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 04.0005 issue No.:1

Certificate history:
Issue No. 1 (2007-6-21)
Issue No. 0 (2004-2-13)

Status: **Current**

Date of Issue: **2007-06-21** Page 1 of 5

Applicant: **Micro Motion, Inc.**
Boulder, Co. 80301
United States of America

Electrical Apparatus: **Processor type Model 700C**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **Ex ib IIB/IIC T5**
Tamb -40 °C up to +60 °C

Approved for issue on behalf of the IECEx Certification Body: Dr. R. Jockers

Position: Head of Certification Body

Signature:
(for printed version)

Date:

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:

Micro Motion, Inc.
Boulder, Co. 80301
United States of America

Manufacturing location(s):

Micro Motion, Inc.
7070 Winchester Circle
Boulder, Co. 80301
United States of America

Micro Motion Inc.
Ave. Miguel de Cervantes 111
Complejo Industrial
Chihuahua
Chihuahua 31109
Mexico

Emerson Process Management Co., Ltd
1277 Xin Jin Qiao Rd
Jin Qiao Export Processing Zone
Pudong
Shanghai 201206
China

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 manufacture'rs 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 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

*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

IECEx ATR:
DE/BVS/04/2013

File Reference:
A 20020548

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Schedule

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

Description

The processor is used for the connection of sensors to transmitters.
The electrical components (terminals and a signal processing unit type 700 in accordance with IECEx BVS 04.0002U) are fastened in a metal housing.

Marking

The name of the manufacturer or his trademark
Type Model 700C
Ex ib IIB/IIC T5
Serial number
Certificate number
Tamb -40 °C up to +60°C

CONDITIONS OF CERTIFICATION: NO

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EQUIPMENT(continued):

Parameters

1 Input circuit (terminals 1 - 4)						
Voltage	Ui	DC	17.3	V		
Current	Ii		484	mA		
Power	Pi		2.1	W		
effective internal capacitance	Ci		2200	pF		
effective internal inductance	Li		30	µH		
2 Output (sensor) circuits						
2.1 Drive circuit (terminals 3 - 4)						
Voltage	Uo	DC	10.5	V		
Current	Io		2.45	A		
Power	Po		2.54	W		
Internal resistance	Ri		4.32	Ω		
external values for group				IIC	IIB	
max. external capacitance	Co			2.41	16.8	µF
max. external inductance	Lo			5.9	24	µH
max. external inductance/resistance ratio	Lo/Ro			5.5	22	µH/Ω

Formular for calculation of maximum external inductance see Annex

2.2 Pick-off circuits (terminals 5 - 8)						
Voltage	Uo	DC	17.3	V		
Current	Io		6.9	mA		
Power	Po		30	mW		
external values for group				IIC	IIB	
max. external capacitance	Co			0.353	2.06	µF
max. external inductance	Lo			0.742	2.97	H
max. external inductance/resistance ratio	Lo/Ro			1.19	4.75	mH/Ω
2.3 Temperature circuit (terminals 1, 2 and 9)						
Voltage	Uo	DC	17.3	V		
Current	Io		26	mA		
Power	Po		112	mW		
external values for group				IIC	IIB	
max. external capacitance	Co			0.353	2.06	µF
max. external inductance	Lo			52.6	210	mH
max. external inductance/resistance ratio	Lo/Ro			0.32	1.26	mH/Ω

3 Ambient temperature range Tamb -40 °C up to +60 °C

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

Issue 1

The manufacturing location Emerson Process Management Co., Ltd, Pudong Shanghai, People's Pepublic of China was added.

The manufacturer Micro Motion Inc., Boulder, United States of America changed the EXCB for quality supervision. Responsible is now DNV for all production sites.

Annexe: Formula.pdf