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 015 U**

(4) Component: **Empty enclosure type S-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 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 13.2102 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 23rd May 2013

Signed: Simanski
Certification body

Signed: Dr. Wittler
Special services unit

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DEKRA EXAM GmbH Dinnendahlstrasse 9 44809 Bochum Germany Phone +49 234/3696-105 Fax +49 234/3696-110 E-mail zs-exam@dekra.com

(13) Appendix to

(14) **EC-Type Examination Certificate**
BVS 13 ATEX E 015 U

(15) 15.1 Subject and type

Empty enclosure type S-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: 12 ... 60
5...6	Width of the enclosure noted in cm [1)] Range: 12 ... 60
7...8	Depth of the enclosure noted in cm [1)] Range: 7 ... 22
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
	4 Combination of Standard and Flat gasket 1
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 S-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.

Parts of the empty enclosure type S-TB ** ** ** ** * * SL * **** are an enclosure housing, an enclosure lid and optionally of one or more 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 screws.

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.

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15.3 Parameters

Ingress protection IP66

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

Size	Size	Size	Size
12-12-07	17-12-09	27-12-09	38-38-22
12-12-08	18-12-07	30-26-10	40-60-12
12-12-09	19-15-09	30-30-20	48-48-20
14-12-07	19-19-10	34-34-15	60-40-22
15-12-08	22-12-09	34-55-15	
15-15-09	25-25-12	37-33-10	
16-38-12	25-40-13	38-30-22	

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
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 13.2102 EG as of 23rd May 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 S-TB ** ** ** ** * * SL * **** have to be taken into account for the complete electrical equipment.

If the earthing facility is carried out with a M6 stud the maximum connectable cross section is 50 mm². If the earthing facility is carried out with a M10 stud the maximum connectable cross section is 120 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.

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, 23rd May 2013
BVS-Kir/Ma A20111024

Certification body

Special services unit

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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 015 U**

(4) Component: **Empty enclosure type S-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 13.2102 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 60079-31:2014	**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 2G Ex e IIB Gb** **II 2D Ex tb IIIC Db**	or	**Type S-TB S* ...**
II 2G Ex e IIC Gb **II 2G Ex e IIB Gb**	or	**Type S-TB P* ...**

DEKRA EXAM GmbH
Bochum, dated 2015-10-30

Signed: Simanski — Certification body

Signed: Dr. Wittler — Special services unit

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DAkkS
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(13) Appendix to

(14) **1st Supplement to the EC-Type Examination Certificate BVS 13 ATEX E 015 U**

(15) 15.1 Subject and type

Empty enclosure type S-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 P1 316L stainless steel - painted variant 1 (only for usage in gas atmospheres) P2 304 stainless steel - painted variant 1 (only for usage in gas atmospheres) P4 316L stainless steel - painted variant 2 (only for usage in gas atmospheres) P5 304 stainless steel - painted variant 2 (only for usage in gas atmospheres)
3 - 4	Height of the enclosure noted in cm [1] Range: 12 up to 60
5 - 6	Width of the enclosure noted in cm [1] Range: 12 up to 75
7 - 8	Depth of the enclosure noted in cm [1] Range: 7 up to 22
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) 4 combination of (standard) and (flat gasket 1)
11	Type plate fastening 1 glued 2 riveted
12 - 15	Miscellaneous variants without influences on explosion protection

[1] Detailed information about the possible combinations of height, width, length and type of gasket are given in the clause parameters.

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15.2 Description

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

The enclosure is completely made of stainless steel with one or more non-metallic gaskets. Optionally the enclosure can be painted for usage in areas endangered by gas atmospheres.

The empty enclosure type S-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 screws.

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:

1. New enclosure variant 34-75-15
2. The enclosures can now be painted with different painting systems. The paintings are not acceptable in areas responsible for the ingress protection of the enclosures.
3. Optionally the gland plates can now also be painted, except the areas responsible for the ingress protection of the enclosure.
4. Optionally the earthing stud can now be sealed with an alternative sealing material.
5. The lower service temperature limit of the standard gasket is now -55 °C
6. The enclosure sizes 12-12-08, 15-12-08, 15-15-09, 19-15-09, 19-19-10 and 25-25-12 can now optionally be manufactured with an alternative wall thickness.

15.3 Parameters

Ingress protection IP66

List of possible enclosure size

Size	Size	Size	Size
12-12-07	17-12-09	27-12-09	38-30-22
12-12-08	18-12-07	30-26-10	38-38-22
12-12-09	19-15-09	30-30-20	40-60-12
14-12-07	19-19-10	34-34-15	48-48-20
15-12-08	22-12-09	34-55-15	60-40-22
15-15-09	25-25-12	34-75-15	
16-38-12	25-40-13	37-33-10	

Permissible temperature range for the different non-metallic materials

Material	Operating temperature range
(standard)	-55 °C ≤ $T_{service}$ ≤ 120 °C
(flat gasket 1)	-40 °C ≤ $T_{service}$ ≤ 120 °C
(plastic washer 1)	-40 °C ≤ $T_{service}$ ≤ 65 °C
(plastic washer 2)	-55 °C ≤ $T_{service}$ ≤ 120 °C
(plastic washer 3)	-55 °C ≤ $T_{service}$ ≤ 120 °C

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(16) Test and Assessment Report

BVS PP 13.2102 EG as of 2015-10-30

(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 S-TB ** ** ** ** * * SL * **** have to be taken into account for the complete electrical equipment.

If the earthing facility is carried out with a M6 stud the maximum connectable cross section is 50 mm². If the earthing facility is carried out with a M10 stud the maximum connectable cross section is 120 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 empty enclosure type S-TB P* ** ** ** * * SL * **** may only be used in areas with potential explosive gas atmospheres.

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, 2015-10-30
BVS-Kir/Nu A 20141063

Certification body

Special services unit

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Translation

1 # EU-Type Examination Certificate Supplement 2

Change to Directive 2014/34/EU

2 **Components intended for use on/in an Equipment or Protective System intended for use in potentially explosive atmospheres**
Directive 2014/34/EU

3 EU-Type Examination Certificate Number: **BVS 13 ATEX E 015 U**

4 Product: **Empty enclosure type S-TB ** ** ** ** * * SL * ****

5 Manufacturer: **Cooper Crouse-Hinds GmbH**

6 Address: **Neuer Weg-Nord 49, 69412 Eberbach, Germany**

7 This supplementary certificate extends EC-Type Examination Certificate No. BVS 13 ATEX E 015 U to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations specified in the appendix to this certificate and the documents referred to therein.

8 DEKRA EXAM GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in the confidential Report No. PP 13.2102 EU.

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012 + A11:2013	**General requirements**
EN 60079-7:2007	**Increased Safety "e"**
EN 60079-31:2014	**Protection by Enclosure "t"**

10 The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system respectively product.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following:

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

II 2G Ex e IIB Gb
II 2D Ex tb IIIC Db

DEKRA EXAM GmbH
Bochum, 2016-08-11

Signed: Dr. Franz Eickhoff
Certifier

Signed: Dr. Michael Wittler
Approver

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telephone +49.234.3696-105, Fax +49.234.3696-110, zs-exam@dekra.com

13 **Appendix**

14 **EU-Type Examination Certificate**

BVS 13 ATEX E 015 U
Supplement 2

15 **Product description**

15.1 **Subject and type**

Empty enclosure type S-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 P1 316L stainless steel - painted variant 1 P2 304 stainless steel - painted variant 1 P4 316L stainless steel - painted variant 2 P5 304 stainless steel - painted variant 2
3 - 4	Height of the enclosure noted in cm [1] Range: 12 up to 60
5 - 6	Width of the enclosure noted in cm [1] Range: 12 up to 75
7 - 8	Depth of the enclosure noted in cm [1] Range: 7 up to 22
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 4 Combination of Standard and Flat gasket 1
11	Type plate fastening 1 glued 2 riveted
12 - 15	Miscellaneous variants without influences on explosion protection

[1] Detailed information about the possible combinations of height, width, length and type of gasket are given in the clause parameters.

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15.2 **Description**

With this supplement the certificate is changed to Directive 2014/34/EU.
(Annotation: In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.)

Reason for the supplement:

- Change to Directive 2014/34/EU
- New definition of possible paintings and changed schedules of limitation.

Description of Product

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

The enclosure is completely made of stainless steel with one or more non-metallic gaskets. Optionally the enclosure can be painted.

The empty enclosure type S-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 screws.

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 IP66

List of possible enclosure size

Size	**Size**	**Size**	**Size**
12-12-07	17-12-09	27-12-09	38-30-22
12-12-08	18-12-07	30-26-10	38-38-22
12-12-09	19-15-09	30-30-20	40-60-12
14-12-07	19-19-10	34-34-15	48-48-20
15-12-08	22-12-09	34-55-15	60-40-22
15-15-09	25-25-12	34-75-15	
16-38-12	25-40-13	37-33-10	

Permissible temperature range for the different non-metallic materials

Material	**Operating temperature range**
Standard	$-55\ °C \le T_{service} \le 120\ °C$
Flat gasket 1	$-40\ °C \le T_{service} \le 120\ °C$
Plastic washer 1	$-40\ °C \le T_{service} \le 65\ °C$
Plastic washer 2	$-55\ °C \le T_{service} \le 120\ °C$
Plastic washer 3	$-55\ °C \le T_{service} \le 120\ °C$

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telephone +49.234.3696-105, Fax +49.234.3696-110, zs-exam@dekra.com

16 **Report Number**

BVS PP 13.2102 EU, as of 2016-08-11

17 **Installation Instructions**

The service 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 S-TB ** ** ** ** * * SL * **** have to be taken into account for the complete electrical equipment.

If the earthing facility is carried out with a M6 stud the maximum connectable cross section is 50 mm². If the earthing facility is carried out with a M10 stud the maximum connectable cross section is 120 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 empty enclosure type S-TB P* ** ** ** * * SL * **** may only be used in areas with potentially explosive dust atmospheres if high or repeated charging processes (e.g. air ions in the vicinity of high voltage electrodes, high speed flowing liquids and pneumatic transfer of powders, and paper or plastic foils transported by machines) are surely excluded. Manual rubbing is not considered to be a high charging process.

18 **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are covered by the standards listed under item 9.

19 **Drawings and Documents**

Drawings and documents are listed in the confidential report.

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
Bochum, dated 2016-08-11
BVS-Kir/Nu A 20160569

Certifier

Approver

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