IECEx Certificate of Conformity

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 12.0071X	issue No.:0	Certificate history:
Status:	**Current**		
Date of Issue:	**2012-10-02**	Page 1 of 3	

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

Electrical Apparatus: **Terminal box, type GHG 74 ****** ****
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
resp.
Ex e ib [ia/ib] IIC T4 / T5 / T6 Gb
Ex tb IIIC T80 °C / T95 °C Db

Approved for issue on behalf of the IECEx Certification Body: H.-Ch. Simanski

Position: Head of Certification Body

Signature:
(for printed version)

Date: 4/10/12

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

DEKRA
DEKRA EXAM GmbH

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 12.0071X

Date of Issue: **2012-10-02** Issue No.: **0**

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

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 electrical 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 Edition: 5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/ExTR12.0068/00

Quality Assessment Report:

DE/BVS/QAR11.0009/00

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 12.0071X

Date of Issue: **2012-10-02** Issue No.: **0**

Schedule

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

The Terminal box type GHG 74 *** *** **** is used like a connection or junction box in type of protection increased safety "e" and type of protection by enclosure "t".

The empty enclosure is separately certified (PTB 99 ATEX 3118 U / IECEx PTB 11.0030 U).

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 maximum power dissipation (see table in parameters).

subject and type
see Annex

Parameters
see Annex

CONDITIONS OF CERTIFICATION: YES as shown below:

The used empty 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 into the separately certified empty enclosure, the clearance and creepage distance must be observed in accordance to table 1 of EN/IEC 60079-7.

Annexe: BVS_12_0071X_Cooper_Annex.pdf

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 12.0071X**
Annex

Subject and Type

Terminal box type GHG 74 ***[1] *** ****[2]

[1] Version

Plastic version (l x w x d)

401 = (135 x 271 x 136) mm

502 = (271 x 271 x 136) mm

603 = (271 x 544 x 136) mm

904 = (271 x 817 x 136) mm

503 = (271 x 217 x 210) mm

604 = (271 x 544 x 210) mm

Metal version (l x w x d)

421 = (175,0 x 312,5 x 136,0) mm

522 = (312,5 x 312,5 x 136,0) mm

623 = (312,5 x 627,0 x 136,0) mm

924 = (312,45 x 941,5 x 136,0) mm

523 = (312,5 x 312,5 x 210,0) mm

624 = (312,5 x 627,0 x 210,0) mm

925 = (627,0 x 941,5 x 136,0) mm

926 = (627,0 x 941,5 x 210,0) mm

[2] not Ex-relevant

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 12.0071X**
Annex

Parameters

Electrical parameter

Nominal voltage[1)]	up to 690 V AC / DC
Nominal current[2)]	up to 400 A
Terminal cross-section	up to 400 mm^2

[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 mm^2	2,5 mm^2	4 mm^2	6 mm^2	10 mm^2	16 mm^2
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*

* Degree of IP Protection could be changed depending on the enclosure configuration (according the empty enclosure certificate PTB 99 ATEX 3118 U / IECEx PTB 11.00030 U).

Thermal data

Ambient temperature range	-55 °C up to +40 °C (T6) -55 °C up to +55 °C (T5)

IECEx Certificate of Conformity

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 12.0071X	issue No.:1	Certificate history: Issue No. 1 (2014-6-11) Issue No. 0 (2012-10-2)
Status:	**Current**		
Date of Issue:	**2014-06-11**	Page 1 of 4	

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

Electrical Apparatus: **Terminal box, type GHG 74 *** *** ****
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
resp.
Ex e ib [ia/ib] IIC T4 / T5 / T6 Gb
Ex tb IIIC T80 °C / T95 °C Db

Approved for issue on behalf of the IECEx Certification Body: H.-Ch. Simanski

Position: Head of Certification Body

Signature:
(for printed version)

Date: 11.6.2014

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

DEKRA
DEKRA EXAM GmbH

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 12.0071X

Date of Issue: **2014-06-11** Issue No.: **1**

Manufacturer:

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

Additional Manufacturing location(s):

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

Cooper Crouse-Hinds PTE Ltd
No 2 Serangoon North Avenue
06-01 Fu Yu Building
Singapore
554911
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 electrical 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 Edition: 5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/ExTR12.0068/00

Quality Assessment Report:

GB/BAS/QAR07.0041/05 GB/BAS/QAR11.0007/02 DE/BVS/QAR11.0009/00

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 12.0071X

Date of Issue: **2014-06-11** Issue No.: **1**

Schedule

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

The Terminal box type GHG 74 *** *** **** is used like a connection or junction box in type of protection increased safety "e" and type of protection by enclosure "t".

The empty enclosure is separately certified (PTB 99 ATEX 3118 U / IECEx PTB 11.0030 U).

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 maximum power dissipation (see table in parameters).

subject and type
see Annex

Parameters
see Annex

CONDITIONS OF CERTIFICATION: YES as shown below:

The used empty 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 into the separately certified empty enclosure, the clearance and creepage distance must be observed in accordance to table 1 of EN/IEC 60079-7.

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 12.0071X

Date of Issue: **2014-06-11** Issue No.: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Two new manufacturing locations (in Singapore and in China) were added.

The old location in Eberbach, Germany is still valid.

Therefore two additional QAR's were linked to this Certificate.

The Annex of issue 0 remains unchanged and is therefore still valid.

Annex: BVS_12_0071X_Cooper_Annex.pdf

IECEx Certificate of Conformity

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 12.0071X	issue No.:2	Certificate history: Issue No. 2 (2015-8-6) Issue No. 1 (2014-6-11) Issue No. 0 (2012-10-2)
Status:	**Current**		
Date of Issue:	**2015-08-06**	Page 1 of 4	

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

Electrical Apparatus: **Terminal box type GHG 74 *** *** ****
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
Ex tb IIIC T80°C / T95°C Db
* Optional the marking can be amplified with the types of protection of the separately certified components, for example "d", "e", "mb" and/or "ia/ib".

Approved for issue on behalf of the IECEx Certification Body: H.-Ch. Simanski

Position: Head of Certification Body

Signature:
(for printed version)

Date: 6.8.2015

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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

DEKRA EXAM GmbH

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 12.0071X

Date of Issue: **2015-08-06** Issue No.: **2**

Manufacturer:

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

Additional Manufacturing location(s):

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

Cooper Crouse-Hinds PTE Ltd
No 2 Serangoon North Avenue
06-01 Fu Yu Building
Singapore
554911
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 electrical 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 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/ExTR12.0068/01

Quality Assessment Report:

DE/BVS/QAR11.0009/04 GB/BAS/QAR07.0041/06 GB/BAS/QAR11.0007/03

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 12.0071X

Date of Issue: **2015-08-06** Issue No.: **2**

Schedule

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

The Terminal box type GHG 74 *** *** **** is used like a connection or junction box in type of protection increased safety "e" and type of protection by enclosure "t".

The empty enclosure is separately certified (PTB 99 ATEX 3118 U / IECEx PTB 11.0030 U).

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 maximum power dissipation (see table in parameters).

Listing of all components used referring to older standards

Subject and type	Certificate	Standards
Enclosure	IECEx PTB 11.0030U	IEC 60079-0:2007 IEC 60079-7:2006 IEC 60079-31:2008
Terminal	Fixed in "List of Components" GHG 902 5018 F0001	
Several components which can be built in	Fixed in "List of Components" GHG 902 5018 F0002	

Subject and type
see Annex

Parameters
see Annex

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The used empty enclosure made from the material SMC 0190 RAL 7035 is only permitted to use in Zone 1 and has to carry the following warning "Clean with moist cloth only".
2. When mounting the separately certified terminals into the separately certified empty enclosure, the clearances and creepage distances in accordance with table 1 of EN/IEC 60079-7 have to be fulfilled.

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 12.0071X

Date of Issue: **2015-08-06** Issue No.: **2**

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

The reason for this supplement is the updating to the new standard.

Annex: BVS_12_0071X_Cooper_Annex_issue2.pdf

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 12.0071X issue No.: 2**
Annex

Subject and Type

Terminal box type GHG 74 ***[1] *** ****[2]
[1] Version
Plastic version (l x w x d)
401 = (135 x 271 x 136) mm
502 = (271 x 271 x 136) mm
603 = (271 x 544 x 136) mm
904 = (271 x 817 x 136) mm
503 = (271 x 217 x 210) mm
604 = (271 x 544 x 210) mm

Metal version (l x w x d)
421 = (175.0 x 312.5 x 136.0) mm
522 = (312.5 x 312.5 x 136.0) mm
623 = (312.5 x 627.0 x 136.0) mm
924 = (312.45 x 941.5 x 136.0) mm
523 = (312.5 x 312.5 x 210.0) mm
624 = (312.5 x 627.0 x 210.0) mm
925 = (627.0 x 941.5 x 136.0) mm
926 = (627.0 x 941.5 x 210.0) mm
[2] not Ex-relevant

Parameters

Electrical parameter

Nominal voltage [1]	up to 690 V AC / DC
Nominal current [2]	up to 400 A
Terminal cross-section	up to 400 mm^2

[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.

Max. Power dissipation for Plastic version 401 = (135 x 271 x 136) mm:

Max. ambient temp.	T6	T5
40 °C	21 W	28 W
55 °C	10 W	21 W

Max. Power dissipation for Plastic version 502 = (271 x 271 x 136) mm:

Max. ambient temp.	T6	T5
40 °C	33 W	46 W
55 °C	20 W	33 W

Max. Power dissipation for Plastic version 603 = (271 x 544 x 136) mm:

Max. ambient temp.	T6	T5
40 °C	59 W	81 W
55 °C	36 W	59 W

Max. Power dissipation for Plastic version 904 = (271 x 817 x 136) mm:

Max. ambient temp..	T6	T5
40 °C	85 W	117 W
55 °C	52 W	85 W

Max. Power dissipation for Plastic version 503 = (271 x 217 x 210) mm:

Max. ambient temp.	T6	T5
40 °C	43 W	59 W
55 °C	26 W	43 W

Max. Power dissipation for Plastic version 604 = (271 x 544 x 210) mm

Max. ambient temp.	T6	T5
40 °C	73 W	101 W
55 °C	45 W	73 W

Max. Power dissipation for Metal version 421 = (175.0 x 312.5 x 136.0) mm:

Max. ambient temp.	T6	T5
40 °C	46 W	63 W
55 °C	28 W	46 W

Max. Power dissipation for Metal version 522 = (312.5 x 312.5 x 136.0) mm:

Max. ambient temp..	T6	T5
40 °C	69 W	95 W
55 °C	43 W	69 W

Max. Power dissipation for Metal version 623 = (312.5 x 627.0 x 136.0) mm

Max. ambient temp.	T6	T5
40 °C	123 W	170 W
55 °C	76 W	123 W

Max. Power dissipation for Metal version 924 = (312.45 x 941.5 x 136.0) mm

Max. ambient temp.	T6	T5
40 °C	177 W	244 W
55 °C	110 W	177 W

Max. Power dissipation for Metal version 523 = (312.5 x 312.5 x 210.0) mm

Max. ambient temp.	T6	T5
40 °C	87 W	119 W
55 °C	54 W	87 W

Max. Power dissipation for Metal version 624 = (312.5 x 627.0 x 210.0) mm:

Max. ambient temp.	T6	T5
40 °C	150 W	207 W
55 °C	94 W	150 W

Max. Power dissipation for Metal version 925 = (627.0 x 941.5 x 136.0) mm

Max. ambient temp.	T6	T5
40 °C	309 W	425 W
55 °C	193 W	309 W

Max. Power dissipation for Metal version 926 = (627.0 x 941.5 x 210.0) mm:

Max. ambient temp.	T6	T5
40 °C	353 W	486 W
55 °C	220 W	353 W

Degree of IP-Protection IP6*

* Degree of IP Protection could be changed depending on the enclosure configuration (according the empty enclosure certificate PTB 99 ATEX 3118 U / IECEx PTB 11.0030 U).

Thermal data

Ambient temperature range -55 °C up to +55 °C (T6)
-55 °C up to +55 °C (T5)
-55 °C up to +55 °C (T4)*

* Only for use of terminals in type of protection Intrinsic Safety "i".

IECEx Certificate of Conformity

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 12.0071X	issue No.:3	Certificate history: Issue No. 3 (2018-2-13) Issue No. 2 (2015-8-6) Issue No. 1 (2014-6-11) Issue No. 0 (2012-10-2)
Status:	**Current**		
Date of Issue:	**2018-02-13**	Page 1 of 4	

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

Equipment: **Terminal box type GHG 74 *** *** ****
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
Ex tb IIIC T80°C / T95°C Db
* Optional the marking can be amplified with the types of protection of the separately certified components, for example 'd', 'e', 'mb' and/or 'ia/ib'.

Approved for issue on behalf of the IECEx Certification Body: Dr Franz Eickhoff

Position: Deputy Head of Certification Body

Signature:
(for printed version)

Date: 2018-02-13

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

DEKRA EXAM GmbH

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 12.0071X

Date of Issue: **2018-02-13** Issue No.: **3**

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

Additional Manufacturing location(s):

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

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

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 electrical 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 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/ExTR12.0068/02

Quality Assessment Report:

DE/BVS/QAR11.0009/08 GB/BAS/QAR07.0041/07 GB/BAS/QAR11.0007/05

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 12.0071X

Date of Issue: **2018-02-13** Issue No.: **3**

Schedule

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

Description

The terminal box type GHG 74 *** *** **** is used like a connection or junction box in type of protection Increased Safety 'e' and type of protection by enclosure 't'. The empty enclosure is separately certified.

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 maximum power dissipation (see table in parameters).

If terminals in type of protection Intrinsic Safety are used the distances according to IEC 60079-11 are fulfilled respectively a suitable spacer is installed.

Separately certified components can be built in the terminal box. They are in one of the types of protection according to IEC 60079-0.

Subject and Type

See Annex

Parameters

See Annex

Listing of all components used referring to older standards

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The used empty enclosure made from the material SMC 0190 RAL 7035 is only permitted to use in Zone 1 and has to carry the following warning "Clean with moist cloth only".
2. When mounting the separately certified terminals into the separately certified empty enclosure, the clearances and creepage distances in accordance with table 1 of IEC 60079-7 have to be fulfilled.

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 12.0071X

Date of Issue: **2018-02-13** Issue No.: **3**

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

The manufacturing location "Eaton Electric (Singapore) PTE Ltd." changed.

Annex: BVS_12_0071X_Cooper_Annex_issue3_1.pdf

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 12.0071X issue No.: 3**
Annex

Subject and Type

Terminal box type GHG 74 ***[1] *** ****[2]
[1] Version
Plastic version (l x w x d)
401 = (135 x 271 x 136) mm
502 = (271 x 271 x 136) mm
603 = (271 x 544 x 136) mm
904 = (271 x 817 x 136) mm
503 = (271 x 217 x 210) mm
604 = (271 x 544 x 210) mm

Metal version (l x w x d)
421 = (175.0 x 312.5 x 136.0) mm
522 = (312.5 x 312.5 x 136.0) mm
623 = (312.5 x 627.0 x 136.0) mm
924 = (312.5 x 941.5 x 136.0) mm
523 = (312.5 x 312.5 x 210.0) mm
624 = (312.5 x 627.0 x 210.0) mm
925 = (627.0 x 941.5 x 136.0) mm
926 = (627.0 x 941.5 x 210.0) mm
[2] not Ex-relevant

Listing of all components used referring to older standards

Subject and type	Certificate	Standards
Enclosure [1]	IECEx PTB 11.0030U	IEC 60079-0:2007 IEC 60079-7:2006 IEC 60079-31:2008
Terminal [1]	Fixed in 'List of Components' GHG 902 5018 F0001	
Several components which can be built in [1]	Fixed in 'List of Components' GHG 902 5018 F0002	

1 No applicable technical differences
2 Technical differences evaluated and found satisfactory

Parameters

Electrical parameter

Nominal voltage [1]	up to	690	V AC / DC
Nominal current [2]	up to	400	A
Terminal cross-section	up to	400	mm^2

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

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

Max. power dissipation for plastic version 401 = (135 x 271 x 136) mm:

Max. ambient temp.	T6	T5
40 °C	21 W	28 W
55 °C	10 W	21 W

Max. power dissipation for plastic version 502 = (271 x 271 x 136) mm:

Max. ambient temp.	T6	T5
40 °C	33 W	46 W
55 °C	20 W	33 W

Max. power dissipation for plastic version 603 = (271 x 544 x 136) mm:

Max. ambient temp.	T6	T5
40 °C	59 W	81 W
55 °C	36 W	59 W

Max. power dissipation for plastic version 904 = (271 x 817 x 136) mm:

Max. ambient temp..	T6	T5
40 °C	85 W	117 W
55 °C	52 W	85 W

Max. power dissipation for plastic version 503 = (271 x 217 x 210) mm:

Max. ambient temp.	T6	T5
40 °C	43 W	59 W
55 °C	26 W	43 W

Max. power dissipation for plastic version 604 = (271 x 544 x 210) mm:

Max. ambient temp.	T6	T5
40 °C	73 W	101 W
55 °C	45 W	73 W

Max. power dissipation for metal version 421 = (175.0 x 312.5 x 136.0) mm:

Max. ambient temp.	T6	T5
40 °C	46 W	63 W
55 °C	28 W	46 W

Max. power dissipation for metal version 522 = (312.5 x 312.5 x 136.0) mm:

Max. ambient temp..	T6	T5
40 °C	69 W	95 W
55 °C	43 W	69 W

Max. power dissipation for metal version 623 = (312.5 x 627.0 x 136.0) mm:

Max. ambient temp.	T6	T5
40 °C	123 W	170 W
55 °C	76 W	123 W

Max. power dissipation for metal version 924 = (312.45 x 941.5 x 136.0) mm:

Max. ambient temp.	T6	T5
40 °C	177 W	244 W
55 °C	110 W	177 W

Max. power dissipation for metal version 523 = (312.5 x 312.5 x 210.0) mm:

Max. ambient temp.	T6	T5
40 °C	87 W	119 W
55 °C	54 W	87 W

Max. power dissipation for metal version 624 = (312.5 x 627.0 x 210.0) mm:

Max. ambient temp.	T6	T5
40 °C	150 W	207 W
55 °C	94 W	150 W

Max. power dissipation for metal version 925 = (627.0 x 941.5 x 136.0) mm

Max. ambient temp.	T6	T5
40 °C	309 W	425 W
55 °C	193 W	309 W

Max. power dissipation for metal version 926 = (627.0 x 941.5 x 210.0) mm:

Max. ambient temp.	T6	T5
40 °C	353 W	486 W
55 °C	220 W	353 W

Degree of IP-Protection IP6*

* Degree of IP Protection could be changed depending on the enclosure configuration (according the empty enclosure certificate IECEx PTB 11.0030 U).

Thermal data

Ambient temperature range

-55 °C up to +55 °C (T6)
-55 °C up to +55 °C (T5)
-55 °C up to +55 °C (T4)*

* Only for use of terminals in type of protection Intrinsic Safety 'i'.

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 12.0071X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 4	Issue 3 (2018-02-13) Issue 2 (2015-08-06) Issue 1 (2014-06-11) Issue 0 (2012-10-02)
Date of Issue:	2022-12-05		

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

Equipment: **Terminal box type GHG 74 *** ** * ****

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 eb* IIC T4 / T5 / T6 Gb

Ex tb IIIC T80°C / T95°C Db

*) Optional the marking can be amplified with the types of protection of the separately certified components, for example “db”, “eb”, “mb” and/or “ia/ib”.

Approved for issue on behalf of the IECEx Certification Body: **Dr Franz Eickhoff**

Position: **Lead Auditor and officially recognised expert**

Signature:
(for printed version)

Date:
(for printed version) 2022-12-05

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

Certificate No.: **IECEx BVS 12.0071X**

Date of issue: 2022-12-05

Issue No: 4

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 Edition:7.0 — Explosive atmospheres - Part 0: Equipment - General requirements

IEC 60079-11:2011 Edition:6.0 — Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

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

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

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/ExTR12.0068/03

Quality Assessment Reports:

DE/BVS/QAR11.0009/09 GB/BAS/QAR07.0041/11 GB/BAS/QAR11.0007/08

IECEx Certificate of Conformity

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

Description

The Terminal box type GHG 74 *** ** * **** is used like a connection or junction box in type of protection Increased Safety “e” and type of protection by enclosure “t”. The empty enclosure is separately certified
(IECEx PTB 11.0030U).

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 to the maximum power dissipation (see table in parameters).

Separately certified components can be built in the terminal box. They are in one of the types of protection according to IEC 60079-0.

Subject and Type

See Annex

Parameters

See Annex

Listing of all components used referring to older standards

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:
The used empty enclosure made from the material SMC 0190 RAL 7035 is only permitted to use in areas with EPL Gb has to carry the following warning “Clean with moist cloth only”.

When mounting the separately certified terminals into the separately certified empty enclosure, the clearances and creepage distances in accordance with table 1 of IEC 60079-7 have to be fulfilled.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Updating to the new standard
- Addition of two new enclosure sizes

Annex:

BVS_12_0071X_Firma _Annex_issue4_3.pdf

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 12.0071X issue No: 4**
Annex

General product information:

Subject and Type

Terminal box type GHG 74 ***[1] ** * ****[2]
[1] Version
Plastic version (l x w x d)
401 = (135 x 271 x 137) mm
502 = (271 x 271 x 137) mm
503 = (271 x 271 x 211) mm
603 = (271 x 544 x 137) mm
604 = (271 x 544 x 211) mm
904 = (271 x 817 x 137) mm
905 = (271 x 817 x 211) mm

Metal version (l x w x d)
421 = (175.0 x 312.5 x 135) mm
522 = (312.5 x 312.5 x 135) mm
523 = (312.5 x 312.5 x 210) mm
623 = (312.5 x 627.0 x 135) mm
624 = (312.5 x 627.0 x 210) mm
924 = (312.5 x 941.5 x 135) mm
925 = (627.0 x 941.5 x 135) mm
926 = (627.0 x 941.5 x 210) mm

[2] not Ex-relevant

Listing of all components used referring to older standards

Subject and type	Certificate	Standards
Fuse type 8560	IECEx PTB 06.0056U	IEC 60079-0:2004 Ed. 4.0 IEC 60079-7:2001 Ed. 3.0 IEC 60079-18:1992 Ed. 1.0
P.B. EX41 GHG417	IECEx IBE 14.0005U	IEC 60079-0:2011 Ed. 6.0 IEC 60079-7:2015 Ed. 5.0
Terminal type MSLKG 5	IECEx KEM 07.0035U	IEC 60079-0:2004 Ed. 4.0 IEC 60079-7:2006 Ed. 4.0

1 No applicable technical differences

Listing of all used components

Subject and type	Certificate
Terminals	see “List of Components” GHG 902 5018 F0001
Different mounting components	see “List of Components” GHG 902 5018 F0002

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 12.0071X issue No: 4**
Annex

Parameters

Electrical parameter

Nominal voltage [1)]	up to 690 V AC / DC
Nominal current [2)]	up to 400 A
Terminal cross-section	up to 400 mm^2

[1)] Dependent on the used terminals, as well as the relevant creepage distances and clearances according to 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.

Max. Power dissipation for Plastic version 401 = (135 x 271 x 137) mm:

Max. ambient temp.	T6	T5
40 °C	18.1 W	24.9 W
55 °C	11.3 W	18.1 W

Max. Power dissipation for Plastic version 502 = (271 x 271 x 137) mm:

Max. ambient temp.	T6	T5
40 °C	34.5 W	47.4 W
55 °C	21.5 W	34.5 W

Max. Power dissipation for Plastic version 503 = (271 x 271 x 210) mm:

Max. ambient temp.	T6	T5
40 °C	43.8 W	60.3 W
55 °C	27.4 W	43.8 W

Max. Power dissipation for Plastic version 603 = (271 x 544 x 137) mm:

Max. ambient temp..	T6	T5
40 °C	60.5 W	83.1 W
55 °C	37.8 W	60.5 W

Max. Power dissipation for Plastic version 604 = (271 x 544 x 211) mm

Max. ambient temp.	T6	T5
40 °C	74.5 W	102.5 W
55 °C	46.6 W	74.5 W

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 12.0071X issue No: 4**
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Max. Power dissipation for Plastic version 904 = (271 x 817 x 137) mm:

Max. ambient temp.	T6	T5
40 °C	86.4 W	118.9 W
55 °C	54 W	86.4 W

Max. Power dissipation for Plastic version 905 = (271 x 817 x 211) mm:

Max. ambient temp.	T6	T5
40 °C	105.2 W	144.7 W
55 °C	65.8 W	105.2 W

Max. Power dissipation for Metal version 421 = (175.0 x 312.5 x 135.0) mm:

Max. ambient temp.	T6	T5
40 °C	46.6 W	64.1 W
55 °C	29.1 W	46.6 W

Max. Power dissipation for Metal version 522 = (312.5 x 312.5 x 135.0) mm:

Max. ambient temp.	T6	T5
40 °C	70.4 W	96.8 W
55 °C	44 W	70.4 W

Max. Power dissipation for Metal version 523 = (312.5 x 312.5 x 210.0) mm

Max. ambient temp.	T6	T5
40 °C	88.5 W	121.7 W
55 °C	55.3 W	88.5 W

Max. Power dissipation for Metal version 623 = (312.5 x 627.0 x 135.0) mm

Max. ambient temp.	T6	T5
40 °C	124.8 W	171.6 W
55 °C	78 W	124.8 W

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 12.0071X issue No: 4**
Annex

Max. Power dissipation for Metal version 624 = (312.5 x 627.0 x 210.0) mm:

Max. ambient temp.	T6	T5
40 °C	152 W	95 W
55 °C	209.1 W	152 W

Max. Power dissipation for Metal version 924 = (312.5 x 941.5 x 135.0) mm

Max. ambient temp.	T6	T5
40 °C	179.2 W	246 W
55 °C	112 W	179.2 W

Max. Power dissipation for Metal version 925 = (627.0 x 941.5 x 135.0) mm

Max. ambient temp.	T6	T5
40 °C	310.1 W	426.4 W
55 °C	193.8 W	310.1 W

Max. Power dissipation for Metal version 926 = (627.0 x 941.5 x 210.0) mm:

Max. ambient temp.	T6	T5
40 °C	355.6 W	489 W
55 °C	222.3 W	355.6 W

Degree of IP-Protection

according to the empty enclosure certificate PTB 99 ATEX 3118 U / IECEx PTB 11.0030 U

Thermal data

Ambient temperature range -55 °C up to +55 °C see above
-55 °C up to +55 °C (T4)*

*only for use of terminals in type of protection Intrinsic Safety „i“.