



Intertek Industrial

1. EC-TYPE EXAMINATION CERTIFICATE
2. **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**
3. EC-Type Examination Certificate Number: **ITS07ATEX25602**
4. Equipment or Protective System: **BA201 COMMUNICATIONS ISOLATOR**
5. Manufacturer: **BEKA ASSOCIATES LIMITED**
6. Address: **Hitchin, Herts, SG5 2DA**
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.
8. The Intertek Testing and Certification Limited, notified body number 0359 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 Number: Intertek Report Ref 07024474, dated July 2007.
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2006 and EN 60079-11:2007
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, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. 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:-



II (1) G, [Ex ia] IIC (Tamb = -40°C to 70°C)

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

Sheet 1 of 3

A M Smart
Deputy Certification Officer
7 April 2008

This certificate, originally dated 27 July 2007, has been re-issued to correct ATEX coding. ISSUE 2

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13. **Schedule**
14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS07ATEX25602
15. Description of Equipment 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 - the device is powered and when the RS232 port is being used.

The BA201 comprises a printed circuit board housed within a plastic enclosure, which provides a Degree of Protection of at least IP20.

Electrical parameters are:

$$U_m = 250 \text{ V}$$

Terminal TB1- 1 and 3

$$\begin{aligned} U_o &= 21.2 \text{ V} \\ I_o &= 96 \text{ mA} \\ P_o &= 0.51 \text{ W} \\ C_i &= 0 \\ L_i &= 0 \\ C_o &= 0.183 \text{ } \mu\text{F} \\ L_o &= 3.2 \text{ mH} \end{aligned}$$

Terminal TB1- 2 and 3

$$\begin{aligned} U_o &= 13.7 \text{ V} \\ I_o &= 84 \text{ mA} \\ P_o &= 0.45 \text{ W} \\ C_i &= 11 \text{ nF} \\ L_i &= 0 \\ C_o &= 0.78 \text{ } \mu\text{F} \\ L_o &= 4.1 \text{ mH} \end{aligned}$$

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13. Schedule
14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS07ATEX25602
Terminal TB1- 1, 2 and 3

$U_o = 21.2 \text{ V}$
 $I_o = 159 \text{ mA}$
 $P_o = 0.85 \text{ W}$
 $C_i = 11 \text{ nF}$
 $L_i = 0$
 $C_o = 0.172 \text{ }\mu\text{F}$
 $L_o = 1 \text{ mH}$

16. Report No. Intertek Report Ref 07024474, dated July 2007

17. SPECIAL CONDITIONS FOR SAFE USE

None

18. Essential Health and Safety Requirements

The essential health and safety requirements not covered by reference to the standards identified in Section 9 above have been addressed in Intertek Report Reference 07024474

19. **DRAWINGS**

Number	Issue	Date	Description
CI201-01 sheets 1 to 9	1	Feb 07	BA201 Certification Information
CI201-02	1	13.02.07	BA201 Certification Label

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