

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 2107X Rev. 1**

[4]

Product: **OLA, CLA, OCLA, DOLA, OSA, and CSA Series Heating Systems**

[5]

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

[6]

Address: **5723 East Alki Ave., 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. **4789121209.1.1**

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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.

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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.

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The marking of the product shall include the following:

 **II 2 G Ex db IIA 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: 2018-11-06

Re-issued: 2019-09-26



Notified Body

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Schedule

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Description of Product

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.

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

OLA	Phase	Wattage	Voltage	-	Motor	Pump	System Control	Other Options
I	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 -

1	120 V	60 Hz	A	400V	50 Hz
2	240 V	60 Hz	C	230V	50 Hz
3	380V	60 Hz	D	690V	50 Hz
4	480V	60 Hz	E	380V	50 Hz
5	600V	60 Hz			
6	690V	60 Hz			
7	277V	60 Hz			
8	208V	60 Hz			

V -

1	1HP 1200 RPM	A	1HP 1000 RPM
2	1HP 1800 RPM	B	1HP 1500 RPM
3	2HP 1200 RPM	C	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	
1	SG 1.6-2.8 GPM	3	30 GPM / 1 HP 40 GPM / 1.5 HP
2	GG 6-10 GPM	4	45 GPM / 1.5 HP 60 GPM / 2 HP
3	HJ 12-20 GPM		
4	HL 18-30 GPM		
5	AK 46-58 GPM		

VII -

0	24V Relay
0	Pressure switch

VIII -

-	No other options
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OCLA	Phase	Coolant Wattage	Oil Wattage	Voltage	-	Coolant Pump/Motor	Oil Motor	Oil Pump	System Control
I	II	III	IV	V	-	VI	VII	VIII	IX

I -

OCLA	Oil and Coolant Ex IECEX/ATEX
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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		

IV -

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

V -

1	120V	A	400V
2	240V	C	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	A	1HP 1000 RPM
2	1HP 1800 RPM	B	1HP 1500 RPM
3	2HP 1200 RPM	C	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 -

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
I	II	III	IV	V	-	VI	VII	VIII	IX	X

I -

DOLA	Two Separate Oil Circuit Heating Systems IECEx/ATEX
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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	A	400V
4	480V	C	230V
5	600V	D	690V
6	690V	E	380V

VI -

1	1HP 1200 RPM	A	1HP 1000 RPM
2	1HP 1800 RPM	B	1HP 1500 RPM
3	2HP 1200 RPM	C	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

VII -

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

VIII -

1	1HP 1200 RPM	A	1HP 1000 RPM
2	1HP 1800 RPM	B	1HP 1500 RPM
3	2HP 1200 RPM	C	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

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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
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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
A	400V
C	230V

V -

1	3/4 hp, 1200R (6P)	A	3/4 hp, 1000R (6P)
2	3/4-1 hp, 1800R (4P)	B	3/4 hp, 1500R (4P)
3	2 hp, 1200R (6P)	C	2 hp, 1000R (6P)
4	2 hp, 1800R (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
I	II	III	IV	-	V	VI	VII

I -

CSA	Coolant Small Ex IECEX/ATEX
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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
A	400V
C	230V

V -

0	SG-0528 1HP 4P
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VI -

0	24V Relay
1	Pressure switch

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Temperature range

The ambient temperature range is -20 °C to +40°C.

Electrical data

See nomenclature.

Routine tests

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 manufacturer shall check for leakage through the welded joint following each overpressure test.

The overpressure testing detailed above may be conducted in accordance with the batch testing procedure shown below and Clause 16.6 of IEC 60079-1.

Production Batch Size	Number of samples to be Tested
Up to 100	8
101 up to 1,000	32
1,001 up to 10,000	80

Note: Batches above 10,000 must be subdivided into smaller batches.

If there are any non-compliant test results, 100% of all remaining samples shall be tested in accordance with the above procedure.

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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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Specific conditions of use:

- 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 enclosures utilize metric bolts that are Class 8.8 minimum and Class A4-70 with a minimum yield strength of 600 MPa.

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Essential Health and Safety Requirements

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

Additional information



The trademark will be used as the company identifier on the marking label.

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