

1 **EU - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres  
Directive 2014/34/EU**

3 EU - Type Examination Certificate **Baseefa02ATEX0073 – Issue 7**  
Number:

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **Load Cell KXX-X with variants**

5 Manufacturer: **Vishay Nobel AB**

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

7 This re-issued certificate extends EC Type Examination Certificate No. Baseefa02ATEX0073 to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Baseefa, Notified Body number 1180, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the 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. **See Certificate History**

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

**EN 60079-0:2012+A11:2013 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 product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 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 this certificate.

12 The marking of the product shall include the following :

Ⓔ II 1 GD See schedule

Ⓔ I M1 See schedule

SGS Baseefa Customer Reference No. **2054**

Project File No. **19/0211**

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**SGS Baseefa Limited**

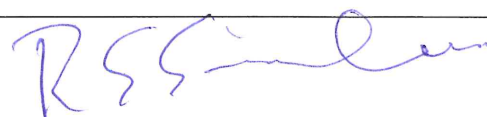
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R S SINCLAIR  
TECHNICAL MANAGER  
On behalf of SGS Baseefa Limited

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## Schedule

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Certificate Number Baseefa02ATEX0073 – Issue 7

### 15 Description of Product

The Loadcells Type KXX-X are designed to measure force. Each loadcell comprises a printed circuit board, two 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 loadcells **KIS-X**, **KIS-8X**, **KIS-9X** and **KIM-1X**, where X represents type and load rating.

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.

The marking of the equipment depends upon input power and ambient temperature as follows:

Ex ia IIC T6 Ga	Ex ia IIIC T80°C T <sub>500</sub> 84°C Da	Ex ia I Ma (-40°C ≤ Ta ≤ 60°C)	1.2W
Ex ia IIC T4 Ga	Ex ia IIIC T60°C T <sub>500</sub> 64°C Da	Ex ia I Ma (-40°C ≤ Ta ≤ 40°C)	1.3W
Ex ia IIC T4 Ga	Ex ia IIIC T80°C T <sub>500</sub> 84°C Da	Ex ia I Ma (-40°C ≤ Ta ≤ 60°C)	1.2W

#### Input Parameters

$U_i$	=	30V	$C_i$	=	2.5nF
$I_i$	=	700mA	$L_i/R_i$	=	30μH/Ω
$P_i$	=	1.2W / 1.3W			

Cable length	Capacitance, $C_i$	Inductance, $L_i$	$L_i / R_i$ Ratio
< 10m	3.5nF	10μH	30μH/Ω
>10m to 15m	5nF	15μH	30μH/Ω
>15m to 25m	8nF	25μH	30μH/Ω
>25m to 50m	15nF	Use $L_i/R_i$ ratio	30μH/Ω
>50m to 100m	30nF	Use $L_i/R_i$ ratio	30μH/Ω

### 16 Report Number

See Certificate History

### 17 Specific Conditions of Use

None

### 18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product:

Clause	Subject	Compliance
1.2.7	Protection against other hazards (LVD type requirements, etc.)	Manufacturer responsibility
1.2.8	Overloading of equipment (protection relays, etc.)	User/Installer responsibility
1.4.1	External effects	User/Installer responsibility
1.4.2	Aggressive substances, etc.	User/Installer responsibility

## 19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
300275	1 of 1	5	2018-04-24	KIS-8X ATEX

This drawing is common to, and held with, IECEx BAS 14.0015X.

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
300277	1 of 1	4	2010-09-09	KIS-9X ATEX
300278	1 of 1	4	2010-09-09	KIM-1X ATEX
400689	1 of 1	4	2010-09-09	KIS-X ATEX
500938	1 of 1	9	2014-02-19	ATEX Label KIS-X
600529	1 of 1	8	2014-02-19	ATEX Label KIS-8X
600530	1 of 1	8	2014-02-19	ATEX Label KIS-9X
600591	1 of 1	8	2014-02-19	ATEX Label KIM-1X

## 20 Certificate History

Certificate No.	Date	Comments
Baseefa02ATEX0073	16 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.
Baseefa02ATEX0073/1	4 February 2004 <i>Reissued 18 November 2005</i>	To permit a change of company name/logo, minor drawing changes, new input parameters and new cable length options. Project File No. 03/0931
Baseefa02ATEX0073/2	17 November 2005	To permit minor drawing changes. Project File No. 05/0362
Baseefa02ATEX0073/3	25 September 2006 <i>Reissued 10 May 2007</i>	To permit a change to the ambient temperatures (to -40°C). Project File No. 06/0310
Baseefa02ATEX0073/4	1 June 2011	To permit minor drawing changes, 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: <b>Ex II 1D Ex t IIC T**°C T<sub>500</sub>**°C Da</b> Project File No. 10/0535.



Certificate No.	Date	Comments
Baseefa02ATEX0073 Issue 5	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: <b>Ex I M1 Ex ia I Ma</b> Test Report No. GB/BAS/ExTR14.0154/00. Project File No. 13/0709.
Baseefa02ATEX0073 Issue 6	11 June 2018	To permit a change in $U_i$ from 25V to 30V (the parameters have been updated accordingly) and to confirm that the equipment meets the requirements of EN 60079-0: 2012+A11:2013. Test Report No. GB/BAS/ExTR18.0071/00. Project File No. 18/0220.
Baseefa02ATEX0073 Issue 7	8 January 2020	To permit minor drawing changes. Test Report No. GB/BAS/ExTR20.0003/00. Project File No. 19/0211.
For drawings applicable to each issue, see original of that issue.		