



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX ITS 09.0007** issue No.:1

Status: **Current**

Certificate history:
Issue No. 1 (2009-11-11)
Issue No. 0 (2009-6-18)

Date of Issue: **2009-11-11** Page 1 of 4

Applicant: **BEKA associates Limited**
Old Charlton Road
Hitchin
Herts
SG5 2DA
United Kingdom

Electrical Apparatus: **BA474ND Indicating Temperature Transmitter**
Optional accessory:

Type of Protection: **Ex n**

Marking: **IECEX ITS 09.0007**
Ex nA nL [ia] IIC T5
Ex tD [iaD] A22 IP66 T80°C
-20°C < Ta < 60°C

*Approved for issue on behalf of the IECEx
Certification Body:*

A T Austin

Position:

Certification Officer

Signature:
(for printed version)

Date:

2009-11-26

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Intertek Testing & Certification Limited
ITS House, Cleeve Road,
Leatherhead,
Surrey, KT22 7SB
United Kingdom





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Manufacturer: **BEKA associates Limited**
Old Charlton Road
Hitchin
Herts
SG5 2DA
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2007-10 Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "I"
IEC 60079-15 : 2005-03 Edition: 3	Electrical apparatus for explosive gas atmospheres Part 15: Construction, test and Marking of Type of Protection "n" electrical apparatus
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/ITS/ExTR09.0007/00
GB/ITS/ExTR09.0007/01

Quality Assessment Report:

GB/ITS/QAR06.0002/01



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

BA474ND Indicating Temperature Transmitter is a field mounting loop powered equipment designed to display temperature in a hazardous process area and to 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.
The BA474ND 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 a plastic, glass reinforced polyester, enclosure. The enclosure provides a degree of protection of IP66.

The maximum input and output parameters are:

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

$U_i = 30 \text{ V}$

$I_i = 100 \text{ mA}$

$P_i = 0.5 \text{ W}$

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

$U_i = 6 \text{ V}$

$I_i = 100 \text{ mA}$

$P_i = 194 \text{ mW}$

$U_o = 6 \text{ V}$

$I_o = 30.3 \text{ mA}$

$P_o = 46 \text{ mW}$

CONDITIONS OF CERTIFICATION: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

VARIATION 1 (GB/ITS/ExTR09.0007/01; Intertek Ref 09043367)

To permit the following changes:

1. Addition of ferrite absorbers in series with sensor inputs 1, 2, 3 and 4 on TB1.
2. Option to replace diodes D601 and D602 with wire links.
3. Minor changes to the Field Terminal Board artwork.
4. Addition of a note reference to the build of 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".