



Translation

(1) EC-Type Examination Certificate

(2) - Directive 94/9/EC -
Equipment and protective systems intended for use
in potentially explosive atmospheres

(3) **BVS 09 ATEX E 145 U**

(4) **Equipment:** Ex-d components type GHG 62 * * **R****

(5) **Manufacturer:** Cooper Crouse-Hinds GmbH

(6) **Address:** 69412 Eberbach, Germany

(7) The design and construction of this component and any acceptable variation thereto are specified in the appendix to this type examination certificate.

(8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this component 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 test and assessment report BVS PP 09.2182 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2009 General requirements
EN 60079-1:2007 Flameproof Enclosure 'd'
EN 60079-7:2007 Increased Safety 'e'

(10) The sign "U" placed after the certificate number indicates that the certificate must not be mistaken for a certificate for equipment or a protective system. This certificate may only be used as the basis for the certification of equipment or a protective system.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified component in accordance to Directive 94/9/EC.
Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

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

II 2G Ex db eb IIC/IIB

DEKRA EXAM GmbH
Bochum, dated 18th November 2009

Signed: Simanski

Signed: Dr. Wittler

Certification body

Special services unit

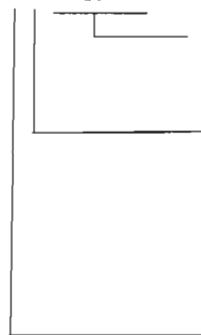
(13) Appendix to

(14) **EC-Type Examination Certificate**

BVS 09 ATEX E 145 U

(15) 15.1 Subject and type

Ex-d components type
GHG 62 * * * * R * * * *



assembly
without influence on the explosion protection

dimensions
1 – w 36 x h 132 x l 177
2 – w 54 x h 132 x l 177
3 – w 72 x h 132 x l 177
4 – w 108 x h 132 x l 177

versions
1 – controller/distribution
2 – circuit breaker acc. to IEC/UL 1077
3 – circuit breaker acc. to UL 489
4 – earth-leakage trip acc. to IEC
5 – earth-leakage trip/LS switch acc. to IEC/UL
6 – contactor / relay / therm. relay

15.2 Description

The Ex-d components consist of a top and bottom part made of Ultramid. After the elements are being built in; both parts are connected tightly and built into an enclosure in the type of protection Increased Safety according to EN/IEC 60079-7.

15.3 Parameters

Type GHG 62 * 1/2/3/4 * * * * R * * * *

Main contact

Rated voltage max. 690 V / 50/60 Hz

Auxiliary contact

Rated voltage max. 250 V / 50/60 Hz

Ambient temperature range

IIC: Type GHG 62 * 1/2/3/4 * * * * R * * * * - 20 °C...+55°C

IIB: Type GHG 62 * 1 * * * * R * * * * - 45 °C...+55°C

(16) Test and assessment report

BVS PP 09.2182 EG as of 18.11.2009

(17) Special conditions for safe use

- 17.1 The Ex-d components shall be built in an enclosure in type of protection Increased Safety according to EN/IEC 60079-7.
- 17.2 The max. temperature rise at the Ex-d components at rated values shall not exceed 55 K.

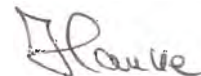
We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 18.11.2009
BVS-Hk/Ar A 20090581

DEKRA EXAM GmbH



Certification body



Special services unit



Translation

1st Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

to the EC-Type Examination Certificate BVS 09 ATEX E 145 U

Component: Ex-d components type GHG 62 * * * * R * * * *
Manufacturer: Cooper Crouse-Hinds GmbH
Address: 69412 Eberbach, Germany

Description

The operating axles of the switching components and the protective components can optionally be mounted in the enclosure via threaded inserts without cementing the thread.

The threaded insert can optionally be screwed into the borehole of the enclosure wall by means of a M10x1mm thread or directly into the enclosure wall via a self-cutting 10x2mm thread.

In the future the operating axles of the controlling elements and the protective elements can also be mounted in the enclosure via a reamed borehole.

The size 2 component is also suitable for use in Group IIB for ambient temperatures as low as -45 °C.

Subject and type

Ex-d components type

GHG 62 * * * * R * * * *

assembly
without influence on the explosion protection
dimensions
1 – w 36 x h 132 x l 177
2 – w 54 x h 132 x l 177
3 – w 72 x h 132 x l 177
4 – w 108 x h 132 x l 177
versions
1 – controller/distribution
2 – circuit breaker acc. to IEC/UL 1077
3 – circuit breaker acc. to UL 489
4 – earth-leakage trip acc. to IEC
5 – earth-leakage trip/LS switch acc. to IEC/UL
6 – contactor / relay / therm. relay

Parameters

Type GHG 62 * 1/2/3/4 ***R****	
main contact	
rated voltage max.	690 V / 50/60 Hz
auxiliary contact	
rated voltage max.	250 V / 50/60 Hz
ambient temperature range	
IIC: Type GHG 62 * 1/2/3/4 ***R****	-20 °C...+55 °C
IIB: Type GHG 62 * 1/2 ***R****	-45 °C...+55 °C

The Essential Health and Safety Requirements of the modified equipment are assured by compliance with:

EN 60079-0:2009 General requirements
EN 60079-1:2007 Flammproof Enclosure `d`
EN 60079-7:2007 Increased Safety `e`

The marking of the component shall include the following:

 **II 2G Ex db eb IIC/IIB**

Installation instructions

- The Ex-d components shall be built in an enclosure in type of protection Increased Safety according to EN/IEC 60079-7.
- The max. temperature rise at the Ex-d components at rated values shall not exceed 55 K.

Test and assessment report

BVS PP 09.2182 EG / N1 as of 24.06.2010

DEKRA EXAM GmbH

Bochum, dated 24. June 2010

Signed: Hans-Christian Simanski

Signed: Dr. Michael Wittler

Certification body

Special services unit

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 24. June 2010
BVS-Hk/Kw A 20100302

DEKRA EXAM GmbH



Certification body



Special services unit