IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

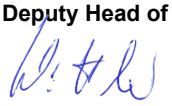
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	**IECEx BVS 22.0008**	Page 1 of 3	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2022-02-17		
Applicant:	**COOPER CROUSE-HINDS GmbH** Neuer Weg Nord 49, 69412 Eberbach **Germany**		
Equipment:	**Control Unit type GHG 44 * * * ** * ****, Distribution board GHG 619 ** ** * ****, EXKO * ***** * ******		
Optional accessory:			
Type of Protection:	**Protection by Enclosure "t", Increased Safety "e"**		
Marking:	Ex eb* IIB/IIC T** Gb 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.		

Approved for issue on behalf of the IECEx Certification Body: **Dr Michael Wittler**

Position: **Deputy Head of Certification Body**

Signature: (for printed version)



Date: (for printed version) 17.02.2022

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

IECEx Certificate of Conformity

Manufacturer: **COOPER CROUSE-HINDS GmbH**
Neuer Weg Nord 49, 69412 Eberbach
Germany

Manufacturing locations:

Cooper Electric (Changzhou) Co., Ltd.
No. 189 Liuyanghe Road, Xinbei District,Changzhou,Jiangsu 213031
China

Eaton Electric (Singapore) PTE Ltd.
100G Pasir Panjang Road, #07-08/ #02-09 Interlocal Centre, Singapore, 118523
Singapore

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

DE/BVS/ExTR22.0012/00

Quality Assessment Reports:

DE/BVS/QAR11.0009/11 GB/BAS/QAR07.0041/10 GB/BAS/QAR11.0007/08

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Subject and Type

See Annex

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.

Industrial components can also be used in the dust variant. A thermal analysis is also carried out for this.

The used empty enclosure series of polyester or metal is separately tested and certified according IECEx certificate IECEx PTB 11.0030U.

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 IEC 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.

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 IECEx PTB 19.0021 with practically determined values.

SPECIFIC CONDITIONS OF USE: NO

Annex:

BVS_22_0008_Cooper _Annex_.pdf

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 22.0008**
Annex

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