

Translation

1 **EU-Type Examination Certificate**

2 **Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014**

3 EU-Type Examination Certificate Number: **BVS 22 ATEX E 032 X** Issue: **00**

4 Equipment: **Control Unit**
type GHG 41.....
type GHG 43.....

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

6 Address: **Neuer Weg Nord 49, 69412 Eberbach, Germany**

7 This product and any acceptable variations thereto are specified in the appendix to this certificate and the documents referred to therein.

8 DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products 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 No. BVS PP 22.2063 EU.

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

EN IEC 60079-0:2018	General requirements
EN 60079-1:2014	Flameproof enclosure "d"
EN IEC 60079-7:2015 + A1:2018	Increased Safety "e"
EN 60079-11:2012	Intrinsic Safety "i"
EN 60079-18:2015+A1:2017	Encapsulation "m"
EN 60079-31:2014	Protection by Enclosure "t"

10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

11 This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following:

 **II 2G Ex eb * IIC/IIB/IIB+H₂ T6/T5 Gb**
II 2D Ex tb IIIC T80 °C Db

*) depending on the separately certified components in type of protection type "db", "mb" and/or "ib".

DEKRA Testing and Certification GmbH
 Bochum, 2022-06-13

Signed: Jörg-Timm Kilisch

 Managing Director

13 **Appendix**

14 **EU-Type Examination Certificate**

BVS 22 ATEX E 032 X issue 00

15 **Product description**

15.1 **Subject and type**

Control Unit type GHG 41^{1),2),3),4),5),6),....7)}

1) Manufacturer control station programme

2) Enclosure type

Moulded plastic 1

3) Type

Ex i- Measuring instruments 4

Customer special types 5

No Ex 6

NOS 7

Standard type 8

Crouse Hinds Australia 9

4) Enclosure size

Size (85mm x 85mm x 78mm) 1

Size (85mm x 125mm x 78mm) 2

Size (85mm x 165mm x 78mm) 3

5)6)7) Alphanumeric character string, without influence on the explosion protection

Type ****1)*****2) GHG411

1) Item number of customer order

2) Customer order number

*) Customized type code based on the standard type code

Control Unit type GHG 41^{1),2),3),4),5),6),....7)}

1) Manufacturer control station programme

2) Enclosure type

Moulded plastic flange mounting 2

3) Type

Ex i- Measuring instruments 4

Customer special types 5

No Ex 6

NOS 7

Standard type 8

Crouse Hinds Australia 9

4) enclosure size

Size (85mm x 125mm x 78mm) 2

Size (85mm x 165mm x 78mm) 3

5)6)7) Alphanumeric character string, without influence on the explosion protection

Control Unit type GHG 41^{1),2),3),4),5),6),....7)}

1) Manufacturer control station programme

2) Enclosure type
Light alloy 3

3) Type
Ex i- Measuring instruments 4
Customer special types 5
No Ex 6
NOS 7
Standard type 8
Crouse Hinds Australia 9

4) Enclosure size
Size (122mm x 120mm x 81mm) 4
Size (220mm x 120mm x 81mm) 5

5)6)7) Alphanumeric character string, without influence on the explosion protection

Control Unit type GHG 41^{1),2),3),4),5),6),....7)}

1) Manufacturer control station programme

2) Enclosure type
Stainless steel 4

3) Type
Ex i- Measuring instruments 4
customer special types 5
No Ex 6
NOS 7
standard type 8
Crouse Hinds Australia 9

4) Enclosure size
Size (166mm x 140mm x 76mm) 1
Size (286mm x 140mm x 76mm) 2

5)6)7) Alphanumeric character string, without influence on the explosion protection

Control Unit type GHG 41^{1),2),3),4),5),6),....7)}

1) Manufacturer control station programme

2) Enclosure type
Combination of plastic enclosure 6
GHG411*

3) Type
Ex i- Measuring instruments 4
customer special types 5
No Ex 6
NOS 7
Standard type 8
Crouse Hinds Australia 9

4)5)6)7) Alphanumeric character string, without influence on the explosion protection

Control Unit type GHG 43^{1),2),...3),4),...5)}

1) Manufacturer control station program

2) Enclosure size

Size (100mm x 158mm x 90mm) 2
 size (100mm x 247mm x 90mm) 4

3)4)5) Alphanumeric character string, without influence on the explosion protection

Type ****1)*****2) GHG43

1) Item number of customer order

2) Customer order number

*) Customized type code based on the standard type code

15.2 Description

The control units of the GHG41 * * * * * and GHG43 * * * * * are used for on-site control of electrical systems or fixed installation on electrical systems in potentially explosive areas. The control units are built in Type of Protection increased safety "eb" and protection by enclosure "tb".

The control units consist of plastic or metal enclosure and can be equipped with different separately certified components according "List of components" GHG9025018F0001 (terminals) und GHG9025018F0002.

15.3 Parameters

Nominal voltage max.: 690 V AC
 Nominal current max.: 16 A
 Ambient temperature range -40°C ... +55°C (GHG411/GHG412/GHG416)*
 -55°C ... +55°C (GHG413/GHG414)*
 -40 °C ... + 55 °C (GHG43)*

*) The maximum permitted ambient temperature depends on the Ex components used or the housing accessories used.

Parameters for marking GHG411/GHG412/GHG416

Rated Current [A]	Cross section [mm ²]	Permitted ignition group		Dust Protection
		$T_{amb} \leq +40^{\circ}\text{C}$	$+40^{\circ}\text{C} < T_{amb} \leq +55^{\circ}\text{C}$	
6	1.5	T6		T80°C
10		T6	T5	
16		n/a		
6	2.5	T6		T80°C
10		n/a		
16		n/a		
6	4	T6		T80°C
10		T6	T5	
16		T6	T5	

Parameters for marking GHG413

Rated Current [A]	Cross section [mm ²]	Permitted ignition group		Dust Protection
		$T_{amb} \leq +40^{\circ}\text{C}$	$+40^{\circ}\text{C} < T_{amb} \leq +55^{\circ}\text{C}$	
6	1.5	T6		T80°C
10		T6	T5	
16		n/A		
6	2.5	T6		T80°C
10		T6	T5	
16		T6		
6	4	T6		T80°C
10		T6	T5	
16		T6		

Parameters for marking GHG414

Rated Current [A]	Cross section [mm ²]	Permitted ignition group		Dust Protection
		$T_{amb} \leq +40^{\circ}\text{C}$	$+40^{\circ}\text{C} < T_{amb} \leq +55^{\circ}\text{C}$	
6	1.5	T6		T80°C
10		T6	T5	
16		n/a		
6	2.5	T6		T80°C
10		T6		
16		n/a		
6	4	T6		T80°C
10		T6	T5	
16		T6		

Parameters for marking GHG43

Rated Current [A]	Cross section [mm ²]	Permitted ignition group		Dust Protection
		$T_{amb} \leq +40^{\circ}\text{C}$	$+40^{\circ}\text{C} < T_{amb} \leq +55^{\circ}\text{C}$	
6	1.5	T6		T80°C
10		T6	T5 (T6 to $T_{amb}=+54^{\circ}\text{C}$)	
16		n/a		
6	2.5	T6		T80°C
10		T6	n/a (only with suitable cable glands + wires)	
16		T6		
6	4	T6		T80°C
10		T6		

17 **Specific Conditions of Use**

The plastic enclosures GHG411/GHG412 and GHG43 can alternatively be made of different materials.

Material "A" is conductive with a surface resistance of $< 10^9 \Omega$.

Materials "B" and "C" are non-conductive with a surface resistance $> 10^9 \Omega$.

The code letters are given with a preceding "Mat.:" on the type label.

With regard to the possible risk of electrostatic discharge, the relevant information in the operating instructions must be observed.

18 **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

19 **Remarks and additional information**

Drawings and documents are listed in the confidential report.

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.

DEKRA Testing and Certification GmbH
Bochum, 2022-06-13
BVS-Pz/MGR A 20210671 / 3423581



Managing Director