Translation

1 # EU-Type Examination Certificate

2 **Equipment intended for use in potentially explosive atmospheres Directive 2014/34/EU**

3 EU-Type Examination Certificate Number: **BVS 22 ATEX E 006**

4 Product: **Control Unit type GHG 44 * * * ** * ****,**
Distribution board GHG 619 ** ** * ** / EXKO * ***** * ****

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 02.2017 EU.

9 The Essential Health and Safety Requirements are assured in consideration of:

EN IEC 60079-0:2018	**General requirements**
EN IEC 60079-7:2015 + A1:2018	**Increased Safety “e”**
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 Special Conditions for Use specified in the appendix to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified product. 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* IIB/IIC T Gb**
II 2D Ex tb IIIC T°C Db**

* Optional the marking can be amplified with the types of protection of the separately certified components, for example “d“ / “m“/ “op is and / or “ia” / “op pr“.

** The values of the temperature class and the surface temperature is depending on the defined ambient temperature range and the specific power dissipation of each variant of distributor / control unit. See clause “Parameters” for details.

DEKRA Testing and Certification GmbH
Bochum, 2022-02-16

Signed: Jörg-Timm Kilisch

Managing Director

DEKRA Testing and Certification GmbH, Handwerkstr. 15, 70565 Stuttgart, Germany
Certification body: Dinnendahlstr. 9, 44809 Bochum, Germany
Phone +49.234.3696-400, Fax +49.234.3696-401, e-mail DTC-Certification-body@dekra.com

13 **Appendix**

14 **EU-Type Examination Certificate**

BVS 22 ATEX E 006

15 **Product description**

15.1 **Subject and type**

Control Unit type GHG 44 * * * ** * ****,
Distribution board GHG 619 ** ** * ****, EXKO * ***** * ****

Control Unit type GHG 44 * * * ** * **

GHG	44	*	*	*	**	*	****
1	2	3	4	5	6	7	8

1. Manufacturing marking

2. Control Unit

3. Enclosure type / Size
   - 1 Combination of various polyester enclosures
   - 3 light alloy enclosure - separate approval
   - 4 Ex44 (size 1)
   - 5 Ex45 (size 5)
   - 7 Ex47 (size 4)
   - 8 Ex48 (size 2)
   - 9 Ex49 (size 3)

4. Material
2. Polyester enclosure
3. Metal enclosure

5. Counting number for e.g. single control unit, combinations or mixed applications

6./7./8. Without influence on the explosion protection with 6,8 counting number and 7 any letter

Distributor type GHG 619 ** ** * **

GHG	619	**	**	*	****
1	2	3	4	5	6

1. Manufacturing marking

2. Distribution board

3. Enclosure type
   - 00 Polyester enclosure
   - 01 Coated steel enclosure
   - 02 Stainless steel enclosure

4./5./6. Without influence on the explosion protection with 4,6 counting number and 5 any letter (e.g. „R“)

Distributor type EXKO * *** * ****

EXKO	**	***** * ****
1	2	3

1. Ex-combinations (distribution board)

2. Priority type of protection
   - 2 Ex-e
   - 7 Ex-d

3. Without influence on the explosion protection

DEKRA Testing and Certification GmbH, Handwerkstr. 15, 70565 Stuttgart, Germany
Certification body: Dinnendahlstr. 9, 44809 Bochum, Germany
Phone +49.234.3696-400, Fax +49.234.3696-401, e-mail DTC-Certification-body@dekra.com

15.2 Description

The control units / distribution boxes of the type GHG 44 * * * ** * ****, GHG 619 ** ** * **** and EXKO * ***** * **** in the types of protection Increased Safety "eb" and Protection by Enclosure "tb" against dust explosion are used for fusing, controlling, switching, distributing and branching electrical energy, e.g. main circuits, lighting circuits, heating circuits, control circuits, intrinsically safe circuits, etc.
The control devices / distribution boxes are suitable for use in Zones 1, 2, 21 and 22.
Industrial components can also be used in the dust variant for Zone 21. A thermal analysis is also carried out for this.

The used empty enclosure series of polyester or metal is separately tested and certified according to ATEX certificate PTB 99 ATEX 3118 U.

Many different separately certified components and devices can be installed in the enclosure according to the manufacturer's documentation (e.g. list of components).
In the case of intrinsically safe circuits in the control unit, this is a simple apparatus according to EN 60079-11 and a marking must be added on the enclosure. The creepage and clearance distances between the intrinsically safe circuits and earth, between two different intrinsically safe circuits and between intrinsically safe and non-intrinsically safe circuits are taken into account when installing the terminals.

In the case of flameproof, encapsulated, intrinsically safe or increased safety installations, the marking on the enclosure must be supplemented accordingly.

15.3 Parameters

Rated voltage [1]	up to 690 V AC/DC
Rated current [2]	up to 400 A
Cross section [3]	up to 300 mm²

[1] The rated voltage depends on the used type of components / devices and the creepage and clearance distances.
[2] The rated current depends on the used type of components / devices, the cross section and the number of conductors.
[3] According to the cross section / current table for each size of enclosure.

Ambient temperature range: $-55\ °C \leq T_{amb} \leq +55\ °C$

To determine the thermal parameters, a calculation tool which has been tested for this purpose is used. The suitability of the calculation tool was tested as part of the approval IECExPTB19.0021 with practically determined values.

16 Report Number

BVS PP 02.2017 EU, as of 2022-02-16

17 Special Conditions for Use

None

Note:
Depending on the selection of components, the ambient temperature range can be reduced.

The instructions for use of the separately certified components and devices used must be provided by the manufacturer to the user by passing on the complete and relevant documentation.

DEKRA Testing and Certification GmbH, Handwerkstr. 15, 70565 Stuttgart, Germany
Certification body: Dinnendahlstr. 9, 44809 Bochum, Germany
Phone +49.234.3696-400, Fax +49.234.3696-401, e-mail DTC-Certification-body@dekra.com

18 **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are covered by the standards listed under item 9.

19 **Drawings and Documents**

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, 2022-02-16
BVS-Wlo/Mu A20211154

Managing Director

DEKRA Testing and Certification GmbH, Handwerkstr. 15, 70565 Stuttgart, Germany
Certification body: Dinnendahlstr. 9, 44809 Bochum, Germany
Phone +49.234.3696-400, Fax +49.234.3696-401, e-mail DTC-Certification-body@dekra.com