

Translation

(1) 1st 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 12 ATEX E 118 X**
- (4) Equipment: **Terminal box type GHG 74 *** ** ***
- (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 12.2132 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- | | |
|-----------------------------------|------------------------------------|
| EN 60079-0:2012 + A11:2013 | General requirements |
| EN 60079-7:2007 | Increased safety "e" |
| EN 60079-11:2012 | Intrinsic safety "i" |
| EN 60079-31:2014 | Protection by enclosure "t" |
- (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 2015-07-28

Signed: Simanski

Signed: Dr. Wittler

Certification body

Special services unit

- (13) Appendix to
- (14) **1st Supplement to the EC-Type Examination Certificate
BVS 12 ATEX E 118 X**
- (15) 15.1 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

15.2 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 EN/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 EN/IEC 60079-0.

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

15.3 Parameters

Electrical parameters

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 Aluminium 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 Aluminium 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 Aluminium 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 Aluminium 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. Verlustleistung Aluminiumausführung 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 Aluminium 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 Aluminium 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 Aluminium 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 see above
-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 12.2132 EG as of 2015-07-28

(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/IEC 60079-7 have to be fulfilled.

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, 2015-07-28
BVS-Hk/Mu A 20150455



Certification body



Special services unit