



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

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

(3) EC-type-examination Certificate Number:

PTB 01 ATEX 1063



(4) Equipment: Signal horn, types dGH21 and dRGH21

(5) Manufacturer: FHF Funke + Huster Fernsig GmbH

(6) Address: 42551 Velbert, Germany

(7) This equipment 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 Council Directive 94/9/EC of 23 March 1994, certifies that this equipment 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 01-10197.

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

EN 50014:1997 + A1 + A2

EN 50018:1994

EN 50019:1994

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment 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, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:

II 2 G EEx de IIC T6

Zertifizierungsstelle Explosionsschutz

Braunschweig, August 23, 2001

By order:

Dr.-Ing. U. Klausmeyer
Regierungsdirektor



SCHEDULE

(13)

(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1063

(15) Description of equipment

The signal horn, types dGH21 and dRGH21, is used as signal transmitter in alarm, signalling, and call systems. The signal horn is designed for protection class II. It is connected to the integrated terminal box.

Electrical data

Rated insulation voltage	up to	250 V
Power input	max.	25 VA / 25 W
Rated cross section *)	max.	2.5 mm ²

(16) Test report PTB Ex 01-10197

(17) Special conditions for safe use

None

(18) Essential health and safety requirements

The tests and the favourable results these have produced reveal that the signal horn meets the requirements of directive 94/9/EC as well as those of the standards quoted on the cover sheet.

Zertifizierungsstelle Explosionsschutz

By order:

Dr.-Ing. U. Klausmeyer
Regierungsdirektor



Braunschweig, August 23, 2001


1st SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1063

(Translation)

Equipment: Alarm horn, types dGH21 and dRGH21

Marking:  II 2 G EEx de IIC T6

Manufacturer: Funke + Huster Fernsig GmbH

Address: Eintrachtstraße 95
42551 Velbert, Germany

Description of supplements and modifications

The flameproof joints of the above-mentioned signalling devices is changed with an inclination of up to 1.5° from the vertical line in order to prevent the joints from being damaged when installing/removing the devices.

Test Report: PTB Ex 03-13005

Zertifizierungsstelle Explosionsschutz
By order:


Braunschweig, February 4, 2003

(signature)

Dr.-Ing. U. Klausmeyer
Regierungsdirektor

1 page, correct and complete as regards content.

By order:


Dr.-Ing. M. Thedens
Oberregierungsrat



Braunschweig, October 28, 2010

Sheet 1/1

2nd SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1063

(Translation)

Equipment: EExII alarm horn

Marking:  II 2 G EEx de IIC T6

Manufacturer: FHF Funke + Huster Fernsig GmbH

Address: Gewerbeallee 15 - 19
45478 Mühlheim a. d. Ruhr, Germany

Description of supplements and modifications

The modifications concern the type "e" terminal compartment in the bottom section of the equipment housing. The equipment, which is fitted with two metal adapters, equipotential bonding and protective conductor connection, is permit the use of metallic cable entries.

The types affected by this modification are:

dGH21/dRGH21

The detailed description, technical data and the relevant documents are laid down in the test documents that are attached to the test report.

Applied standards

EN 50014:1997 + A1 + A2

EN 50019:1994

Test report: PTB Ex 05-15094

Zertifizierungsstelle Explosionsschutz

By order:

Braunschweig, April 20, 2005

Dipl.-Phys.



Sheet 1/1

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.


3rd SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1063

(Translation)

Equipment: Alarm horn, types dGH21 and dRGH21

Marking:  II 2 G EEx de IIC T6

Manufacturer: FHF Funke + Huster Fernsig GmbH

Address: Gewerbeallee 15-19, 45478 Mülheim a.d. Ruhr, Germany

Description of supplements and modifications

The alarm horn, types dGH21 and dRGH21, may also be employed in areas in which a potentially explosive atmosphere as a mixture of dust and air can occasionally form.

The marking will thus change to:

 II 2 G EEx de IIC T6

 II 2 D IP66 T 80 °C

Applied standards

EN 50281-1-1:1998

Test report: PTB Ex 07-16383

Zertifizierungsstelle Explosionsschutz

By order:

Dr.-Ing. U. Klaus
Direktor und Professor



Braunschweig, March 1, 2007

Sheet 1/1

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

4th SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1063

(Translation)

Equipment: Alarm horn, types dGH21 and dRGH21

Marking:  II 2 G EEx de IIC T6
 II 2 D IP66 T 80 °C

Manufacturer: FHF Funke + Huster Fernsig GmbH

Address: Gewerbeallee 15-19, 45478 Mülheim a.d. Ruhr, Germany

Description of supplements and modifications

- Modification to the ambient temperature range:
The maximum permissible temperature range is: -20 °C to +75 °C at T5
-20 °C to +70 °C at T6
- Conversion to the current generation of standards
- An alternative material can be used for the typeplate

Applied standards

EN 60079-0:2006

EN 60079-1:2007

EN 60079-7:2007

EN 61241-0:2006

EN 61241-1:2004

Test report: PTB Ex 08-18203

The following marking is hence proposed for certification of the product:

 II 2 G Ex de IIC T5 and T6
 II 2 D Ex tD A21 IP66 T95 °C and T80 °C

Zertifizierungsstelle Explosionsschutz

Braunschweig, September 8, 2008

By order:


Dr.-Ing. U. Klausmeyer
Direktor und Professor

Sheet 1/1

5th SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1063

(Translation)

Equipment: ExII signal horn dGH21 resp. dRGH21

Marking:  II 2 G Ex d e IIC T5 resp. T6
 II 2 D Ex tD A21 IP 66 T 95 °C resp. T 80 °C

Manufacturer: FHF Funke + Huster Fernsig GmbH

Address: Gewerbeallee 15-19, 45478 Mülheim an der Ruhr, Germany

Description of supplements and modifications

- Revaluation according to the current standards.

Thus the marking changes to:

 II 2 G Ex d e IIC T5, T6 Gb
 II 2 D Ex tb IIIC T95 °C, T80 °C Db

- The EPL-marking was inserted.

Applied standards

EN 60079-0:2009

EN 60079-1:2007

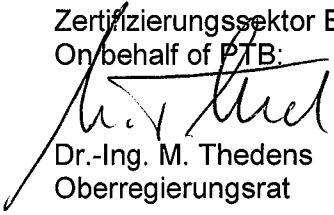
EN 60079-7:2007

EN 60079-31:2009

Test report: PTB Ex 13-12300

Zertifizierungssektor Explosionsschutz

On behalf of PTB:


Dr.-Ing. M. Thedens
Oberregierungsrat



Braunschweig, May 23, 2013

Sheet 1/1

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.