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 09.0017 issue No.:8
Status:	Current
Date of Issue:	2015-11-11 Page 1 of 4
Applicant:	**Chalmit Lighting** 388 Hillington Road Glasgow G52 4BL **United Kingdom**

Certificate history:
Issue No. 8 (2015-11-11)
Issue No. 7 (2015-6-10)
Issue No. 6 (2015-2-27)
Issue No. 5 (2014-12-11)
Issue No. 4 (2014-11-27)
Issue No. 3 (2014-1-30)
Issue No. 2 (2013-4-22)
Issue No. 1 (2012-5-29)
Issue No. 0 (2010-6-25)

Electrical Apparatus: *Optional accessory:*	**The Protecta III Range of Luminaires**
Type of Protection:	**Increased Safety 'e', Powder Filled 'q', Encapsulation 'm', Flameproof 'd', Protection by enclosure**
Marking:	**Ex e mb q IIC T4 Gb** **or** **Ex d e mb q IIC T4 Gb** **Ex tb IIIC T85°C Db IP66/67** **Ta : See description**
Approved for issue on behalf of the IECEx Certification Body:	R S Sinclair
Position:	Technical Manager
Signature: *(for printed version)*	pp MPowney MPOWNEY
Date:	11/11/15

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 09.0017

Date of Issue: 2015-11-11 Issue No.: 8

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Additional Manufacturing location(s):

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 : 2007-10 Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2004 Edition: 2.0	Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation 'm' electrical apparatus
IEC 60079-5 : 2007-03 Edition: 3	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/ExTR09.0035/00	GB/BAS/ExTR12.0140/00	GB/BAS/ExTR13.0092/00
GB/BAS/ExTR14.0037/00	GB/BAS/ExTR14.0286/00	GB/BAS/ExTR14.0349/00
GB/BAS/ExTR15.0006/00	GB/BAS/ExTR15.0125/00	GB/BAS/ExTR15.0287/00

Quality Assessment Report:

GB/BAS/QAR06.0027/05

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: 2015-11-11 Issue No.: 8

Schedule

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

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

The luminaire may have an optional insert switch fitted to allow removal of the fully isolated gear tray.

Refer to the Annex to this certificate for full details of the equipment.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: 2015-11-11 Issue No.: 8

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

Variation 8.1

To permit an optional flameproof isolation switch to IECEx EPS 14.0091U, and additional terminals to IECEx PTB 04.0004U for the LED versions of the luminaire.

When provided with the above the luminaire is marked:-

Ex d e mb q IIC T4 Gb Ta -40°C to +55°C.
Ex tb IIIC T95°C Db IP66/67

Variation 8.2

To permit an alternative ballast to IECEx DEK 13.0041U.

ExTR: GB/BAS/ExTR15.0287 /00	File Reference: 15/0638 & 15/0565

Annex: IECEx BAS 09.0017 Annex Issue 3.pdf

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

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Certificate No.:	IECEx BAS 09.0017 issue No.:7
Status:	Current
Date of Issue:	2015-06-10 Page 1 of 4
Applicant:	**Chalmit Lighting** 388 Hillington Road Glasgow G52 4BL **United Kingdom**

Certificate history:
Issue No. 7 (2015-6-10)
Issue No. 6 (2015-2-27)
Issue No. 5 (2014-12-11)
Issue No. 4 (2014-11-27)
Issue No. 3 (2014-1-30)
Issue No. 2 (2013-4-22)
Issue No. 1 (2012-5-29)
Issue No. 0 (2010-6-25)

Electrical Apparatus: *Optional accessory:*	**The Protecta III Range of Luminaires**
Type of Protection:	**Increased Safety 'e', Powder Filled 'q', Encapsulation 'm', Flameproof 'd', Protection by enclosure**
Marking:	**Ex e mb q IIC T4 Gb** **or** **Ex d e mb q IIC T4 Gb** **Ex tb IIIC T85°C Db IP66/67** **Ta : See description**
Approved for issue on behalf of the IECEx Certification Body:	R S Sinclair
Position:	Technical Manager
Signature: *(for printed version)*	
Date:	10/6/15

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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 09.0017

Date of Issue: **2015-06-10** Issue No.: **7**

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Additional Manufacturing location(s):

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:
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IEC 60079-5 : 2007-03 Edition: 3	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
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*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:
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GB/BAS/ExTR14.0349/00
GB/BAS/ExTR15.0006/00
GB/BAS/ExTR15.0125/00

Quality Assessment Report:

GB/BAS/QAR06.0027/05

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: 2015-06-10 Issue No.: 7

Schedule

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

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

The luminaire may have an optional insert switch fitted to allow removal of the fully isolated gear tray.

Refer to the Annex to this certificate for full details of the equipment.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: 2015-06-10 Issue No.: 7

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

Variation 7.1

The permit the addition of a heater around the battery for the emergency LED models. The heater comprises of self-limiting heating unit to IECEx BAS 06.0043X.

The heater can have an optional Ex d thermostat to IECEx LCI 07.0021 in series with the heating cable. If provided the ambient temperature range is -40° C to + 45° C and the marking is **Ex d e mb q IIC T4 Gb.**

ExTR: GB/BAS/ExTR15.0125 /00	File Reference: 13/0353

Annex: IECEx BAS 09.0017 Annex Issue 3.pdf

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
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Certificate No.:	IECEx BAS 09.0017 issue No.:6
Status:	Current
Date of Issue:	2015-02-27

Certificate history:
Issue No. 6 (2015-2-27)
Issue No. 5 (2014-12-11)
Issue No. 4 (2014-11-27)
Issue No. 3 (2014-1-30)
Issue No. 2 (2013-4-22)
Issue No. 1 (2012-5-29)
Issue No. 0 (2010-6-25)

Applicant:
Chalmit Lighting
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Electrical Apparatus:
Optional accessory:
The Protecta III Range of Luminaires

Type of Protection:
Increased Safety 'e', Powder Filled 'q', Encapsulation 'm', Flameproof 'd', Protection by enclosure

Marking:
Ex e mb q IIC T4 Gb
or
Ex d e mb q IIC T4 Gb
Ex tb IIIC T85°C Db IP66/67
Ta : See description

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

Position: Technical Manager

Signature:
(for printed version)

Date: 27 FEBRUARY 2015

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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 09.0017

Date of Issue: **2015-02-27** Issue No.: **6**

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Additional Manufacturing location(s):

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IEC 60079-5 : 2007-03 Edition: 3	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/ExTR09.0035/00
GB/BAS/ExTR12.0140/00
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GB/BAS/ExTR14.0286/00
GB/BAS/ExTR14.0349/00
GB/BAS/ExTR15.0006/00

Quality Assessment Report:

GB/BAS/QAR06.0027/05

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2015-02-27** Issue No.: **6**

Schedule

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

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

The luminaire may have an optional insert switch fitted to allow removal of the fully isolated gear tray.

Refer to the Annex to this certificate for full details of the equipment.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2015-02-27** Issue No.: **6**

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

Variation 6.1

To include an emergency version of the LED luminaires. The marking for emergency luminaires with the LED light source is:

Ex e mb q IIC T4 Gb (-40°C ≤Ta ≤+55°C)
Ex tb IIIC T95°C Db

The following models are included:

Version	Light source	Mains input (Vac)	Input Current (mA)	Emergency operation (minutes)
-HV-550-E	2 x 600mm LED strip	220-254	155	90
-HV-1100-E	2 x 1200mm LED strip	220-254	295	90
-LV-550-E	2 x 600mm LED strip	110-130	275	90
-LV-1100-E	2 x 1200mm LED strip	110-130	545	90
-HV-550-E180	2 x 600mm LED strip	220-254	155	180
-HV-1100-E180	2 x 1200mm LED strip	220-254	295	180
-LV-550-E180	2 x 600mm LED strip	110-130	275	180
-LV-1100-E180	2 x 1200mm LED strip	110-130	545	180

ExTR: **GB/BAS/ExTR15.0006/00** File Reference: **15/0071**

Annex: IECEx BAS 09.0017 Annex Issue 3.pdf

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

ANNEX to IECEx BAS 09.0017 Issue No. 3 Date: 2015/2/27

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

GRP models are identified by the catalogue code PRGE/***/, and the stainless steel models are identified by PRSE/***/. The code further defines the number and wattage of the lamps, bi-pin, emergency, voltage etc.

The control gear components are mounted within the body of the luminaire via a removable gear tray.

The electronic control gear is ATEX component certified and has been revalidated within the IECEx report in accordance with the IECEx Operational Document OD009. The component certification covers the parallel circuit ballast type ILB. The same certificate covers CNEVA electronic control gear incorporating an inverter for use on emergency models. Emergency models have a 6 volt battery made up of 5 Nickel-cadmium batteries connected in series rated at either 4 or 7 Ah. The CNEVA control gear controls the charging and discharging of the battery, providing under-voltage and over-voltage protection and preventing reverse polarity charging of the cells.

The body of the enclosure is fitted with 4 cable entries, maximum two at each end. The permitted component certified blanking elements to be used are detailed in the table below. Other suitable equipment certified blanking elements may be used.

Component / Manufacturer	Part No.	Certificate No.	Temperature range / IP rating
Blanking element / Redapt	PD-U-	IECEx SIR 05.0042U / SIRA00ATEX1094	-50°C to +150°C (Nitrile O'ring) / IP66/68
Blanking element / Hawke	Type 375	IECEx BAS 06.0056U / Baseefa06ATEX0236U	-60°C to +75°C / IP66/67
	Type 387	IECEx BAS 06.0029U / Baseefa06ATEX0118U	-60°C to +80°C (Nitrile O'ring) -60°C to +160°C (Silicone O'ring) / IP66/67

The enclosure must be fitted with suitably approved cable entry devices which shall maintain the ingress protection rating of the enclosure.

The body is also fitted with 2 x M8 bushes for mounting purposes. The stainless steel bodied version is supplied with external brackets to allow for mounting.

Brass earth continuity plates are fitted to the entries of the luminaires on the GRP bodied versions and an internal/external M8 earth stud is fitted to the body of the stainless steel bodied version. An earth terminal is also fitted to the gear tray. All the earth points are connected together via earth conductors.

* The ambient temperature ranges for the different models of luminaire are shown in the table below.

Body Material	Lamp Type	Model	Lamps	T_{amb} (°C)	T Class	Max Surface temperature (°C)
GRP	Bi-pin	Non-emergency	2 x 18W	-20 to +55	T4	T85
			2 x 36W			
		Emergency	2 x 18W			
			2 x 36W			
Stainless Steel	Bi-pin	Non-emergency	2 x 18W	-20 to +55		
			2 x 36W			
		Emergency	2 x 18W	-20 to +45		
			2 x 36W			

Alternatively if the enclosures are fitted with the silicone gasket they may be used within a lower ambient of -40°C.

Internal wiring is by 0.75mm^2 or 1.0mm^2 stranded copper conductors with PVC insulation. Through wiring is by 2.5mm^2 or 4mm^2 stranded conductors with PVC insulation.

Variation 0.1

An isolating switch may be fitted to the luminaire operated by a raised lip on the diffuser. When the diffuser is opened the contacts of the switch open-circuit and de-energises the luminaire. When this switch is fitted the equipment is marked as follows:

Ex d e mb q IIC T4 Gb Ex tb IIIC T85°C Db IP66/67

Variation 0.2

Version of the enclosure with pole mounting option. The base of the enclosure incorporates a sleeve for the pole. The sleeve is fitted internally with a certified cable gland and a silicone seal around the entry which maintains the IP66/67 rating of the luminaire. Grub screws are incorporated into the sleeve to secure the luminaire to the pole once mounted. When the pole mounted variation is used the luminaire is restricted to the temperature range and IP rating of the cable gland.

Variation 1.1

To allow the use of an alternative silicone gasket.

Variation 2.1

To note minor drawing changes.

Variation 3.1

To allow the optional addition of the Bartec Insert Switch 07-1511, certified as IECEx PTB 07.0040U. This will enable the removal of the fully isolated gear tray from the luminaire.

Variation 4.1

To allow an alternative moulded insert for mounting the luminaire.

Variation 5.1

To allow an alternative light source consisting of encapsulated LED strips and associated Ex q driver circuit covered by DEKRA13ATEX0096U and Baseefa14ATEX0365U respectively. The marking for luminaires with the LED light source is:

Ex e mb q IIC T4 Gb T_{amb} -40°C to +55°C
Ex tb IIIC T95°C Db

The following models are included:

Version	Light source	Mains input (Vac)	Input Current (mA)
LV-550	2 x 600mm LED strip	110-130	275
LV-1100	2 x 1200mm LED strip	110-130	545
HV-550	2 x 600mm LED strip	220-254	155
HV-1100	2 x 1200mm LED strip	220-254	295

Variation 6.1

To include an emergency version of the LED luminaires. The marking for emergency luminaires with the LED light source is:

Ex e mb q IIC T4 Gb (-40°C ≤Ta ≤+55°C)
Ex tb IIIC T95°C Db

The following models are included:

Version	Light source	Mains input (Vac)	Input Current (mA)	Emergency operation (minutes)
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-HV-550-E180	2 x 600mm LED strip	220-254	155	180
-HV-1100-E180	2 x 1200mm LED strip	220-254	295	180
-LV-550-E180	2 x 600mm LED strip	110-130	275	180
-LV-1100-E180	2 x 1200mm LED strip	110-130	545	180

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Certificate No.:	IECEx BAS 09.0017	Issue No: 5	Certificate history:
Status:	Current	Page 1 of 4	Issue No. 5 (2014-12-11) Issue No. 4 (2014-11-27) Issue No. 3 (2014-01-30) Issue No. 2 (2013-04-22) Issue No. 1 (2012-05-29) Issue No. 0 (2010-06-25)
Date of Issue:	2014-12-11		
Applicant:	Chalmit Lighting 388 Hillington Road Glasgow G52 4BL United Kingdom		
Electrical Apparatus:	The Protecta III Range of Luminaires		
Optional accessory:			
Type of Protection:	Increased Safety 'e', Powder Filled 'q', Encapsulation 'm', Flameproof 'd', Protection by enclosure		
Marking:	Ex e mb q IIC T4 Gb or Ex d e mb q IIC T4 Gb Ex tb IIIC T85°C Db IP66/67 Ta : See description		

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

Position: General Manager

Signature: (for printed version)

Date: 11-12-14

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IECEx Certificate of Conformity

Certificate No:	IECEx BAS 09.0017	Issue No: 5
Date of Issue:	2014-12-11	Page 2 of 4
Manufacturer:	**Chalmit Lighting** 388 Hillington Road Glasgow G52 4BL **United Kingdom**	
Additional Manufacturing location(s):		

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IEC 60079-5 : 2007-03 Edition:3	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
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Quality Assessment Report:

GB/BAS/QAR06.0027/04

IECEx Certificate of Conformity

Certificate No:	IECEx BAS 09.0017	Issue No: 5
Date of Issue:	2014-12-11	Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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The luminaire may have an optional insert switch fitted to allow removal of the fully isolated gear tray.

Refer to the Annex to this certificate for full details of the equipment.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

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

Variation 5.1

To allow an alternative light source consisting of encapsulated LED strips and associated Ex q driver circuit covered by DEKRA13ATEX0096U and Baseefa14ATEX0365U respectively. The marking for luminaires with the LED light source is:
Ex e mb q IIC T4 Gb (-40°C ≤ Ta ≤ +55°C)
Ex tb IIIC T95°C Db

The following models are included:

Version	Light source	Mains input (Vac)	Input Current (mA)
LV-550	2 x 600mm LED strip	110-130	275
LV-1100	2 x 1200mm LED strip	110-130	545
HV-550	2 x 600mm LED strip	220-254	155
HV-1100	2 x 1200mm LED strip	220-254	295

ExTR: GB/BAS/ExTR14.0349/00 File Reference: 14/0944

Annex:

IECEx BAS 09.0017 Annex Issue 2.pdf

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

ANNEX to IECEx BAS 09.0017 Issue No. 2 Date: 2014/12/11

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

GRP models are identified by the catalogue code PRGE/***/, and the stainless steel models are identified by PRSE/***/. The code further defines the number and wattage of the lamps, bi-pin, emergency, voltage etc.

The control gear components are mounted within the body of the luminaire via a removable gear tray.

The electronic control gear is ATEX component certified and has been revalidated within the IECEx report in accordance with the IECEx Operational Document OD009. The component certification covers the parallel circuit ballast type ILB. The same certificate covers CNEVA electronic control gear incorporating an inverter for use on emergency models. Emergency models have a 6 volt battery made up of 5 Nickel-cadmium batteries connected in series rated at either 4 or 7 Ah. The CNEVA control gear controls the charging and discharging of the battery, providing under-voltage and over-voltage protection and preventing reverse polarity charging of the cells.

The body of the enclosure is fitted with 4 cable entries, maximum two at each end. The permitted component certified blanking elements to be used are detailed in the table below. Other suitable equipment certified blanking elements may be used.

Component / Manufacturer	Part No.	Certificate No.	Temperature range / IP rating
Blanking element / Redapt	PD-U-	IECEx SIR 05.0042U / SIRA00ATEX1094	-50°C to +150°C (Nitrile O'ring) / IP66/68
Blanking element / Hawke	Type 375	IECEx BAS 06.0056U / Baseefa06ATEX0236U	-60°C to +75°C / IP66/67
	Type 387	IECEx BAS 06.0029U / Baseefa06ATEX0118U	-60°C to +80°C (Nitrile O'ring) -60°C to +160°C (Silicone O'ring) / IP66/67

The enclosure must be fitted with suitably approved cable entry devices which shall maintain the ingress protection rating of the enclosure.

The body is also fitted with 2 x M8 bushes for mounting purposes. The stainless steel bodied version is supplied with external brackets to allow for mounting.

Brass earth continuity plates are fitted to the entries of the luminaires on the GRP bodied versions and an internal/external M8 earth stud is fitted to the body of the stainless steel bodied version. An earth terminal is also fitted to the gear tray. All the earth points are connected together via earth conductors.

* The ambient temperature ranges for the different models of luminaire are shown in the table below.

Body Material	Lamp Type	Model	Lamps	T_{amb} (°C)	T Class	Max Surface temperature (°C)
GRP	Bi-pin	Non-emergency	2 x 18W	-20 to +55	T4	T85
			2 x 36W			
		Emergency	2 x 18W			
			2 x 36W			
Stainless Steel	Bi-pin	Non-emergency	2 x 18W	-20 to +55		
			2 x 36W			
		Emergency	2 x 18W	-20 to +45		
			2 x 36W			

Alternatively if the enclosures are fitted with the silicone gasket they may be used within a lower ambient of -40°C.

Internal wiring is by 0.75mm^2 or 1.0mm^2 stranded copper conductors with PVC insulation. Through wiring is by 2.5mm^2 or 4mm^2 stranded conductors with PVC insulation.

Variation 0.1

An isolating switch may be fitted to the luminaire operated by a raised lip on the diffuser. When the diffuser is opened the contacts of the switch open-circuit and de-energises the luminaire. When this switch is fitted the equipment is marked as follows:

Ex d e mb q IIC T4 Gb Ex tb IIIC T85°C Db IP66/67

Variation 0.2

Version of the enclosure with pole mounting option. The base of the enclosure incorporates a sleeve for the pole. The sleeve is fitted internally with a certified cable gland and a silicone seal around the entry which maintains the IP66/67 rating of the luminaire. Grub screws are incorporated into the sleeve to secure the luminaire to the pole once mounted. When the pole mounted variation is used the luminaire is restricted to the temperature range and IP rating of the cable gland.

Variation 1.1

To allow the use of an alternative silicone gasket.

Variation 2.1

To note minor drawing changes.

Variation 3.1

To allow the optional addition of the Bartec Insert Switch 07-1511, certified as IECEx PTB 07.0040U. This will enable the removal of the fully isolated gear tray from the luminaire.

Variation 4.1

To allow an alternative moulded insert for mounting the luminaire.

Variation 5.1

To allow an alternative light source consisting of encapsulated LED strips and associated Ex q driver circuit covered by DEKRA13ATEX0096U and Baseefa14ATEX0365U respectively. The marking for luminaires with the LED light source is:

Ex e mb q IIC T4 Gb T_{amb} -40°C to +55°C
Ex tb IIIC T95°C Db

The following models are included:

Version	Light source	Mains input (Vac)	Input Current (mA)
LV-550	2 x 600mm LED strip	110-130	275
LV-1100	2 x 1200mm LED strip	110-130	545
HV-550	2 x 600mm LED strip	220-254	155
HV-1100	2 x 1200mm LED strip	220-254	295

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 09.0017 issue No.:4	Certificate history: Issue No. 4 (2014-11-27) Issue No. 3 (2014-1-30) Issue No. 2 (2013-4-22) Issue No. 1 (2012-5-29) Issue No. 0 (2010-6-25)
Status:	Current	
Date of Issue:	2014-11-27 Page 1 of 4	
Applicant:	**Chalmit Lighting** 388 Hillington Road Glasgow G52 4BL **United Kingdom**	
Electrical Apparatus: *Optional accessory:*	**The Protecta III Range of Luminaires**	
Type of Protection:	**Increased Safety 'e', Powder Filled 'q', Encapsulation 'm', Flameproof 'd', Protection by enclosure**	
Marking:	**Ex e mb q IIC T4 Gb** **or** **Ex d e mb q IIC T4 Gb** **Ex tb IIIC T85°C Db IP66/67** **-20°C ≤ Ta ≤ + * °C (See description)**	
Approved for issue on behalf of the IECEx Certification Body:	R S Sinclair	
Position:	General Manager	
Signature: *(for printed version)*	pp MPowell MPowell	
Date:	27/11/14	

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 09.0017

Date of Issue: **2014-11-27** Issue No.: **4**

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Additional Manufacturing location(s):

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 : 2007-10 Edition: 5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2004 Edition: 2.0	Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation 'm' electrical apparatus
IEC 60079-5 : 2007-03 Edition: 3	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/ExTR09.0035/00 GB/BAS/ExTR12.0140/00 GB/BAS/ExTR13.0092/00
GB/BAS/ExTR14.0037/00 GB/BAS/ExTR14.0286/00

Quality Assessment Report:

GB/BAS/QAR06.0027/04

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2014-11-27** Issue No.: **4**

Schedule

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

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

The luminaire may have an optional insert switch fitted to allow removal of the fully isolated gear tray.

Refer to the Annex to this certificate for full details of the equipment.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2014-11-27** Issue No.: **4**

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

Variation 4.1

To allow for an alternative mounting boss design by way of a moulded insert.

ExTR: **GB/BAS/ExTR14.0286/00** File Reference: **14/0385**

Annex: IECEx BAS 09.0017 Annex Issue 1.pdf

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 09.0017 issue No.:3	Certificate history: Issue No. 3 (2014-1-30) Issue No. 2 (2013-4-22) Issue No. 1 (2012-5-29) Issue No. 0 (2010-6-25)
Status:	Current	
Date of Issue:	2014-01-30 Page 1 of 4	
Applicant:	**Chalmit Lighting** 388 Hillington Road Glasgow G52 4BL **United Kingdom**	
Electrical Apparatus: *Optional accessory:*	**The Protecta III Range of Luminaires**	
Type of Protection:	**Increased Safety 'e', Powder Filled 'q', Encapsulation 'm', Flameproof 'd', Protection by enclosure**	
Marking:	**Ex e mb q IIC T4 Gb** **or** **Ex d e mb q IIC T4 Gb** **Ex tb IIIC T85°C Db IP66/67** **-20°C ≤ Ta ≤ + * °C (See description)**	

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

Position: General Manager

Signature:
(for printed version)

Date: 30/1/14

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 09.0017

Date of Issue: **2014-01-30** Issue No.: **3**

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Additional Manufacturing location(s):

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 : 2007-10 Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2004 Edition: 2.0	Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation 'm' electrical apparatus
IEC 60079-5 : 2007-03 Edition: 3	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/ExTR09.0035/00 GB/BAS/ExTR12.0140/00 GB/BAS/ExTR13.0092/00
GB/BAS/ExTR14.0037/00

Quality Assessment Report:

GB/BAS/QAR06.0027/04

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2014-01-30** Issue No.: 3

Schedule

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

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

The luminaire may have an optional insert switch fitted to allow removal of the fully isolated gear tray.

Refer to the Annex to this certificate for full details of the equipment.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2014-01-30** Issue No.: **3**

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

Variation 3.1

To allow the optional addition of the Bartec Insert Switch 07-1511, certified as IECEx PTB 07.0040U. This will enable the removal of the fully isolated gear tray from the luminaire.

ExTR: **GB/BAS/ExTR14.0037/00** File Reference: **14/0102**

Annex: IECEx BAS 09.0017 Annex Issue 1.pdf

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

ANNEX to IECEx BAS 09.0017 Issue No. 1 Date: 2014/01/30

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

GRP models are identified by the catalogue code PRGE/***/, and the stainless steel models are identified by PRSE/***/. The code further defines the number and wattage of the lamps, bi-pin, emergency, voltage etc.

The control gear components are mounted within the body of the luminaire via a removable gear tray.

The electronic control gear is ATEX component certified and has been revalidated within the IECEx report in accordance with the IECEx Operational Document OD009. The component certification covers the parallel circuit ballast type ILB. The same certificate covers CNEVA electronic control gear incorporating an inverter for use on emergency models. Emergency models have a 6 volt battery made up of 5 Nickel-cadmium batteries connected in series rated at either 4 or 7 Ah. The CNEVA control gear controls the charging and discharging of the battery, providing under-voltage and over-voltage protection and preventing reverse polarity charging of the cells.

The body of the enclosure is fitted with 4 cable entries, maximum two at each end. The permitted component certified blanking elements to be used are detailed in the table below. Other suitable equipment certified blanking elements may be used.

Component / Manufacturer	Part No.	Certificate No.	Temperature range / IP rating
Blanking element / Redapt	PD-U-	IECEx SIR 05.0042U / SIRA00ATEX1094	-50°C to +150°C (Nitrile O'ring) / IP66/68
Blanking element / Hawke	Type 375	IECEx BAS 06.0056U / Baseefa06ATEX0236U	-60°C to +75°C / IP66/67
	Type 387	IECEx BAS 06.0029U / Baseefa06ATEX0118U	-60°C to +80°C (Nitrile O'ring) -60°C to +160°C (Silicone O'ring) / IP66/67

The enclosure must be fitted with suitably approved cable entry devices which shall maintain the ingress protection rating of the enclosure.

The body is also fitted with 2 x M8 bushes for mounting purposes. The stainless steel bodied version is supplied with external brackets to allow for mounting.

Brass earth continuity plates are fitted to the entries of the luminaires on the GRP bodied versions and an internal/external M8 earth stud is fitted to the body of the stainless steel bodied version. An earth terminal is also fitted to the gear tray. All the earth points are connected together via earth conductors.

* The ambient temperature ranges for the different models of luminaire are shown in the table below.

Body Material	Lamp Type	Model	Lamps	T_{amb} (°C)	T Class	Max Surface temperature (°C)
GRP	Bi-pin	Non-emergency	2 x 18W	-20 to +55	T4	T85
			2 x 36W			
		Emergency	2 x 18W			
			2 x 36W			
Stainless Steel	Bi-pin	Non-emergency	2 x 18W	-20 to +55		
			2 x 36W			
		Emergency	2 x 18W	-20 to +45		
			2 x 36W			

Alternatively if the enclosures are fitted with the silicone gasket they may be used within a lower ambient of -40°C.

Internal wiring is by 0.75mm^2 or 1.0mm^2 stranded copper conductors with PVC insulation. Through wiring is by 2.5mm^2 or 4mm^2 stranded conductors with PVC insulation.

Variation 0.1

An isolating switch may be fitted to the luminaire operated by a raised lip on the diffuser. When the diffuser is opened the contacts of the switch open-circuit and de-energises the luminaire. When this switch is fitted the equipment is marked as follows:

Ex d e mb q IIC T4 Gb Ex tb IIIC T85°C Db IP66/67

Variation 0.2

Version of the enclosure with pole mounting option. The base of the enclosure incorporates a sleeve for the pole. The sleeve is fitted internally with a certified cable gland and a silicone seal around the entry which maintains the IP66/67 rating of the luminaire. Grub screws are incorporated into the sleeve to secure the luminaire to the pole once mounted. When the pole mounted variation is used the luminaire is restricted to the temperature range and IP rating of the cable gland.

Variation 1.1

To allow the use of an alternative silicone gasket.

Variation 2.1

To note minor drawing changes.

Variation 3.1

To allow the optional addition of the Bartec Insert Switch 07-1511, certified as IECEx PTB 07.0040U. This will enable the removal of the fully isolated gear tray from the luminaire.

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 09.0017 issue No.:2

Status: Current

Date of Issue: 2013-04-22 Page 1 of 4

Certificate history:
Issue No. 2 (2013-4-22)
Issue No. 1 (2012-5-29)
Issue No. 0 (2010-6-25)

Applicant:
Chalmit Lighting
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Electrical Apparatus: **The Protecta III Range of Luminaires**
Optional accessory:

Type of Protection: **Increased Safety 'e', Powder Filled 'q', Encapsulation 'm', Flameproof 'd',**

Marking: **Ex e mb q IIC T4 Gb**
or
Ex d e mb q IIC T4 Gb
Ex tb IIIC T85°C Db IP66/67
-20°C ≤Ta ≤+ * °C (See description)

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

Position: General Manager

Signature:
(for printed version)

Date: 22/04/13

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 09.0017

Date of Issue: **2013-04-22** Issue No.: **2**

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Additional Manufacturing location(s):

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 : 2007-10 Edition: 5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2004 Edition: 2.0	Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation 'm' electrical apparatus
IEC 60079-5 : 2007-03 Edition: 3	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/ExTR09.0035/00 GB/BAS/ExTR12.0140/00 GB/BAS/ExTR13.0092/00

Quality Assessment Report:

GB/BAS/QAR06.0027/03

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2013-04-22** Issue No.: **2**

Schedule

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

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

Refer to the Annex to this certificate for full details of the equipment.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2013-04-22** Issue No.: **2**

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

Variation 2.1

To note minor drawing changes.

ExTR: **GB/BAS/ExTR13.0092 /00** File Reference: **13/0194**

Annexe: IECEx BAS 09.0017 Annex.pdf

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 09.0017 issue No.:1	Certificate history: Issue No. 1 (2012-5-29) Issue No. 0 (2010-6-25)
Status:	Current	
Date of Issue:	2012-05-29	Page 1 of 4
Applicant:	**Chalmit Lighting** 388 Hillington Road Glasgow G52 4BL **United Kingdom**	
Electrical Apparatus: *Optional accessory:*	**The Protecta III Range of Luminaires**	
Type of Protection:	**Increased Safety 'e', Powder Filled 'q', Encapsulation 'm', Flameproof 'd',**	
Marking:	**Ex e mb q IIC T4 Gb** **or** **Ex d e mb q IIC T4 Gb** **Ex tb IIIC T85°C Db IP66/67** **-20°C ≤ Ta ≤ + * °C (See description)**	

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

Position: General Manager

Signature:
(for printed version)

Date: 29/5/12

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:

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

Baseefa

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2012-05-29** Issue No.: **1**

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Manufacturing location(s):

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 : 2007-10 Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2004 Edition: 2.0	Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation 'm' electrical apparatus
IEC 60079-5 : 2007-03 Edition: 3	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/ExTR09.0035/00 GB/BAS/ExTR12.0140/00

Quality Assessment Report:

GB/BAS/QAR06.0027/03

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2012-05-29** Issue No.: 1

Schedule

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

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

Refer to the Annex to this certificate for full details of the equipment.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2012-05-29** Issue No.: **1**

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

Variation 1.1

To allow the use of an alternative silicone gasket.

ExTR: **GB/BAS/ExTR12.0140/00** File Reference: **12/0183**

Annexe: IECEx BAS 09.0017 Annex.pdf

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 09.0017	issue No.:0	Certificate history:
Status:	Current		
Date of Issue:	2010-06-25	Page 1 of 3	

Applicant:
Chalmit Lighting
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Electrical Apparatus: **The Protecta III Range of Luminaires**
Optional accessory:

Type of Protection: **Increased Safety 'e', Powder Filled 'q', Encapsulation 'm', Flameproof 'd',**

Marking:
Ex e mb q IIC T4 Gb
Or
Ex d e mb q IIC T4 Gb
Ex tb IIIC T85°C Db IP66/67
-20°C ≤ Ta ≤ + * °C (See description)

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

Position: Managing Director

Signature:
(for printed version)

Date: 30-6-10

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:

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

Baseefa

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2010-06-25** Issue No.: **0**

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Manufacturing location(s):

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 : 2007-10 Edition: 5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2004 Edition: 2.0	Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation 'm' electrical apparatus
IEC 60079-5 : 2007-03 Edition: 3	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/ExTR09.0035/00

Quality Assessment Report:
GB/BAS/QAR06.0027/01

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 09.0017

Date of Issue: **2010-06-25** Issue No.: **0**

Schedule

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

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

Refer to the Annex to this certificate for full details of the equipment.

CONDITIONS OF CERTIFICATION: NO

Annexe: IECEx BAS 09.0017 Annex.pdf

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

ANNEX to IECEx BAS 09.0017 Issue No. 0 Date: 25/06/2010

The Protecta III Range of Luminaires comprises single / twin bi-pin fluorescent lamp units of 18W and 36W in emergency and non-emergency variants.

The luminaire body is manufactured from glass reinforced polyester resin or stainless steel and the diffuser is manufactured from polycarbonate. The diffuser is hinged along one side to the body of the luminaire and along the other side a quick release snap-on clamp bar runs the entire length and is used to seal the diffuser to the body. The stainless steel body option has clips that are placed along the length of the luminaire. A gasket is secured in a grove in the body of the luminaire and forms an IP66/67 seal.

GRP models are identified by the catalogue code PRGE/***/, and the stainless steel models are identified by PRSE/***/. The code further defines the number and wattage of the lamps, bi-pin, emergency, voltage etc.

The control gear components are mounted within the body of the luminaire via a removable gear tray.

The electronic control gear is ATEX component certified and has been revalidated within the IECEx report in accordance with the IECEx Operational Document OD009. The component certification covers the parallel circuit ballast type ILB. The same certificate covers CNEVA electronic control gear incorporating an inverter for use on emergency models. Emergency models have a 6 volt battery made up of 5 Nickel-cadmium batteries connected in series rated at either 4 or 7 Ah. The CNEVA control gear controls the charging and discharging of the battery, providing under-voltage and over-voltage protection and preventing reverse polarity charging of the cells.

The body of the enclosure is fitted with 4 cable entries, maximum two at each end. The permitted component certified blanking elements to be used are detailed in the table below. Other suitable equipment certified blanking elements may be used.

Component / Manufacturer	Part No.	Certificate No.	Temperature range / IP rating
Blanking element / Redapt	PD-U-	IECEx SIR 05.0042U / SIRA00ATEX1094	-50°C to +150°C (Nitrile O'ring) / IP66/68
Blanking element / Hawke	Type 375	IECEx BAS 06.0056U / Baseefa06ATEX0236U	-60°C to +75°C / IP66/67
	Type 387	IECEx BAS 06.0029U / Baseefa06ATEX0118U	-60°C to +80°C (Nitrile O'ring) -60°C to +160°C (Silicone O'ring) / IP66/67

The enclosure must be fitted with suitably approved cable entry devices which shall maintain the ingress protection rating of the enclosure.

The body is also fitted with 2 x M8 bushes for mounting purposes. The stainless steel bodied version is supplied with external brackets to allow for mounting.

Brass earth continuity plates are fitted to the entries of the luminaires on the GRP bodied versions and an internal/external M8 earth stud is fitted to the body of the stainless steel bodied version. An earth terminal is also fitted to the gear tray. All the earth points are connected together via earth conductors.

* The ambient temperature ranges for the different models of luminaire are shown in the table below.

Body Material	Lamp Type	Model	Lamps	T_{amb} (°C)	T Class	Max Surface temperature (°C)
GRP	Bi-pin	Non-emergency	2 x 18W	-20 to +55	T4	T85
			2 x 36W			
		Emergency	2 x 18W			
			2 x 36W			
Stainless Steel	Bi-pin	Non-emergency	2 x 18W	-20 to +55		
			2 x 36W			
		Emergency	2 x 18W	-20 to +45		
			2 x 36W			

Alternatively if the enclosures are fitted with the silicone gasket they may be used within a lower ambient of -40°C.

Internal wiring is by 0.75mm^2 or 1.0mm^2 stranded copper conductors with PVC insulation. Through wiring is by 2.5mm^2 or 4mm^2 stranded conductors with PVC insulation.

Variation 0.1

An isolating switch may be fitted to the luminaire operated by a raised lip on the diffuser. When the diffuser is opened the contacts of the switch open-circuit and de-energises the luminaire. When this switch is fitted the equipment is marked as follows:

Ex d e mb q IIC T4 Gb Ex tb IIIC T85°C Db IP66/67

Variation 0.2

Version of the enclosure with pole mounting option. The base of the enclosure incorporates a sleeve for the pole. The sleeve is fitted internally with a certified cable gland and a silicone seal around the entry which maintains the IP66/67 rating of the luminaire. Grub screws are incorporated into the sleeve to secure the luminaire to the pole once mounted. When the pole mounted variation is used the luminaire is restricted to the temperature range and IP rating of the cable gland.