IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	**IECEx ITS 07.0014**	Page 1 of 5	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2007-07-04)
Date of Issue:	2022-05-16		

Applicant: **BEKA associates Limited**
Old Charlton Road
Hitchin
Herts
SG5 2DA
United Kingdom

Equipment: **BA201 Communications Isolator**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: IECEx ITS 07.0014
[Ex ia Ga] IIC
Tamb = -40 °C to +70 °C

Approved for issue on behalf of the IECEx Certification Body: **A M Smart**

Position: **Certification Officer**

Signature: (for printed version)

Date: (for printed version) **2022-05-16**

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 www.iecex.com or use of this QR Code.

Certificate issued by:

Intertek Testing & Certification Limited
ITS House, Cleeve Road
Leatherhead
Surrey, KT22 7SA
United Kingdom

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Date of issue: 2022-05-16 Issue No: 1

Manufacturer: **BEKA associates Limited**
Old Charlton Road
Hitchin
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SG5 2DA
United Kingdom

Manufacturing locations: **BEKA associates Limited**
Old Charlton Road
Hitchin
Herts
SG5 2DA
United Kingdom

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with 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 Reports:

GB/ITS/ExTR07.0018/00 GB/ITS/ExTR07.0018/01

Quality Assessment Report:

GB/ITS/QAR06.0002/09

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

BA201 Communications Isolator is a dedicated interface for connecting intrinsically safe BEKA Serial Text Displays to a non-hazardous area computer system.
The BA201 converts a non-hazardous area RS232 or RS485 serial communication signal into a 2 or 3-wire galvanically isolated intrinsically safe voltage and current limited proprietary standard. Four green LEDs on the top of the isolator indicate status when the device is powered and when the RS232 port is being used.

The BA201 comprises a printed circuit board housed within a DIN rail mounted plastic enclosure which provides a degree of protection IP20.

SPECIFIC CONDITIONS OF USE: NO

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Equipment (continued):

Electrical parameters are :

U_m = 250 V

Terminal TB1- 1 and 3
U_o = 21.2 V
I_o = 96 mA
P_o = 0.51W
C_i = 0
L_i = 0
C_o = 0.183 µF
L_o = 3.2 mH

Terminal TB1- 2 and 3
U_o = 13.7 V
I_o = 84 mA
P_o = 0.45 W
C_i = 11 nF
L_i = 0
C_o = 0.78 µF
L_o = 4.1 mH

Terminal TB1- 1, 2 and 3
U_o = 21.2 V
I_o = 159 mA
P_o = 0.85 W
C_i = 11 nF
L_i = 0
C_o = 0.172 µF
L_o = 1 mH

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Alternate Opto-Isolator Module.
- Update to the latest version of standards.

Annex:

IECEx ITS 07.0014 Annex 1_1.pdf

Annex to IECEx Certificate of Conformity

Certificate No:	IECEx ITS 07.0014	Issue No. 1
Annex No. 1		

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
*IECEx ATEX and UKCA Certification Information for BA201 Communications Isolator	CI201-01	2	Aug 2021
*Instruction sheet for BA201 Communications Isolator Section 3 only.	BA201	6	-

*Note: An * is included before the title of documents that are new or revised.*

IECEx Certified Components on Which Conformance Depends					
Item	Description	Manufacturer	Type	Certificate No. / Standards*	Coding / Ratings
1	Opto-Isolator	Bedford Opto-Isolators Ltd.	BOT OPI 1000	IECEx BAS 06.0021U *IEC 60079-0:2011 IEC 60079-11:2011 BAS01ATEX1278U *EN 60079-0:2012+A11:2013 EN 60079-11:2012	Ex ia IIC Ga (-40 ≤ Ta ≤ +85°C) Ex ia III C Da (-40 ≤ Ta ≤ +85°C)

* "No applicable Technical Differences" or "Technical Differences evaluated and found satisfactory – for detail see ExTR"

Required Manufacturer Routine Testing		
Test	Title/Description of Test	Standard and Clause
1	The infallible transformer shall be subjected to 2500V rms between the primary and secondary windings for a minimum of 60 seconds. Alternatively, the test may be carried out at 1.2 times the test voltage, but with a reduced duration of at least 1 second. During these tests there shall be no breakdown of the insulation between the windings.	IEC 60079-11, Clause 8.2.5