


Translation

(1) EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC
- (3) No. of EC-Type Examination Certificate: **BVS 13 ATEX E 014 U**
- (4) Component: **Empty enclosure type N-TB * * * * * SL * * * ***
- (5) Manufacturer: **Cooper Crouse-Hinds GmbH**
- (6) Address: **Neuer Weg-Nord 49, 69412 Eberbach**
- (7) The design and construction of this component and any acceptable variation thereto are specified in the appendix to this type examination certificate.
- (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 component 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 13.2100 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- EN 60079-0:2012 General requirements**
EN 60079-7:2007 Increased safety "e"
EN 60079-31:2009 Protection by enclosures "t"
- (10) The sign "U" placed after the certificate number indicates that the certificate must not be mistaken for a certificate for equipment or a protective system. This certificate may only be used as the basis for the certification of equipment or a protective system.
- (11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified component in accordance to Directive 94/9/EC.
Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.
- (12) The marking of the component shall include the following:

 **II 2G Ex e IIC Gb**
II 2D Ex tb IIIC Db

DEKRA EXAM GmbH
Bochum, dated 22nd May 2013

Signed: Hans-Christian Simanski

Certification body

Signed: Dr. Michael Wittler

Special services unit

- (13) Appendix to
- (14) **EC-Type Examination Certificate**
BVS 13 ATEX E 014 U
- (15) 15.1 Subject and type

Empty enclosure type N-TB * * * * * SL * * * * *

<u>Asterisks</u>	<u>Description</u>
1...2	Enclosure material S1 316L stainless steel – polished S2 304 stainless steel – polished S3 316L stainless steel – natural S5 304 stainless steel – natural
3...4	Height of the enclosure noted in cm ¹⁾ Range: 22 ... 105
5...6	Width of the enclosure noted in cm ¹⁾ Range: 15 ... 74
7...8	Depth of the enclosure noted in cm ¹⁾ Range: 13 ... 34
9	Gland plate 0 without 1 one side 2 two sides 3 three sides 4 all sides
10	Type of gasket ¹⁾ 1 Standard 2 Flat gasket 1 3 Flat gasket 2 4 Combination of Standard and Flat gasket 1 5 Combination of Standard and / or Flat gasket 1 and Flat gasket 2
11	Type plate fastening 1 glued 2 riveted
12...15	Miscellaneous variants without influences on explosion protection

¹⁾ Please see "Parameters" for detailed information about the possible combinations of height, width, length and type of gasket.

15.2 Description

The empty enclosure type N-TB * * * * * SL * * * * is designed in type of protection Increased Safety 'e' for use in areas endangered by gas atmospheres and in type of protection Protection by Enclosure 't' for use in areas endangered by dust atmospheres.

The enclosure is completely made of stainless steel with one or more non-metallic gaskets.

The empty enclosure type N-TB * * * * * SL * * * * consists of an enclosure housing, an enclosure lid and optionally of gland plates for the mounting of cable glands. The enclosure housing and the enclosure lid are made of folded and welded stainless steel plates. The non-metallic gaskets are placed between the enclosure housing and the enclosure lid and in case of the optional gland plates between the enclosure housing and each gland plate.

The lid is mounted to the housing by use of hinges on one side.

The rail for mounting terminals inside the enclosure can optionally be replaced by bolts.

Optionally a separately certified breathing element can be mounted to the enclosure.

15.3 Parameters

Ingress protection

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List of possible enclosure variants depending on enclosure size and type of gasket

Size	Gasket	Size	Gasket	Size	Gasket	Size	Gasket	Size	Gasket
22-15-13	¹²³	38-30-23	¹²³	45-55-20	¹²³	50-64-20	¹²³	78-50-20	¹
26-26-16	¹²³	38-38-23	¹²³	48-48-16	¹²³	60-64-20	¹²³	86-64-16	¹
26-26-20	¹²³	38-45-20	¹²³	48-48-20	¹²³	62-45-16	¹²³	86-64-20	¹
30-30-16	¹²³	40-40-16	¹²³	50-35-16	¹²³	62-45-20	¹²³	91-61-20	¹
30-30-20	¹²³	40-50-15	¹²³	50-35-20	¹²³	73-73-34	¹	98-74-16	¹
30-35-20	¹²³	45-38-16	¹²³	50-45-20	¹²³	74-55-16	¹	98-74-20	¹
38-26-16	¹²³	45-38-20	¹²³	50-55-20	¹²³	74-55-20	¹	105-61-20	¹

38-26-20 ¹²³

- ¹ Gasket type Standard
- ² Gasket type Flat gasket 1
- ³ Gasket type Flat gasket 2

Permissible temperature range for the different non-metallic materials

Material	Operating temperature range
Standard	-40 °C ... 120 °C
Flat gasket 1	-40 °C ... 120 °C
Flat gasket 2	-35 °C ... 120 °C
Plastic washer ⁴	-40 °C ... 65 °C

⁴ The plastic washer is only relevant for the enclosure variant with sealed earthing stud.

(16) Test and Assessment Report

BVS PP 13.2100 EG as of 22.05.2013

(17) Installation instructions

The operation temperatures of the sealing materials have to be taken into account for the certification of the complete equipment.

The creepage and clearance distances in the empty enclosure type N-TB * * * * * SL * * * * * have to be taken into account for the complete electrical equipment.

If the earthing facility is carried out with a M10 stud the maximum connectable cross section is 120 mm². If the earthing facility is carried out with a M14 stud the maximum connectable cross section is 300 mm². The maximum cross section of the earthing stud has to be taken into account for the maximum acceptable cross section of the supply lines for the complete electrical equipment.

The lid must be opened and closed in vertical position so that the hinges are surely protected against excessive mechanical forces.

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, 22nd May 2013
BVS-Kir/Mu A 20111022



Certification body




Special services unit

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 13 ATEX E 014 U**
- (4) Component: **Empty enclosure type N-TB * * * * * SL * * * * ***
- (5) Manufacturer: **Cooper Crouse-Hinds GmbH**
- (6) Address: **Neuer Weg-Nord 49, 69412 Eberbach, Germany**
- (7) The design and construction of this component 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 component 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 13.2100 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- EN 60079-0:2012 General requirements**
EN 60079-7:2007 Increased safety "e"
EN 60079-31:2009 Protection by enclosure "t"
- (10) The sign "U" placed after the certificate number indicates that the certificate must not be mistaken for a certificate for equipment. This certificate may only be used as the basis for the certification of equipment.
- (11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified component in accordance to Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.
- (12) The marking of the component shall include the following:

 **II 2G Ex e IIC Gb**
II 2D Ex tb IIIC Db

DEKRA EXAM GmbH
Bochum, dated 2014-05-08

Signed: Simanski

Certification body

Signed: Dr. Wittler

Special services unit

- (13) Appendix to
- (14) **1st Supplement to the EC-Type Examination Certificate
BVS 13 ATEX E 014 U**
- (15) 15.1 Subject and type

Empty enclosure type N-TB * * * * * SL * * * *

Asterisks	Description	
1...2	Enclosure material	S1 316L stainless steel - polished
		S2 304 stainless steel - polished
		S3 316L stainless steel - natural
		S5 304 stainless steel - natural
3...4	Height of the enclosure noted in cm ¹⁾ Range: 22 up to 105	
5...6	Width of the enclosure noted in cm ¹⁾ Range: 15 up to 74	
7...8	Depth of the enclosure noted in cm ¹⁾ Range: 13 up to 34	
9	Gland plate	0 without
		1 one side
		2 two sides
		3 three sides
		4 all sides
10	Type of gasket ¹⁾	1 Standard
		2 Flat gasket 1
		3 Flat gasket 2
		4 combination of Standard and Flat gasket 1
		5 combination of Standard and/or Flat gasket 1 and Flat gasket 2
11	Type plate fastening	1 glued
		2 riveted
12...15	Miscellaneous variants without influences on explosion protection	

¹⁾ Please see *Parameters* for detailed information about the possible combinations of height, width, length and type of gasket.

15.2 Description

The empty enclosure type N-TB * * * * * SL * **** is designed in type of protection Increased Safety 'e' for use in areas endangered by gas atmospheres and in type of protection Protection by Enclosure 't' for use in areas endangered by dust atmospheres.

The enclosure is completely made of stainless steel with one or more non-metallic gaskets.

The empty enclosure type N-TB * * * * * SL * **** consists of an enclosure housing, an enclosure lid and optionally of gland plates for the mounting of cable glands. The enclosure housing and the enclosure lid are made of folded and welded stainless steel plates. The non-metallic gaskets are placed between the enclosure housing and the enclosure lid and in case of the optional gland plates between the enclosure housing and each gland plate.

The lid is mounted to the housing by use of hinges on one side.

The rail for mounting terminals inside the enclosure can optionally be replaced by bolts.

Optionally a separately certified breathing element can be mounted to the enclosure.

Reasons for this supplement are:

- two new enclosure variants with the dimensions 30-18-15 and 37-31-15
- additional gland plates with modified dimensions
- change in construction without influence to the explosion protection relevant parts to use a padlock

15.3 Parameters

Ingress protection

IP66

List of possible enclosure variants depending on enclosure size and type of gasket

Size	Gasket	Size	Gasket	Size	Gasket	Size	Gasket	Size	Gasket
22-15-13	^{1,2,3}	38-26-16	^{1,2,3}	45-38-20	^{1,2,3}	50-64-20	^{1,2,3}	86-64-16	¹
26-26-16	^{1,2,3}	38-26-20	^{1,2,3}	45-55-20	^{1,2,3}	60-64-20	^{1,2,3}	86-64-20	¹
26-26-20	^{1,2,3}	38-30-23	^{1,2,3}	48-48-16	^{1,2,3}	62-45-16	^{1,2,3}	91-61-20	¹
30-18-15	^{1,2,3}	38-38-23	^{1,2,3}	48-48-20	^{1,2,3}	62-45-20	^{1,2,3}	98-74-16	¹
30-30-16	^{1,2,3}	38-45-20	^{1,2,3}	50-35-16	^{1,2,3}	73-73-34	¹	98-74-20	¹
30-30-20	^{1,2,3}	40-40-16	^{1,2,3}	50-35-20	^{1,2,3}	74-55-16	¹	105-61-20	¹
37-31-15	^{1,2,3}	40-50-15	^{1,2,3}	50-45-20	^{1,2,3}	74-55-20	¹		
30-35-20	^{1,2,3}	45-38-16	^{1,2,3}	50-55-20	^{1,2,3}	76-50-20	¹		

¹ Gasket type Standard

² Gasket type Flat gasket 1

³ Gasket type Flat gasket 2

Permissible temperature range for the different non-metallic materials

Material	Operating temperature range
Standard	-40 °C up to 120 °C
Flat gasket 1	-40 °C up to 120 °C
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Plastic washer ⁴	-40 °C up to 65 °C

⁴ The plastic washer is only relevant for the enclosure variant with sealed earthing stud.

(16) Test and Assessment Report

BVS PP 13.2100 EG as of 2014-05-08

(17) Installation instructions

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The lid must be opened and closed in vertical position so that the hinges are surely protected against excessive mechanical forces.

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DEKRA EXAM GmbH
44809 Bochum, 2014-05-08
BVS-Kir/Ma A20140312

A handwritten signature in blue ink, appearing to read "Lensch", is written over a horizontal line.

Certification body

A handwritten signature in blue ink, appearing to read "P.H.", is written over a horizontal line.

Special services unit