



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 13.0026U**

Page 1 of 5

Certificate history:

Status: **Current**

Issue No: 5

[Issue 4 \(2016-08-18\)](#)

[Issue 3 \(2015-11-05\)](#)

[Issue 2 \(2014-05-15\)](#)

[Issue 1 \(2014-02-17\)](#)

[Issue 0 \(2013-05-29\)](#)

Date of Issue: 2018-03-12

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

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

Optional accessory:

Type of Protection: **Equipment dust ignition protection by enclosure "t", Equipment protection by increased safety "e"**

Marking: Ex e IIC Gb or Ex e IIB Gb
Ex tb IIIC Db Ex tb IIIC Db

Approved for issue on behalf of the IECEx
Certification Body:

Jörg Koch

Position:

Head of Certification Body

Signature:
(for printed version)

Date:

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 EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

 **DEKRA**
On the safe side.



IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 13.0026U**

Page 2 of 5

Date of issue: 2018-03-12

Issue No: 5

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

Additional
manufacturing
locations: **Eaton MEDC Limited**
4003 – Crouse-Hinds UK Division
Dorset Road
Sheerness
Kent
ME12 1LP
United Kingdom

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 60079-0:2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

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

IEC 60079-7:2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:4

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/ExTR13.0059/05](#)

Quality Assessment Report:

[DE/BVS/QAR11.0009/08](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 13.0026U**

Page 3 of 5

Date of issue: 2018-03-12

Issue No: 5

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Subject and type

See Annex

Description

The empty enclosure type N-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 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.

SPECIFIC CONDITIONS OF USE: NO



IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 13.0026U**

Page 4 of 5

Date of issue: 2018-03-12

Issue No: 5

Equipment (continued):

Ratings

See Annex

Schedule of Limitations

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 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.

The empty enclosure type N-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.



IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 13.0026U**

Page 5 of 5

Date of issue: 2018-03-12

Issue No: 5

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

The name of the manufacturing location in Sheerness has been changed from **Cooper Crouse Hinds GmbH (UK) Limited** to **Eaton MEDC Limited**.

Annex:

[BVS_13_0026u_Cooper_Annex_Issue5.pdf](#)



Certificate No.: IECEx BVS 13.0026U **issue No.: 5**
Annex
Page 1 of 2

General product information:

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
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: 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
6	Combination of Flat gasket 1 and Flat gasket 2
7	Combination of Standard and Flat gasket 2
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.



IECEx Certificate of Conformity



Certificate No.: IECEx BVS 13.0026U issue No.: 5
Annex
Page 2 of 2

Ratings

Ingress protection

IP66

List of possible enclosure size

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

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	$-55\text{ °C} \leq T_{\text{service}} \leq 120\text{ °C}$
Flat gasket 1	$-40\text{ °C} \leq T_{\text{service}} \leq 120\text{ °C}$
Flat gasket 2	$-35\text{ °C} \leq T_{\text{service}} \leq 120\text{ °C}$
Plastic washer 1	$-40\text{ °C} \leq T_{\text{service}} \leq 65\text{ °C}$
Plastic washer 2	$-55\text{ °C} \leq T_{\text{service}} \leq 120\text{ °C}$
Plastic washer 3	$-55\text{ °C} \leq T_{\text{service}} \leq 120\text{ °C}$