

UK-TYPE EXAMINATION CERTIFICATE

Product or Protective Systems Intended for Use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

1. **UK-Type Examination Certificate Number:** ITS21UKEX0084X **Issue** 00
2. **Product:** BA414DF Fieldbus Indicator
3. **Manufacturer:** BEKA Associates Ltd
4. **Address:** Old Charlton Road, Hitchin, Herts, SG5 2DA, United Kingdom
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, Approved Body number 0359, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential report 06020618 dated August 2006, 080303580 dated July 2008, 09403172A dated October 2009 and G102060830 dated September 2015.
7. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2012+A11:2013 and EN 60079-11:2012 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 UK-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.
10. The marking of the product shall include the following:

II 1 G D Ex ia IIC T4 Ga -40°C ≤ Ta ≤ +70°C

Ex ia IIIC T100°C Da IP66 -20°C ≤ Ta ≤ +60°C



FISCO Field Device Ex ia IIC T4 Ga

II 3 G D Ex ic IIC T4 Gc -40°C ≤ Ta ≤ +70°C

Ex ic IIIC T100°C Dc IP66 -20°C ≤ Ta ≤ +60°C

Certification Officer:



M Newman

Date:

5th July 2021

SCHEDULE:

UK-Type Examination Certificate Number: ITS21UKEX0084X Issue 00

11. Description of Product or Protective System

BA414DF Fieldbus Indicator is a field mounting equipment designed to display one fieldbus process variable on a 5 digit LCD and 31 segment analogue bar graph.

The BA414DF comprises a field terminal board and a main display board, all housed within a stainless steel or a plastic enclosure. In each case the enclosure is fitted with a glass window.

The enclosure provides a degree of protection of at least IP20 for gas.

The BA414DF field terminal board and a main display board may alternatively be housed with a plastic enclosure fitted with a polycarbonate window or a toughened glass window.

The enclosure provides a degree of protection of IP66 for dust.

Intrinsic safety is assured by limitation of voltage, current and power, limitation of capacitance and inductance, and infallible segregation.

The maximum intrinsically safe input parameters are as follows:

$U_i = 17.5 \text{ V}$, $I_i = 380 \text{ mA}$ and $P_i = 5.32 \text{ W}$ (FISCO); or

$U_i = 22 \text{ V}$, $I_i = 250 \text{ mA}$ and $P_i = 1.2 \text{ W}$ (Non-FISCO); or

$U_i = 32 \text{ V}$, $I_i = 125 \text{ mA}$ and $P_i = 1 \text{ W}$ (For "ic" only)

The equivalent parameters are:

$C_i = 0$

$L_i = 8 \mu\text{H}$

$C_o = 165 \text{ nF}$

$L_o = 0.15 \text{ mH}$

BA414DF may alternatively be identified as a BA444DF Fieldbus Indicator, or a BA444DL Fieldbus Listener, or a BA424DF Fieldbus Set-Point Station, or a BA434DF. These alternative models are due to changes in the firmware.

12. Report Number

Intertek Report: 06020618 dated August 2006, 080303580 dated July 2008, 09403172A dated October 2009 and G102060830 dated September 2015.

13. Special Conditions of Certification

(a). Special Conditions of Use

- When installed in a Zone 0 potentially explosive atmosphere requiring EPL Ga apparatus, the instrument shall be installed such that even in the event of rare incidents, an ignition source due to impact or friction between the aluminium label and iron/steel is excluded.

(b). Conditions of Manufacture

- No Conditions of Manufacture

SCHEDULE:

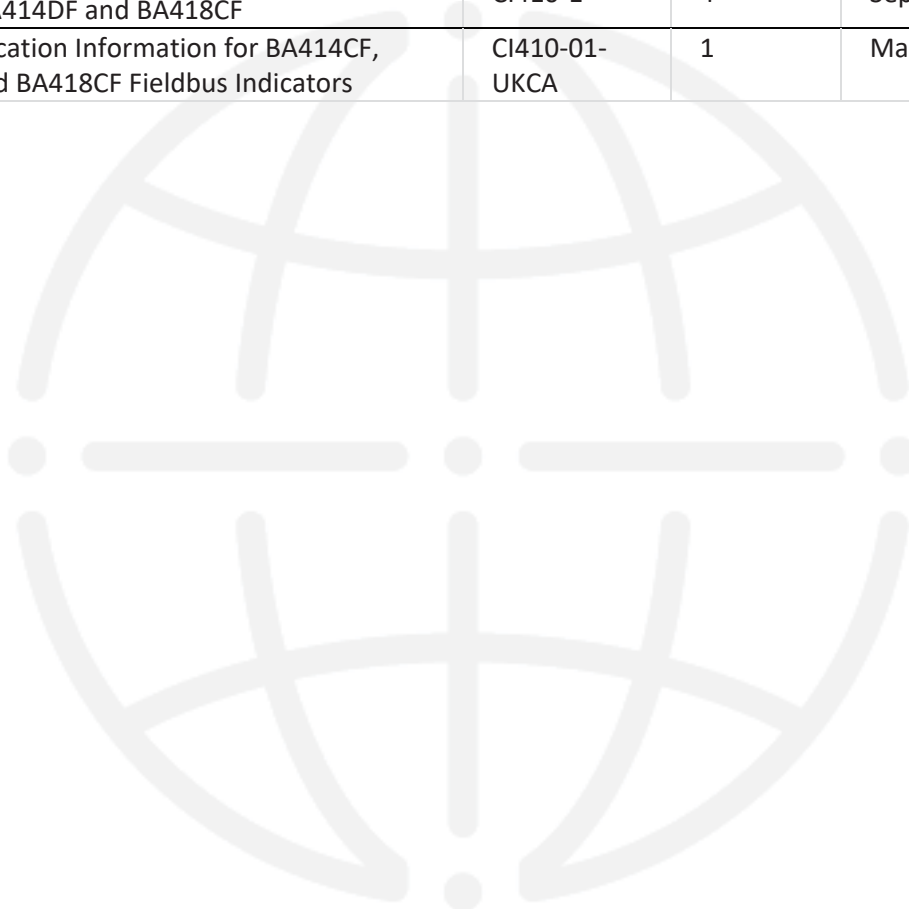
UK-Type Examination Certificate Number: ITS21UKEX0084X Issue 00

14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report: 104629389CHE-008 dated 25th May 2021.

15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
ATEX and IECEx Certification Information for BA414CF, BA414DF and BA418CF	CI410-1	4	September 2015
UKCA Certification Information for BA414CF, BA414DF and BA418CF Fieldbus Indicators	CI410-01-UKCA	1	May 21



This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. This Certificate is accredited under UKAS schedule 0010

Intertek Testing & Certification Limited, Cleeve Road, Leatherhead, Surrey, KT22 7SA
Registered No 3272281 Registered Office: Academy Place, 1-9 Brook Street, Brentwood, Essex, CM14 5NQ.