



# BEKA associates BA304G-SS Loop-Powered Digital Indicators Installation Guide

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## *BEKA associates BA304G-SS Loop-Powered Digital Indicators Installation Guide*

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## Description

Field and panel mounting intrinsically safe, 4/20mA loop-powered digital indicators which display the input current in engineering units.

Model	Mounting	Digits	Enclosure material	Panel cut-out mm
BA304G	Field mounting	4 x 34mm high	GRP	N/A
BA304G-SS			316 SS	
BA324G		5 x 29mm high + bargraph	GRP	
BA324G-SS			316 SS	
BA307E	Panel mounting 96 x 48mm	4 x 15mm high	Noryl	90.0 +0.5/-0 x 43.5 +0.5/-0
BA327E		5 x 12.7mm high + bargraph		
BA308E	Panel mounting 144 x 72mm	4 x 34mm high		136 +0.5/-0 x 66.2 +0.5/-0
BA328E		5 x 29mm high + bargraph		
BA307E-SS	Panel mounting 105 x 60mm	4 x 15mm high	316 SS	90.0 +0.5/-0 x 43.5 +0.5/-0
BA327E-SS		5 x 12.7mm high + bargraph		

**Intrinsic safety** IECEx, ATEX and UKCA gas and dust certification. Other approvals, such as cFM and cETL are available, please refer to full instruction manuals for details.

**Code:**

II 1 G Ex ia IIC T5 Ga  
 II 2 D Ex ia IIIC T80°C Db IP66 field mounting  
 Ex ia IIIC T80°C Db IP20 panel mounting  
 $-40^{\circ}\text{C} \leq T_a \leq +70^{\circ}\text{C}$

**Parameters:**

Circuit	Input parameters			Output parameters
	Ui	Ii	Pi	
4/20mA input with or without loop powered backlight	30V	200mA	0.84W	Comply with requirements for Simple Apparatus
Optional alarms				
Optional backlight separately powered				

### Special conditions for safe use – see certificates

BA304G BA324G	When installed in Zone 0, installation shall be such that an ignition due to impact between aluminium label and iron/steel is excluded.
BA307E BA308E BA327E BA328E	When used in a Group IIIC conductive dust environments instrument terminals shall have at least IP6X protection. To avoid an electrostatic charge instrument enclosure should only be cleaned with a damp cloth.
BA307E-SS BA327E-SS	When used in a Group IIIC conductive dust environments instrument terminals shall have at least IP6X protection. When installed in an Ex ta, tb px, py, pz or e enclosure, the indicator will not invalidate the enclosure certification, but the indicator must be powered by a suitably rated Zener barrier or galvanic isolator.

### Repair

No attempt should be made to repair a faulty indicator, it should be returned to BEKA associates or to your local agent.

### Disposal

Indicators should be correctly disposed of, not in household rubbish.

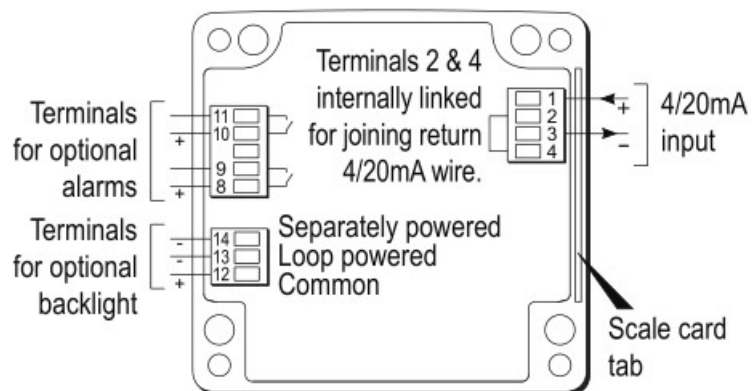
Essential Health & Safety Requirements  
for loop powered 4/20mA indicators  
BA304G, BA304G-SS, BA324G,  
BA324G-SS, BA307E, BA307E-SS, BA327E,  
BA327E-SS, BA308E & BA328E



Issue 1  
28th February 2023

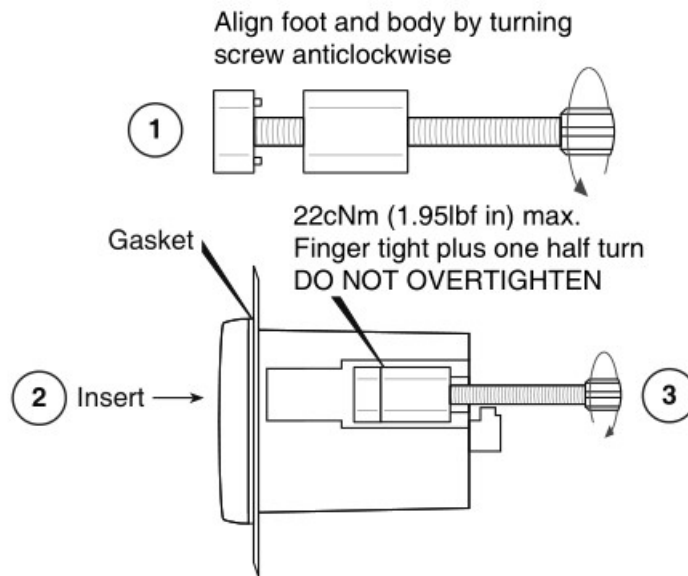
**BEKA associates Ltd.** Old Charlton Rd, Hitchin, Hertfordshire,  
SG5 2DA, UK Tel: +44(0)1462 438301  
e-mail: [sales@beka.co.uk](mailto:sales@beka.co.uk)  
web: [www.beka.co.uk](http://www.beka.co.uk)

**Installation & connections: Field mounting models BA304G, BA304G-SS, BA324G, BA324G-SS**

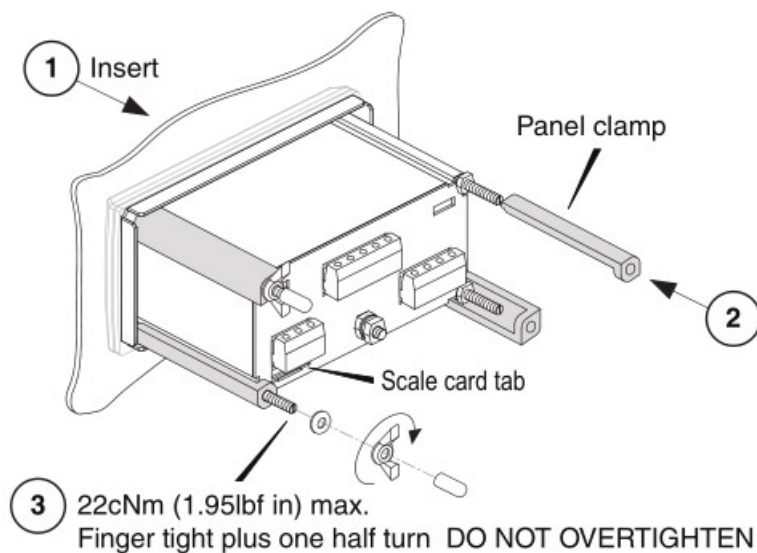


Back-box has four M6 clearance holes for surface mounting and two threaded M20 x 1.5 holes for cable entries.

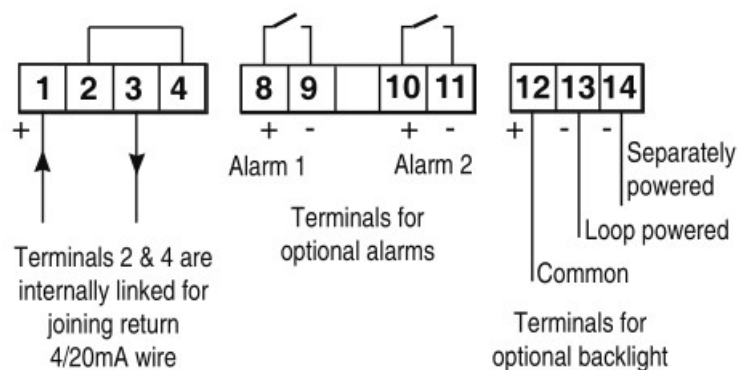
**Installation: Panel mounting models BA307E, BA327E, BA308E & BA328E**



### Installation: Panel mounting models BA307E-SS & BA327E-SS



### Connections: Panel mounting models BA307E, BA327E, BA308E, BA328E, BA307E-SS and BA327E-SS



### Combined EU Declaration of Conformity

**Description of Electrical Apparatus**

BA304G, BA304G-SS 4 digit; BA324G, BA324G-SS 5 digit field mounting  
(Intrinsically safe 4/20mA loop powered indicators)

BA307E, BA307E-SS, BA308E 4 digit; BA327E, BA327E-SS, BA328E  
5 digit panel mounting (-SS models have a stainless steel enclosure)

**Manufactured by**

BEKA associates Ltd, Old Charlton Road, Hitchin, Herts. UK. SG5 2DA

**Council Directives this equipment complies with:****2014/34/EU (ATEX Directive)**

Relating to equipment and protective systems intended  
for use in potentially explosive atmospheres.

**Provisions of the Directive fulfilled by the equipment:**

Group II Category 1G Ex ia IIC T5 Ga Ta -40°C to +70°C

Group II Category 2D Ex ia IIIC T80°C Db

(IP66 field IP20 panel) Ta -40°C to +70°C

**Notified Body for EU-Type Examination and production**

INTERTEK ITALIA SPA 2575 Via Guido Miglioli, 2/A  
20063 Cernusco sul Naviglio (MI) Italy.

**EU-Type Examination Certificates**

ITS11ATEX27253X Issue 2 12th August 2015.

ITS11ATEX27254X Issue 4 16th October 2017.

ITS14ATEX28077X issue 1 19th August 2014.

**Standards used:**

Compliant with EN IEC 60079-0:2018; EN 60079-11:2012 except in  
respect of those requirements referred to at item 16 of the Schedule.

**2014/30/EU (EMC Directive)**

Standards used:

EN 61326-1:2013

**2011/65/EU (RoHS Directive)** relating to hazardous  
substances in electronic and electrical equipment.

**2015/863/EU** additional substances added by amending  
Annex II to Directive 2011/65/EU as regards the list of  
restricted substances.

 **mark first affixed in 2011**

Authorised Signatory: Issue 1 19th October 2022

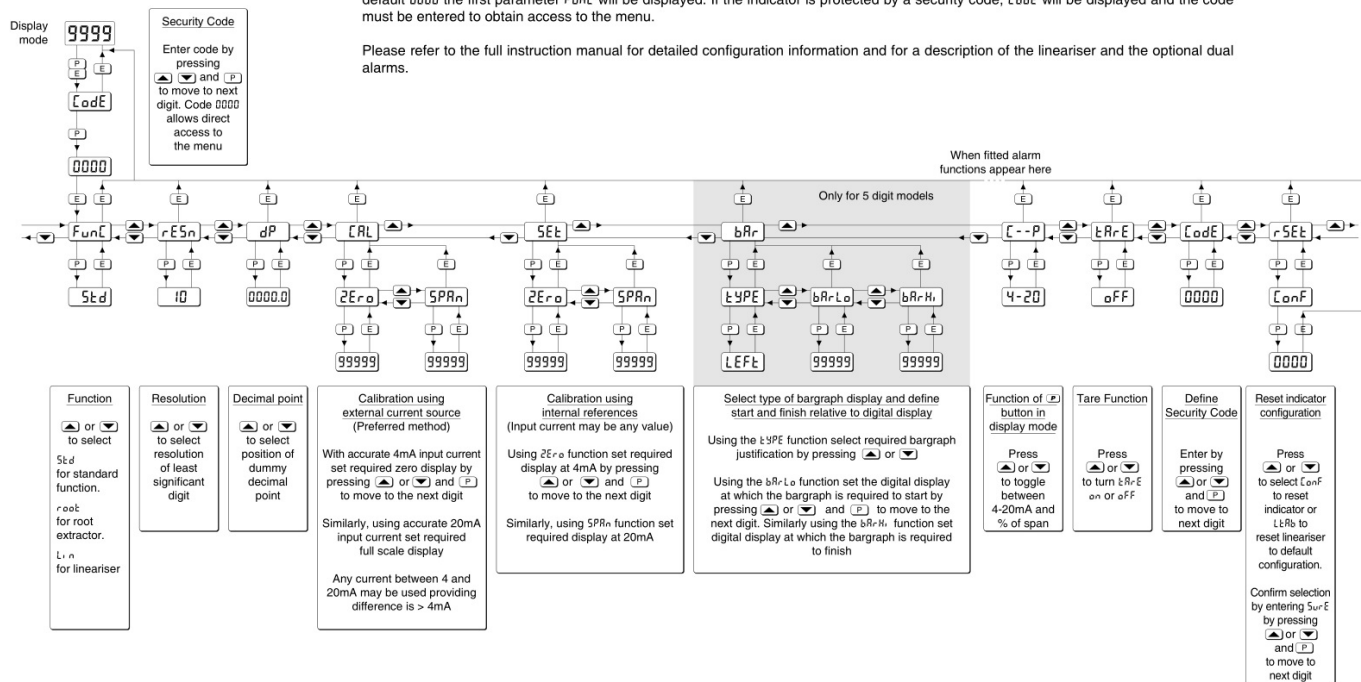
Olivier Lebreton CEng MIET  
Managing Director

**CONFIGURATION**



Access to the configuration menu is obtained by pressing the **[P]** and **[E]** buttons simultaneously. If the indicator security code is set to the default 0000 the first parameter **FunC** will be displayed. If the indicator is protected by a security code, **codE** will be displayed and the code must be entered to obtain access to the menu.

Please refer to the full instruction manual for detailed configuration information and for a description of the lineariser and the optional dual alarms.



Manuals, certificates and datasheets can be downloaded from <https://www.beka.co.uk/lpi01>

**BEKA associates**

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## Documents / Resources

	<p><a href="#">BEKA associates BA304G-SS Loop-Powered Digital Indicators</a> [pdf] Installation Guide BA304G-SS Loop-Powered Digital Indicators, BA304G-SS, Loop-Powered Digital Indicators, Digital Indicators, Indicators</p>
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## References

- [BEKA associates Ltd.](#)
- [EU Essential Health & Safety Requirements for loop powered 4/20mA indicators documentation](#)