

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 BKI 08.0007** issue No.:0 Certificate history:

Status: **Current**

Date of Issue: **2008-09-01** Page 1 of 3

Applicant: **Cooper Crouse Hinds GmbH**
previously CEAG Sicherheitstechnik GmbH
Neuer Weg Nord 49
D-69412 Eberbach, Germany
Germany

Electrical Apparatus: **Trumpet-shaped cable glands**
Optional accessory: **Type GHG 960..R....**

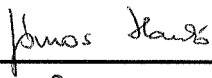
Type of Protection: **General requirements, Increased safety, Dust Protection**

Marking: **Ex e II**
Standard range -40 °C ≤ Tamb ≤ +85 °C (with NBR sealing rings)
Extended range -50 °C ≤ Tamb ≤ +85 °C (with Evoprene SuperG sealing rings)
Ex tD A21 IP66 T85°C

Approved for issue on behalf of the IECEx Certification Body: **János HANKÓ**

Position: **Director**

Signature:
(for printed version)



2008 - 09 - 01

Date:

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:

Testing Station for Explosion Proof Equipment
H 1037 BUDAPEST
MIKOVINY S.u. 2-4
Hungary





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Page 2 of 3

Manufacturer: **Cooper Crouse-Hinds GmbH**
Neuer Weg Nord 49
D-69412 Eberbach, Germany
Germany

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 product 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 identity documents, was found to comply with the following standards:

IEC 60079-0 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-7 : 2001 Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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:

HU/BKI/ExTR08.0007/00

Quality Assessment Report:

HU/BKI/QAR06.0005/09



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Certificate No.: IECEx BKI 08.0007

Date of Issue: 2008-09-01

Issue No.: 0

Page 3 of 3

Schedule

EQUIPMENT:

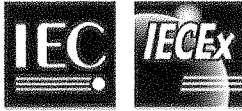
Equipment and systems covered by this certificate are as follows:

The cable entry of types GHG 960 19..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 an intermediate gland, a trumpet-shaped gland, a strain relief device with two screws and sealing ring. An accessory part is closing device for M type glands.

See details in Addendum to IECEx BKI 08.0007.

CONDITIONS OF CERTIFICATION: NO

Annexe: Addendum to IECEx BKI 08.0007.pdf



1. Description

The cable entry of types GHG 960 19..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 a sealing ring. An accessory part is a closing device for M-type glands.

2. Type assortment

Type GHG 960 19.. R....

Legend of the signs from left to right

1_, 2_, 3_	Code for manufacturer
4_, 5_, 6_, 7_, 8_	Code for cable entry
9_, 10_	Code for colour 49 = black 50 = black (clamp only)
12_, 13_, 14_, 15_	Code for thread size 1 = M20×1,5 mm 2 = M25×1,5 mm 3 = M32×1,5 mm 4 = M40×1,5 mm 5 = M50×1,5 mm 6 = M63×1,5 mm

3. General parameters

3.1 Technical data

Nominal size	to be used for cable and conduit diameters
M20×1,5	from 8,0 mm to 13,0 mm
M25×1,5	from 11,0 mm to 16,0 mm
M32×1,5	from 15,0 mm to 20,0 mm
M40×1,5	from 19,0 mm to 27,0 mm
M50×1,5	from 28,0 mm to 34,0 mm
M63×1,5	from 38,0 mm to 46,0 mm

Suitable for equipment of equipment group II, with degree of mechanical hazard: high (7 joule)

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

4. Ambient temperature

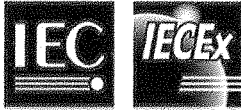
Standard range $-40\text{ °C} \leq T_{amb} \leq +85\text{ °C}$ (with NBR sealing rings)

Extended range of temperature of use, when sealing rings made of Evoprene Super Gare used:
 $-55\text{ °C} \leq T_{amb} \leq +85\text{ °C}$

5. Ingress protection IP66 to IEC 60529

Notes for manufacture and operation

- 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 -55 °C to $+85\text{ °C}$, as indicated by special marking.
- The maximum thermal load of the cables introduced is to be taken into account.



ADDENDUM TO IECEX CERTIFICATE OF CONFORMITY
IECEX BKI 08.0007

Page 2 of 2

Drawings			
Description	No. 4213	3 pages	2000.06.28.
Annex for Description	No. 4213	1 page	2000.06.28.
Drawing No.	GHG 96-4-3975		2000.06.28.
	GHG 96-1-3871		2000.06.28.
Test protocol on thermal endurance to heat and cold		2 pages	2000.05.12.
Test protocol on impact test		3 pages	2000.05.16.
Test protocol on pull test		3 pages	2000.04.06.
Test protocol on pull test		2 pages	2000.04.07.
Test protocol on pull test		2 pages	2000.04.10.
Test protocol on pull test		2 pages	2000.04.07.
Commentary on tests performed		2 pages	2000.02.21.
Test protocol on pull test	No CCH 01-MI4-B1-020200	1 page	2000.02.21.
Material specification	No. GHG 00-4-5118	1 page	2002.01.07.
Material specification	No. GHG 00-4-5107	1 page	1994.04.20.
Material specification	No. GHG 00-4-5101	3 pages	2003.01.20.
Data sheet	"NASF on-metallic enclosures and enclosure parts" on Ultramid B3S	1 page	2000.06.28.
BASF			
Material specification	No. GHG 00-4-5121	3 pages	1997.11.18.
Data sheet	for sealing material on NBR manufactured Fa. Metzler GmbH	1 page	2000.06.28.
Data sheet	for sealing material on Evoprene	2 pages	2000.06.28.
Super G manufactured Albis Plastic GmbH PTB list of tested seals		1 page	2000.06.16.
Operating instructions	No. GHG 9607001 P 0001 D/E/F (M)	18 pages	2008.01.24.
Test Report	PTB Ex 00-30060	7 pages	2000.07.07.
1 st Supplement Descriptive documents Description for Supplement 1		1 page	2004.01.19.
Test protocol	No CCH 01-MI4-B1-1310 2003	3 pages	2004.01.19.
Test Report	PTB Ex 04-14028	2 pages	2004.02.09.
2 nd Supplement Descriptive document Description for Supplement 2			
	No. 4305	1 page	2005.04.07.
Test protocol	No CCH 01-MI4-B1-07022005	3 pages	2005.04.01.
Test Report	PTB Ex 05-15121	2 pages	2005.04.28.