

Translation of a document from German into English

Physikalisch-Technische Bundesanstalt (PTB)

[approx. Physical-Technical Federal German Institute]

Braunschweig and Berlin

(1) **EC Prototype Test Certificate**

(2) Equipment and protection systems used for the purpose it was built in explosion-hazardous areas – Directive 94/9/EC



(3) EC Prototype Test Certificate Number
PTB 01 ATEX 2133

(4) Instrument: Pocket calculator TI – 36 Ex Solar

(5) Manufacturer: ECOM Rolf Nied GmbH

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

(7) The type of this instrument as well as the different approval versions are determined in the Appendix to this Prototype Test Certificate.

(8) The Physikalisch-Technische Bundesanstalt (PTB) certifies as the named agency No. 0102 in accordance with Article 9 of the Directives of the Council of the European Communities of 23 March 1994 (94/9/EC) the fulfilment of the basic safety and health requirements for the conception and construction of equipment and protective systems for use for the purpose it is build in explosion-hazardous areas in accordance with Appendix II of the Directive.

The results of the test are laid down in the confidential test report PTB Ex 01-20445.

(9) The basic safety and health requirements are fulfilled in conformity with

EN 50014: 1997 + A1 + A2 EN 50020:1994

(10) Should the letter "X" be entered behind the certification number this indicates special conditions for the safe use of the instrument in the appendix to this certificate.

(11) This EC Prototype Test Certificate refers only to the conception and construction of the determined instrument in accordance with Directive 94/9/EC. Further requirements under this directive are applicable for the production and distribution of this instrument.

(12) The instrument marking must contain the following details:



II 2 G EEx ia IIC T4

Certification Agency for Explosion Protection

By Order:

Braunschweig, September 21., 2001

Signature: illegible
Dr.-Ing. U. Johannsmeyer
Government Director

Round seal: Physikalisch-Technische Bundesanstalt (PTB)
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(13) **Appendix**

(14) **EC Prototype Test Certificate PTB 01 ATEX 2133**

(15) Description of instrument

The above instrument, TI – 36 Ex Solar – is a pocket calculator designed for computations and calculations to be carried out in explosion-hazardous areas. The energy supply for the instrument is provided exclusively via an incorporated solar cell.

The type of protection of the instrument is as follows:

 II 2 G EEx ia IIC T4

The permissible ambient temperature is as follows:
–20°C to +50°C

Electrical data

Power supply: $U_{\max} \leq 4.74 \text{ V}$
 $P_{\max} \leq 7.40 \text{ mW}$
Panasonic BP – 5511C4C (solar cell)

(16) Test report PTB Ex 01-20445

(17) Special conditions
none

(18) Basic safety and health requirements
Covered by the standards

Certification Agency for Explosion Protection
By Order:

Braunschweig, September 21, 2001

Signature: illegible
Dr.-Ing. U. Johannsmeyer
Government Director

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I hereby certify that this is a true and complete translation of a document in the German language.
D-97209 Veitshöchheim, November 22, 2001

