IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx ITS 16.0005X

Issue No: 2

Certificate history:
Issue No. 2 (2016-11-25)
Issue No. 1 (2016-08-08)
Issue No. 0 (2016-03-15)

Status: **Current**

Date of Issue: **2016-11-25**

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

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

Optional accessory:

Type of Protection: **Type of protection 'n' non-sparking, dust ignition protection by enclosure 't', intrinsic safety 'i'**

Marking:

IECEx ITS 16.0005X

BEKA associates

Ex nA ic IIC T5 Gc

Ex ic tc III C T80°C Dc IP66

-40°C ≤ Ta ≤ +60°C

Approved for issue on behalf of the IECEx Certification Body: A T Austin

Position: Certification Officer

Signature:
(for printed version)

Date: 2016-11-25

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 the Official IECEx Website.

Certificate issued by:

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

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

Additional Manufacturing location(s):

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 electrical apparatus 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical 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 Report:

GB/ITS/ExTR16.0006/00 GB/ITS/ExTR16.0006/01 GB/ITS/ExTR16.0006/02

Quality Assessment Report:

GB/ITS/QAR06.0002/04

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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 enclosures provides minimum degree of protection by enclosures of IP66.

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

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 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 IEC 60079-0 or IEC 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.

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EQUIPMENT (continued):

Equipment provides several terminals for connection to external circuits:

The power supply input 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

I_I = 200mA

U_O = 0

I_O = 0

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

U_I = 30V

I_I = 100mA

U_O = 0

I_O = 0

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

U_I = 30V

U_O = 0

I_O = 0

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1 (GB/ITS/ExTR16.0006/01):

- 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.

Issue 2 (GB/ITS/ExTR16.0006/02):

- Addition of optional components not listed previously in the documentation.
- Update to the drawings to reflect above changes.