Physikalisch-Technische Bundesanstalt

[Federal Physical-Technical Institute]

Braunschweig and Berlin

EC Type Examination Certificate (1)

- Devices and protective systems intended for application in explosion hazard areas -(2)Guideline 94/9/EG
- (3)EC Prototype Test Certificate Number

PTB 99 ATEX 2115

(4)Device:

Telephone secondary and signal alarm TWIN-EExII type 5842/1

(5)Manufacturer: Funke+Huster Fernsig Fernsprech-und Signalbau GmbH & Co.KG

(6)Address: 42551 Velbert, Germany

- (7)The design of this device as well as its permissible variations are specified in the attachment to this prototype test certificate.
- (8)The Physikalisch-Technische Bundesanstalt, known as Office No. 0102 under Article 9 of the Guideline set forth by the European Community Council dated 23 March 1994 (94/9/EG), certifies the fulfilment of fundamental safety and health requirements for the concept and build of devices and protective systems intended for use in explosion hazard areas as specified by Attachment II of the Guideline.

The results of testing are documented in the confidential Test Report PTB Ex 99-29119.

The fundamental safety and health requirements were fulfilled by conformance to (9)EN 50014:1997

EN 50019:1994

EN 50020:1994

EN 50028:1987

- (10)If the letter "X" is appended to the certification number, this indicates that special conditions for the safe use of the device have been included in the attachment to this certification.
- This EC Prototype Test Certificate covers only the device's concept and build according to (11)Guideline 94/9/EG. Additional requirements in this guideline apply to the manufacture and dissemination of this device.
- The markings on the device must include the following information: (12)

II 2 G EEx [ib] em IIC T6

Explosion Protection Certification Office on behalf of <signature> Dr.-Ing. U. Johannsmeyer Government Director <stamp> Braunschweig, 16 July 1999

Page 1 of 2

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Braunschweig and Berlin

(13)

Attachment

(14) EC Prototype Test Certificate PTB 99 ATEX 2115

(15) Device Description

The telephone secondary and signal alarm, TWIN-EExII type 5842/1, is specially constructed for use in industrial explosion-hazard areas. It permits operation in buildings and outdoors. A slide-switch on the device permits switching between TWIN-EExII operational modes as telephone secondary alarm and signal alarm.

Electrical Data

230 V / 50 Hz Connecting terminals Power supply (N and L1 lines) +10% / -15% required series fuse 500 mA or Power supply 120 V / 50 Hz +10% / -10% required series fuse 800 mA Telephone connection AC ring voltage E ≤ 165 V (terminals W and Lb) DC power supply E ≤ 60 V

Terminals W and Lb may only be connected to a telephone operating on a direct line, PBX line or directly connected to the telephone line itself. Short circuit protection is to be affected in those named systems. Short circuit current must be designed for a limit equal to the maximum operating current (three times nominal current).

Category "ib" intrinsic self-protected circuits

on the main circuit board

loudspeaker connector signal connector slide switch S1

internal circuits without intrinsic self-

electrical-shock board

protection

Test report PTB Ex 99-29119

(17) <u>Special Conditions</u> not applicable

(16)

(18) <u>Fundamental Safety and Health Requirements</u> covered by the aforementioned standards

Explosion Protection Certification Office on behalf of <signature> Dr.-Ing. U. Johannsmeyer Government Director <sta

Braunschweig, 16 July 1999

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Page 2 of 2