



# IECEx Certificate of Conformity

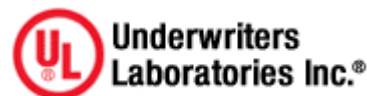
## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:	IECEx ULD 06.0009	issue No.:2	<b>Certificate history:</b> Issue No. 2 (2011-11-25) Issue No. 1 (2009-10-19) Issue No. 0 (2006-5-9)
Status:	<b>Current</b>		
Date of Issue:	<b>2011-11-25</b>	Page 1 of 4	
Applicant:	<b>HB Products A/S</b> Boegekildevej 21, 8361 Hasselager <b>Denmark</b>		
Electrical Apparatus: <i>Optional accessory:</i>	<b>Longstroke/Shortstroke Displacement Sensors</b> None		
Type of Protection:	<b>Intrinsic Safety "i"</b>		
Marking:	<b>IECEx ULD 06.0009</b> <b>Ex ib IIC T5</b> <b>Li: 1 mH; Ci: 50 nF; Ui: 26,5 V, li: 116 mA;</b> <b>Pi: 0.95 W</b> <b>-20 °C &lt; Ta &lt; +70 °C</b>		
<i>Approved for issue on behalf of the IECEx Certification Body:</i>	Fred Lankamp		
<i>Position:</i>	Lead Auditor / Senior Project Engineer		
<i>Signature:</i> <i>(for printed version)</i>	_____		
<i>Date:</i>	_____		
<ol style="list-style-type: none"> <li>1. This certificate and schedule may only be reproduced in full.</li> <li>2. This certificate is not transferable and remains the property of the issuing body.</li> <li>3. The Status and authenticity of this certificate may be verified by visiting the <a href="http://www.iecex.com">Official IECEx Website</a>.</li> </ol>			

Certificate issued by:

**UL International DEMKO A/S**  
**Borupvang 5A,**  
**DK-2750 Ballerup**  
**Denmark**







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Certificate No.: IECEx ULD 06.0009  
Date of Issue: 2011-11-25 Issue No.: 2  
Page 2 of 4

Manufacturer: **HB Products A/S**  
Boegekildevej 21  
DK-8361 Hasselager  
Denmark

Manufacturing location(s):  
**HB Products A/S**  
Boegekildevej 21  
DK-8361 Hasselager  
Denmark

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 electrical 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 : 2004** Electrical apparatus for explosive gas atmospheres - Part 0: General requirements  
Edition: 4.0  
**IEC 60079-11 : 1999** Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'  
Edition: 4

*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:

[DK/ULD/ExTR06.0007/00](#)

[DK/ULD/ExTR06.0007/01](#)

##### Quality Assessment Report:

[GB/ITS/QAR09.0003/01](#)





# IECEx Certificate of Conformity

Certificate No.: IECEx ULD 06.0009

Date of Issue: 2011-11-25

Issue No.: 2

Page 3 of 4

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The certificate covers two types of transducers in the same family, the Long stroke type SA96DX-I/xxx/Ex and Short stroke type SLCD-M1/xx/Ex (Shortstroke type SLCD-M1/25/Ex, Shortstroke type SLCD-M1/70/Ex).

Both are Position/Displacement Sensors typically used to detect positions of Hydraulic systems.

Both versions of position transmitters are "non contact" transmitters and they are designed for screw compressors in the refrigeration industry. Both are SPLIT types, which means it is possible to separate the sensor tube from the electronic part. The moving part is an aluminium tube, which is built into the compressors capacity slider.

Output signal is 4 to 20 mA and corresponds to 0 to 100% capacity (display). The measuring range can be changed via a calibration (built-in push button and 2 LED).

The difference between a long stroke and a short stroke transmitter is the measuring range and the location of the sensor coil. The long stroke transmitter has the sensor coil arranged in a coil tube outside the electronic top part with a measuring length of 100 to 1000 mm and the short stroke transmitter has the coil arranged inside the electronic part with a measuring length of 5 to 70 mm.

The Shortstroke transmitter is produced in two different types of metal enclosures as follows:

SLCD-M1/25/Ex, which have a measuring range of 0 to 25 mm.

SLCD-M1/70/Ex, which have a measuring range of 0 to 70 mm.

Nomenclature for type:

Longstroke type:

SA96DX-I/xxx/Ex

Shortstroke type:

SLCD-M1/25/Ex

SLCD-M1/70/Ex

### CONDITIONS OF CERTIFICATION: NO





# IECEx Certificate of Conformity

Certificate No.: IECEx ULD 06.0009

Date of Issue: 2011-11-25

Issue No.: 2

Page 4 of 4

**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

issue 2: Merging of three labels into one.

