



1 **EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 EC - Type Examination Certificate Number: **Baseefa11ATEX0090**

4 Equipment or Protective System: **Solas & Solas (Emergency) LED Luminaires**

5 Manufacturer: **Chalmit Lighting**

6 Address: **388 Hillington Road, Glasgow, G52 4BL**

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Baseefa, Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. **GB/BAS/ExTR11.0092/00**

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

EN60079-0: 2009 **EN60079-7: 2007**
EN60079-1: 2007 **EN60079-31: 2009**

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include the following :

(Ex) II 2 GD Ex d e IIB T5 Gb Ex tb IIIC T100°C Db IP6X (T_{amb}= see Schedule)

This certificate may only be reproduced in its entirety, without any change, schedule included.



Baseefa Customer Reference No. **0068**

Project File No. **10/0964**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.


PP R S SINCLAIR 
DIRECTOR
On behalf of
Baseefa



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Schedule

14

Certificate Number Baseefa11ATEX0090

15 Description of Equipment or Protective System

The Solas & Solas (Emergency) Luminaires comprise a circular body with external fins and a circular flat cover, both manufactured from aluminium, brass or gunmetal. The cover is fitted with a glass window sealed in place by a silicone cement. The cover is fixed to the body with 8 off M10 stainless steel screws of grade A2-70.

The body has an integral increased safety terminal box on the side containing a 4 or 6 way terminal block to either PTB98ATEX3125U or Sira01ATEX3249U. The rear wall of the terminal box is fitted with up to 2 line bushings to either Baseefa04ATEX0317U or PTB97ATEX1047U, which provide interconnection with the flameproof chamber.

The LED lamp array, comprising up to 34 high intensity LEDs and 2 indicator LEDs, is mounted within the flameproof chamber on an aluminium mounting plate (flat for the narrow beam spotlight unit or angled strips for the wide beam floodlight unit) directly behind the cover window.

In addition supplementary control gear as follows may optionally be mounted within the enclosure base to form the various models/functions as specified in the table below :-

- a. additional terminal blocks
- b. a battery pack, comprising 18 cells
- c. a battery pack heater, c/w thermal switches
- d. a LED mains driver
- e. an emergency driver/inverter

Internal and external earth facilities are provided.

Up to two M20 or M25 cable entries, or NPT equivalent, are provided in the side wall of the terminal box for the accommodation of suitably certified cable entry devices. The cable entry devices or stopping plugs should be certified as Equipment (not a Component) and be installed to maintain the IP rating of the enclosure.

The maximum/minimum ambient temperatures applicable for each luminaire are determined by the function of the unit (i.e. the internal components fitted) as follows:-

Model	Ambient*	Maintained or Non-maintained	Battery Heater
Solas Spotlight	-55°C to +55°C	N/A - Switched only	N/A
Solas (Emergency)	-55°C to +55°C	Non-maintained	Yes
	-20°C to +55°C	Non-maintained	No
	-55°C to +40°C	Maintained	Yes
	-20°C to +40°C	Maintained	No

* The permitted ambient temperatures may be restricted to other figures within the ranges as shown above.

16 Report Number

Baseefa Certification Report GB/BAS/ExTR11.0092/00

17 Special Conditions for Safe Use

None



18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

Number	Issue	Date	Description
H015293 Sheets 1 to 3	1	20/01/2010	General Arrangement, Solas LED Spotlight/Emergency Luminaire
H022205	0	11/04/2011	Solas Glazing Detail
H022212 Sheets 1 to 4	1	14/04/2011	Circuit Specification

These drawings are common to and held with IECEx BAS 11.0049,



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **Baseefa11ATEX0090/1**

4 Equipment or Protective System: **Solas & Solas Emergency LED Luminaires Luminaires**

5 Manufacturer: **Chalmit Lighting**

6 Address: **388 Hillington Road, Glasgow, G52 4BL**

7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa11ATEX0090** to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **0068**

Project File No. **11/0849**

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Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.

A handwritten signature in black ink, appearing to read "R S Sinclair".

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



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Schedule

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Certificate Number Baseefa11ATEX0090/1

15 **Description of the variation to the Equipment or Protective System**

Variation 1.1

To permit 110Vac. - 130Vac. versions of the luminaires.

Variation 1.2

To permit stopping plugs afforded Baseefa11ATEX0149X to replace a line bushing between the increased safety and flameproof enclosures.

16 **Report Number**

Baseefa Certification Report GB/BAS/ExTR11.0282/00

17 **Specific Conditions of Use**

None.

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 **Drawings and Documents**

Number	Sheet	Issue	Date	Description
H015293	1 to 3 inc.	2	26.10.11	General Arrangement, Solas LED Spotlight/Emergency Luminaire

This drawing is common to and held with IECEx BAS11.0047.

1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **Baseefa11ATEX0090/2**

4 Equipment or Protective System: **Solas & Solas (Emergency) LED Luminaires**

5 Manufacturer: **Chalmit Lighting**

6 Address: **388 Hillington Road, Glasgow, G52 4BL**

7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa11ATEX0090** to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

Baseefa Customer Reference No. **0068**

Project File No. **13/0566**

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SGS Baseefa Limited

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ

Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601

e-mail info@baseefa.com web site www.baseefa.com

Registered in England No. 4305578.

Registered address: Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN

A handwritten signature in blue ink, appearing to read 'R S Sinclair'.

R S SINCLAIR *RS SINCLAIR*

GENERAL MANAGER

On behalf of SGS Baseefa Limited

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Schedule

14

Certificate Number Baseefa11ATEX0090/2

15 **Description of the variation to the Equipment or Protective System**

Variation 2.1

An increase in the maximum permitted ambient temperature for the maintained units to +45°C.

16 **Report Number**

Baseefa Report No. GB/BAS/ExTR13.0155/00

17 **Specific Conditions of Use**

None

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 **Drawings and Documents**

Number	Issue	Date	Description
H015293 Sheets 1 to 3	3	10/07/13	General Arrangement, Solas LED Luminaire

These drawings are common to, and are held with, IECEx BAS 11.0047

1 **SUPPLEMENTARY EU - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres**
Directive 2014/34/EU

3 Supplementary EU - Type Examination Certificate Number: **Baseefa11ATEX0090/3**

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

4 Product: **Solas & Solas (Emergency) LED Luminaires**

5 Manufacturer: **Chalmit Lighting**

6 Address: **388 Hillington Road, Glasgow, G52 4BL**

7 This supplementary certificate extends EC - Type Examination Certificate No. **Baseefa11ATEX0090** to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Baseefa, Notified Body number 1180, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that the product, as modified by this supplementary certificate, has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

SGS Baseefa Customer Reference No. 0068

Project File No. 16/0591

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SGS Baseefa Limited


Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ

Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601

e-mail baseefa@sgs.com web site www.sgs.co.uk/baseefa

Registered in England No. 4305578.

Registered address: Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN



R S SINCLAIR

TECHNICAL MANAGER

On behalf of SGS Baseefa Limited

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Schedule

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Certificate Number Baseefa11ATEX0090/3

15 Description of the variation to the Product

Variation 3.1

To permit the fitting, of an alternative LED of Type Cree XLamp XP-G2 in the luminaire.

16 Report Number

GB/BAS/ExTR16.0233/00

17 Specific Conditions of Use

None

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is affected as follows.

Clause	Subject	Compliance
1.2.7	LVD type requirements	Directive requires a manufacturer's declaration.
1.2.8	Overloading of equipment (protection relays, etc.)	Covered by installation rules and manufacturer's instructions. End used responsibility.
1.4.1	External effects	The Purchaser should make the manufacturer aware of such issues. Covered in Instructions
1.4.2	Aggressive substances, etc.	The Purchaser should make the manufacturer aware of such issues. Covered in Instructions

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
H015293	1-3	4	27/02/2017	Solas LED Spotlight Emergency Version

This drawing is common to and held with IECEx BAS 11.0047

1 **SUPPLEMENTARY EU - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**

3 Supplementary EU - Type Examination Certificate Number: **Baseefa11ATEX0090/4**

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

4 Product: **Solas & Solas (Emergency) LED Luminaires**

5 Manufacturer: **Chalmit Lighting**

6 Address: **388 Hillington Road, Glasgow, G52 4BL**

7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa11ATEX0090** to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Baseefa, Notified Body number 1180, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that the product, as modified by this supplementary certificate, has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

9 Item 9 of the original Certificate is replaced by “Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0: 2012 + A11: 2013 EN 60079-1: 2014 EN 60079-7: 2015 EN 60079-31: 2014

except in respect of those requirements listed at item 18 of the Schedule.”

12 The marking of the equipment has changed from the original Certificate and shall include the following:

 **II 2 GD Ex db eb IIB T5 Gb**
Ex tb IIIC T100°C Db IP6X (T_{amb}= see Schedule)

SGS Baseefa Customer Reference No. **0068**

Project File No. **17/0661**

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SGS Baseefa Limited

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ

Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601

e-mail baseefa@sgs.com web site www.sgs.co.uk/baseefa

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R S SINCLAIR

TECHNICAL MANAGER

On behalf of SGS Baseefa Limited

13

Schedule

14

Certificate Number Baseefa11ATEX0090/4

15 Description of the variation to the Product

Variation 4.1

To allow a modification to the existing Solas driver circuit.

Variation 4.2

To assess the Solas & Solas (Emergency) LED Luminaires against the following standards:

EN 60079-0: 2012 + A11: 2013, EN 60079-1: 2014, EN 60079-7: 2015 and EN 60079-31: 2014.

16 Report Number

SGS Baseefa report No GB/BAS/ExTR17.0352/00

17 Specific Conditions of Use

None additional to those listed previously

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is affected as follows.

Clause	Subject
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
H022212	1-5	2	26.09.2017	Comparison of Solas inverter circuit with the applicable requirements for secondary batteries to Annex E of IEC EN 60079-1
H015293	1 - 3	5	06/12/2017	Solas LED spotlight emergency version.

These drawings are common to, and held with, IECEx BAS 11.0047.