



(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 00 ATEX 3121

(4) Equipment: Trompet- shaped cable glands of types GHG 960 19..R....

(5) Manufacturer: CEAG Sicherheitstechnik GmbH

(6) Address: Neuer Weg Nord 49, D-69412 Eberbach

(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 00-30060.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50 014:1997 EN 50 019:1994

(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 and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

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

II 2 G EEx e II

Zertifizierungsstelle Explosionsschutz

Braunschweig, July 21, 2000

By order:


Dr.-Ing. U. Engel
Regierungssekretär



- (13) **SCHEDULE**
- (14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 3121**
- (15) Description of equipment

The cable entry of types GHG 960 1949 R.... and GHG 960 1950 R.... made of polyamide serves to introduce non-permanently laid cables into electrical equipment of the type of protection increased safety "e". The cable entry consists of an intermediate gland, a trumpet-shaped gland, a strain relief device with two screws and sealing ring. An accessory part is a closing device for M-type glands.

Technical data

Nominal size	to be used for cable and conduit diameters
M 20 x 1,5	from 8,0 mm to 13,0 mm
M 25 x 1,5	from 11,0 mm to 16,0 mm
M 32 x 1,5	from 15,0 mm to 20,0 mm
M 40 x 1,5	from 19,0 mm to 27,0 mm
M 50 x 1,5	from 28,0 mm to 34,0 mm
M 63 x 1,5	from 38,0 mm to 46,0 mm

Range of temperature of use, normal when sealing rings made of nitrile rubber NBR are used: -40 °C to +85 °C

Range of temperature of use, extended when sealing rings made of Evoprene Super are used: -50 °C to +80 °C

Suitable for equipment of equipment group II, with a degree of mechanical hazard: high

Minimum wall thicknesses when fitted into equipment: 3,5 mm (plastic material); 1,0 mm (metal)

Protection against contact, foreign matter and water: at least IP 54 acc. to EN 60 529:1991

Note

The closing device for M-type glands for closing unused holes is to be fitted into the intermediate gland; then the trumpet-shaped gland is to be tightened to guarantee compliance with the minimum type of protection.

The blue-coloured clip is to be used for intrinsically safe circuits only.

The Ex cable entries are suitable for a range of the temperature of use extending from -40 °C to +85 °C. Suitability for the extended range, i.e. from -50 °C to +80 °C, is indicated by special marking.

The maximum thermal load of the cables introduced is to be taken into account.

- (16) Test report PTB Ex 00-30060
- (17) Special conditions for safe use
not applicable

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 3121

(18) Essential health and safety requirements

The degree of protection - at least IP 54 according to EN 60529:1991 - will be guaranteed only by adequate selection of cable and conduit entries, of the sealings tested and by proper installation of the cable and conduit entries into the electrical apparatus.

Zertifizierungsstelle Explosionsschutz

Braunschweig, July 21, 2000

By order:


Dr.-Ing. U. Engel
Regierungschef



1st SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 3121

(Translation)

Equipment: Trumpet-shaped cable gland, type GHG 960 19.. R....

Marking:  II 2 G EEx e II

Manufacturer: Cooper Crouse-Hinds GmbH
formerly: CEAG Sicherheitstechnik GmbH

Address: Neuer Weg Nord 49,
69412 Eberbach, Germany

Description of supplements and modifications

Standard applied in addition: EN 50281-1-1:1998

The nominal sizes M32x1.5, M40x1.5, M50x1.5 and M63x1.5 of the trumpet-shaped cable gland, type GHG 960 19.. R...., may also be employed in areas in which a potentially explosive atmosphere as a mixture of dust and air can occasionally form.

The marking for these nominal sizes thus changes to read:

 II 2 G/D EEx e II IP 66

The operating temperatures of these nominal sizes is expanded to - 55 °C + 85 °C, provided a suitable sealing ring is used.

Since the company name has changed, the trumpet-shaped cable gland, type GHG 960 19.. R...., is provided with the new name COOPER Crouse-Hinds GmbH.

Notes for manufacturing and operation

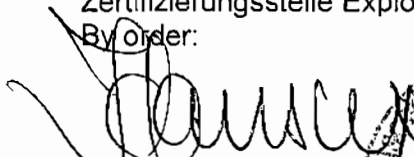
The notes for manufacturing and operation equally apply to this supplement.

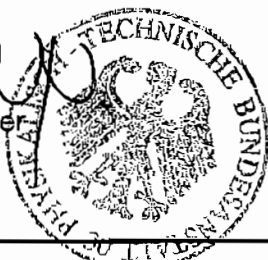
Test report: PTB Ex 04-14028

Zertifizierungsstelle Explosionsschutz

By Order:

Braunschweig, February 9, 2004


Dr.-Ing. U. Klausmeyer
Regierungsdirektor



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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.

2nd SUPPLEMENT
according to Directive 94/9/EC Annex III.6
to EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 3121
(Translation)

Equipment: Trumpet-shaped cable gland, type GHG 960 19.. R....

Marking: II 2 G EEx e II II 2 D IP 66

Manufacturer: Cooper Crouse-Hinds GmbH (vormals CEAG Sicherheitstechnik GmbH)

Address: Neuer Weg Nord 49, 69412 Eberbach, Germany

Description of supplements and modifications

The nominal sizes M20 to M63 of the trumpet-shaped cable gland, type GHG 960 19.. R.... , may also be employed in areas in which a potentially explosive atmosphere as a mixture of dust and air can occasionally form.

The marking for use in areas with inflammable dust changes to read:

II 2 D IP 6X

The operating temperatures of all nominal sizes is expanded to - 55 °C ... + 85 °C, provided a suitable sealing ring is used.

Applied standards

EN 50281-1-1:1998

Test report: PTB Ex 05-15121

Zertifizierungsstelle Explosionsschutz

By order:

Dr. M. Thedens

Braunschweig, April 28, 2005

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.

Physikalisch-Technische Bundesanstalt • Postfach 33 45 • 38023 Braunschweig

Cooper-Crouse Hinds GmbH
z. Hd. Frau Frankhauser

Neuer Weg Nord 49
69412 Eberbach

Ihr Zeichen:
Ihre Nachricht vom: 29.11.2007
Unser Zeichen:
Unsere Nachricht vom:

Bearbeitet von: Dr. Monika Schumann
Telefondurchwahl: +49 (0) 531-592-3515
Telefaxdurchwahl: +49 (0) 531-592-3505
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Datum: 14. Januar 2008

Normengenerationsänderung nach EN 60079-0 ff, EN 6124-0 ff Trompetenverschraubung Typ / trumpet-shaped cable gland, type GHG 960 19.. R...., PTB 00 ATEX 3121

Sehr geehrte Frau Frankhauser,
es bestehen keine sicherheitstechnischen Bedenken,
die Trompetenverschraubung Typ GHG 960 19.. R.... mit folgenden Kennzeichnungen zu versehen:


 II 2 G Ex e II


 II 2 D Ex tD A21 IP66

Wir bitten Sie, diese Änderungen bei zukünftigen Ergänzungen mit aufzunehmen.

Translation

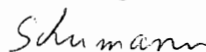
there are no safety-related objections from PTB to mark
the trumpet-shaped cable gland, type GHG 960 19.. R.... as follows

 II 2 G Ex e II

 II 2 D Ex tD A21 IP66

We would like to ask you to include this change into the next supplement.

Mit freundlichen Grüßen
Im Auftrag



Dr. Schumann
Regierungsrätin

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