Spec.:200437R0

Certificate Number Baseefa06ATEX0107X/1



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1 SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

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

3 Supplementary EC - Type

Baseefa06ATEX0107X/1

Examination Certificate Number:

Equipment or Protective System:

Loadcells Type KXXD-(D)AX

5 Manufacturer:

Vishay Nobel AB

6 Address:

4

Box 423, SE-691 27 Karlskoga, Sweden

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa06ATEX0107X to apply to equipment or protective systems 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.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. 2054

Project File No. 10/0535

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

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Baseefa is a trading name of Baseefa Ltd

Registered in England No. 4305578. Registered address as above.

R S SINCLAIR

DIRECTOR
On behalf of
Baseefa

Certificate Number Baseefa06ATEX0107X/1



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Schedule Schedule

Certificate Number Baseefa06ATEX0107/1

15 Description of the variation to the Equipment or Protective System

Variation 1.1

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To permit minor drawing changes that do not affect the original assessment.

Variation 1.2

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 that none of these differences affect this equipment.

Variation 1.3

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:

-AX types

$P_{\rm i} = 1.3 \rm W$:	
$P_{\rm i} = 1.2{\rm W}$:	⟨ II 1D Ex t IIIC T70°C T ₅₀₀ 84°C Da
$P_{\rm i} = 1.1 {\rm W}$:	⟨ II 1D Ex t IIIC T80°C T ₅₀₀ 94°C Da
$P_{i} = 1.0W$:	⟨ II 1D Ex t IIIC T90°C T ₅₀₀ 104°C Da
-DAX types	
$P_{\rm i} = 1.3 {\rm W}$:	
$P_{i} = 1.2W$:	
$P_{i} = 1.1$ W:	⟨ II 1D Ex t IIIC T80°C T ₅₀₀ 112°C Da
$P_{i} = 1.0W$:	⟨ II 1D Ex t IIIC T90°C T ₅₀₀ 122°C Da

16 Report Number

None

17 Special Conditions for Safe Use

None additional to those listed previously.

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
300429	1 of 1	1	2010-09-14	KIMD Type. Single amp, connector or cable
300430	1 of 1	1	2010-09-14	KIMD Type. Double amp, connector or cable

Certificate Number Baseefa06ATEX0107X/1



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Number	Sheet	Issue	Date	Description
300431	1 of 1	1	2010-09-14	KOSD Type. Single amp, connector or cable
300432	1 of 1	1	2010-09-14	KOSD Type. Double Amp, connector or cable
600785	1 of 1	1	2010-09-14	ATEX Label KIMD-AX-DAX and KOSD-AX-DAX

Certificate Number Baseefa06ATEX0107X



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EC - TYPE EXAMINATION CERTIFICATE

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

3 EC - Type Examination

Baseefa06ATEX0107X

Certificate Number:

4 Equipment or Protective System:

Loadcells Type KXXD-(D)AX

5 Manufacturer:

Vishay Nobel AB

6 Address:

1

Box 423, SE-691 27 Karlskoga, Sweden

- 7 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 (2001) Ltd., 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. 05(C)0502

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

EN 60079-0:2004

EN 50020:2002

IEC 61241-0:2004

IEC 61241-11:2005

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:
 - (Ex) II 1 GD See schedule for further information

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. 2054

Project File No. 05/0502

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R S SINCLAIR
DIRECTOR
On behalf of
Baseefa (2001) Ltd.

Re-issued 10 November 2006 to replace original

Certificate Number Baseefa06ATEX0107X

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Schedule Schedule

Certificate Number Baseefa06ATEX0107X

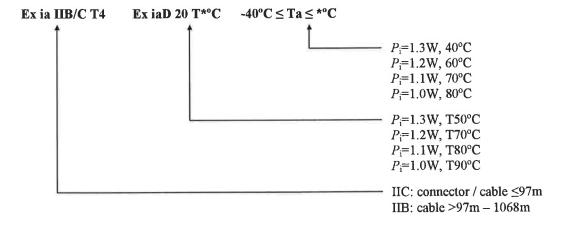
15 Description of Equipment or Protective System

The Loadcells Type KXXD-DAX are designed to measure force. Each loadcell comprises a printed circuit board, four dual element strain gauges and either two or four modulus gauges, all housed in a stainless steel enclosure. External connections are made via a glanded integral cable, the termination of which is encapsulated on the internal printed circuit board, or a female multi-pole connector.

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

Types covered by this certificate are KIMD-AX, KIMD-DAX, KOSD-AX and KOSD-DAX where AX represents a single amplifier type with a single printed circuit board and DAX represents a twin amplifier type with two printed circuit boards, each connected independently to separate cables or connectors. X can be up to five characters to define accuracy and degree of temperature compensation.

The marking of the equipment or protective system shall include the following:



Input Parameters

In the case of the dual amplifier KXXD-DAX types, these parameters apply to each independent amplifier circuit.

Connector version, no cable

 $U_{i} = 30V$ $C_{i} = 26nF$ $I_{i} = 120mA$ $L_{i} = 0$ $P_{i} = 1.0W-1.3W*$

^{* -} dependent on ambient temperature: 1.3W at 40°C, 1.2W at 60°C, 1.1W at 70°C, 1.0W at 80°C

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Integral cable versions

 U_i , I_i and P_i remain as above.

Cable length	Capa	citance	Inductance		Croun
	Cable	Total (C_i)	Cable	Total (L_i)	Group
None, connector only	0	26nF	0	0μΗ	IIC
<10m	3.5nF	30nF	10μΗ	10μΗ	IIC
>10m - 40m	14nF	40nF	40μΗ	40μΗ	IIC
>40m – 68m	23.8nF	50nF	68µH	70μΗ	IIC
>68m – 97m	33.9nF	60nF	97μΗ	0.10mH	IIC
>97m – 211m	73.9nF	100nF	211μΗ	0.22mH	IIB
>211m - 497m	173.9nF	200nF	497μΗ	0.50mH	IIB
>497m – 1068m	373.8nF	400nF	1068μΗ	1.07mH	IIB

16 Report Number

Baseefa Certification Report 05(C)0502

17 Special Conditions for Safe Use

Types with integral cables only:

- 1. The leakage current may exceed 5mA when a test voltage of 500V is applied between all inputs and frame. Each unit is tested by the manufacturer and those units that do not meet the insulation test requirement will be clearly identified. This must be taken into account during installation.
- 2. The free end of the cable must be installed such that the terminations are afforded a degree of protection of at least IP20.

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

Number	Sheet	Issue	Date	Description
300429	1 of 1	-	2006-05-16	KIMD type, single amp, connector or cable
300430	1 of 1	-	2006-05-16	KIMD type, double amp, connector or cable
300431	1 of 1	-	2006-05-16	KOSD type, single amp, connector or cable
300432	1 of 1	-	2006-05-16	KOSD type, double amp, connector or cable
500548	1 of 1	1	00-11-13	PC-board TRANSAMP
500653	1 of 1	-	00-03-08	PC assembly C-side TRANSAMP
500564	1 of 1	-	00-03-08	PC assembly S-side TRANSAMP
600785	1 of 1	-	2006-07-17	ATEX label, KIMD-AX-DAX and KOSD-AX-DAX
850073	1 of 1	2	06-05-24	Parts list for ATEX Transamp