

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin

(1) **EC-Type-Examination Certificate**

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – **Directive 94/9/EC**

(3) EC-Type-Examination Certificate Number
PTB 02 ATEX 2197 X

(4) Device: Explosion-proof Wall Clock, type Ex-time **

(5) Manufacturer: ecom instruments GmbH

(6) Address: Industriestrasse 2, 97959 Assamstadt, Germany

(7) The design of this device and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the European Community Council Directive of March 23, 1994 (94/9/EC), certifies that this device 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 the confidential report PTB Ex 02-22330.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with

EN 50014:1997 + A1 + A2

EN 50020: 1994

(10) If there is an "X" after the certificate number, special conditions for the safe use of the device are provided in the schedule to this certificate.

(11) This EC-Type-Examination Certificate relates only to the design and examination of the specified device in accordance with Directive 94/9/EC. Further requirements of this directive apply to the manufacture and supply of the device. These requirements are not covered by this certificate.

(12) The labeling of this device must include the following information:



II 2 G EEx ia IIC T4

(13) **S c h e d u l e**

(14) **EC-Type-Examination Certificate PTB 02 ATEX 2197 X**

(15) Device Description

The explosion-proof wall clock, type Ex-Time ** can be used in potentially explosive atmospheres.

The admissible ambient temperature range is 0°C - 50°C.

Electrical Data

Auxiliary power..... Battery 1.5 V model LR14 (see (17))

Feed circuit..... in ignition protection class for

intrinsic safety EEx ia IIC

Maximum values:

$U_o = 1.5 \text{ V}$

$I_o = 866 \text{ mA}$

$P_o = 60 \text{ mW}$

for clockwork connection

(16) Examination Report PTB Ex 02-22330

(17) Special Conditions

Only use battery types that are listed in the operating instructions supplied with the device.

(18) Essential Safety and Health Requirements

are fulfilled in accordance with the above-mentioned directives

Certifying body for Explosion Protection

Braunschweig,

By the order of

Dr.-Ing. U. Johannsmeyer

Government Director

Physikalisch-Technische Bundesanstalt

Baunschweig und Berlin

1st AMENDMENT

in accordance with directive 94/9/EC, appendix III number 6

to EC type approval test certificate PTB 02 ATEX 2197 X

Device: Explosion-protected wall clock Ex-Time **
Designation:  II 2 G EEx ia IIC T4
Manufacturer: ecom instruments GmbH
Address: Industriestraße 2, 97959 Assamstadt, Germany

Description of the amendments and alterations

The Ex-Time ** explosion-protected wall clock may be manufactured in the future in accordance with the test documents specified in the test report. The alterations concern the internal and external configuration. The electrical data, special conditions and all of the other details remain unaffected and are also applicable for this 1st amendment.

Applied standards EN 50020:2002

Test report: PTB Ex 06-26307

Certification body for explosion protection
By order of

Braunschweig, 6th December 2006

Dr.-Ing. U. Johannsmeyer
Director and professor

Page 1/1

EC type approval test certificates without a signature and seal are not valid.
This EC type approval test certificate may only be circulated without alteration.
Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt.

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

2nd AMENDMENT

in accordance with directive 94/9/EC, appendix III number 6
to EC type approval test certificate PTB 02 ATEX 2197 X

Device: Explosion-protected wall clock Ex-Time **

Designation:  II 2 G Ex ia IIC T4

Manufacturer: ecom instruments GmbH

Address: Industriestr. 2
97959 Assamstadt, Germany

Description of the amendments and alterations

The Ex-Time ** explosion-protected wall clock may be manufactured in the future in accordance with the test documents specified in the test report.

The alterations concern the internal and external configuration.

The electrical data, special conditions, instructions for manufacture and use, as well as all of the other information in the EC type approval test certificate remain unaffected.

Applied standards

EN 60079-0:2006 EN 60079-11:2007

Evaluation and test report: PTB Ex 09-29066

Certification sector for explosion protection

Braunschweig, 9th October 2009

By order of

Dr.-Ing. U. Gerlach
Senior executive office

Page 1/1

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FM Approvals
1151 Boston-Providence Turnpike
P.O. Box 9102 Norwood, MA 02062 USA
T: 781 762 4300 F: 781 762 9375 www.fmglobal.com

CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

Ex-TIME 40 and 50. Wall Clock

IS / I / 1 / ABCD / T4, Ta = 50 °C

Equipment Ratings:

Intrinsically safe for Class I Division 1, Groups A, B, C, and D T4 Ta = 50°C hazardous (classified) locations

Approved for:

ecom instruments
D-97959 Assamstadt, Germany



This certifies that the equipment described has been found to comply with the following FM Approval Standards and other documents:

Class 3600	1998
Class 3610	1999
Class 3810	1989

Original Project ID: 3015562

FM Approval Granted: November 13, 2002

Subsequent Revision Reports / Date FM Approval Amended

Report Number Date

Report Number Date

Translation

FM Global Technologies LLC



Nicholas P. Ludlam
Technical Team Manager

November 14, 2002
Date