



# UK Type Examination Certificate CML 21UKEX1018X Issue 0

## **United Kingdom Conformity Assessment**

1 Product or Protective System Indented for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1

2 Equipment BD\*\*\*\* Breather / Drainer Plugs and BA\*\*\*E Breather Drainer Adapter

3 Manufacturer CCG Cable Terminations (Pty) Ltd

4 Address **33-37 Forge Road**,

Spartan Industrial Area,

Kempton Park,

1619,

South Africa

- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, United Kingdom, Approved Body Number 2503, in accordance with Regulation 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential reports listed in Section 12.

- If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- This UK Type Examination certificate relates only to the design and construction of the specified equipment. Further requirements of the Regulations apply to the manufacturing process and supply of the product. These are not covered by this certificate.
- Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

BS EN IEC 60079-0:2018 BS EN 60079-1:2014 BS EN 60079-7:2018 BS EN 60079-31:2014

10 The equipment shall be marked with the following:

BD\*\*\*E

 $\langle \mathcal{E}_{\mathbf{x}} \rangle_{\mathsf{II}\,\mathsf{2}\,\mathsf{G}\,\mathsf{D}}$ 

 $\langle \rangle_{\rm LM2}$ 

Ex eb IIC Gb Ex eb I Mb Ex tb IIIC Db IP66

This certificate shall only be copied in its entirety and without change www.CMLEx.com BD\*\*\*D

(ξx)<sub>II 2 G C</sub>

 $\langle \mathcal{E}_{\mathbf{x}} \rangle_{\mathbf{IM}}$ 

Ex db IIC Gb
Ex db I Mb
Ex tb IIIC Db
IP6X 'Dust tight'
1 of 2

BA\*\*\*E

(€x) <sub>II 2 G Γ</sub>

 $\langle \mathcal{E}_{\mathbf{x}} \rangle_{\mathsf{IM2}}$ 

Ex eb IIC Gb Ex eb I Mb Ex tb IIIC Db

IP66

S. Roumbedakis Technical Manager





## 11 Description

For product description refer to attached certificate CML 16ATEX1029X Iss.3.

## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	27 Jan 2021	R13654M/00	Issue of Prime Certificate

Note: Drawings that describe the equipment are listed in the Annex.

## 13 Conditions of Manufacture

13.1 Any previously certified parts incorporated in the equipment shall be UKCA compliant by the 1st of January 2022.

For additional conditions of manufacture refer to attached certificate CML 16ATEX1029X Iss.3.

## 14 Specific Conditions of Use

For Specific conditions of use refer to attached certificate CML 16ATEX1029X Iss.3.

# **Certificate Annex**

Certificate Number CML 21UKEX1018X

Equipment BD\*\*\*\* Breather / Drainer Plugs and BA\*\*\*E Breather

**Drainer Adapter** 

Manufacturer CCG Cable Terminations (Pty) Ltd

The following documents describe the equipment defined in this certificate:

## Issue 0

Drawing No	Sheets	Rev	Approved date	Title
BAE-ASSY	1 of 1	2	27 Jan 2021	Breather Adaptor Assembly
BDD-ASSY	1 of 1	4	27 Jan 2021	EXD Breather Drain Assembly
BDE-ASSY	1 of 1	4	27 Jan 2021	EXE Breather Drain Assembly
BDE-ASSY_M12_M16	1 of 1	2	27 Jan 2021	M12/M16 Exe B/Drain Assy







# EU Type Examination Certificate CML 16ATEX1029X Issue 3

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment BD\*\*\*\* Breather / Drainer Plugs and BA\*\*\*E Breather Drainer Adapter

3 Manufacturer CCG Cable Terminations (Pty) Ltd

4 Address 33-37 Forge Road,

Spartan Industrial Area,

Kempton Park,

1619,

South Africa

- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, 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 equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

- If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN 60079-0:2018 EN 60079-1:2014 EN 60079-7:2018 EN 60079-31:2014

10 The equipment shall be marked with the following:

Ex eb IIC Gb Ex db IIC Gb Ex eb IIC Gb
Ex eb I Mb Ex db I Mb Ex eb I Mb
Ex tb IIIC Db Ex tb IIIC Db

IP66 IP6X 'Dust tight' IP66

A Snowdon





# 11 Description

## BD\*\*\*\* Breather/Drain Plugs for Hazardous Areas

The BD\*\*\*D Ex d breather/drainer assembly consists of a main body made from either: Brass, Stainless Steel or Mild Steel and an internal plug made from the same material. The Ex d breather/drainer has a sinter between plug and main body, this is held in place with a press fit and further secured with a screwed plug. The sinter bush has materials options of stainless steel or bronze, both of an average pore size of no more than 80µm.

The Ex d breather drainer further uses sealing gaskets to create a seal against the given enclosure. The breather / drainer has the following basic size options: M20, M25, ½"NPT and ¾"NPT. Larger thread sizes are also allowed, but the inner plug will remain the same size and the protrusion length will be no greater than for the M25 size.

The BD\*\*\*E Ex e breather/drainer assembly consists of a main body, sinter and castellated locking nut. With the main body and locking nut having material options: Brass, Stainless Steel and Mild Steel, and the press fit sinter bush having a material option of stainless steel or bronze, both of an average pore size of no more than 80µm.

There is a further optional assembly using an internal tooth lock washer and standard locknut in replacement of the castellated nut. The breather drainer also uses sealing gaskets, between the main body and outer enclosure.

The breather / drainer has the following basic size options: M12, M16, M20, M25, ½"NPT and ¾"NPT. Larger thread sizes are also allowed, but the inner features and the protrusion length will be no greater than for the M25 size.

## BA\*\*\*\*E Breather/Drain Adapter for Hazardous Areas

The BAE Ex e breather/drainer adapter assembly consists of a main body, a sintered ring, sealing gasket, and either a castellated nut, or a combination of serrated washer and locknut for use when fitted to unthreaded entries. The main body is constructed from either Brass, Stainless Steel or Mild Steel. The sinter has an average pore size of no more than 80µm and material options of Bronze or Stainless Steel.

The breather/drainer adapter has the following basic male size options: M20, M25, M32, NPT ½, NPT ¾ or NPT1, along with female thread options as follows: M20, M25, M32, M40, NPT ½, NPT ¾, NPT 1, NPT 1¼. Female threads are permitted to be either the same size as the male thread or any size smaller or one size larger.

#### Variation 1

This variation includes the following modifications:

i. To include addition of a Breather Drainer Adapter option and additional sizes to BD\*\*\*E breather/drains.





### Variation 2

This variation includes the following modifications:

- i. The optional marking of the Breather/Drain arrangements for use in Group I applications.
- ii. The marking and Specific Conditions of Use have been updated in-line with the above modification.

# 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	12/05/2016 R870A/00 Issue of prime certificate		Issue of prime certificate
1	16/09/2016 - Addition of IP rating to certificate man clarify a Condition of Safe Use.		Addition of IP rating to certificate marking and clarify a Condition of Safe Use.
2	03/02/2020	R12860A/00	To introduce Variation 1
3	24/12/2020	R13787A/00	To introduce Variation 2

Note: Drawings that describe the equipment or component are listed in the Annex.

#### 13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

i. Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.

## 14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

- 14.1 The breather drain plugs shall be used with the supplied sealing washers and the installer shall ensure that the surface of the enclosure against which the sealing gasket seals is in good condition.
- The breather drain plugs must be installed at the bottom of the equipment.
- 14.3 When used in Ex db applications, the breather drain plugs shall not be used with any form of entry device.
- 14.4 For Group I applications, the Breather/Drains shall only be installed in locations where the risk of mechanical impact is low.





# 14.5 The following service temperature ranges shall not be exceeded:

Breather / Drainer	Service Temperature
BD***D (All arrangements)	-60°C to +95°C
BD***E & BA***E (HDPE gasket)	-60°C to +95°C
BD***E & BA***E (Nylon gasket)	-60°C to +100°C
BD***E & BA***E (PTFE gasket)	-60°C to +160°C

# **Certificate Annex**

Certificate Number CML 16ATEX1029X

**Equipment** BD\*\*\*\* Breather / Drainer Plugs and BA\*\*\*E Breather Drainer

Adapter

Manufacturer CCG Cable Terminations Pty Ltd

The following documents describe the equipment or component defined in this certificate:

#### Issue 0

Drawing No	Sheets	Rev	Approved date	Title
BDE-ASSY	1 of 1	-	12/05/2016	EXE BREATHER DRAIN ASSEMBLY
BDD-ASSY	1 of 1	1	12/05/2016	EXD BREATHER DRAIN ASSEMBLY

## Issue 1

No additional drawings issued.

## Issue 2

Drawing No	Sheets	Rev	Approved date	Title
BDE-ASSY_M12_M16	1 of 1	11/11/2019	03/02/2020	M12 / M16 Exe B/Drain Assembly
BAE-ASSY	1 of 1	20/09/2019	03/02/2020	Breather Adapter Assembly

## Issue 3

Drawing No.	Sheets	Rev.	Approved date	Title
BDD-ASSY	1 of 1	4	24 Dec 2020	EXD BREATHER DRAIN ASSEMBLY
BDE-ASSY	1 of 1	4	24 Dec 2020	EXE BREATHER DRAIN ASSEMBLY
BDE-ASSY M12 M16	1 of 1	2	24 Dec 2020	M12 / M16 Exe B/Drain Assy
BAE-ASSY	1 of 1	2	24 Dec 2020	Breather Adapter Assembly