



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 19.0054X** Page 1 of 4 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2019-09-30
Applicant: **Cooper Crouse-Hinds GmbH**
Neuer Weg-Nord 49
69412 Eberbach
Germany
Equipment: **Load-, Main- and Safety switch type GHG 263 * * * * ***
Optional accessory:
Type of Protection: **Flameproof Enclosure "d", Increased Safety "e", Intrinsic Safety "i", Protection by Enclosure "t"**
Marking: Ex db eb ia IIC/IIB T6/T5 Gb
Ex tb IIIC T80°C Db

Approved for issue on behalf of the IECEx
Certification Body:

Dr Franz Eickhoff

Position:

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 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.



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Manufacturer: **Cooper Crouse-Hinds GmbH**
Neuer Weg-Nord 49
69412 Eberbach
Germany

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

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"
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/ExTR19.0062/00](#)

Quality Assessment Report:

[DE/BVS/QAR11.0009/09](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Subject and Type

Load-, Main-, and Safety switch type GHG 263 *1) *2) **3) *4) ****5)

GHG Manufacturers marking

263 Switch 40 A

*1) Switch and enclosure version

- 1 = Main current switch / load switch – plastic version
- 2 = Safety switch – plastic version
- 3 = Main current switch / load switch – metal version
- 4 = Safety switch – metal version

*2) Number of switch contacts

- 3 = 3-pole
- 4 = 4-pole
- 5 = 5-pole
- 6 = 6-pole

**3) Equipment version

- 01 = Standard version
- 02 = Variant version
- ** = Specification by „Local-Assembly-Partner“

*4) Identification marking (country code) - Without influence on explosion protection

- R = Standard version
- * = Variant version (e.g. "X")

****5) Alphanumeric string - Without influence on explosion protection

SPECIFIC CONDITIONS OF USE: YES as shown below:

The gap lengths of the flameproof gaps of the switching base are partly longer and the gap widths of the flameproof gaps are partly smaller than required in Table 2 and 3 of IEC 60079-1:2014. Information on the dimensions can be obtained from the manufacturer.

When combined with circuits of ignition protection type "I" - intrinsic safety, the clearances and creepage distances between intrinsically safe and non-intrinsically safe circuits in accordance with IEC 60079-11:2011 must be maintained.



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Equipment (continued):

Description

The load, main and safety switch type GHG 263 * * * * * is used for switching and disconnecting rated currents up to 40A. The main and safety switch type GHG 263 * * * * * is designed in type of protection "eb", Increased safety or "tb" protection by enclosure. Alternatively, circuits with intrinsic safety "i" protection can also be connected to the separately certified terminals or components.

The enclosure is made of plastic. Alternatively, a separately certified empty enclosure (IECEx PTB 11.0030U) made of plastic or metal can be used.

The enclosure is equipped with a separately certified load switch (IECEx BVS 14.0055U) in type of protection "db" flameproof enclosure and can optionally be equipped with an auxiliary switch (IECEx EPS 14.0038U), indicator lamp (IECEx IBE 13.0031U), Ex-d component (IECEx IBE 14.0005U) and/or separately certified terminal block (IECEx PTB11.0029U) or terminal strip (IECEx PTB 15.0028U).

Optionally, further separately certified terminals can be used according to the "List of components".

Parameters

Nominal voltage up to 690 V
Nominal current up to 40 A

Nominal cross-section:

main contact 16 mm² fine-stranded and stranded wire
25 mm² stranded wire
25 mm² flexible with special cable lug or additional clamping bracket
35 mm² stranded with special cable lug or additional clamping bracket

auxiliary contact up to 4 mm² fine wire and stranded wire

Intrinsically safe parameters for signal lamp GHG 417 1805 R...

$U_i \leq 30$ V
 $I_i \leq 120$ mA
 $C_i = 0$
 $L_i = 0$
 $P_i \leq 750$ mW

Ambient temperature range

IIC $-20\text{ °C} \leq T_{amb} \leq +55\text{ °C}$
IIB / IIIC $-55\text{ °C} \leq T_{amb} \leq +55\text{ °C}$
IIB $-20\text{ °C} \leq T_{amb} \leq +55\text{ °C}$ (only safety switch for inverter drives)

Annex:

[BVS_19_0054X_Cooper_Annex.pdf](#)



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Temperature class and surface temperature

≤ 4-pole version

connection cross-section	rated current	Ambient temperature and temperature class / surface temperature		
		+40 °C	+50 °C	+55 °C
6 mm ²	I _n up to 35 A	T6 / T80°C	T6 / T80°C	T6 / T80°C
10 mm ²	I _n up to 35 A	T6 / T80°C	T6 / T80°C	T6 / T80°C
	I _n up to 40 A	T6 / T80°C	T6 / T80°C	T5 / T80°C
16 mm ²	I _n up to 40 A	T6 / T80°C	T6 / T80°C	T6 / T80°C

> 4-pole version

connection cross-section	rated current	Ambient temperature and temperature class / surface temperature		
		+40 °C	+50 °C	+55 °C
6 mm ²	I _n up to 35 A	T6 / T80°C	T5 / T80°C	T5 / T80°C */**
10 mm ²	I _n up to 40 A	T6 / T80°C	T6 / T80°C	T5 / T80°C **
16 mm ²	I _n up to 40 A	T6 / T80°C	T6 / T80°C	T6 / T80°C

*Use cables and wires with a temperature resistance of more than 80 °C.

**Use cable glands with a temperature resistance of more than 70 °C.



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Listing of all components used referring to older standards

Subject and type	Certificate	Standards
Empty Enclosure GHG 60* **** R ****	IECEX PTB 11.0030U	IEC 60079-0 (Ed.5) ¹ IEC 60079-7 (Ed.4) ¹ IEC 60079-31 (Ed.1) ¹
Ex-d switch base GHG 263	IECEX BVS 14.0055U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-1 (Ed.7.0) ¹ IEC 60079-7 (Ed.5.0) ¹ IEC 60079-11 (Ed.6.0) ¹ IEC 60079-31 (Ed.2) ¹
Built-in switch mini 07-1501-****/****	IECEX EPS 14.0038U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-1 (Ed.7.0) ¹
Signal lamp	IECEX IBE 13.0031U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-1 (Ed.7.0) ¹ IEC 60079-7 (Ed.5.0) ¹ IEC 60079-11 (Ed.6.0) ¹
Switch block	IECEX IBE 14.0005U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-1 (Ed.7.0) ¹ IEC 60079-7 (Ed.5.0) ¹
Terminal block GHG 790 110. R	IECEX PTB 11.0029U	IEC 60079-0 (Ed.5) ¹ IEC 60079-7 (Ed.4) ¹
Terminal block GHG 240 130* R****	IECEX PTB 15.0028U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-7 (Ed.4) ¹
Terminal blocks, type AKG 4-EX and type EK 135	IECEX KIWA 14.0005U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-7 (Ed.4) ¹
Feed-through terminal block, type MXK4	IECEX PTB 06.0100U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-7 (Ed.4) ¹
Terminal block	IECEX SEV 13.0003U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-7 (Ed.4) ¹
Terminal Blocks types UK 10N, UK 16N, UK 35, UKH 50, UKH 50-IB and UKH 95 and Pick-off Terminal Blocks types AGK 10-UKH 50, AGK 10-UKH 95 and AGK 10-UKH 150/240	IECEX KEM 06.0029U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-7 (Ed.4) ¹
Terminal blocks	IECEX SEV 13.0012U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-7 (Ed.4) ¹
Terminal blocks	IECEX SEV 12.0008U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-7 (Ed.4) ¹
Terminal blocks, type AKG 4-EX and type EK 13	IECEX KIWA 14.0005U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-7 (Ed.4) ¹
SAK K range of rail mounted feedthrough terminals	IECEX SIR 05.0032U	IEC 60079-0 (Ed.4.0) ¹ IEC 60079-7 (Ed.3) ¹
Feedthrough terminal blocks, type PT 2,5*** and PTTB 2,5***, Protective conductor terminal blocks, type PT 2,5***-PE and PTTB 2,5-PE	IECEX PTB 10.0021U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-7 (Ed.4) ¹
Feedthrough terminal blocks, type PT 4***, PTTB 4***, Protective conductor terminal blocks, type PT 4***-PE, PTTB 4-PE	IECEX PTB 10.0046U	IEC 60079-0 (Ed.6.0) ¹ IEC 60079-7 (Ed.4) ¹
Weidmüller Terminal blocks, W-Reihe, type feed-through and PE	IECEX ULD 05.0008U	IEC 60079-0 (Ed.4.0) ¹ IEC 60079-7 (Ed.3) ¹

¹ No applicable technical differences

² Technical differences evaluated and found satisfactory