

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

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

Certificate No.: **IECEx UL 18.0106X** Page 1 of 4 Certificate history:

Issue 2 (2024-03-28) Issue No: 3 Status: Current Issue 1 (2019-09-26) Issue 0 (2018-11-06)

Date of Issue: 2024-12-19

Applicant: **HOTSTART Inc., a Washington Company**

5723 East Alki Ave. Spokane, WA 99212 **United States of America**

Equipment: Heating Systems, OLA***-****, CLA***-****, OCLA****-****, DOLA****-****, OSA***-**** and CSA***-***

Optional accessory:

Type of Protection: Flameproof "db"

Ex db IIA T3 Gb Marking:

-20°C to +40°C

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature:

(for printed version)

(for printed version)

Katy A. Holdredge

Senior Staff Engineer

2024-12-19

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Certificate issued by:

UL Solutions (US) 333 Pfingsten Road Northbrook IL 60062-2096 **United States of America**





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Date of issue: 2024-12-19 Issue No: 3

Manufacturer: HOTSTART Inc., a Washington Company

5723 East Alki Ave. Spokane, WA 99212 United States of America

Manufacturing HOTSTART Inc., a Washington

locations: Company

5723 East Alki Ave. Spokane, WA 99212 United States of America

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

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

Edition:7.0

This Certificate **does not** indicate compliance with 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 Reports:

US/UL/ExTR18.0121/00 US/UL/ExTR18.0121/01 US/UL/ExTR18.0121/02

Quality Assessment Report:

US/UL/ExTR18.0121/03

US/UL/QAR18.0007/04



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The OLA, CLA, OCLA, DOLA, OSA and CSA Heating system series are assemblies of Ex certified devices used for heating water, engine oil, and engine coolant. The various devices are interconnected with certified cable glands and suitable cables.

Please see Annex for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- · Flameproof joints are not intended to be repaired in the field. Do not attempt to repair any flameproof joints that become damaged.
- · Warning: Wipe all operators and hoses with damp cloth to reduce potential for electro-static discharge
- The special fasteners of the flameproof enclosure shall have minimum quality class 8.8 (for carbon steel screws) and A4-80 (for stainless steel screws).
- When required, in order to minimize the risk of hazards caused by electrostatic charges, clean the motor only with a wet rag or by non-frictional means.
- The specified power source must be within plus or minus 10% of the rated voltage.
- A delay of 60 minutes is required after de-energizing and before opening the motor.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1: Addition of alternate operators and motors to the OLA, CLA, OCLA, DOLA, OSA, and CSA Heating systems. Editorial changes were also made to the drawings.

Issue 2: The marking plates were updated with revised customer logo. Alternate motors, cable, cable gland, and alternate construction of the PT100 RTD were evaluated.

Issue 3: Editorial corrections and minor edit to drawing for typo.

Annex:

Annex to IECEx UL 18.0106X Issue 3.pdf



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50 Hz 50 Hz 50 Hz 50 Hz

TYPE DESIGNATION

Nomenclature for type OLA, CLA, OCLA, DOLA, OSA and CSA Heating system series:

								Other
OLA	Phase	Wattage	Voltage	-	Motor	Pump	System Control	Options
ı	II	III	IV	-	V	VI	VII	VIII

I –

OLA	Oil Large Ex IECEx/ATEX
CLA	Coolant Large Ex IECEx/ATEX

II –

1-	I Phase
3-	3 Phase

III –

025	2.5 kW	300	30 kW
060	6 kW	360	36 kW
090	9 kW	480	48 kW
110	11 kW	540	54 kW
120	12 kW	600	60 kW
170	17 kW	660	66 kW
180	18 kW	720	72 kW
240	24 kW		

IV –

120 V	60 Hz	Α	400V
240 V	60 Hz	С	230V
380V	60 Hz	D	690V
480V	60 Hz	E	380V
600V	60 Hz		
690V	60 Hz		
277V	60 Hz		
208V	60 Hz		
	240 V 380V 480V 600V 690V 277V	240 V 60 Hz 380V 60 Hz 480V 60 Hz 600V 60 Hz 690V 60 Hz 277V 60 Hz	240 V 60 Hz C 380V 60 Hz D 480V 60 Hz E 600V 60 Hz 690V 60 Hz 277V 60 Hz



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11	
v	

1	1HP 1200 RPM	Α	1HP 1000 RPM
2	1HP 1800 RPM	В	1HP 1500 RPM
3	2HP 1200 RPM	С	2HP 1000 RPM
4	2HP 1800 RPM	D	2HP 1500 RPM
5	3HP 1200 RPM	Е	3HP 1000 RPM
6	3HP 1200 RPM	F	3HP 1500 RPM
7	5HP 1200 RPM	G	5HP 1000 RPM

VI –

OLA		CLA		
,	22 / 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		30 GPM / 1 HP	
1	SG 1.6-2.8 GPM	3	40 GPM / 1.5 HP	
	00 0 40 0014	_	45 GPM / 1.5 HP	
2	GG 6-10 GPM	4	60 GPM / 2 HP	

VII –

0	24V Relay
0	Pressure switch

VIII –

-	No other options

OCLA	Phase	Coolant Wattage	Oil Wattage	Voltage	•	Coolant Pump/Motor	Oil Motor	Oil Pump	System Control
I	П	III	IV	٧	-	VI	VII	VIII	IX

I –

OCLA	Oil and Coolant Ex IECEx/ATEX

II **–**

1-	I Phase
3-	3 Phase

III –

060	6 kW	180	18 kW
090	9 kW	240	24 kW
110	11 kW	300	30 kW
120	12 kW	360	36 kW
170	17 k\/\/		



400V 230V 690V 380V

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ı	۱,	
ı	v	

025	2.5 kW
060	6 kW
090	9 kW
120	12 kW

V -

1	120V	Α
2	240V	C
3	380V	Е
4	480V	Е
5	600V	
6	690V	
7	277V	
8	208V	

VI –

1	15 GPM / WILO
2	20 GPM / 0.75 HP
3	40 GPM / 1 HP - 1.5 HP
4	60 GPM / 1.5 HP

VII –

1	1HP 1200 RPM	А	1HP 1000 RPM
2	1HP 1800 RPM	В	1HP 1500 RPM
3	2HP 1200 RPM	С	2HP 1000 RPM
4	2HP 1800 RPM	D	2HP 1500 RPM
5	3HP 1200 RPM	Е	3HP 1000 RPM
6	3HP 1800 RPM	F	3HP 1500 RPM

VIII –

1	SG 1.6-2.8 GPM
2	GG 6-10 GPM
3	HJ 12-20 GPM
4	HL 18-30 GPM

IX -

0	24V Relay
1	Pressure switch
2	Dual 24VDC



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DOLA	Phase	Oil 1 Wattage	Oil 2 Wattage	Voltage	-	Oil 1 Motor	Oil 1 Pump	Oil 2 Motor	Oil Pump	System Control
ı	II	III	IV	V	-	VI	VII	VIII	IX	X

I –

DOLA	Two Separate Oil Circuit Heating Systems IECEx/ATEX
202.	The departed on entraining dysterne 1202%, trex

II –

1-	I Phase
3-	3 Phase

III –

025	2.5 kW
060	6 kW
090	9 kW
120	12 kW

IV –

025	2.5 kW
060	6 kW
090	9 kW
120	12 kW

V –

1	120V	7	277V
2	240V	8	208V
3	380V	Α	400V
4	480V	С	230V
5	600V	D	690V
6	690V	Е	380V

VI –

1	1HP 1200 RPM	А	1HP 1000 RPM
2	1HP 1800 RPM	В	1HP 1500 RPM
3	2HP 1200 RPM	С	2HP 1000 RPM
4	2HP 1800 RPM	D	2HP 1500 RPM
5	3HP 1200 RPM	Е	3HP 1000 RPM
6	3HP 1800 RPM	F	3HP 1500 RPM

VII –

1	SG 1.6-2.8 GPM
2	GG 6-10 GPM



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VIII –

1	1HP 1200 RPM	Α	1HP 1000 RPM
2	1HP 1800 RPM	В	1HP 1500 RPM
3	2HP 1200 RPM	С	2HP 1000 RPM
4	2HP 1800 RPM	D	2HP 1500 RPM
5	3HP 1200 RPM	E	3HP 1000 RPM
6	3HP 1800 RPM	F	3HP 1500 RPM

IX -

1	SG 1.6-2.8 GPM
2	GG 6-10 GPM
3	HJ 12-20 GPM
4	HL 18-30 GPM

X –

0	24V Relay
1	Pressure switch
2	Dual 24VDC

OSA	Phase	Wattage	Voltage	-	Motor	Pump	System Control	Area Classification
I	II	III	IV	-	V	VI	VII	VIII

I –

OSA Oil Small Ex IECEx/ATEX

II –

1-	I Phase
3-	3 Phase

III –

015	1.5 kW
025	2.5 kW
040	4.0 kW

IV –

2	240V
4	480V
8	208V
Α	400V
С	230V



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١,	
v	_

1	3/4 hp, 1200R (6P)	Α	3/4 hp, 1000R (6P)
2	3/4-1 hp, 1800R (4P)	В	3/4 hp, 1500R (4P)
3	2 hp, 1200R (6P)	С	2 hp, 1000R (6P)
4	2 hp, 18000R (4P)	D	2 hp, 1500R (4P)

VI –

1	1.6-2.9 GPM
2	3.1-5.7 GPM
3	6.1-11 GPM

VII –

0	24 V Relay
1	Pressure Switch

CSA	Phase	Wattage	Voltage	-	Pump/Motor	System Control	Area Classification
ı	II	III	IV	_	V	VI	VII

I –

CSA Coolant Small Ex IECEx/ATEX	CSA
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II –

1-	I Phase	
3-	3 Phase	

III –

030	3 kW
060	6 kW
090	9 kW
120	12 kW

IV –

2	240V
4	480V
Α	400V
С	230V

V –

0	SG-0528 1HP 4P
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VI –	
0	24V Relay
1	Pressure switch

MARKING

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

	TSTART. JAL MANAGEMENT E, WA. 99212 U.S.A. 4	REF. SERIAL NUMBER WHEN ORDERING REPLACEMENT PARTS U.S. PATENT 9,784,470
VOLTSAMPSCONTROL CIRCUI	HERTZPHASET VOLTS	DEMKO 18 ATEX 2107X C€ 0539 ₪ II 2 G Ex db IIA T3 Gb
CAUTION: TO REDUCE RISK OF IGNITION OF HAZARDOUS ATMOSPHERES, DISCONNECT FROM SUPPLY CIRCUIT BEFORE OPENING ENCLOSURE, KEEP TIGHTLY CLOSED WHEN IN OPERATION. WARNING: DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT. SEE INSTALLATION INSTRUCTIONS. WARNING: WIPE ALL OPERATORS AND HOSES WITH DAMP CLOTH TO REMOVE POTENTIAL FOR ELECTRO-STATIC DISCHARGE.		

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 welded joint in accordance with Clause 16.3 of IEC 60079-1. The test shall be conducted at a pressure of 3000 kPa for 10 seconds. The pressure shall be applied from the lead side of the RTD.

Per ExTAG DS 2015/001A, the specific Clauses of IEC 60079-14 Ed. 5 that have been satisfied along with a schedule of Equipment including all IECEx Certified items that comprise the equipment assembly are to be included in the Annex. For a complete assessment of how each Clause was considered, see below.

The following Clauses from IEC 60079-14 Ed. 5 were verified as part of the Ex equipment assembly: 4.1,4.4.1.1, 4.4.1.2, 4.4.2, 6.1, 6.2, 6.3, 6.3.1, 6.5.1, 6.5.2, 8.1, 9.1, 9.3.1, 9.3.2, 9.3.3, 9.3.8, 9.3.9, 9.5, 9.6.2, , 9.6.3, 10.1, 10.2, 10.3, 10.5, 10.6.1, 10.6.2, 11.1, 13.1, 13.2, 13.4, 13.5,14.1, 14.2, 14.3.

The following Clauses from IEC 60079-14 Ed. 5 were considered not applicable: 4.4.3, 5.12, 5.14, 5.15, 5.16, 6.3.7, 6.4.1, 6.4.2, 6.5.3, 6.7, 6.7.1, 6.7.2, 6.8, 6.9, 9.2, 9.3.4, 9.3.5, 9.4, 10.4, 10.7, 10.8, 11.2.1, 11.2.2, 11.3, 11.4, 11.5, 11.6, 12, 14.4, 15, 16, 17, 18, 19, 20, 21, 22, 23, Annex H.



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The following Clauses from IEC 60079-14 Ed. 5 need to be verified on site: 4.2, 4.3, 4.5, 5.1, 5.2, 5.3, 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.4.5, 5.5, 5.6.1, 5.6.2, 5.6.3, 5.7, 5.8,5.9, 5.10, 5.11, 5.13, 6.3.2, 6.3.3, 6.3.4, 6.3.4, 6.3.5, 6.3.6, 6.6, 7, 8.2, 8.3, 9.3.6, 9.3.7, 9.6.1, 9.6.4, 9.6.5, 9.6.6, Annex A, Annex C, Annex G, Annex K.