



(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 3108



(4) Equipment: Junction boxes and terminal boxes of types GHG 79101 a. 79102

(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 00-30059.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50 014:1997 EN 50 019:1994 EN 50 020:1994

(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 T6 bzw. EEx ia IIC T6

Zertifizierungsstelle Explosionsschutz

Braunschweig, July 20, 2000

By order:

Dr.-Ing. U. Engel
Regierungsdirktor

SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 3108**

(15) Description of equipment

Junction boxes and terminal boxes made of polyamide of types GHG 791 01 and 791 02, intended for permanent installation, with built-in modular or mantle terminals for non-intrinsically safe and intrinsically safe (certified separately) circuits.

Marking for the type of protection

Fitting with terminals

- for non-intrinsically safe circuits only
- for intrinsically safe circuits only

EEx e II T6
EEx ia IIC T6

Technical data

Rated voltage:

maximally 750 V (depending on the working voltage of the terminals used)

For terminal boxes have been specified rated current, number of conductors and conductor cross section in the supplementary sheets.

Junction boxes GHG 791 01 and GHG 791 02:

Rated cross section, max.:

2.5 mm² 4.0 mm² 6.0 mm²

Rated current, max.:

22 A 30 A 39 A

Ambient temperature range, normal
if EPDM gaskets are used:

$-20\text{ °C} \leq T_{\text{amb}} \leq +40\text{ °C}$

Extended ambient temperature range
if silicon gaskets are used:

$-50\text{ °C} \leq T_{\text{amb}} \leq +40\text{ °C}$

Protection against contact, foreign bodies and water:

at least IP 54 acc. to EN 60 529:1991

Note

The degree of protection - at least IP 54 - will be reached only by adequate use of the separately tested gaskets, cable and conduit entries and sealing plugs.

Suitability for low ambient temperatures is indicated by separate marking. Only, such gaskets and attachments which are suitable for these temperatures and for which a separate certificate has been issued. Further notes of the manufacturer are to be taken into account.

(16) Test report PTB Ex 00-30059

(17) Special conditions for safe use

not applicable

(18) Essential health and safety requirements

met by compliance with standards

Zertifizierungsstelle Explosionsschutz

Braunschweig, July 20, 2000

By order:

Dr.-Ing. U. Engel
Regierungsdirektor



sheet 2/2

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.

1st SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 3108

(Translation)

Equipment: Branching or terminal boxes, type GHG 791 01 and 791 02

Marking:  II 2 G EEx e II T6 or EEx ia IIC T6

Manufacturer: CEAG Sicherheitstechnik GmbH

Address: Neuer Weg Nord 49
69412 Eberbach, Germany

Description of supplements and modifications

The branching or terminal boxes, of type GHG 791 01 and 791 02 may now also be used in areas that have to be expected to be occasionally exposed to potentially explosive atmospheres with dust/air mixtures.

The marking, therefore, changes to

 II 2 G/D EEx e II T6 or EEx ia IIC T6 IP66 T 58 °C

Test report: PTB Ex 01-11176

Zertifizierungsstelle Explosionsschutz
By order:

Braunschweig, July 26, 2001

Dipl.-Phys. U. Völkel



2nd SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 3108

(Translation)

Equipment: Junction boxes and terminal boxes, types GHG 791 01 and 791 02

Marking: II 2 G/D EEx e II T6 or EEx ia IIC T6 IP66 T 58 °C

Manufacturer: CEAG Sicherheitstechnik GmbH

Address: Neuer Weg Nord 49
69412 Eberbach, Germany

Description of supplements and modifications

The junction boxes and terminal boxes, types GHG 791 01 and GHG 791 02, are extended to additionally include type GHG 79. R.... . This type has an enclosure made from stainless steel or aluminium and can be fitted with terminals for intrinsically safe or non-intrinsically safe circuits. It is designed for the field of application (no dust):

II 2 G EEx e II T6 or EEx ia IIC T6

The technical data are not affected by the modifications.

Ambient temperature range -55 °C to +55 °C

Notes for manufacture and operation

For the maximum number of conductors for each enclosure size, which is subject to the cross section and the permissible continuous current, reference is made to the attached data sheets.

Test report: PTB Ex 01-11317

Zertifizierungsstelle Explosionsschutz

Braunschweig, February 11, 2002

By order:

Dr.-Ing. U. Klausmeyer
Regierungsdirektor



Sheet 1/1

3rd SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 3108

(Translation)

Equipment: Branching or terminal boxes, types GHG 791 01 and 791 02

Marking:  II 2 G/D EEx e II T6 and EEx ia IIC T6 IP66 T 58 °C

Manufacturer: CEAG Sicherheitstechnik GmbH

Address: Neuer Weg Nord 49
69412 Eberbach, Germany

Description of supplements and modifications

The branching or terminal boxes of types GHG 791 01 and 791 02 may optionally be provided with cable entry, type GHG 960 92.. P....., size M25, with long screw thread.

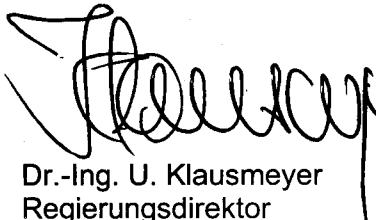
Notes for installation and operation

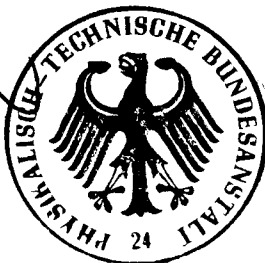
The cable entry shall be glued in place by means of adhesive DELO-PUR 9693

Test report: PTB Ex 02-12279

Zertifizierungsstelle Explosionsschutz
By order:

Braunschweig, September 13, 2002


Dr.-Ing. U. Klausmeyer
Regierungsdirektor



4th SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 3108

(Translation)

Equipment: Branching / terminal boxes, types GHG 791 01 and 791 02

Marking:  II 2 G/D EEx e II T6 or EEx ia IIC T6 IP66 T 58 °C

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

Address: Neuer Weg Nord 49, 69412 Eberbach, Germany

Description of supplements and modifications

The branching / junction boxes, types GHG 791 01 and 791 02, may optionally be provided with the cable entry, type GHG 960 92.. P...., size M32, with long screw thread.

Notes for manufacturing and operation

The cable entry shall be glued in place, using DELO-PUR 9694 adhesive.

Test report: PTB Ex 04-14087

Zertifizierungsstelle Explosionsschutz

By order:

Braunschweig, April 28, 2004


Dipl.-Phys. U. Völkel



5th SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 3108

(Translation)

Equipment: Branching or terminal boxes, types GHG 791 01 and 791 02

Marking:  II 2 G/D EEx e II T6 or EEx ia IIC T6 IP66 T 58 °C

Manufacturer: Cooper Crouse-Hinds GmbH

Address: Neuer Weg Nord 49, 69412 Eberbach, Germany

Description of supplements and modifications

The branching or terminal boxes of types GHG 791 01 and 791 02 may be provided with an outside earthing terminal.

The companion sheet version for determination of the maximum number of conductors for each enclosure size as a function cross section and the permissible continuous current may optionally be that of 13 September 2004.

Test report: PTB Ex 04-14134

Zertifizierungsstelle Explosionsschutz

By order:

Dipl.-Phys. U. Völkel



Braunschweig, November 2, 2004

6th SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 3108

(Translation)

Equipment: Branching or terminal boxes, type GHG 79. R....

Marking:  II 2 G/D EEx e II T6 or EEx ia IIC T6 IP66 T 58 °C

Manufacturer: Cooper Crouse-Hinds GmbH

Address: Neuer Weg Nord 49,
69412 Eberbach, Germany

Description of supplements and modifications

The rated cross sections of the connecting cables for the branching box, type GHG 791 02.. R.... , with polyamide enclosure, are extended from 1.0 mm² to 10 mm².

When connecting a cable of 10 mm² rated cross section, the branching box will only have two terminal blocks and will be fitted with an earthing bracket which is suited for the rated cross section.

A new cross section table has been defined for the terminal box, type GHG 793 R.... .

Technical data

Rated voltage	up to	750 V
Rated current.....	max.	39 A
Rated cross section per terminal.....	max.	10 mm ²

The rated current, number of conductors, and conductor cross section are defined for the terminal boxes in the corresponding cross section table GHG 793 01.

Applied standards

EN 50014:1997 + A1 + A2

EN 50019:2000

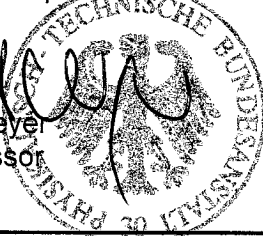
Test report: PTB Ex 05-15089

Zertifizierungsstelle Explosionsschutz

Braunschweig, June 2, 2005

By order:


Dr.-Ing. U. Klausmeyer
Direktor und Professor



Sheet 1/1

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