



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: **ITS09ATEX46157**

4. Equipment or Protective System: **BA474ND Indicating Temperature Transmitter**

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. 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 Intertek Report Ref 08036506B Issue 1 dated June 2009.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with standards EN 60079-0:2006, EN 60079-11:2007, EN 60079-15:2005, EN 61241-0:2006, EN61241-1:2004 and EN 61241-11:2006, except in respect of those requirements referred to 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 and construction 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 3 (1)GD, Ex nA nL [ia] IIC T5, Ta = -20°C to +60°C
Ex tD [iaD] A22 IP66 T80°C, Ta = -20°C to +60°C

A T Austin
Certification Officer
Date: 18 June 2009

Intertek Testing & Certification Limited
Intertek House, Cleeve Road, Leatherhead, Surrey, KT22 7SB
Tel: + 44 (0)1372 370900 Fax: +44 (0)1372 370977

<http://www.intertek.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 and is subject to Intertek Testing and Certification Conditions for Granting Certification.

13. SCHEDULE
14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS09ATEX46157
15. Description of Equipment or Protective System

The BA474ND Indicating Temperature Transmitter is a field mounting loop powered equipment designed to display temperature in the hazardous process area and transmit a linearised 4/20 mA current to the non-hazardous area. Incorporating a galvanically isolated intrinsically safe input that permits direct connection to measuring elements in any gas or dust hazardous zone.

The BA474ND may optionally be fitted with an Alarm board and may additionally be fitted with an optional Back Light board.

The BA474ND Indicating Temperature Transmitter comprises a field terminal board, a main display board, and an optional Alarm board, and/or an optional Back Light board, all housed within plastic, glass reinforced polyester, enclosure. The enclosure provides a degree of protection IP66.

The maximum input and output parameters at the external connections are as follows:

Terminals TB2 - 5 & 6; TB3 - 8 & 9; 10 & 11

$U_i = 30 \text{ V}$
 $I_i = 100 \text{ mA}$
 $P_i = 0.5 \text{ W}$

Terminals TB1 - 1, 2, 3 & 4 (Intrinsically Safe)

$U_i = 6 \text{ V}$	$U_o = 6 \text{ V}$
$I_i = 100 \text{ mA}$	$I_o = 30.3 \text{ mA}$
$P_i = 194 \text{ mW}$	$P_o = 46 \text{ mW}$

16. Report Number:
- Intertek Report Ref 08036506B Issue 1 dated June 2009

17. CONDITIONS OF CERTIFICATION:

- (a). Special Conditions for safe use

There are no special conditions for safe use.

- (b). Conditions For Use (Routine Tests)

A dielectric strength test shall be carried out in accordance with clause 6.8.1 of EN 60079-15:2005.

18. Essential Health and Safety Requirements (EHSR's)

The relevant EHSR's have been identified and assessed in Intertek Report Ref 08036506B Issue 1 dated June 2009.

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

This Certificate is the property of Intertek Testing and Certification Ltd
and is subject to Intertek Testing and Certification Conditions for Granting Certification.

Intertek



- 13. SCHEDULE
- 14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS09ATEX46157
- 19. Drawings and Documents

Number	Title	Issue	Date
CI470-01, sheets 1 to 12, 15 to 23, 27	Certification Information for BA474D Indicating Temperature transmitter	1	August 2008
CI470-06, sheets 1 to 3	Certification Information for BA474ND Indicating Temperature transmitter	1	14/08/2008

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.

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

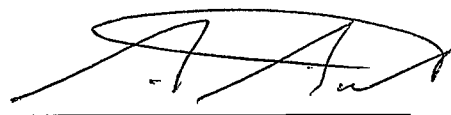
This Certificate is the property of Intertek Testing and Certification Ltd
and is subject to Intertek Testing and Certification Conditions for Granting Certification.



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: **ITS09ATEX46157/1**
4. Equipment or Protective System: **BA474ND Indicating Temperature Transmitter**
5. Manufacturer: **BEKA ASSOCIATES LIMITED**
6. Address: **Old Charlton Road, Hitchin, Herts, SG5 2DA**
7. This supplementary certificate extends EC-Type Examination Certificate Number ITS09ATEX46157 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 Report Ref 09043367, dated November 2009

This Supplementary Certificate shall be held with the original Certificate



A T Austin
Certification Officer
17 November 2009

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

This Certificate is the property of Intertek Testing and Certification Ltd
and is subject to Intertek Testing and Certification Conditions for Granting Certification.



Schedule

**SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE NUMBER
ITS09ATEX46157/1**

VARIATION ONE

Description of the Variation to the Equipment or Protective System.

To permit the following changes:

- 1.1 Addition of ferrite absorbers in series with sensor inputs 1, 2, 3 and 4 on TB1.
- 1.2 Option to replace diodes D601 and D602 with wire links.
- 1.3 Minor changes to the Field Terminal Board artwork.
- 1.4 Addition of a note reference to the build of the BA474ND as BA474D specified in CI470-01, except for items listed in the drawing number CI470-06, sheet 2.

The above changes do not impair type of protection "n".

Report No.

Intertek Report Ref 09043367, dated November 2009

SPECIAL CONDITIONS FOR SAFE USE

None

Essential Health and Safety Requirements

See original certificate

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

This Certificate is the property of Intertek Testing and Certification Ltd
and is subject to Intertek Testing and Certification Conditions for Granting Certification.



Schedule

SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE NUMBER
ITS09ATEX46157/1

DRAWINGS

Number	Sheets	Issue	Date	Description
CI470-06	1 & 2	2	Sept 09	BA474ND Certification Information

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.

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

This Certificate is the property of Intertek Testing and Certification Ltd
and is subject to Intertek Testing and Certification Conditions for Granting Certification.