLOSED WHEN IN OPERATION.
 WARNING: TO REDUCE THE RISK OF IGNITION OF HAZARDOUS ATMOSPHERES, CONDUIT RUNS MUST HAVE A SEALING FITTING CONNECTED WITHIN 18 INCHES OF THE ENCLOSURE FOR NORTH AMERICA ONLY
 ATTENTION: POUR RÉDUIRE LE RISQUE D'INFLAMMATION D'ENDROITS A RISQUE, DECONNECTER LE CIRCUIT D'ALIMENTATION AVANT D'OUVRIR LE COFFRET, LE GARDER HERMETIQUEMENT FERME PENDANT SON UTILISATION
 WARNING: DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT. SEE INSTALLATION INSTRUCTIONS.

ROUTINE EXAMINATIONS AND TESTS

Each piece of equipment defined above has to have successfully passed, before delivery:

Routine overpressure testing is required on the RTD Element in accordance with Clause 16.3 of IEC 60079-1. The test shall be conducted at a pressure of 13.5 bar (197 PSI).