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

Certificate No.:	IECEx BVS 13.0109X issue No.:2	Certificate history: Issue No. 2 (2015-6-1) Issue No. 1 (2014-7-9) Issue No. 0 (2014-1-8)
Status:	Current	
Date of Issue:	2015-06-01 Page 1 of 4	

Applicant: **Hottinger Baldwin Messtechnik GmbH**
Im Tiefen See 45
64293 Darmstadt
Germany

Electrical Apparatus: **Load cell, Type *** *-*-*-*-******-**-*-* (see below)**
Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i", Equipment protection by type of protection "n", Equipment dust ignition protection by enclosure 't'**

Marking:
Type *** I-*-*-*-V*****-**-*-* or type *** I-*-*-*-S*****-**-*-*
Ex ia I Ma or Ex ia I Mb
or
Ex ia IIC T6/T4 Ga or Ex ia IIC T6/T4 Gb
Ex ia IIIC T125°C Da or Ex ia IIIC T125°C Db
IP67
Type *** I-*-*-*-P*****-**-*-* or type *** I-*-*-*-P*****-**-*-*
(intrinsically safe with connector)
Ex ia IIC T6/T4 Ga or Ex ia IIC T6/T4 Gb
Type *** N-*-P-*-V*****-**-*-* or type *** N-*-P-*-S*****-**-*-*
Ex nA IIC T6/T4 Gc
Ex tc IIIC T125°C Dc
IP67
Type *** N-*-H-*-V*****-**-*-* or type *** N-*-H-*-S*****-**-*-*
Ex nA IIC T6/T4 Gc
Ex tb IIIC T12°C Db
IP67

Approved for issue on behalf of the IECEx Certification Body: S. Wiegand

Position: Deputy Head of Certification Body

Signature:
(for printed version)

Date: 2015-06-01

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA EXAM GmbH

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Manufacturer: **Hottinger Baldwin Messtechnik GmbH**
Im Tiefen See 45
64293 Darmstadt
Germany

Additional Manufacturing location (s):

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 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-15 : 2010 Edition: 4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*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:
DE/BVS/ExTR14.0003/02

Quality Assessment Report:

DE/BVS/QAR12.0010/01

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Schedule

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

Description

See Annex

Parameters

Voltage	U_i	DC	30	V
Current	I_i		500	mA
Power	P_i		4	W
Effective internal capacitance				negligible
Type *** I-*-*-*-V*****-**-*-* or				
type *** I-*-*-*-S*****-**-*-* (with connected cable)			162	pF/m
Effective internal inductance				negligible
Type *** I-*-*-*-V*****-**-*-* or				
type *** I-*-*-*-S*****-**-*-* (with connected cable)			0.85	µH/m
Ambient temperature range	T_a			
Variants marked with EPL Da, Db, Dc, Ma or Mb			up to +70 °C	
Variants marked with temperature class T4			up to +70 °C	
Variants marked with temperature class T6			up to +30 °C	
Variants type *** *-*-*-*-****10-**-*-*: min. ambient temperature			-10 °C	
Variants type *** *-*-*-*-****25-**-*-*: min. ambient temperature			-25 °C	
Variants type *** *-*-*-*-****30-**-*-*: min. ambient temperature			-30 °C	
Type C16 *-*-*-*-****50-**-*-*: min. ambient temperature			-50 °C	
Max. surface temperature for EPL Da, EPL Db and EPL Dc			125 °C	
Degree of protection			IP67	

CONDITIONS OF CERTIFICATION: YES as shown below:

1 If the load cells are installed in areas requiring EPL Ga gas group IIC, EPL Da or EPL Db equipment (depending on the variant), the cables (permanently connected or fastened at the connector) have to be installed in a way that electrostatic charging/discharging will be precluded.
2 Load cells type *** *-A-*-*-******-**-*-* (aluminium enclosure) may only be installed in areas requiring EPL Ga or EPL Da equipment, if they are mounted in a way that impact is precluded.
3 For load cells type *** *-*-*-S-******-**-*-* and type *** *-*-*-*-******-0V1-*-* equipotential bonding along the external circuits has to be guaranteed.
4 Load cells type *** *-*-*-*-******-**-C-* may only be installed in areas requiring EPL Gb, EPL Gc, EPL Db, EPL Dc, EPL Ma or EPL Mb (depending on the variant); installation in areas requiring EPL Ga or EPL Da equipment is only permitted if the load cells are protected against electrostatic charging/discharging.
5 The enclosure of load cells type *** *-*-*-*-******-**-*-E has to be earthed.
6 The load cells can be used in following ambient temperature conditions (see instructions):
Variants marked with temperature class T4: max. ambient temperature +70 °C
Variants marked with temperature class T6: max. ambient temperature +30 °C
Variants marked with EPL Da, Db , Ma or Mb: max. ambient temperature +70 °C
Variants type *** *-*-*-*-****10-**-*-*: min. ambient temperature -10 °C
Variants type *** *-*-*-*-****25-**-*-*: min. ambient temperature -25 °C
Variants type *** *-*-*-*-****30-**-*-*: min. ambient temperature -30 °C
Type C16 *-*-*-*-****50-**-*-*: min. ambient temperature -50 °C
7 For load cells type *** N-*-*-*-V*****-**-*-* or type *** N-*-*-*-S*****-**-*-* applies:
The end of the permanently connected cable should either be connected outside the hazardous area or inside a suitable (e.g. Ex e, Ex t, Ex n) enclosure.

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

Slight modifications have been carried out.
The actual standard version IEC60079-31:2013 has been used.
A new type of load cell has been added: type PW10.
For type HLC a load cell for a new capacity (100 kg) has been added.

Annex: BVS_13_0109x_HottingerBaldwin_Annex_Issue2.pdf