Spec.: 200418R2

## Certificate Number Baseefa02ATEX0072 Issue 2



# Issued 11 November 2014 Page 1 of 3

EC - TYPE EXAMINATION CERTIFICATE

2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC

3 EC - Type Examination Certificate

Baseefa02ATEX0072 - Issue 2

Number:

1

4 Equipment or Protective System: Load Cell KXXD-X with variants

5 Manufacturer: Vishay Nobel AB

6 Address: Box 423, SE-691 27 Karlskoga, Sweden

- This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- Baseefa, Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems 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's. See Schedule

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012 EN 60079-11:2012

except in respect of those requirements listed at item 18 of the Schedule.

- 10 If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- 11 This EC TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- 12 The marking of the equipment or protective system shall include the following:
  - $\langle E_X \rangle$  II 1 GD Ex ia IIC T4 Ga Ex ia IIIC T80°C T<sub>500</sub>84°C Da (-40°C  $\leq$ Ta  $\leq$ 60°C) I M1 Ex ia I Ma (-40°C  $\leq$ Ta  $\leq$ 60°C)

Baseefa Customer Reference No. 2054

Project File No. 13/0709

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R S SINCLAIR
GENERAL MANAGER
On behalf of SGS Baseefa Limited



## Issued 11 November 2014 Page 2 of 3

13

14

## **Schedule**

#### Certificate Number Baseefa02ATEX0072 - Issue 2

#### 15 Description of Equipment or Protective System

The Loadcells Type KXXD-X are designed to measure force. Each loadcell comprises a printed circuit board, four dual element strain gauges and two modulus gauges all housed in a stainless steel enclosure. External connections are made via an integral four core cable.

This certificate covers types **KOSD-XXX-Z**, **KOSD-X**, **KOSD-New Style**, **KISD-X**, **KIMD-X** and **KXXD-DX**, where X represents type and load rating and the -DX suffix represents a double-bridge type.

The apparatus comprises a stainless steel body, in which the strain and modulus gauges and the printed circuit board (coated with silicon rubber compound or varnish) are mounted. Electrical connections are made via a glanded integral cable, the termination of which, on the internal printed circuit board is encapsulated.

The loadcells are adequately protected against dust ingress; the enclosures offering a degree of protection of not less than IP6X.

### **Input Parameters**

$U_{\rm i}$	=	25V	$C_{ m i}$	=	2.5nF
$I_{ m i}$	=	1A	$L_{ m i}/R_{ m i}$	=	$30\mu H/\Omega$
D.	_	1 2XV			

#### 16 Report Number

GB/BAS/ExTR14.0154/00

#### 17 Specific Conditions of Use

None.

#### 18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

## 19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
300138	1 of 1	1	2014-02-19	KIMD Type Double Bridge Connector or Cable
300139	1 of 1	1	2014-02-19	KOSD Type Double Bridge Connector or Cable
300332	1 of 1	3	2014-02-19	KOSD-New Style
600610	1 of 1	4	2014-02-19	ATEX Label KOSD-X
600631	1 of 1	4	2014-02-19	ATEX Label KOSD-X
600632	1 of 1	4	2014-02-19	ATEX Label KIMD-X
600633	1 of 1	4	2014-02-19	ATEX Label KOSD-XXX-Z

# Certificate Number Baseefa02ATEX0072 Issue 2



# Issued 11 November 2014 Page 3 of 3

Current drawings also associated with this certificate:

Number	Sheet	Issue	Date	Description
300279	1 of 1	1	10-10-2002	KISD-X
300280	1 of 1	1	10-10-2002	KIMD-X ATEX
300331	1 of 1	1	10-10-2002	KOSD-XXX-Z ATEX
400774	1 of 1	1	10-10-2002	KOSD-X ATEX

## 20 Certificate History

Date	Comments
18 October 2002	The release of the prime certificate. The associated test and assessment is documented in Test Report No. 02(C)0290. Project File No. 02/0290.
19 January 2010	To introduce the KXXD-DX double-bridge loadcell, to permit a change to the ambient temperature range to -40°C ≤Ta ≤+60°C,to confirm that the equipment covered by this certificate has been reviewed against the requirements of EN 60079-0:2009 and EN 60079-11:2007 in respect of the differences from EN 50014:1997 + Amds 1 & 2 and EN 50020:2002 and to confirm that the equipment covered by this certificate has been additionally reviewed against the requirements of IEC 60079-31:2008 and may also therefore be coded:  © II 1D Ex t IIIC T80°C T <sub>500</sub> 84°C Da  Project File No. 10/0535.
11 November 2014	This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate and confirms the current design meets the requirements of EN 60079-0: 2012 & EN 60079-11: 2012 including the revision of the marking in accordance with these standards. The equipment has been assessed
	against the requirements for Group I and may also therefore be additionally coded:
	19 January 2010