Intertek ETL SEMKO

1. EC-TYPE EXAMINATION CERTIFICATE

2. **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

3. EC-Type Examination Certificate Number: **ITS04ATEX22779**

4. Equipment or Protective System: **BA488CF FIELDBUS DISPLAY**

5. Manufacturer: **BEKA ASSOCIATES LIMITED**

6. Address: **Hitchin, Herts, SG5 2DA**

7. This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8. The Intertek Testing and Certification Limited, notified body number 0359 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

   The examination and test results are recorded in confidential Report Number:
   Intertek Report Ref 04014722, dated September 2004

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
   EN 50014:1997+ Amds 1 & 2, EN 50020:2002 and EN 50284:1999
   except in respect of those requirements listed at item 18 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 EC Type Examination Certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12. The marking of the equipment or protective system shall include the following:-

   II 1 G, EEx ia IIC T4 (Tamb = -40°C to 60°C)

R M Adams
Certification Manager
29 September 2004

Intertek Testing & Certification Limited
Intertek House, Cleeve Road, Leatherhead, Surrey
KT22 7SB
Tel: + 44 (0)1372 370900 Fax: +44 (0)1372 370977
http://www.uk.intertek-etlsemko.com
Registered No 3272281 Registered Office: 25 Savile Row London W1X 1AA

This certificate may only be reproduced in its entirety and without any change, schedule included.

Intertek ETL SEMKO

13. # Schedule

14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS04ATEX22779

15. Description of Equipment or Protective System.

BA488CF Fieldbus Display is a panel mounting equipment designed to display up to eight fieldbus process variables in the hazardous area. The BA488CF incorporates six push buttons. The BA488CF Fieldbus Display can be supplied with six optional alarm outputs that may be linked to any of the displayed fieldbus variables. The BA488CF is powered by fieldbus.

The BA488CF comprises a Fieldbus Interface CI-PC134, EC-Type Examination Certificate Number ITS04ATEX22023U, two Alarm Board 01's, EC-Type Examination Certificate Number ITS02ATEX2044U and a CPU and Display, EC-Type Examination Certificate Number ITS02ATEX2045U, all housed within a metallic enclosure.

The enclosure provides a Degree of Protection of at least IP20.

Intrinsic safety is assured by the use of certified components, which provide limitation of voltage, current and power, limitation of capacitance and inductance, and infallible segregation.

The maximum intrinsically safe input and output parameters are as follows:

TB1 terminals 1 and 2
U_i = 17.5V
I_i = 380 mA
P_i = 5.32 W

The equivalent parameters are:
C_i = 1 nF
L_i = 8 µH
Terminals 1 and 2 comply with Intrinsically Safe Concept (FISCO) to the IEC TS 60079-27 standard.

TBA1 terminals A1 & A2, A3 & A4 and TBA2 terminals A5 & A6 (each channel) TBA3 terminals A7 & A8, A9 & A10 and TBA4 terminals A11 & A12 (each channel)

U_i = 28 V	U_O = 1.49 V
I_i = 200 mA	I_O = 1 µA
P_i = 0.85 W	P_O = 3 µw

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13. Schedule

14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS04ATEX22779

The equivalent parameters are:

C_i = 0.04 µF
L_i = 0.02mH

For intrinsic safety considerations, under fault conditions the voltage, current and power at the above terminals do not exceed those specified in Clause 5.4 of EN 50020: 2002. The equivalent capacitance and inductance are the result of r.f suppression components directly connected to the apparatus terminals.

TBS terminals S1 to S7
Uo = 14.7 V
Io = 146.7 mA
Po = 0.58 W

The equivalent parameters are:
C_i = 30 µF at 6 V
C_i = 0.54 µF at 14.7V
L_i = 0.3 mH

16. Report No. Intertek Report Ref 04014722, dated September 2004

17. SPECIAL CONDITIONS FOR SAFE USE

None

18. Essential Health and Safety Requirements

The essential health and safety requirements not covered by reference to the standards identified in Section 9 above have been addressed in Intertek Report Reference 04014722

19. **DRAWINGS**

Number	Issue	Date	Description
CI480-11 sheets 1*, 2*, 3* & 4	1	May 04	BA488CF Certification Information

* These drawings are common to and held with EC-Type Examination Certificate No ITS04ATEX22778.

Intertek Testing & Certification Limited
Intertek House, Cleeve Road, Leatherhead, Surrey, KT22 7SB
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http://www.uk.intertek-etlsemko.com
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1. **SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE**

2. **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

3. Supplementary EC-Type Examination Certificate Number: **ITS04ATEX22779/1X**

4. Equipment or Protective System: **BA488CF Fieldbus Display**

5. Manufacturer: **BEKA ASSOCIATES LIMITED**

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

7. This supplementary certificate extends EC-Type Examination Certificate Number ITS04ATEX22779 to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said Certificate but having variations specified in the Schedule attached to this certificate and the documents therein referred to.

   Intertek Project No 10050420 (IECEx Test Report GB/ITS/ExTR09.0031/01 dated 2012-01-16).

   This Supplementary Certificate shall be held with the original 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.

This issued certificate - Certificate No: ITS04ATEX22779

and supporting Technical Construction File underwent a legal transfer of new ownership by signed agreement between the named applicant on this certificate and the 3rd party bodies involved in the transfer from NB0359 to NB2575 on 17 December 2020

Name: Fabrizio Massei

Position: ATEX Certification Officer

Signature:

Date: 17 December 2020

A T Austin
Certification Officer
23 January 2012

Intertek Testing & Certification Limited
Intertek House, Cleeve Road, Leatherhead, Surrey, KT22 7SB
Tel: + 44 (0) 1372 370900 Fax: +44 (0) 1372 370977
http://www.etlsemko.com/uk
Registered No 3272281 Registered Office: 25 Savile Row London W1X 1AA

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Schedule

SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE NUMBER
ITS04ATEX22779/1X

VARIATION ONE

Description of the Variation to the Equipment or Protective System.

To permit the following changes:

1.1 Addition of alternative Alarm Board 01 (PC175). The entity parameter, Li, is changed from 20 µH to 8 µH at the TBA Terminals for each Alarm channel when PC175 is fitted. The remaining entity parameters are unchanged.

1.2 Assessment of the BA488CF Fieldbus Display to the latest standards listed below. Category of the instrument is changed from "ib" to "ia" and Special Condition for Safe Use added as the material limits of the enclosure are exceeded for equipment of ELP Ga.

IEC 60079-0:2011
IEC 60079-11:2011
IEC 60079-26:2006

The equipment coding is:

II 1 G, Ex ia IIC T4 Ga (Tamb = –40°C to +60°C)

Report No.

Intertek Project No 10050420 (IECEx Test Report GB/ITS/ExTR09.0031/01 dated 2012-01-16).

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Schedule

SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS04ATEX22779/1X

SPECIAL CONDITION FOR SAFE USE

When installed in the Zone 0 potentially explosive atmosphere, the BA488CF Fieldbus Display shall be installed such that even in the event of rare incidents, ignition source due to impact or friction between the aluminium enclosure of the instrument and iron/steel is excluded.

Essential Health and Safety Requirements

See original certificate

DRAWINGS

Number	Sheets	Issue	Date	Description
CI480-11	1*, 2*, 3* & 4	3	Oct. 11	Certification Information for BA484DF & BA488CF Fieldbus Display

* These drawings are common to and held with EC-Type Examination Certificate No ITS04ATEX22778/2

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.

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