



#### 1. EC TYPE-EXAMINATION CERTIFICATE

- 2. Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC
- EC-Type Examination Certificate Number: ITS02ATEX2017
- 4. Equipment or Protective System: BA369 BATTERY POWERED CLOCK
- 5. Manufacturer: BEKA ASSOCIATES LIMITED
- 6. Address: Old Charlton Road, 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 ITS 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: ITS Report Ref 02006976, dated April 2002

- Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
   EN 50014: 1992, EN 50020: 1994, 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 of the specified equipment or protective system. Further requirements of this Directive apply to the manufacture and supply of this equipment or protection system.
- 12. The marking of the equipment or protective system shall include the following: -

 $\langle \mathcal{E}_{\mathsf{X}} \rangle$ 

II J G, EEx ia IIC T5 (Tamb= -40°C to 50°C)

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

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Deputy Certification Manager 26 April 2002

R M Adams

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

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## ITS Intertek Testing Services

### Schedule Schedule

- 14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS02ATEX2017
- 15. Description of Equipment or Protective System.

BA369 Battery Powered Clock is a self-contained panel mounting instrument primarily intended for displaying local time in an area that may be hazardous. The BA369 may be selected for twelve or twenty four hour display.

The BA369 is internally powered from a BA491 Battery Unit, Component Certificate ITS No Ex 01E2021U, coded EEx ia IIC, Tamb= -40°C to 50°C, which may be replaced in the hazardous area.

The BA369 comprises a terminal board, a display board and external keypad all housed within a metallic enclosure. 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 infallible segregation and use of a certified BA491 Battery Unit.

The maximum intrinsically safe input parameters are as follows:

 $\begin{array}{lll} U_i = 10 \text{ V dc} & U_O = 3.7 \text{ V dc} \\ I_i = 200 \text{ mA dc} & I_O = 3.62 \text{ mA dc} \\ P_i = 0.7 \text{ W} & P_O = 3.4 \text{ mW} \end{array}$ 

The equivalent parameters are:

 $C_i = 20 \text{ nF}$   $L_i = 0$ 

- 16. Report No. ITS Report Ref 02006976.
- 17. SPECIAL CONDITIONS FOR SAFE USE None

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# **ITS** Intertek Testing Services

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### Schedule

- 14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS01ATEX2017
- 18. Essential Health and Safety Requirements

Essential Health and Safety Requirements not covered by Standards listed at (9)				
Clause	Subject	Compliance		
1.01	Principal of integrated explosion protection	The equipment is designed to comply with the requirements of EN 50014 and EN 50020		
1.02	Analysis of possible operating faults	The equipment is designed to comply with failure modes specified in EN 50020		
1.0.3	Special checking and maintenance conditions	No special requirements		
1.0.6	Instructions	Instruction Manual provides all the information		
1.2.1	Design with regard to technical knowledge	The state of the art as specified in EN 50014 and EN 50020 satisfies this requirement		
1.2.4	Dust deposits	Certification for gas atmospheres only		
1.2.5	Additional means of protection	No special requirements		
1.2.7	Protection against other hazards	The equipment is designed to comply with the requirements of EN 50014		
2.1.1	Explosive atmospheres caused by gases, vapours or hazes.	Equipment is designed to comply with the requirements of EN 50020		

#### 19. DRAWINGS

Number	Issue	Date	Description
CI369-01, sheets 1 to 10	i	Feb 02	BA369 Certification Information

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