

Type Examination Certificate

In accordance with EC NOTICE TO STAKEHOLDERS
WITHDRAWAL OF THE UNITED KINGDOM AND EU RULES IN
THE FIELD OF INDUSTRIAL PRODUCTS dated 13 March 2020.



Valued Quality. Delivered.

This issued certificate - Certificate No: ITS16ATEX48409X

1. TYPE EXAMINATION CERTIFICATE

2. Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU

3. Type Examination Certificate Number: ITS16ATEX48409X Issue 3

4. Product: 'E' and 'G' series field and panel mount externally powered rate
totalizers BA317NE, BA337NE, BA367NE, BA377NE, BA314NG,
BA334NG, BA364NG, BA374NG and BA384NG

5. Manufacturer: BEKA associates Limited

6. Address: Old Charlton Road
Hitchin, Herts SG5 2DA
United Kingdom

Name: Fabrizio Massei

Position: ATEX Certification Officer

Signature:

Date:

17 December 2020

7. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8. 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 Annex II to the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential Intertek Report Ref 102170728LHD-001B Issue 1 dated March 2016, Intertek Report Ref 102578398LHD-001B Issue 1 dated August 2016 and Intertek Report Ref 102738036LHD-001B dated November 2016.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2012, EN 60079-11:2012, EN 60079-15:2010 and EN 60079-31:2014 except in respect of those requirements referred to at item 16 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 Type Examination Certificate relates only to the design of the specified product and not to specific items subsequently manufactured.

12. The marking of the product shall include the following:-



II 3G Ex nA ic IIC T5 Gc
II 3D Ex ic tc IIIC T80°C Dc
-40°C ≤ Ta ≤ +60°C

Intertek Testing & Certification Limited
Intertek House, Cleeve Road, Leatherhead, Surrey, KT22 7SB
Tel: +44 (0)1372 370900 Fax: +44 (0)1372 370977
www.intertek.com

Registered No 3272281 Registered Office: Academy Place, 1-9 Brook Street, Brentwood, Essex, CM14 5NQ.

A T Austin
Certification Officer
25th November 2016

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SCHEDULE

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13. Description of Equipment or Protective System

The BEKA 'E' and 'G' series externally powered rate totalizers, models BA317NE, BA337NE, BA367NE, BA377NE, BA314NG, BA334NG, BA364NG, BA374NG and BA384NG are indicators displaying rate value and/or total value in various engineering units. They are controlled and configured via the four push-buttons located in front panel which are accessible to the user.

Models BA317NE, BA337NE, BA367NE, BA377NE are panel mounted while models BA314NG, BA334NG, BA364NG, BA374NG and BA384NG are field mounted.

Equipment in the simplest configuration comprises terminals for single channel input and external reset input. Factory fitted accessories include an display backlight, dual alarms output, an isolated 4-20mA output and single alarm / single pulse output. Equipment comprises connectors for connection to external circuits. All input and output connections must be supplied from limited energy supply meeting input/output parameters of external connections.

The panel mounted models BA317NE, BA337NE, BA367NE, BA377NE are housed within stainless steel (bezel size 105mm x 60mm) enclosure. Stainless steel enclosure is Ex component certified under IECEx ITS14.0007U and allows equipment to be installed also in panels for use in explosive dust atmospheres. The front of the stainless steel enclosure complies with requirements for 'Ex e', 'Ex nA', 'Ex p' and 'Ex t' type of protection providing adequate mechanical strength and minimum degree of protection by enclosure of IP66.

The field mounted models BA314NG, BA334NG, BA364NG, BA374NG and BA384NG are housed within small field Ex approved non-metallic enclosure certified under IECEx certificate no. IECEx ITS14.0063U. The enclosure provides minimum degree of protection by enclosures of IP66.

The 'Ex ic' in codes refers to instrument push button contacts which are non-incendive.

Equipment comprises several terminals for connection to external circuits:

The power supply terminals 1 and 2 have following parameters:

$U_i = 30V$
 $I_i = 100mA$

The Reset terminals RS1 and RS2 have the following parameters:

$U_i = 30V$
 $U_o = 3.8V$ $I_o = 1mA$

The input terminals 4, 5 and 6 have the following parameters:

$U_i = 30V$
 $U_o = 1.1V$ $I_o = 0.5mA$

The input terminals 3, 4, 5 and 6 have the following parameters:

$U_i = 15V$
 $U_o = 10.5V$ $I_o = 9.2mA$

Optional Alarm output terminals A1, A2 and A3, A4 have the following parameters:

$U_i = 30V$ $U_o = 0$
 $I_i = 200mA$ $I_o = 0$

Optional Pulse output terminals P1, P2 have the following parameters:

$U_i = 30V$ $U_o = 0$
 $I_i = 100mA$ $I_o = 0$

Optional 4-20mA output terminals C1, C2, C3 and C4 have the following parameters:

$U_i = 30V$
 $U_o = 0$ $I_o = 0$

EU-Type Examination Certificate



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EU-TYPE EXAMINATION CERTIFICATE NUMBER ITS16ATEX48409X Issue 3

14. Report Number

Intertek Report Ref. 102170728LHD-001B Issue 1 dated March 2016.
Intertek Report Ref. 102578398LHD-001B Issue 1 dated August 2016.
Intertek Report Ref. 102738036LHD-001B Issue 1 dated November 2016.

15. Conditions of Certification

- (a). Specific Conditions of Safe Use
- Models BA317NE, BA337NE, BA367NE and BA377NE shall be used and mounted such that the instrument terminals are protected by at least IP54 enclosure certified to EN 60079-0 or EN 60079-15 as appropriate.
 - The equipment terminals must be supplied from limited energy circuits. It is not necessary to power the instrument from an intrinsically safe interface, such as a certified shunt diode barrier or a galvanic isolator, to comply with this requirement.
 - Provision is made for field mounted equipment for fitting cable entry devices suitable for intended use, location and protection concept cable glands maintaining the ingress of protection of the enclosure.
- (b). Conditions of Manufacture - Routine Tests
- None.

16. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report Ref. 102578398LHD-001B Issue 1 dated August 2016.

17. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
IECEx and ATEX Ex ia Certification Information for 'E' series externally powered rate totalisers BA317E, BA318E, BA337E, BA338E, BA367E, BA368E, BA377E, BA378E and BA388E (40 sheets)	CI330-41	1	Feb 2016
ATEX & IECEx Ex nA & Ex tc Certification Information for 'E' series externally powered rate totalisers BA317NE, BA337NE, BA367NE & BA377NE (4 sheets)	CI330-42	1	March 2016

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18. Details of Certificate changes

Modifications to the product covered under **Issue 2**:

- Addition of field mounted version of externally powered rate totalisers denoted by new model numbers: BA314NG, BA334NG, BA364NG, BA374NG and BA384NG
- Update to the drawings to reflect above changes

Title:	Drawing No.:	Rev. Level:	Date:
IECEx and ATEX Ex ia Certification Information for 'E' series externally powered rate totalisers BA317E, BA318E, BA337E, BA338E, BA367E, BA368E, BA377E, BA378E and BA388E .	CI330-41	2	July 2016
ATEX & IECEx Ex nA & Ex tc Certification Information for 'E' series externally powered rate totalisers BA317NE, BA337NE, BA367NE & BA377NE.	CI330-42	2	July 2016

Modifications to the product covered under **Issue 3**:

- Addition of optional components not listed previously in the documentation. Components do not invalidate protection concept of the equipment
- Update to the manufacturer documentation to reflect above change

Title:	Drawing No.:	Rev. Level:	Date:
IECEx and ATEX Ex ia Certification Information for 'E' series externally powered rate totalisers BA317E, BA318E, BA337E, BA338E, BA367E, BA368E, BA377E, BA378E and BA388E .	CI330-41	3	Sept 2016
ATEX & IECEx Ex nA & Ex tc Certification Information for 'E' series externally powered rate totalisers BA317NE, BA337NE, BA367NE & BA377NE.	CI330-42	3	Sept 2016

This Certificate is the property of Intertek Testing and Certification Ltd and is subject to Intertek Testing and Certification's Conditions for Granting Certification

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