



(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 1109



(4) Equipment: Four-pole connector, types GHG 59./....
and GHG 511 R....

(5) Manufacturer: CEAG Sicherheitstechnik GmbH

(6) Address: 69412 Eberbach, 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 00-19231.

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

EN 50014: 1997

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 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 and T5 or EEx de IIC T6 and T5

Zertifizierungsstelle Explosionsschutz

Braunschweig, January 16, 2001

By order:

Dr.-Ing. U. Klausmeyer
Regierungsdirektor



(13)

SCHEDULE

(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 1109

(15) Description of equipment

The four-pole connector of type GHG 59./.... and GHG 511 R.... is used for the connection of cables in potentially explosive areas. The connector will be provided with an electromagnetically locked isolator or a mechanical interlocking device and a warning note.

Staggered slots are to ensure that only connectors of identical voltage rating and contact assignment will be used at the same time.

Technical data

Connector

Rated operating voltage	up to	500 V	250 V
Rated current I_e	max.	16 A 20 A	10 A
Plug-in contacts	up to	7 poles	8 – 21 poles
Temperature class		T6 T5	T6

Isolator

Rated voltage U_e	up to	500 V	250 V	60 V
Rated current I_e	max.	10 A	16 A	6 A
based on utilisation category		AC-3	AC-3	DC-1

Auxiliary switch

Rated voltage U_e	up to	250 V
Rated current I_e	max.	5 A
based on utilisation category		AC-1

Rated frequency	up to	400 Hz
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Connection rating	2.5 mm ²
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The composition of the protection symbol will be based on the types of protection of components actually used.

(16) Test report PTB Ex 00-19231

(17) Special conditions for safe use

None

Notes for installation and use

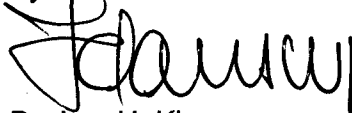
The connector may only be connected and disconnected with de-energised feeder cables.

(18) Essential health and safety requirements

The tests and the favourable results these have produced reveal that the connector 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, January 16, 2001

1st SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 1109

(Translation)

Equipment: Plug-and-socket device, type GHG 59.R..... and GHG 511 R....
Marking:  II 2 G EEx e IIC T6 or T5, or: EEx de IIC T6 or T5
Manufacturer: CEAG Sicherheitstechnik GmbH
Address: Neuer Weg Nord 49
69412 Eberbach, Germany

Description of supplements and modifications

The multi-pole plug-and-socket connection of type GHG 59. R.... and GHG 511 R.... may also be provided with an auxiliary switch for operation with an intrinsically safe circuit.

Intrinsically safe auxiliary circuit

Connection to the terminals for intrinsically safe circuits EEx [ia] IIC T6 or T5

Only for connection to certified intrinsically safe circuits.

When using the intrinsically safe auxiliary circuit, the type of protection symbol will change to:

EEx de [ia] IIC T6 or T5

Auxiliary contacts of type of protection Intrinsic Safety "i"

The flush-mounting switches shall be installed in the enclosure in such a way that the clearance and creepage distances required under EN 50020 between intrinsically safe and non-intrinsically safe circuits are duly considered.

If system installation and layout does not provide for the clearance requirements for connectors as specified in EN 50020, wiring that meets the quality criteria Increased Safety "e" shall be used, or the wiring shall be mechanically fail-safe.

Should the above clearance requirements not be met, local wiring measures will be accepted only, if an explosion risk can positively be excluded along all the lines.

When using more than one intrinsically safe circuit, the rules and regulations for interconnection shall duly be observed.

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The composition of the protection symbol will be based on the types of protection of components actually used.

Test report: PTB Ex 02-11244

Zertifizierungsstelle Explosionsschutz

Braunschweig, July 30, 2002

By order:



Dr.-Ing. U. Klausmeyer
Regierungsdirektor

