IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx BAS 15.0071U issue No.:0	Certificate history:
Status:	Current	
Date of Issue:	2016-06-21	Page 1 of 4

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

Equipment: **Ex-Cell Range of Enclosures**
Optional accessory:

Type of Protection: **Increased Safety, Dust Protection by Enclosure**

Marking: **Ex e IIC Gb**
Ex tb IIIC Db

Approved for issue on behalf of the IECEx Certification Body: R S Sinclair

Position: Technical Manager

Signature:
(for printed version)

Date: 21-6-16

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 the Official IECEx Website.

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 15.0071U

Date of Issue: **2016-06-21** Issue No.: **0**

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

Additional Manufacturing location (s):
Cooper Crouse-Hinds (UK) Limited
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 electrical apparatus 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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical 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:
GB/BAS/ExTR15.0168/00

Quality Assessment Report:

DE/BVS/QAR11.0009/05 GB/BAS/QAR06.0048/06

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 15.0071U

Date of Issue: **2016-06-21** Issue No.: **0**

Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

The Cooper Crouse-Hinds Ex-Cell, Ex-Cell EAGLE and Ex-Cell FLUSH MOUNTED Empty Enclosures are a range of fabricated sheet metal enclosures, comprising of a body and lid with gasket arrangements, and gland plates (if applicable).

Schedule of Limitations:

1. Due to the narrow gauge of the Ex-Cell enclosures:

- When a hinged lid is fitted, the enclosure shall only be mounted in a vertical orientation on a flat surface, and care is required in the installation process and when opening the hinged lid to ensure the enclosure does not distort.
- When a fully bolted lid is fitted the enclosure may be mounted in any orientation but it shall be on a flat surface and care is required in the installation process to ensure the enclosure does not distort.

Distortion will affect the sealing faces.

2. The enclosures shall not be exposed to temperatures outside the range of:

-40°C to +80°C when fitted with standard grey foam in place gaskets
-60°C to +135°C when fitted with optional white silicone sponge flat gaskets

3. The enclosures have an Ingress Protection Rating of IP66.

4. Cable entry holes in the gland plate, side panels or back panel shall be fitted with suitable cable glands having an equipment certificate. The operating temperature range and ingress protection rating of the enclosure is limited to that of the cable gland fitted. The plain hole shall be no larger than 0.7mm above the major diameter of the cable gland thread. Cable gland entries are not permitted in the enclosure lid.

Schedule of Limitations continued on Page 4.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 15.0071U

Date of Issue: **2016-06-21** Issue No.: **0**

EQUIPMENT(continued):

Schedule of Limitations continued

5. Unused entry holes shall be fitted with suitable stopping plugs having an equipment certificate, or having a component certificate subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature of the component. The operating temperature range and ingress protection rating of the enclosure is limited to that of the stopping plug fitted.

6. Only equipment certified breather/drain devices may be used with these enclosures and they shall be suitable for the wall thickness of the enclosure to ensure draining can occur, subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature. The breather/drain devices must be installed in their correct orientation in the bottom face. The operating temperature range and Ingress Protection rating of the enclosure is limited to that of the breather/drain device fitted.

7. Only adaptor/reducer devices having an equipment certificate may be used with these enclosures subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature. The operating temperature range and Ingress Protection rating of the enclosure is limited to that of the adaptor/reducer device fitted.

8. When the gland plates or enclosure panels are painted, the required entry holes provided by Cooper Crouse Hinds shall not have paint on the entry hole seal faces. If cable entry holes are added by the end user in the gland plates/enclosure panels, they shall ensure that any paint is removed from the entry hole seal faces.

Annex: IECEx BAS 15-0071-00 ANNEX.pdf

SGS Baseefa Limited
Rockhead Business Park
Staden lane, Buxton, Derbyshire
SK17 9RZ
United Kingdom

ANNEX to IECEx BAS 15.0071U Issue No. 0 Date: 2016/06/21

The Cooper Crouse-Hinds Ex-Cell, Ex-Cell EAGLE and Ex-Cell FLUSH MOUNTED Empty Enclosures are a range of fabricated sheet metal enclosures, comprising of a body and lid with gasket arrangements, and gland plates (if applicable).

The Ex-Cell enclosures have 4 flat faces.

The Ex-Cell EAGLE enclosures have 3 flat faces and a sloping roof.

The Ex-Cell FLUSH MOUNTED enclosures have 4 flat faces and a mounting frame.

The Ex-Cell and Ex-Cell EAGLE enclosures are mounted via 4 welded stainless steel fixing lugs.
The Ex-Cell FLUSH MOUNTED enclosure is mounted via a mounting frame.

Ex-Cell	Variant	Material	Height	Width	Depth	Gland Plates	Lid Fixing	Options	Gasket Material
XL	V: Vertical mount enclosure	S1: 316L polished	23: 229mm	15: 152mm	12: 124.5	0: None	HQ: Hinge left & Qtr turn lock	T1: Tag label HPL bonded	1: Standard gasket
	H: Horizontal mount enclosure	S2: 304 polished	26: 260mm	20: 203mm	15: 152mm	1: 1 side	HB: Hinge left & bolted	S1: Tag label st/steel bonded	2: Flat gasket
	E: Eagle slope top enclosure	S3: 316L natural	160: 1600mm	26: 260mm	20: 203mm	2: 2 sides	BB: Fully bolted	S2: Tag label st/steel riveted	3: Combi-nation of 1 & 2
	F: Flush mount enclosure	S5: 304 natural	(see table below for other sizes)	(see table below for other sizes)	25: 250mm	3: 3 sides	QH: Hinge right & Qtr turn lock	HASP: Hasp lock	
		P3: 316 Decorative painted	CS: Custom size	CS: Custom size	30: 300mm	4: All sides	BH: Hinge right & bolted		
		P4: 304 Decorative painted			40: 400mm				
					CS: Custom size				

The Ex-Cell enclosures may be supplied with gland plates on one or more of the enclosure faces and there may be one or more gland plates per face.

The Ex-Cell EAGLE enclosures may be supplied with one single gland plate on the bottom face of the enclosure only.

The Ex-Cell FLUSH MOUNTED enclosures do not have gland plates.

The enclosure lid, body and gland plates are fabricated in stainless steel.

The enclosures have an Ingress Protection Rating of IP66 provided as standard by a silicone Foam In Place gasket, or an optional one piece silicone sponge flat gasket. A gasket is placed between the lid and body, and between the body and gland plates. There is also a silicone sponge gasket in the hinge/lid fixing arrangement and a sealing ring on the internal/external earth stud assembly.

The gland plates are secured using bolts into blind inserts. The lid is secured using 2 or more hinges with 1 or more quarter turn fixings. As optional alternatives, the lid may be secured using hinges and bolts or just fully bolted.

The standard Ex-Cell range comprises the following sizes:
~ FLUSH MOUNT are only 229x152x124 up to 406x406x200
~ EAGLE are only 305x305x152 up to 610x508x200

No.	ENCLOSURE SIZE (Height x Width)	DEPTH (mm)	LID / BODY THICKNESS (mm) minimum	GLAND PLATE THICKNESS (mm) Minimum
1	150 x150	80	1.5 / 1.2	No Gland Plate
2	229 x 152	124.5	1.5 / 1.2	3
3	260 x 203	152	1.5 / 1.2	3
4	260 x 260	152	1.5 / 1.2	3
5	306 x 203	152	1.5 / 1.2	3
6	306 x 260	152	1.5 / 1.2	3
7	306 x 306	203	1.5 / 1.2	3
8	406 x 306	203	1.5 / 1.2	3
9	406 x 406	203	1.5 / 1.2	3
10	406 x 508	203	1.5 / 1.2	3
11	508 x 406	203	1.5 / 1.2	3
12	508 x 508	203	1.5 / 1.2	3
13	508 x 610	203	1.5 / 1.2	3
14	610 x 406	203	1.5 / 1.2	3
15	610 x 508	203	1.5 / 1.2	3
16	610 x 610	203	1.5 / 1.2	3
17	610 x 762	203	1.5 / 1.2	3
18	762 x 508	250	1.5 / 1.2	3
19	762 x 610	250	1.5 / 1.2	3
20	762 x 762	250	1.5 / 1.2	3
21	800 x 610	250	1.5 / 1.2	3
22	800 x 800	300	1.5 / 1.2	3
23	915 x 610	300	1.5 / 1.2	3
24	915 x 762	300	1.5 / 1.2	3
25	915 x 915	300	1.5 / 1.2	3
26	1000 x 610	300	1.5 / 1.2	3
27	1000 x 800	300	1.5 / 1.2	3
28	1000 x 1000	300	1.5 / 1.2	3
29	1200 x 610	300	1.5 / 1.2	3
30	1200 x 800	300	1.5 / 1.2	3
31	1200 x 915	300	1.5 / 1.2	3
32	1200 x 1000	300	1.5 / 1.2	3
33	1200 x 1200	300	1.5 / 1.2	3
34	1524 x 915	400	1.5 / 1.2	3
35	1600 x 1000	400	1.5 / 1.2	3
36	1600 x 1200	400	1.5 / 1.2	3

Alternative size variants are permitted providing they are interpolated from within the existing size range and that lid and flange plate fixing centres are equal to or less than those given in the range shown above as specified on the certification drawings listed below.

The enclosure gland plates may be drilled with plain holes, or threaded holes if the gland plate is thick enough, for suitably certified cable glands, stopping plugs or breather/drain devices. If no gland plates are fitted then plain holes may be drilled direct in to the enclosure body face or back panel, except in the sloping roof of the Ex-Cell EAGLE. Holes may be drilled in the enclosure lid only for the use of control station accessories such as lamps and push-buttons, they shall not be used for cable gland entries. The entry hole configurations and lid hole configurations are specified in the relevant drawings listed below and in the operating instructions.

Earthing is provided by a stainless steel internal/external earth stud welded on the inside and outside of the enclosure, in a position to suit the application. As an alternative a sealed stainless steel or brass earth stud with seal washer and stud assembly may be used. The threaded stud is supplied fitted with stainless steel nuts and anti-vibration washers and saddle/anti-rotation washers.

On the inside of the enclosure there are 2 or more raised threaded inserts or threaded studs that are welded to the body, for subsequent fixing of internal components.

The enclosures may also include an optional padlock system.

The enclosures are fitted with a self-adhesive certification label on the inside of the lid. Alternatively, for apparatus/equipment marking, a stainless steel label may be secured to the lid using sealed pop rivets, or plastic labels may be glued directly to the lid or it may be screwed to an intermediate stainless steel plate that is secured to the lid by pop rivets or secured outside the lid sealing area. When plastic labels are used, electrostatic ignition risk shall be prevented by limiting the projected surface area.

Variation 1.1
The lid and body may be polished or metallic plated to suit the application. The lid and body may be painted to suit the application but the seal face areas are free from paint. The gland plates may be painted to suit the application but the seal face areas between the gland plate and the cable gland/stopping plug shall be free from paint. When the lid, body and gland plates are painted, the paint thickness is limited to:
~ 0.2mm maximum for IIC gas applications
~ 2.0mm maximum for IIA and IIB gas and IIIA, IIIB and IIIC dust applications

For 0.2mm maximum paint thickness, the marking remains unchanged:
Ex e IIC Gb Ex tb IIIC Db

For 2.0mm maximum paint thickness, the marking changes as follows to amend the gas group:
Ex e IIB Gb Ex tb IIIC Db

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 15.0071U

Issue No: 1

Certificate history:
Issue No. 1 (2018-03-07)
Issue No. 0 (2016-06-21)

Status: **Current**

Date of Issue: **2018-03-07**

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

Equipment: **Ex-Cell Range of Enclosures**

Optional accessory:

Type of Protection: **Increased Safety, Dust Protection by Enclosure**

Marking:

Ex e IIC Gb
Ex tb III C Db

Approved for issue on behalf of the IECEx Certification Body: R S Sinclair

Position: Technical Manager

Signature:
(for printed version)

M POWNEY
Certification
Manager

Date: 7/3/18

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 the Official IECEx Website.

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom

IECEx Certificate of Conformity

Certificate No:	IECEx BAS 15.0071U	Issue No: 1
Date of Issue:	**2018-03-07**	Page 2 of 4
Manufacturer:	**Cooper Crouse-Hinds GmbH** Neuer Weg-Nord 49, 69412 Eberbach, **Germany**	

Additional Manufacturing location(s):

Eaton MEDC Limited
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 apparatus 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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical 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:

GB/BAS/ExTR15.0168/00

Quality Assessment Report:

DE/BVS/QAR11.0009/08 GB/BAS/QAR06.0048/08

IECEx Certificate of Conformity

Certificate No: IECEx BAS 15.0071U Issue No: 1

Date of Issue: **2018-03-07**

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Cooper Crouse-Hinds Ex-Cell, Ex-Cell EAGLE and Ex-Cell FLUSH MOUNTED Empty Enclosures are a range of fabricated sheet metal enclosures, comprising of a body and lid with gasket arrangements, and gland plates (if applicable).

Schedule of Limitations:

1. Due to the narrow gauge of the Ex-Cell enclosures:

- When a hinged lid is fitted, the enclosure shall only be mounted in a vertical orientation on a flat surface, and care is required in the installation process and when opening the hinged lid to ensure the enclosure does not distort.
- When a fully bolted lid is fitted the enclosure may be mounted in any orientation but it shall be on a flat surface and care is required in the installation process to ensure the enclosure does not distort.

Distortion will affect the sealing faces.

2. The enclosures shall not be exposed to temperatures outside the range of:

-40°C to +80°C when fitted with standard grey foam in place gaskets
-60°C to +135°C when fitted with optional white silicone sponge flat gaskets

3. The enclosures have an Ingress Protection Rating of IP66.

4. Cable entry holes in the gland plate, side panels or back panel shall be fitted with suitable cable glands having an equipment certificate. The operating temperature range and ingress protection rating of the enclosure is limited to that of the cable gland fitted. The plain hole shall be no larger than 0.7mm above the major diameter of the cable gland thread.
Cable gland entries are not permitted in the enclosure lid.

5. Unused entry holes shall be fitted with suitable stopping plugs having an equipment certificate, or having a component certificate subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature of the component. The operating temperature range and ingress protection rating of the enclosure is limited to that of the stopping plug fitted.

6. Only equipment certified breather/drain devices may be used with these enclosures and they shall be suitable for the wall thickness of the enclosure to ensure draining can occur, subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature. The breather/drain devices must be installed in their correct orientation in the bottom face. The operating temperature range and Ingress Protection rating of the enclosure is limited to that of the breather/drain device fitted.

7. Only adaptor/reducer devices having an equipment certificate may be used with these enclosures subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature. The operating temperature range and Ingress Protection rating of the enclosure is limited to that of the adaptor/reducer device fitted.

8. When the gland plates or enclosure panels are painted, the required entry holes provided by Cooper Crouse Hinds shall not have paint on the entry hole seal faces. If cable entry holes are added by the end user in the gland plates/enclosure panels, they shall ensure that any paint is removed from the entry hole seal faces.

SPECIFIC CONDITIONS OF USE: NO

IECEx Certificate of Conformity

Certificate No: IECEx BAS 15.0071U Issue No: 1

Date of Issue: **2018-03-07**

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 1.1

Change to alternative manufacturing location only.

File Reference: **18/0193**

Annex:

IECEx BAS 15.0071U ANNEX.pdf

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

Ex COMPONENT CERTIFICATE

Certificate No.:	**IECEx BAS 15.0071U**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 2	Issue 1 (2018-03-07) Issue 0 (2016-06-21)
Date of Issue:	2020-04-23		

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

Ex Component: Ex-Cell Range of Enclosures

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Increased Safety, Dust Protection by Enclosure**

Marking: **Ex eb IIC Gb**
Ex tb IIIC Db

Approved for issue on behalf of the IECEx Certification Body: **R S Sinclair**

Position: **Technical Manager**

Signature: (for printed version)

Date: 29/4/2020

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:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom

IECEx Certificate of Conformity

Certificate No.: **IECEx BAS 15.0071U**

Date of issue: 2020-04-23

Issue No: 2

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

Additional manufacturing locations: **Eaton MEDC Limited**
Dorset Road, Sheerness, Kent, ME12 1LP
United Kingdom

Cooper Electric (Changzhou) Co. Ltd.
No, 189 Liuyanghe Road
Xinbei District
Changzhou, Jiangsu
213031
China

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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

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

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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 Reports:

GB/BAS/ExTR15.0168/00 GB/BAS/ExTR20.0060/00

Quality Assessment Reports:

DE/BVS/QAR11.0009/10 GB/BAS/QAR06.0048/09 GB/BAS/QAR07.0041/09

IECEx Certificate of Conformity

Ex Component(s) covered by this certificate is described below:

The Cooper Crouse-Hinds Ex-Cell, Ex-Cell EAGLE and Ex-Cell FLUSH MOUNTED Empty Enclosures are a range of fabricated sheet metal enclosures, comprising of a body and lid with gasket arrangements, and gland plates (if applicable).

SCHEDULE OF LIMITATIONS:

1. Due to the narrow gauge of the Ex-Cell enclosures:

- When a hinged lid is fitted, the enclosure shall only be mounted in a vertical orientation on a flat surface, and care is required in the installation process and when opening the hinged lid to ensure the enclosure does not distort.
- When a fully bolted lid is fitted the enclosure may be mounted in any orientation but it shall be on a flat surface and care is required in the installation process to ensure the enclosure does not distort.

Distortion will affect the sealing faces.

2. The enclosures shall not be exposed to temperatures outside the range of:

-55°C to +120°C when fitted with standard grey foam in place gaskets
-60°C to +135°C when fitted with optional white silicone sponge flat gaskets

3. The enclosures have an Ingress Protection Rating of IP66.

4. Cable entry holes in the gland plate, side panels or back panel shall be fitted with suitable cable glands having an equipment certificate. The operating temperature range and ingress protection rating of the enclosure is limited to that of the cable gland fitted. The plain hole shall be no larger than 0.7mm above the major diameter of the cable gland thread.
Cable gland entries are not permitted in the enclosure lid.

5. Unused entry holes shall be fitted with suitable stopping plugs having an equipment certificate, or having a component certificate subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature of the component. The operating temperature range and ingress protection rating of the enclosure is limited to that of the stopping plug fitted.

6. Only equipment certified breather/drain devices may be used with these enclosures and they shall be suitable for the wall thickness of the enclosure to ensure draining can occur, subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature. The breather/drain devices must be installed in their correct orientation in the bottom face. The operating temperature range and Ingress Protection rating of the enclosure is limited to that of the breather/drain device fitted.

7. Only adaptor/reducer devices having an equipment certificate may be used with these enclosures subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature. The operating temperature range and Ingress Protection rating of the enclosure is limited to that of the adaptor/reducer device fitted.

8. When the gland plates or enclosure panels are painted, the required entry holes provided by Cooper Crouse Hinds shall not have paint on the entry hole seal faces. If cable entry holes are added by the end user in the gland plates/enclosure panels, they shall ensure that any paint is removed from the entry hole seal faces.

9. For Dust Applications: When the Ex-Cell enclosure has a non-metallic coating a warning shall be added to the equipment label i.e. ‘Warning: For Dust Applications, potential electrostatic charging hazard, see instructions.’

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Variation 2.1

To confirm that the equipment covered by this certificate has been reviewed against the requirements of IEC 60079-0: 2017 and IEC 60079-7: 2015 + Amd 1: 2017 in respect to the differences from IEC 60079-0: 2011 and IEC 60079-7: 2006-07, and that the only differences in the standards that affects this equipment is the marking code

The equipment is now in compliance with IEC 60079-0: 2017 and IEC 60079-7: 2015 + Amd 1: 2017

The marking is updated to include Ex eb as follows:

Ex eb IIC Gb

Variation 2.2

When fitted with standard grey foam in place gaskets, the service temperature range is now extended to -55°C to + 120°C.

Variation 2.3

For commercial purposes the nomenclature has been amended.

Variation 2.4

Schedule of Limitation Number 2 updated.

Variation 2.5

New Schedule of Limitation Number 9 added.

ExTR: **GB/BAS/ExTR20.0060/00**	File Reference: **20/0151**

Annex:

IECEx BAS 15.0071U Annex 1.pdf

SGS Baseefa Limited
Rockhead Business Park
Staden lane, Buxton, Derbyshire
SK17 9RZ
United Kingdom

ANNEX to IECEx BAS 15.0071U Issue No. 1 Date: 23 April 2020

The Cooper Crouse-Hinds Ex-Cell, Ex-Cell EAGLE and Ex-Cell FLUSH MOUNTED Empty Enclosures are a range of fabricated sheet metal enclosures, comprising of a body and lid with gasket arrangements, and gland plates (if applicable).

The Ex-Cell enclosures have 4 flat faces.

The Ex-Cell EAGLE enclosures have 3 flat faces and a sloping roof.

The Ex-Cell FLUSH MOUNTED enclosures have 4 flat faces and a mounting frame.

The Ex-Cell and Ex-Cell EAGLE enclosures are mounted via 4 welded stainless steel fixing lugs.
The Ex-Cell FLUSH MOUNTED enclosure is mounted via a mounting frame.

Ex-Cell	Variant	Material	Height	Width	Depth	Gland Plates	Lid Fixing	Gasket Material
XL	V: Vertical mount enclosure	S1: 316L polished	15: 152mm	15: 152mm	08: 80mm	0: None	HQ: Hinge left & Qtr turn lock	1: Standard gasket
	H: Horizontal mount enclosure	S2: 304 polished	26: 260mm	20: 203mm	12: 125mm	1: 1 side 3mm	HB: Hinge left & bolted	2: Flat gasket
	E: Eagle slope top enclosure	S3: 316L natural	30: 306mm	26: 260mm	15: 152mm	2: 2 sides 3mm	BB: Fully bolted	3: Combi-nation of 1 & 2
	F: Flush mount enclosure	S5: 304 natural	160: 1600mm	120: 1200mm	20: 203mm	3: 3 sides 3mm	QH: Hinge right & Qtr turn lock	
			CS: Custom size	CS: Custom size	25: 250mm	4: 4 sides 3mm	BH: Hinge right & bolted	
					30: 300mm	5: 1 side 6mm		
					40: 400mm	6: 2 sides 6mm		
					CS: Custom size	7: 3 sides 6mm		
						8: 4 sides 6mm		

The Ex-Cell enclosures may be supplied with gland plates on one or more of the enclosure faces and there may be one or more gland plates per face.

The Ex-Cell EAGLE enclosures may be supplied with one single gland plate on the bottom face of the enclosure only.

The Ex-Cell FLUSH MOUNTED enclosures do not have gland plates.

The enclosure lid, body and gland plates are fabricated in stainless steel.

The enclosures have an Ingress Protection Rating of IP66 provided as standard by a silicone Foam In Place gasket, or an optional one piece silicone sponge flat gasket. A gasket is placed between the lid and body, and between the body and gland plates. There is also a silicone sponge gasket in the hinge/lid fixing arrangement and a sealing ring on the internal/external earth stud assembly.

The gland plates are secured using bolts into blind inserts. The lid is secured using 2 or more hinges with 1 or more quarter turn fixings. As optional alternatives, the lid may be secured using hinges and bolts or just fully bolted.

The standard Ex-Cell range comprises the following sizes:
~ FLUSH MOUNT are only 229x152x124 up to 406x406x200
~ EAGLE are only 305x305x152 up to 610x508x200

No.	ENCLOSURE SIZE (Height x Width)	DEPTH (mm)	LID / BODY THICKNESS (mm) minimum	GLAND PLATE THICKNESS (mm) Minimum
1	150 x150	80	1.5 / 1.2	No Gland Plate
2	229 x 152	124.5	1.5 / 1.2	3
3	260 x 203	152	1.5 / 1.2	3
4	260 x 260	152	1.5 / 1.2	3
5	306 x 203	152	1.5 / 1.2	3
6	306 x 260	152	1.5 / 1.2	3
7	306 x 306	203	1.5 / 1.2	3
8	406 x 306	203	1.5 / 1.2	3
9	406 x 406	203	1.5 / 1.2	3
10	406 x 508	203	1.5 / 1.2	3
11	508 x 406	203	1.5 / 1.2	3
12	508 x 508	203	1.5 / 1.2	3
13	508 x 610	203	1.5 / 1.2	3
14	610 x 406	203	1.5 / 1.2	3
15	610 x 508	203	1.5 / 1.2	3
16	610 x 610	203	1.5 / 1.2	3
17	610 x 762	203	1.5 / 1.2	3
18	762 x 508	250	1.5 / 1.2	3
19	762 x 610	250	1.5 / 1.2	3
20	762 x 762	250	1.5 / 1.2	3
21	800 x 610	250	1.5 / 1.2	3
22	800 x 800	300	1.5 / 1.2	3
23	915 x 610	300	1.5 / 1.2	3
24	915 x 762	300	1.5 / 1.2	3
25	915 x 915	300	1.5 / 1.2	3
26	1000 x 610	300	1.5 / 1.2	3
27	1000 x 800	300	1.5 / 1.2	3
28	1000 x 1000	300	1.5 / 1.2	3
29	1200 x 610	300	1.5 / 1.2	3
30	1200 x 800	300	1.5 / 1.2	3
31	1200 x 915	300	1.5 / 1.2	3
32	1200 x 1000	300	1.5 / 1.2	3
33	1200 x 1200	300	1.5 / 1.2	3
34	1524 x 915	400	1.5 / 1.2	3
35	1600 x 1000	400	1.5 / 1.2	3
36	1600 x 1200	400	1.5 / 1.2	3

Alternative size variants are permitted providing they are interpolated from within the existing size range and that lid and flange plate fixing centres are equal to or less than those given in the range shown above as specified on the certification drawings listed below.

The enclosure gland plates may be drilled with plain holes, or threaded holes if the gland plate is thick enough, for suitably certified cable glands, stopping plugs or breather/drain devices. If no gland plates are fitted then plain holes may be drilled direct in to the enclosure body face or back panel, except in the sloping roof of the Ex-Cell EAGLE. Holes may be drilled in the enclosure lid only for the use of control station accessories such as lamps and push-buttons, they shall not be used for cable gland entries. The entry hole configurations and lid hole configurations are specified in the relevant drawings listed below and in the operating instructions.

Earthing is provided by a stainless steel internal/external earth stud welded on the inside and outside of the enclosure, in a position to suit the application. As an alternative a sealed stainless steel or brass earth stud with seal washer and stud assembly may be used. The threaded stud is supplied fitted with stainless steel nuts and anti-vibration washers and saddle/anti-rotation washers.

On the inside of the enclosure there are 2 or more raised threaded inserts or threaded studs that are welded to the body, for subsequent fixing of internal components.

The enclosures may also include an optional padlock system.

The enclosures are fitted with a self-adhesive certification label on the inside of the lid. Alternatively, for apparatus/equipment marking, a stainless steel label may be secured to the lid using sealed pop rivets, or plastic labels may be glued directly to the lid or it may be screwed to an intermediate stainless steel plate that is secured to the lid by pop rivets or secured outside the lid sealing area. When plastic labels are used, electrostatic ignition risk shall be prevented by limiting the projected surface area.

Variation 1.1

The lid and body may be polished or metallic plated to suit the application. The lid and body may be painted to suit the application but the seal face areas are free from paint. The gland plates may be painted to suit the application but the seal face areas between the gland plate and the cable gland/stopping plug shall be free from paint. When the lid, body and gland plates are painted, the paint thickness is limited to:
~ 0.2mm maximum for IIC gas applications
~ 2.0mm maximum for IIA and IIB gas and IIIA, IIIB and IIIC dust applications

For 0.2mm maximum paint thickness, the marking remains unchanged:
Ex eb IIC Gb Ex tb IIIC Db

For 2.0mm maximum paint thickness, the marking changes as follows to amend the gas group:
Ex eb IIB Gb Ex tb IIIC Db

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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx BAS 15.0071U**

Page 1 of 4

Certificate history:

Issue 2 (2020-04-23)
Issue 1 (2018-03-07)
Issue 0 (2016-06-21)

Status: **Current**

Issue No: 3

Date of Issue: 2022-10-04

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

Ex Component: Ex-Cell Range of Enclosures

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Increased Safety, Dust Protection by Enclosure**

Marking: **Ex eb IIC Gb**
Ex tb IIIC Db

Approved for issue on behalf of the IECEx Certification Body: **R S Sinclair**

Position: **Technical Manager**

Signature: (for printed version)

M POWNEY
Certification Manager

Date: (for printed version) 25/11/2022

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:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom

IECEx Certificate of Conformity

Certificate No.: **IECEx BAS 15.0071U**

Date of issue: 2022-10-04

Issue No: 3

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

Manufacturing locations:

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

Eaton MEDC Limited
Dorset Road, Sheerness, Kent, ME12 1LP
United Kingdom

Cooper Electric (Changzhou) Co. Ltd.
No, 189 Liuyanghe Road
Xinbei District
Changzhou, Jiangsu
213031
China

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 component 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 60079-0:2017 Edition:7.0 — Explosive atmospheres - Part 0: Equipment - General requirements

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

IEC 60079-7:2017 Edition:5.1 — Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

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 component listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/BAS/ExTR15.0168/00 GB/BAS/ExTR20.0060/00 GB/BAS/ExTR22.0123/00

Quality Assessment Reports:

DE/BVS/QAR11.0009/10 GB/BAS/QAR06.0048/09 GB/BAS/QAR07.0041/11

IECEx Certificate of Conformity

Ex Component(s) covered by this certificate is described below:

The Cooper Crouse-Hinds Ex-Cell, Ex-Cell EAGLE and Ex-Cell FLUSH MOUNTED Empty Enclosures are a range of fabricated sheet metal enclosures, comprising of a body and lid with gasket arrangements, and gland plates (if applicable).

SCHEDULE OF LIMITATIONS:

1. Due to the narrow gauge of the Ex-Cell enclosures:
- When a hinged lid is fitted, the enclosure shall only be mounted in a vertical orientation on a flat surface, and care is required in the installation process and when opening the hinged lid to ensure the enclosure does not distort.
- When a fully bolted lid is fitted the enclosure may be mounted in any orientation but it shall be on a flat surface and care is required in the installation process to ensure the enclosure does not distort.

Distortion will affect the sealing faces.

2. The enclosures shall not be exposed to temperatures outside the range of:
-55°C to +120°C when fitted with standard grey foam in place gaskets
-60°C to +135°C when fitted with optional white silicone sponge flat gaskets

3. The enclosures have an Ingress Protection Rating of IP66.

4. Cable entry holes in the gland plate, side panels or back panel shall be fitted with suitable cable glands having an equipment certificate. The operating temperature range and ingress protection rating of the enclosure is limited to that of the cable gland fitted. The plain hole shall be no larger than 0.7mm above the major diameter of the cable gland thread. Cable gland entries are not permitted in the enclosure lid.

5. Unused entry holes shall be fitted with suitable stopping plugs having an equipment certificate, or having a component certificate subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature of the component. The operating temperature range and ingress protection rating of the enclosure is limited to that of the stopping plug fitted.

6. Only equipment certified breather/drain devices may be used with these enclosures and they shall be suitable for the wall thickness of the enclosure to ensure draining can occur, subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature. The breather/drain devices must be installed in their correct orientation in the bottom face. The operating temperature range and Ingress Protection rating of the enclosure is limited to that of the breather/drain device fitted.

7. Only adaptor/reducer devices having an equipment certificate may be used with these enclosures subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature. The operating temperature range and Ingress Protection rating of the enclosure is limited to that of the adaptor/reducer device fitted.

8. When the gland plates or enclosure panels are painted, the required entry holes provided by Cooper Crouse Hinds shall not have paint on the entry hole seal faces. If cable entry holes are added by the end user in the gland plates/enclosure panels, they shall ensure that any paint is removed from the entry hole seal faces.

9. For Dust Applications: When the Ex-Cell enclosure has a non-metallic coating a warning shall be added to the equipment label i.e., 'Warning: For Dust Applications, potential electrostatic charging hazard, see instructions.'

10. When enclosures are coupled together, the enclosures shall not be exposed to temperatures outside the range of:
-40°C to +100°C when the SSK coupling method is used
-60°C to +110°C when connection set coupling method is used
-100°C to +130°C when the thread hull coupling method is used

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 3.1

To allow the coupling of empty Ex-cell enclosures and GHG 60 enclosures.

Variation 3.2

To adjust the service temperature for coupled enclosures.

Variation 3.3

To allow an adaptation of the type code.

ExTR: **GB/BAS/ExTR22.0123/00**	File Reference: **22/0272**

Annex:

IECEx BAS 15.0071U Annex 2.pdf

SGS Baseefa Limited
Rockhead Business Park
Staden lane, Buxton, Derbyshire
SK17 9RZ
United Kingdom

The Cooper Crouse-Hinds Ex-Cell, Ex-Cell EAGLE and Ex-Cell FLUSH MOUNTED Empty Enclosures are a range of fabricated sheet metal enclosures, comprising of a body and lid with gasket arrangements, and gland plates (if applicable).

The Ex-Cell enclosures have 4 flat faces.

The Ex-Cell EAGLE enclosures have 3 flat faces and a sloping roof.

The Ex-Cell FLUSH MOUNTED enclosures have 4 flat faces and a mounting frame.

The Ex-Cell and Ex-Cell EAGLE enclosures are mounted via 4 welded stainless steel fixing lugs.
The Ex-Cell FLUSH MOUNTED enclosure is mounted via a mounting frame.

Ex-Cell	Variant	Material	Height	Width	Depth	Gland Plates	Lid Fixing	Gasket Material
XL	V: Vertical mount enclosure	S1: 316L polished	15: 152mm	15: 152mm	08: 80mm	0: None	HQ: Hinge left & Qtr turn lock	1: Standard gasket
	H: Horizontal mount enclosure	S2: 304 polished	26: 260mm	20: 203mm	12: 125mm	1: 1 side 3mm	HB: Hinge left & bolted	2: Flat gasket
	E: Eagle slope top enclosure	S3: 316L natural	30: 306mm	26: 260mm	15: 152mm	2: 2 sides 3mm	BB: Fully bolted	3: Combi-nation of 1 & 2
	F: Flush mount enclosure	S5: 304 natural	160: 1600mm	120: 1200mm	20: 203mm	3: 3 sides 3mm	QH: Hinge right & Qtr turn lock	
		P3: 316L decorative painted	CS: Custom size	CS: Custom size	25: 250mm	4: 4 sides 3mm	BH: Hinge right & bolted	
		P4: 304 decorative painted	See table enclosure sizes for other sizes	See table enclosure sizes for other sizes	30: 300mm	5: 1 side 6mm	CQ: CH left & Qrt.-turn lock	
					40: 400mm	6: 2 sides 6mm	CB: CH left & bolted	
					CS: Custom size	7: 3 sides 6mm	QC: CH right & Qrt.-turn lock	
						8: 4 sides 6mm	BC: CH right & bolted	

The Ex-Cell enclosures may be supplied with gland plates on one or more of the enclosure faces and there may be one or more gland plates per face.

The Ex-Cell EAGLE enclosures may be supplied with one single gland plate on the bottom face of the enclosure only.

The Ex-Cell FLUSH MOUNTED enclosures do not have gland plates.

The enclosure lid, body and gland plates are fabricated in stainless steel.

The enclosures have an Ingress Protection Rating of IP66 provided as standard by a silicone Foam In Place gasket, or an optional one piece silicone sponge flat gasket. A gasket is placed between the lid and body, and between the body and gland plates. There is also a silicone sponge gasket in the hinge/lid fixing arrangement and a sealing ring on the internal/external earth stud assembly.

The gland plates are secured using bolts into blind inserts. The lid is secured using 2 or more hinges with 1 or more quarter turn fixings. As optional alternatives, the lid may be secured using hinges and bolts or just fully bolted.

The standard Ex-Cell range comprises the following sizes:
~ FLUSH MOUNT are only 229x152x124 up to 406x406x200
~ EAGLE are only 305x305x152 up to 610x508x200

No.	ENCLOSURE SIZE (Height x Width)	DEPTH (mm)	LID / BODY THICKNESS (mm) minimum	GLAND PLATE THICKNESS (mm) Minimum
1	150 x150	80	1.5 / 1.2	No Gland Plate
2	229 x 152	124.5	1.5 / 1.2	3
3	260 x 203	152	1.5 / 1.2	3
4	260 x 260	152	1.5 / 1.2	3
5	306 x 203	152	1.5 / 1.2	3
6	306 x 260	152	1.5 / 1.2	3
7	306 x 306	203	1.5 / 1.2	3
8	406 x 306	203	1.5 / 1.2	3
9	406 x 406	203	1.5 / 1.2	3
10	406 x 508	203	1.5 / 1.2	3
11	508 x 406	203	1.5 / 1.2	3
12	508 x 508	203	1.5 / 1.2	3
13	508 x 610	203	1.5 / 1.2	3
14	610 x 406	203	1.5 / 1.2	3
15	610 x 508	203	1.5 / 1.2	3
16	610 x 610	203	1.5 / 1.2	3
17	610 x 762	203	1.5 / 1.2	3
18	762 x 508	250	1.5 / 1.2	3
19	762 x 610	250	1.5 / 1.2	3
20	762 x 762	250	1.5 / 1.2	3
21	800 x 610	250	1.5 / 1.2	3
22	800 x 800	300	1.5 / 1.2	3
23	915 x 610	300	1.5 / 1.2	3
24	915 x 762	300	1.5 / 1.2	3
25	915 x 915	300	1.5 / 1.2	3
26	1000 x 610	300	1.5 / 1.2	3
27	1000 x 800	300	1.5 / 1.2	3
28	1000 x 1000	300	1.5 / 1.2	3
29	1200 x 610	300	1.5 / 1.2	3
30	1200 x 800	300	1.5 / 1.2	3
31	1200 x 915	300	1.5 / 1.2	3
32	1200 x 1000	300	1.5 / 1.2	3
33	1200 x 1200	300	1.5 / 1.2	3
34	1524 x 915	400	1.5 / 1.2	3
35	1600 x 1000	400	1.5 / 1.2	3
36	1600 x 1200	400	1.5 / 1.2	3

Alternative size variants are permitted providing they are interpolated from within the existing size range and that lid and flange plate fixing centres are equal to or less than those given in the range shown above as specified on the certification drawings listed below.

The enclosure gland plates may be drilled with plain holes, or threaded holes if the gland plate is thick enough, for suitably certified cable glands, stopping plugs or breather/drain devices. If no gland plates are fitted then plain holes may be drilled direct in to the enclosure body face or back panel, except in the sloping roof of the Ex-Cell EAGLE. Holes may be drilled in the enclosure lid only for the use of control station accessories such as lamps and push-buttons, they shall not be used for cable gland entries. The entry hole configurations and lid hole configurations are specified in the relevant drawings listed below and in the operating instructions.

Earthing is provided by a stainless steel internal/external earth stud welded on the inside and outside of the enclosure, in a position to suit the application. As an alternative a sealed stainless steel or brass earth stud with seal washer and stud assembly may be used. The threaded stud is supplied fitted with stainless steel nuts and anti-vibration washers and saddle/anti-rotation washers.

On the inside of the enclosure there are 2 or more raised threaded inserts or threaded studs that are welded to the body, for subsequent fixing of internal components.

The enclosures may also include an optional padlock system.

The enclosures are fitted with a self-adhesive certification label on the inside of the lid. Alternatively, for apparatus/equipment marking, a stainless steel label may be secured to the lid using sealed pop rivets, or plastic labels may be glued directly to the lid or it may be screwed to an intermediate stainless steel plate that is secured to the lid by pop rivets or secured outside the lid sealing area. When plastic labels are used, electrostatic ignition risk shall be prevented by limiting the projected surface area.

Variation 1.1

The lid and body may be polished or metallic plated to suit the application. The lid and body may be painted to suit the application but the seal face areas are free from paint. The gland plates may be painted to suit the application but the seal face areas between the gland plate and the cable gland/stopping plug shall be free from paint. When the lid, body and gland plates are painted, the paint thickness is limited to:
~ 0.2mm maximum for IIC gas applications
~ 2.0mm maximum for IIA and IIB gas and IIIA, IIIB and IIIC dust applications

For 0.2mm maximum paint thickness, the marking remains unchanged:
Ex eb IIC Gb Ex tb IIIC Db

For 2.0mm maximum paint thickness, the marking changes as follows to amend the gas group:
Ex eb IIB Gb Ex tb IIIC Db

Variation 3.1

The enclosures can be coupled together.

The connection of the Ex-Cell Range of Enclosures can be made by three methods, SSK coupling, connection set or thread hull.