

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 15.0103X** Page 1 of 5 Certificate history:

Issue No: 0 Status: Current

Date of Issue: 2015-11-13

Applicant: Cooper Crouse-Hinds GmbH

Neuer Weg-Nord 49 69412 Eberbach Germany

Equipment: Load- and safety switch type GHG 264 00 ** * * ***

Optional accessory:

Equipment protection by flameproof enclosures "d", Equipment protection by intrinsic safety "i", Equipment Type of Protection:

dust ignition protection by enclosure "t", Equipment protection by increased safety "e"

Dr. F. Eickhoff

Ex db e IIB/IIC T5/T6 Gb Marking:

Ex db e [ia/ib] IIB/IIC T5/T6 Gb

Ex tb III C T80°C Db

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Deputy Head of Certification Body**

Signature:

(for printed version)

(for printed version)

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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**

Manufacturing locations:

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 60079-0:2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

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

Fdition:2

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

Edition:4

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/ExTR15.0090/00

Quality Assessment Report:

DE/BVS/QAR11.0009/05



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Subject and Type

Load- and safety switch type GHG 264 00 **1) * *2) ***

1) Switching mode

17 = Load- and safety switch 6-pole version with terminals (plastic version)

20 = Load- and safety switch 3-/4-pole version (plastic version)

21 = Load- and safety switch 6-pole version (plastic version)

23 = Load- and safety switch 3-/4-pole version (metal version)

24 = safety switch for converter supply (plastic version)

2) Equipment version

0 = standard

9 = special version

SPECIFIC CONDITIONS OF USE: YES as shown below:

The used enclosure made from the material SMC 0190 RAL 7035 is only permitted to use in Zone 1 and has to carry the following warning "WARNING – CLEAN ONLY WITH DAMP CLOTH".

The dimensions of the flameproof joints are in parts other than the relevant minimum or maximum values of IEC 60079-1:2014. For information on the dimensions of the flameproof joints contact the manufacturer.

For the combination with circuits in type of protection intrinsic safety "i" the creepage and clearance distances between the intrinsic and non-intrinsic circuits must be fulfil the requirements according IEC 60079-11:2011.



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Equipment (continued):

Description

The Load- and safety switch GHG 264 00 ** * * * *** is used for the switching of rated currents up to 80 A and/or for curcuits in type of protection intrinsic safety "i" built in a 3-/4- or 6 pole version.

The standard version load- and safety switch GHG 264 00 ** * * *** consist of a separately certified empty enclosure in type of protection increased safety "e" or protection by enclosure "t" with a switch base type GHG 264 **** R **** installed inside.

Additional, the version type GHG 264 00 24 * * **** is used with a separately certified mounting Switch

type 07-1501-6420/01. Optionally, a switch block type GHG 41 R...., signal lamp type GHG41. . . . R...., terminal block type GHG 240 130. R or terminal block

type GHG 790 110.R can be installed.

Listing of all components used referring to standards

Subject and type	Certificate	Standards	
Empty enclosure GHG 60	IECEx PTB 11.0030U	030U IEC 60079-0:2007 Ed. 5 ¹ IEC 60079-7:2006 Ed. 4 IEC 60079-31:2008 Ed. 1 ¹	
Switch base GHG 264 **** R ****	IECEx BVS 12.0083U	IEC 60079-0:2007 Ed. 5 ¹ IEC 60079-1:2007 Ed. 6 ¹ IEC 60079-7:2006 Ed. 4 IEC 60079-11:2006 Ed. 5 ¹	
Miniature insert switch 07-1501/	IECEx EPS 14.0038U	IEC 60079-0:2011 Ed. 6 IEC 60079-1:2007 Ed. 6 ¹	
Signal lamp	IECEx IBE 13.0031U	IEC 60079-0:2011 Ed. 6 IEC 60079-1:2007 Ed. 6 ¹ IEC 60079-7:2006 Ed. 4 IEC 60079-11:2011 Ed. 6	
Ex-d component GHG 417/418	IECEx IBE 14.0005U	IEC 60079-0:2011 Ed. 6 IEC 60079-1:2007 Ed. 6 ¹ IEC 60079-7:2006 Ed. 4	
Terminal block GHG 240 130. R	IECEx PTB 15.0028U	IEC 60079-0:2011 Ed. 6 IEC 60079-7:2006 Ed. 4	
Terminal block GHG 790 110. R	IECEx PTB 11.0029U	IEC 60079-0:2007 Ed. 5 ¹ IEC 60079-11:2011 Ed. 6	

No applicable Technical Differences



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Additional information: Parameters

Electrical parameter

Rated voltage up to 690 V Rated current up to 80 A

Cross-section up to 16 mm² (fine wire), up to 25 mm² (multi wire),

(main contact) up to 25 mm² (fine wire with special cable lug),

up to 35 mm² (multi wire with special cable lug)

Cross-section up to 4 mm² (fine wire and multi wire)

(auxiliary contact)

Thermal parameters:

Ambient temperature range $-20 \,^{\circ}\text{C}$ up to $+40 \,^{\circ}\text{C}$ / $+50 \,^{\circ}\text{C}$ /+55 $^{\circ}\text{C}$ (IIC)

-36 °C up to +40 °C / +50 °C /+55 °C (IIB) -35 °C up to +40 °C / +50 °C /+55 °C (IIB) (only for safety switch of converter supply)

-35 °C up to +55 °C (IIIC)

Cross-section	Rated current	Temperature class at T _{amb}		
		+40 °C	+50 °C	+55 °C
16 mm ²	≤ 63 A	Т6	Т6	Т6
	≤ 80 A	Т6	T5	
25 mm ²	≤ 80 A	Т6	Т6	Т6
35 mm ²	≤ 80 A	Т6	Т6	Т6