

TYPE EXAMINATION CERTIFICATE

Product or Protective Systems Intended for Use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended)

1. **Type Examination Certificate Number:** ITS22UKEX0609X Issue 0
2. **Product:** BA307SE & BA327SE Panel Mount Indicators
3. **Manufacturer:** BEKA associates Ltd.
4. **Address:** Old Charlton Road, Hitchin, Herts, SG5 2DA, UK
5. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
6. Intertek Testing and Certification Limited, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of the products intended for use in potentially explosive atmospheres given in Schedule 1 of UKSI 2016:1107 (as amended).

The examination and test results are recorded in the confidential report 104721971LHD-001 dated 28th April 2023.

7. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018, EN IEC 60079-7:2015+A1:2018, EN 60079-11:2012 & EN 60079-31:2014 except in respect of those requirements referred to within item 14 of the Schedule.
8. 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.
9. This Type Examination Certificate relates only to the design of the specified product and not to specific items subsequently manufactured.
10. The marking of the product shall include the following:



II 3 G Ex ec ic IIC T5 Gc

II 3 D Ex tc ic IIIC T80°C Dc

-40°C ≤ Tamb ≤ +70°C

Certification Officer:  _____ **Date:** 2nd May 2023
M Newman

SCHEDULE:

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11. Description of Equipment or Protective System

The BA307SE & BA327SE 4 and 5 digit panel mounting indicators are loop powered instruments designed to display a measured variable in meaningful engineering units within the hazardous area. The zero and span of the display are independently adjustable allowing the instruments to be calibrated to display a variable represented by the 4/20 mA signal.

A root extractor and an adjustable sixteen segment lineariser enable the indicator to display flow and non-linear variables such as tank level in engineering units.

The 4 and 5 Digit Panel Mounting Indicators may optionally incorporate an Alarm board and may additionally be fitted with an optional Backlight board.

The 4 and 5 Digit Panel Mounting Indicators comprise a main board, a display module, an optional Alarm Board and an optional Backlight board, all housed within the certified BEKA 105 x 60 robust panel, stainless steel enclosure, certified under ATEX certificate number ITS14ATEX17967U.

12. Report Number

Intertek Report: 104721971LHD-001 dated 28th April 2023.

13. Conditions of Certification

(a). Special Conditions of Use

- For Ex ec, the instrument must be installed within an Ex e or Ex pzc panel enclosure.
- For Ex tc, the instrument must be installed in Ex tc panel enclosure.
- For all installations, the instrument must be powered from a limited energy circuit and the vents located on the back of the instrument must not be obstructed.
- For instruments designated for type of protection pressurized equipment the supply circuit shall be rated for a prospective short circuit current of not more than 10kA.
- The equipment must be installed in a panel that maintains at least one of the following types of protection:
 - Ex e IIC Gc $-40^{\circ}\text{C} \leq \text{Ta} \leq +70^{\circ}\text{C}$.
 - Ex pzc IIC Gc $-40^{\circ}\text{C} \leq \text{Ta} \leq +70^{\circ}\text{C}$.
 - Ex tc IIIC Dc $-40^{\circ}\text{C} \leq \text{Ta} \leq +70^{\circ}\text{C}$ with an enclosure meeting the requirements of either: IP5X for Groups IIIB & IIIA or IP6X for Group IIIC applications.

(b). Conditions of Manufacture

- The voltages applied to infallible transformers shall conform to the values given in Table 10 as per the requirements of EN 60079-11, Clause 11.2, Routine tests for infallible transformers. The transformers must either have 1500V applied between primary and secondary windings for 60 seconds or tested at 1.2x the test voltage for 1 second.

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14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) affected by this variation have been identified and assessed in Intertek Report: 104721971LHD-001 dated 28th April 2023.

15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
ATEX, IECEx & UKCA Certification Information for BA307SE & BA327SE Digital Indicators	CI300-78	1	27.03.2023
BA307SE & BA327SE Ex ec & Ex tc loop-powered panel mounting indicators – User Manual Pages 4 to 7 only.	-	1	28.04.2023

