

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:
Status:	Current	Issue No: 2	Issue 1 (2019-09-26) Issue 0 (2018-11-06)
Date of Issue:	2024-03-28		
Applicant:	HOTSTART Inc., a Washington Company 5723 East Alki Ave. Spokane, WA 99212 United States of America		
Equipment:	Heating Systems, OLA***-****, CLA***-****, O	CLA****-****, DOLA****-*****, OSA***-**** and	CSA***-***
Optional accessory:			
Type of Protection:	Flameproof "db"		
Marking:	Ex db IIA T3 Gb		
	-20°C to +40°C		
Approved for issue o Certification Body:	n behalf of the IECEx	Katy A. Holdredge	
Position:		Senior Staff Engineer	
Signature: (for printed version)			
Date: (for printed version)			
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Certificate issued	l by:		
UL Solutions (333 Pfingsten R	(US) oad		Solutions

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



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Date of issue:	2024-03-28	Issue No: 2		
Manufacturer:	HOTSTART Inc., a Washington Company 5723 East Alki Ave. Spokane, WA 99212 United States of America			
Manufacturing locations:	HOTSTART Inc., a Washington Company 5723 East Alki Ave. Spokane, WA 99212 United States of America			
This sortificate is issued as verification that a sample(a) representative of production, was assessed and tested and found to samply with the				

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 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1:2014 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

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/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 nonfrictional 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)

2024-03-28

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.

Annex:

Annex to IECEx UL 18.0106X Issue 2.pdf



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TYPE DESIGNATION

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

									Other
OLA	Phase	Wattage	Voltage	-	Motor	Pump	Syste	m Control	Options
I	II	III	IV	-	v	VI		VII	VIII
I	_			•		•	·		
(OLA Oil Large Ex IECEx/ATEX			(
(CLA	Coolant Lar	ATEX						
	II –								
-	1-	I Phase							
3	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	660 66 kW				
	180	18 kW		720		72 kW			
2	240	24 kW							
_ I	IV –								
	1	120 V	6	60 Hz		A	400V	50 Hz	
2	2	240 V	6	60 Hz		С	230V	50 Hz	
3	3	380V	6	60 Hz		D	690V	50 Hz	
4	4	480V	6	60 Hz		E	380V	50 Hz	
Ę	5	600V	6	60 Hz					
6	6	690V	6	60 Hz					
7	7	277V	6	0 Hz					
8	8	208V	6	60 Hz					



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V –			
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	E	3HP 1000 RPM
6	3HP 1200 RPM	F	3HP 1500 RPM
7	5HP 1200 RPM	G	5HP 1000 RPM

VI –

OLA		CLA	
			30 GPM / 1 HP
1	SG 1.6-2.8 GPM	3	40 GPM / 1.5 HP
	00.040.0014		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	II	111	IV	V	-	VI	VII	VIII	IX

1-

	1		
OCLA	Oil and Coolant E	x 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 kW		



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IV –	
025	2.5 kW
060	6 kW
090	9 kW
120	12 kW
V -	

-			
1	120V	А	400V
2	240V	С	230V
3	380V	D	690V
4	480V	E	380V
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	E	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 –

173	
0	24V Relay
1	Pressure switch
2	Dual 24VDC



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DO	DLA	Phase	Oil 1 Wattag	je	Oil 2 Wattage	Voltage	-	Oil 1 Motor	Oil 1 Pump	Oil 2 Motor	Oil Pump	System Control	
	I	II			IV	V	-	VI	VII	VIII	IX	х	1
	I –		•							ı	1	1	1
Γ	DOL	A	Two Sepa	arate	Oil Circuit H	eating Syste	ems	IECEx/ATE	x				
_	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								
F	V –					1							
_	1		120V	'		7		2	77V				
_	2		240V	,		8		2	V8V				
	3		380V	,		А		4	V00				
	4		480V	,		С		2	30V				
	5		600V	,		D		6	90V				
	6		690V	,		E		38	80V				
г	VI –					1							
_	1		1HP	1200) RPM	А		1	HP 1000 F	RPM			
	2		1HP	1800) RPM	В		1	HP 1500 F	RPM			
_	3		2HP	1200) RPM	С		2	HP 1000 F	RPM			
	4		2HP	1800) RPM	D		2	HP 1500 F	RPM			
	5		3HP	1200) RPM	E		3	HP 1000 F	RPM			
	6		3HP	1800) RPM	F		3	HP 1500 F	RPM			
F	VII –			I									
	1			SG	6 1.6-2.8 GPN	N							
	2			GG	6-10 GPM								



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VIII –			
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	E	3HP 1000 RPM
6	3HP 1800 RPM	F	3HP 1500 RPM
IX -			

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

OSA
II –
1-
3-

...

I –

III =	
015	1.5 kW
025	2.5 kW
040	4.0 kW

Oil Small Ex IECEx/ATEX

IV –

2	240V
4	480V
8	208V
А	400V
С	230V

I Phase 3 Phase



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V –			
1	3/4 hp, 1200R (6P)	А	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 –

VII –	Γ
3	6.1-11 GPM
2	3.1-5.7 GPM
1	1.6-2.9 GPM

0	24 V Relay
1	Pressure Switch

CSA	Phase	Wattage	Voltage	-	Pump/Motor	System Control	Area Classification
I	П	=	IV	-	v	VI	VII

1-				
CSA	Coolant Sma	all Ex IECE	x/ATEX	
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				
A 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:

HE	ISTART. IAL MANAGEMENT IE, WA. 99212 U.S.A.	REF. SERIAL NUMBER WHEN ORDERING REPLACEMENT PARTS U.S. PATENT 9,784,470)	
MODEL				
VOLTS	HERTZ	_ IECEX UL 18.0106X		
AMPS	PHASE	EX dD IIA 13 GD		
CONTROL CIRCUI	TVOLTS	DEMKO 18 ATEX 2107X		
SERTAL NUMBER		• C€ 0539 ⊕ II 2 G Ex db IIA T3 Gb		
YEAR OF MEG		—		
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.				
0				

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.

LIST OF CERTIFIED EQUIPMENT AND/OR COMPONENTS

The following additional previous editions of Standards noted under the "Standards" section of this Certificate were applied to integral Equipment and/or Components as itemized below. There are no significant safety related changes between these previous editions and the editions noted under the "Standards" section.

Product	Certificate Number	Standards
E-series Heating Elements manufactured by HOTSTART Inc.	IECEx UL 18.0071X	IEC 60079-0, Ed.6