

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx BVS 13.0031X Issue No: 0 Certificate history:

Issue No. 2 (2015-08-06)

Issue No. 0 (2013-02-26)

Status: Current Issue No. 1 (2014-06-11)

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Date of Issue: 2013-02-26

Applicant: Cooper Crouse-Hinds GmbH

Neuer Weg-Nord 49 69412 Eberbach **Germany**

Equipment: Terminal box GHG 72 *** *** ****

Optional accessory:

Type of Protection: Equipment protection by intrinsic safety "i", Equipment dust ignition protection by enclosure "t", Equipment protection by

increased safety "e"

Marking: Ex e * IIC T4 / T5 / T6 Gb

*) Optional the marking can be amplified with the types of protection of the separately certified components, for example "d" and/or "ib".

Ex tb III C T80°C / T95°C Db IP6*

*) see "parameters"

Approved for issue on behalf of the IECEx Dr. F. Eickhoff

Certification Body:

Position: Deputy Head of Certification Body

Signature:

(for printed version)

Date:

- 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 the Official IECEx Website.

Certificate issued by:

DEKRA EXAM GmbH Dinnendahlstrasse 9 44809 Bochum Germany





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Manufacturer: Cooper Crouse-Hinds GmbH

Neuer Weg-Nord 49 69412 Eberbach **Germany**

Additional Manufacturing location(s):

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 apparatus 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 : 2007-10 Explosive atmospheres - Part 0:Equipment - General requirements

Edition:5

IEC 60079-11: 2006 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:5

IEC 60079-31: 2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

Edition:1

IEC 60079-7: 2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition:4

This Certificate **does not** indicate compliance with electrical 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/ExTR13.0030/00

Quality Assessment Report:

DE/BVS/QAR11.0009/01



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Subject and Type

Terminal box type GHG 72 **1) *** ****2)
1) Version
Plastic version (I x w x d)
10 = (165 x 165 x 131) mm
11 = (285 x 165 x 131) mm
Aluminium version (I x w x d)
30 = (220 x 120 x 80) mm
31 = (280 x 230 x 90) mm
32 = (400 x 230 x 90) mm
2) not Ex-relevant

Description

The Terminal box type GHG 72 ** *** **** is used as a connection or junction box in type of protection increased safety "e" and type of protection by enclosure "t". The terminal box enclosure could be executed in plastic or aluminium (only for EPL Gb).

The electrical connection can be realized with separately certified terminals in type of protection "e" increased safety and / or "i" intrinsic safety. The maximum numbers of the terminals, numbers of single leads, size of cross-section and the maximum rated current must be designed according the permitted current / cable size table resp. acc. to the maximum power dissipation (see table in parameters).

Further other mounting components (e. g. fuses etc.) which are separately certified for this purpose can be used with a max. power dissipation of 1 W resp. according the table parameters (apart from components in type of protection "i" intrinsic safety).

To be continued on page 4

SPECIFIC CONDITIONS OF USE: YES as shown below:

The enclosure made from the material SMC 0190 RAL 7035 has to carry the following warning "Clean with moist cloth only".

When mounting the separately certified terminals, the clearance and creepage distance must be observed in accordance to table 1 of EN/IEC 60079-7.



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EQUIPMENT (continued):

<u>Parameters</u>

Electrical parameter

Nominal voltage1) up to 690 V AC / DC

Nominal current2) up to 200 A

Terminal cross-section up to 95 mm2

1) Dependent on the used terminals, as well as the relevant creepage distances and clearances according table 1 of EN/IEC 60079-7.

2) Dependent on the used terminals, as well as terminal cross-section and the number of single leads.

Power Dissipation

Rated current	Power Dissipation / Terminal cross-section					
	1.5 mm2	2.5 mm2	4 mm2	6 mm2	10 mm2	16 mm2
2 A	0.020 W					
3 A	0.025 W	0.015 W				
4 A	0.040 W	0.025 W	0.015 W			
5 A	0.055 W	0.080 W	0.025 W	0.015 W		
10 A	0.250 W	0.200 W	0.080 W	0.060 W	0.035 W	0.025 W
15 A		0.350 W	0.200 W	0.130 W	0.080 W	0.050 W
20 A			0.350 W	0.230 W	0.150 W	0.080 W
25 A				0.350 W	0.230 W	0.150 W
30 A					0.320 W	0.200 W
40 A					0.550 W	0.350 W
50 A						0.550 W

Degree of IP-Protection IP6*

Thermal data

The lower temperature range is depending on the used enclosure assembly parts.

Ambient temperature range -40 °C / -55 °C up to +40 °C (T6)

-40 °C / -55 °C up to +55 °C (T5)

-40 °C / -55 °C up to +55 °C (T4)*

^{*} The degree of IP Protection could be changed depending on the enclosure for use with special assembly parts.

^{*} Only for use of terminals in type of protection intrinsic safety "i".