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 PTB 13.0048 issue No.:0	Certificate history:
Status:	**Current**	
Date of Issue:	**2013-11-01** Page 1 of 5	

Applicant: **FHF Funke + Huster Fernsig GmbH**
Gewerbeallee 15 – 19
Mühlheim a.d. Ruhr
Germany

Electrical Apparatus: **Secondary telephone alarm and signal unit**
Optional accessory: TWIN-EEXII type 5842/1

Type of Protection: **increased safety, intrinsic safety, encapsulation**

Marking: Ex e mb [ib] IIC T6 or T5 or T4 Gb

Approved for issue on behalf of the IECEx Certification Body: Dr.-Ing. U. Johannsmeyer

Position: Department Head "Explosion Protection in Sensor Technology and Instrumentation"

Signature:
(for printed version)

Date: 2013-11-11

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:

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100
38116 Braunschweig
Germany

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Manufacturer: **FHF Funke + Huster Fernsig GmbH**
Gewerbeallee 15 – 19
Mühlheim a.d. Ruhr
Germany

Additional 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 60079-18 : 2009 Edition: 3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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:
DE/PTB/ExTR13.0067/00

Quality Assessment Report:

DE/BVS/QAR07.0004/06

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

The secondary telephone alarm and signal unit TWIN-EExII type 5842/1 is particularly constructed for the application in explosion hazardous industrial areas and permits the operation inside of buildings or in open air environments. The TWIN-EExII can be switched to the operating modes telephone alarm and optical alarm signal by a slide switch inside the apparatus.

CONDITIONS OF CERTIFICATION: NO

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EQUIPMENT(continued):

Electrical data

Terminals (N-mains and L1-mains)	mains supply	230 V /50 Hz or 60 Hz +10%/-15%
	fuse to be connected in series	500 mA
resp.		
	mains supply	120 V/50 Hz +10%/-10%
	fuse to be connected in series	800 mA
Telephone terminal connection(terminals W and Lb)	calling alternating voltage	U ≤ 165 V
	supplying direct voltage	U ≤ 60 V

The terminals W and Lb shall only be connected to a telephone for operation with master and slave stations or directly to the telephone network. The short-circuit protection is carried out in the mentioned stations. The limitation must correspond to the max. rated current (permissible 3 x IN).

Internal intrinsically safe circuits of category "ib" on the master board	speaker terminal signal terminal slide switch S1
Internal non-intrinsically safe circuit	flash board

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Additional information:

The equipment shall be marked corresponding to the ambient temperature range as follows.

for -20°C ≤ T_a ≤ +40°C	Ex e mb [ib] IIC T6 Gb
for -20°C ≤ T_a ≤ +50°C	Ex e mb [ib] IIC T5 Gb
for -20°C ≤ T_a ≤ +60°C	Ex e mb [ib] IIC T4 Gb

When the equipment is used at ambient temperatures > 40°C it is only suitable for a lower grade of mechanical impact.