

UK-TYPE EXAMINATION CERTIFICATE

Product or Protective Systems Intended for Use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

- UK-Type Examination Certificate Number:** ITS21UKEX0086 Issue 0
- Product:** BA201
- Manufacturer:** BEKA associates Limited.
- Address:** Old Charlton Road, Hitchin, Herts, SG5 2DA, United Kingdom
- This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- Intertek Testing and Certification Limited, Approved Body number 0359, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), 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 Schedule 1 of the Regulations.
The examination and test results are recorded in the confidential report 104797220LHD-001.
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018 & EN 60079-11:2012 except in respect of those requirements referred to within item 14 of the Schedule.
- If the sign “X” is placed after the certificate number, it indicates that the product is subject to the special conditions of use specified in the Schedule to this certificate.
- This UK-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- The marking of the product shall include the following:



II (1) G [Ex ia Ga] IIC
-40°C ≤ Ta ≤ +70°C

Certification Officer: _____



A M Smart

Date: 16-May-2022

SCHEDULE:

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11. Description of Product or Protective System

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.

Electrical parameters are :

Input Voltage:											
Um	=	250	V								
Terminal TB1- 1 and 3				Terminal TB1- 2 and 3				Terminal TB1- 1, 2 and 3			
U _o	=	21.2	V	U _o	=	13.7	V	U _o	=	21.2	V
I _o	=	96	mA	I _o	=	84	mA	I _o	=	159	mA
P _o	=	0.51	W	P _o	=	0.45	W	P _o	=	0.85	W
C _i	=	0		C _i	=	11	nF	C _i	=	11	nF
L _i	=	0		L _i	=	0		L _i	=	0	
C _o	=	0.183	μF	C _o	=	0.78	μF	C _o	=	0.172	μF
L _o	=	3.2	mH	L _o	=	4.1	mH	L _o	=	1	mH

12. Report Number

Intertek Report: 104797220LHD-001 Issue: 0 Dated: 11th May 2022.

13. Special Conditions of Certification

(a). Special Conditions of Use

- None.

(b). Conditions of Manufacture

- 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.

14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report: 104797220LHD-001 Issue: 0 Dated: 11th May 2022.

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15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
IECEX ATEX and UKCA Certification Information for BA201 Communications Isolator	CI201-01	2	Aug 2021
UKCA certification information for BA201 Communications Isolator	CI201-02-UKCA	1	10.11.2021
Instruction sheet for BA201 Communications Isolator Section 3 only.	BA201	6	-



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