

## Translation

# (1) 1<sup>st</sup> Supplement to the EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6
- (3) No. of EC-Type Examination Certificate: **BVS 13 ATEX E 037 X**
- (4) Equipment: **Terminal box type GHG 731 \*\* \*\*\* \*\*\*\*\***
- (5) Manufacturer: **Cooper Crouse-Hinds GmbH**
- (6) Address: **Neuer Weg-Nord 49, 69412 Eberbach, Germany**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in the Test and Assessment Report BVS PP 13.2078 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- |                                   |                                    |
|-----------------------------------|------------------------------------|
| <b>EN 60079-0:2012 + A11:2013</b> | <b>General requirements</b>        |
| <b>EN 60079-7:2007</b>            | <b>Increased safety "e"</b>        |
| <b>EN 60079-11:2012</b>           | <b>Intrinsic safety "i"</b>        |
| <b>EN 60079-31:2014</b>           | <b>Protection by enclosure "t"</b> |
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the appendix to this certificate.
- (11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

 **II 2G Ex e\* IIC T4 / T5 / T6 Gb**

 **II 2D 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".

DEKRA EXAM GmbH  
Bochum, dated 2015-08-13

Signed: Simanski

Certification body

Signed: Dr. Wittler

Special services unit

- (13) Appendix to
- (14) **1<sup>st</sup> Supplement to the EC-Type Examination Certificate  
BVS 13 ATEX E 037 X**
- (15) 15.1 Subject and type

Terminal box type GHG 731 <sup>\*\*1)</sup> \*\*\* <sup>\*\*\*\*2)</sup>

<sup>1)</sup> Version

Plastic version (l x w x d)

01 = ( 85 x 85 x 77.5) mm

02 = (125 x 85 x 77.5) mm

03 = (165 x 85 x 77.5) mm

11 = (120 x 140 x 95) mm

12 = (182 x 140 x 95) mm

<sup>2)</sup> not Ex-relevant

## 15.2 Description

The Terminal box type GHG 731 <sup>\*\* \*\*\*\* \*\*\*\*\*</sup> 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 material.

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).

In addition other components (apart from components in type of protection "i" Intrinsic Safety) separately certified for this purpose can be used (e.g. fuses) with a max. power dissipation of 1 W.

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

Listing of all components used referring to older standards

| Subject and type                         | Certificate                                      | Standards |
|------------------------------------------|--------------------------------------------------|-----------|
| 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 |           |

## 15.3 Parameters

Type GHG 731 01, GHG 731 02, GHG 731 03

|                               |       |                   |
|-------------------------------|-------|-------------------|
| Nominal voltage <sup>1)</sup> | up to | 690 V AC / DC     |
| Nominal current <sup>2)</sup> | up to | 25 A              |
| Terminal cross-section        | up to | 4 mm <sup>2</sup> |

Type GHG 731 11, GHG 731 12

|                               |       |                    |
|-------------------------------|-------|--------------------|
| Nominal voltage <sup>1)</sup> | up to | 690 V AC / DC      |
| Nominal current <sup>2)</sup> | up to | 80 A               |
| Terminal cross-section        | up to | 25 mm <sup>2</sup> |

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

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

| Max. ambient temp. | T6    | T5    |
|--------------------|-------|-------|
| 40 °C              | 4.7 W | 6.4 W |
| 55 °C              | 2.9 W | 4.7 W |

Max. Power dissipation version 02 = (125 x 85 x 77.5) mm:

| Max. ambient temp. | T6    | T5    |
|--------------------|-------|-------|
| 40 °C              | 5.8 W | 8.0 W |
| 55 °C              | 3.5 W | 5.8 W |

Max. Power dissipation version 03 = (165 x 85 x 77.5) mm:

| Max. ambient temp. | T6    | T5    |
|--------------------|-------|-------|
| 40 °C              | 7.0 W | 9.6 W |
| 55 °C              | 4.3 W | 7.0 W |

Max. Power dissipation version 11 = (120 x 140 x 95) mm

| Max. ambient temp. | T6    | T5    |
|--------------------|-------|-------|
| 40 °C              | 9.3 W | 12 W  |
| 55 °C              | 5.8 W | 9.3 W |

Max. Power dissipation version 12 = (182 x 140 x 95) mm:

| Max. ambient temp. | T6    | T5   |
|--------------------|-------|------|
| 40 °C              | 12 W  | 17 W |
| 55 °C              | 8.0 W | 12 W |

Degree of IP-Protection IP6\*

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

## Thermal data

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

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".

(16) Test and Assessment Report

BVS PP 13.2078 EG as of 2015-08-13

(17) Special conditions for safe use Installation instructions

- 17.1 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".
- 17.2 When mounting the separately certified terminals into the separately certified empty enclosure, the clearances and creepage distances in accordance with table 1 of EN 60079-7 have to be fulfilled.

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We confirm the correctness of the translation from the German original.  
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH  
44809 Bochum, 2015-08-13  
BVS-Pz/Mu A 20150457



Certification body



Special services unit