

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:** ITS21UKEX0085X **Issue 00**
2. **Product:** BA418CF 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 Ex ia IIC T4 Ga



FISCO Field Device Ex ia IIC T4 Ga

II 3 G Ex ic IIC T4 Gc

-40°C ≤ Ta ≤ +70°C

Certification Officer:



M Newman

Date:

5th July 2021

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.

SCHEDULE:

UK-Type Examination Certificate Number: ITS21UKEX0085X Issue 00

11. Description of Product or Protective System

BA418CF Fieldbus Indicator is a panel mounting equipment designed to display one fieldbus process variable on a 5 digit LCD and 31 segment analogue bar graph.

The BA418CF comprises a panel terminal board and a main display board, all housed within a metallic enclosure having a magnesium content less than 6% by weight. Part of the housing, bezel and keypads, or blanks is made of plastic. The display window is of polycarbonate.

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

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:

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

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

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

The equivalent parameters are:

$C_i = 0$

$L_i = 8\mu H$

$C_o = 165\text{ nF}$

$L_o = 0.15\text{ mH}$

The BA418CF may alternatively be identified as a BA448CF Fieldbus Indicator, or a BA448CL Fieldbus Listener, or a BA428CF Fieldbus Set-Point Station, or a BA438CF; these alternative models are due to changes in the firmware.

FISCO Field Device input parameters are as follows:

$U_i = 17.5\text{ V}$

$I_i = 380\text{ mA}$

$P_i = 5.32\text{ W}$

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 in the event of rare incidents, an ignition source due to impact or friction between the aluminium enclosure at the rear of the instrument mounting panel and iron/steel is excluded.

(b). Conditions of Manufacture

- No Conditions of Manufacture.

14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report: 104629389CHE-009 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

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