



# 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](http://www.iecex.com)

Certificate No.: IECEx SIR 11.0118 issue No.:0 [Certificate history: ...](#)

Status: **Current**

Date of Issue: 2011-10-27 Page 1 of 5

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

Electrical Apparatus: VL100 floodlight  
*Optional accessory:*

Type of Protection: **Type nA, Type nR and Dust**

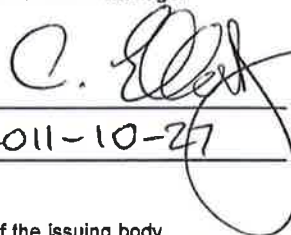
Marking: **Ex nR IIC T3 Gc IP66/67 or  
Ex nA nR IIC T3 Gc IP66  
Ex tc IIIC T200°C Dc  
Ta = -30°C to +50°C or  
Ta = -30°C to +40°C (Narrow beam version)**

Approved for issue on behalf of the IECEx Certification Body: C Ellaby

Position: Deputy Certification Manager

Signature:  
(for printed version)

Date:

  
2011-10-27

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:  
**SIRA Certification Service**  
Rake Lane  
Eccleston  
Chester  
CH4 9JN  
United Kingdom

**sira**  
CERTIFICATION



# IECEX Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2011-10-27

Issue No.: 0

Page 2 of 5

Manufacturer: **Victor 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:

<b>IEC 60079-0 : 2007-10</b> Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
<b>IEC 60079-15 : 2010</b> Edition: 4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
<b>IEC 60079-31 : 2008</b> Edition: 1	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

*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/SIR/EXTR11.0262/00](#)

Quality Assessment Report:

[GB/BAS/QAR06.0027/02](#)



# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2011-10-27

Issue No.: 0

Page 3 of 5

## Schedule

### EQUIPMENT:

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

The VL 100 Floodlight is an aluminum die-casting that houses a reflector, a lamp and the associated control gear to operate the lamp. It is designed as a restricted breathing enclosure.

#### Enclosure:

The VL100 Floodlight consists of a single die cast alloy enclosure with hinged cover and window. The enclosure is split into two main compartments to house the lamp and to house the control gear. The lamp compartment is shaped to locate the lamp holder and lamp reflectors. The control gear compartment houses the supply connection terminals and lamp control gear such as the ballast and ignitor etc. The enclosure utilises a single die cast cover to hold the window that is hinged on the bottom of the control gear compartment. The cover is secured in place using four counter bored cap head fasteners. The window is sealed against the cover using silicone RTV sealant and is mechanically held in place with two steel bolted retaining strips. To maintain the restricted breathing properties of the enclosure, suitably approved cable glands for use with Type n restricted breathing enclosures shall be used to provide the cable entries. There is also an option to mount the field wired terminals externally in an approved terminal box which is secured to the main enclosure.

CONDITIONS OF CERTIFICATION: NO



# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2011-10-27

Issue No.: 0

Page 4 of 5

## EQUIPMENT(continued):

<b>Control Gear</b>	
<b>Lampholders</b>	Porcelain screw non-sparking lamp holders as detailed below: E40 – BJB 29.048
<b>Igniters</b>	Transtar Sealed Igniters; types T-60454400 and T-60454500, IECEx component certified under IECEx BAS 11.0009U.
<b>Capacitors</b>	Power factor correction capacitors, dry Metallised Film construction to IEC/EN 61048 rated for continuous use in a -30°C to +95°C ambient conditions.
<b>Ballasts</b>	Ballasts are manufactured in accordance with EN 61347-1, EN 61347-2-9 & EN 60923 with minimum specifications: Tw = 140°C ΔT = 60°C Ballast may be fitted with thermal cut outs

### Conditions of manufacture

The Manufacturer shall comply with the following:

1. Each Enclosure shall be subject to a routine restricted breathing test by checking that the time taken for the internal pressure to change from 3 KPa to 2.7 KPa is greater than 14s, as required by clause 23.2.3.2.1.2 of IEC 60079-15:2010.
2. All luminaires to be subjected to a routine Insulation resistance and electric strength test in accordance with IEC 60598-2, as required by clause 11.3.6 of IEC60079-15:2010.
3. The products covered by this certificate incorporate previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform Sira of any modifications of the devices that may impinge upon the explosion safety design of their products.



# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2011-10-27

Issue No.: 0

Page 5 of 5

**Additional information:**

**Ratings**

220-250 V ac 50/60 Hz

Tungsten Halogen lamp types: 250 V max

SON	MBI	MBF	T/H
400W – T	400W – T	400W	Up to 500 W
400W – E	400W – E	250W	-
250W – T	250W – T	-	-
250W – E	250W – E	-	-
150W – T	-	-	-
150W – E	-	-	-

The VL 100 Floodlight has 5 beam patterns as follows

Reflector Type	Lamp Type	T Class	Ambient
Narrow beam	Tubular	T3	-30°C to +40°C
Wide beam	Elliptical	T3	-30°C to +50°C
Wide beam	Tubular	T3	-30°C to +50°C
Double asymmetric beam	Tubular	T3	-30°C to +50°C
Narrow symmetric beam	Tubular	T3	-30°C to +50°C
Medium beam	Tubular	T3	-30°C to +50°C



# 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](http://www.iecex.com)

Certificate No.: IECEx SIR 11.0118 Issue No.:1  
Status: Current  
Date of Issue: 2012-02-01 Page 1 of 6

Certificate history:  
Issue No. 1 (2012-2-1)  
Issue No. 0 (2011-10-27)

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

Electrical Apparatus: VL100 floodlight  
Optional accessory:

Type of Protection: Type nA, Type nR and Dust

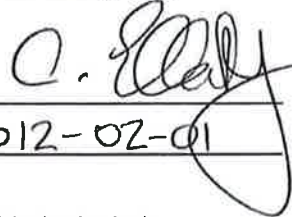
Marking: Ex nR IIC T3 Gc IP66/67 or  
Ex nA nR IIC T3 Gc IP66  
Ex tb IIIC T200°C Db  
Ex tc IIIC T200°C Dc  
Ta = -30°C to +50°C or  
Ta = -30°C to +40°C (Narrow beam version)

Approved for issue on behalf of the IECEx Certification Body: C Ellaby

Position: Deputy Certification Manager

Signature:  
(for printed version)

Date:

  
2012-02-01

1. This certificate and schedule may only be reproduced in full.
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3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SIRA Certification Service  
Rake Lane  
Eccleston  
Chester  
CH4 9JN  
United Kingdom

**sira**  
CERTIFICATION



# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2012-02-01

Issue No.: 1

Page 2 of 6

Manufacturer: **Victor 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:

<b>IEC 60079-0 : 2007-10</b> Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
<b>IEC 60079-15 : 2010</b> Edition: 4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
<b>IEC 60079-31 : 2008</b> Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"

*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/SIR/ExTR11.0262/00

GB/SIR/ExTR11.0324/00

#### Quality Assessment Report:

GB/BAS/QAR06.0027/02



# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2012-02-01

Issue No.: 1

Page 3 of 6

## Schedule

### EQUIPMENT:

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

The VL 100 Floodlight is an aluminium die-casting that houses a reflector, a lamp and the associated control gear to operate the lamp. It is designed as a restricted breathing enclosure.

#### Enclosure:

The VL100 Floodlight consists of a single die cast alloy enclosure with hinged cover and window. The enclosure is split into two main compartments to house the lamp and to house the control gear. The lamp compartment is shaped to locate the lamp holder and lamp reflectors. The control gear compartment houses the supply connection terminals and lamp control gear such as the ballast and ignitor etc. The enclosure utilises a single die cast cover to hold the window that is hinged on the bottom of the control gear compartment. The cover is secured in place using four counter bored cap head fasteners. The window is sealed against the cover using silicone RTV sealant and is mechanically held in place with two steel bolted retaining strips. To maintain the restricted breathing properties of the enclosure, suitably approved cable glands for use with Type n restricted breathing enclosures shall be used to provide the cable entries. There is also an option to mount the field wired terminals externally in an approved terminal box which is secured to the main enclosure.

CONDITIONS OF CERTIFICATION: NO





# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2012-02-01

Issue No.: 1

Page 4 of 6

## EQUIPMENT(continued):

### Control Gear Lampholders

Porcelain screw non-sparking lamp holders as detailed below:  
E40 – BJB 29.048

### Igniters

Transtar Sealed Igniters; types T-60454400 and T-60454500, IECEx component certified under IECEx BAS 11.0009U.

### Capacitors

Power factor correction capacitors, dry Metallised Film construction to IEC/EN 61048 rated for continuous use in a -30°C to +95°C ambient conditions.

### Ballasts

Ballasts are manufactured in accordance with EN 61347-1, EN 61347-2-9 & EN 60923 with minimum specifications:

$T_w = 140^{\circ}\text{C}$

$\Delta T = 60^{\circ}\text{C}$

Ballast may be fitted with thermal cut outs

### Conditions of manufacture

The Manufacturer shall comply with the following:

1. Each Enclosure shall be subject to a routine restricted breathing test by checking that the time taken for the internal pressure to change from 3 KPa to 2.7 KPa is greater than 14s, as required by clause 23.2.3.2.1.2 of IEC 60079-15:2010.
2. All luminaires to be subjected to a routine Insulation resistance and electric strength test in accordance with IEC 60598-2, as required by clause 11.3.6 of IEC60079-15:2010.
3. The products covered by this certificate incorporate previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform Sira of any modifications of the devices that may impinge upon the explosion safety design of their products.



# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2012-02-01

Issue No.: 1

Page 5 of 6

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

Issue 1 – this Issue introduced the following changes:	
1.	Minor change to the drawings, to list the latest applicable standards and amend the label to include the new dust marking. The marking has been changed to include Ex tb IIIC T200°C Db.



# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2012-02-01

Issue No.: 1

Page 6 of 6

## Additional Information:

### Ratings

220-250 V ac 50/60 Hz

Tungsten Halogen lamp types: 250 V max

SON	MBI	MBF	T/H
400W – T	400W – T	400W	Up to 500 W
400W – E	400W – E	250W	-
250W – T	250W – T	-	-
250W – E	250W – E	-	-
150W – T	-	-	-
150W – E	-	-	-

The VL 100 Floodlight has 5 beam patterns as follows

Reflector Type	Lamp Type	T Class	Ambient
Narrow beam	Tubular	T3	-30°C to +40°C
Wide beam	Elliptical	T3	-30°C to +50°C
Wide beam	Tubular	T3	-30°C to +50°C
Double asymmetric beam	Tubular	T3	-30°C to +50°C
Narrow symmetric beam	Tubular	T3	-30°C to +50°C
Medium beam	Tubular	T3	-30°C to +50°C



# 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](http://www.iecex.com)

Certificate No.: **IECEX SIR 11.0118** issue No.: **2**  
Status: **Current**  
Date of Issue: **2013-12-16** Page 1 of 6

Certificate history:  
Issue No. 2 (2013-12-16)  
Issue No. 1 (2012-2-1)  
Issue No. 0 (2011-10-27)

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

Electrical Apparatus: **VL100 floodlight**  
Optional accessory:

Type of Protection: **Type nA, Type nR and Dust**


Marking: Ex nR IIC T3 Gc IP66/67 or  
Ex nA nR IIC T3 Gc IP66  
Ex tb IIIC T200°C Db  
Ex tc IIIC T200°C Dc  
Ta = -30°C to +50°C or  
Ta = -30°C to +40°C (Narrow beam version)

Approved for issue on behalf of the IECEx Certification Body: **C Ellaby**

Position: **Deputy Certification Manager**

Signature:  
(for printed version)

Date:

  
2013-12-16

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Certificate issued by:  
**SIRA Certification Service**  
Rake Lane  
Eccleston  
Chester  
CH4 9JN  
United Kingdom

**sira**  
CERTIFICATION



# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2013-12-16

Issue No.: 2

Page 2 of 6

Manufacturer: **Victor 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** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition: 5
- IEC 60079-15 : 2010** Explosive atmospheres - Part 15: Equipment protection by type of protection "n"  
Edition: 4
- IEC 60079-31 : 2008** Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 'I'  
Edition: 1

*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/SIR/ExTR11.0262/00

GB/SIR/ExTR11.0324/00

GB/SIR/ExTR13.0346/00

Quality Assessment Report:

GB/BAS/QAR06.0027/02

GB/BAS/QAR06.0027/03

GB/BAS/QAR06.0027/04



# IECEX Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2013-12-16

Issue No.: 2

Page 3 of 6

## Schedule

### EQUIPMENT:

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

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### Enclosure:

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### CONDITIONS OF CERTIFICATION: NO





# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2013-12-16

Issue No.: 2

Page 4 of 6

## EQUIPMENT(continued):

### Control Gear

#### Lampholders

Porcelain screw non-sparking lamp holders as detailed below:

E40 – BJB 29.048

#### Igniters

Transtar Sealed igniters; types T-60454400 and T-60454500, IECEx component certified under IECEx BAS 11.0009U.

#### Capacitors

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#### Ballasts

Ballasts are manufactured in accordance with EN 61347-1, EN 61347-2-9 & EN 60923 with minimum specifications:

$T_w = 140^\circ\text{C}$

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Ballast may be fitted with thermal cut outs

### Conditions of manufacture

The Manufacturer shall comply with the following:

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3. The products covered by this certificate incorporate previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform Sira of any modifications of the devices that may impinge upon the explosion safety design of their products.



# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2013-12-16

Issue No.: 2

Page 5 of 6

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

<b>Issue 1 – this Issue introduced the following changes:</b>	
1.	Minor change to the drawings, to list the latest applicable standards and amend the label to include the new dust marking. The marking has been changed to include Ex tb IIIC T200°C Db.
<b>Issue 2 – this Issue introduced the following change:</b>	
1.	The recognition of an alternative mounting orientation of the optional, non-sparking terminal enclosure used on the Ex nA nR IIC T3 Gc IP66 version of the luminaire.





# IECEx Certificate of Conformity

Certificate No.: IECEx SIR 11.0118

Date of Issue: 2013-12-16

Issue No.: 2

Page 6 of 6

**Additional information:**

**Ratings**

220-250 V ac 50/60 Hz

Tungsten Halogen lamp types: 250 V max

SON	MBI	MBF	T/H
400W – T	400W – T	400W	Up to 500 W
400W – E	400W – E	250W	-
250W – T	250W – T	-	-
250W – E	250W – E	-	-
150W – T	-	-	-
150W – E	-	-	-

The VL 100 Floodlight has 5 beam patterns as follows

Reflector Type	Lamp Type	T Class	Ambient
Narrow beam	Tubular	T3	-30°C to +40°C
Wide beam	Elliptical	T3	-30°C to +50°C
Wide beam	Tubular	T3	-30°C to +50°C
Double asymmetric beam	Tubular	T3	-30°C to +50°C
Narrow symmetric beam	Tubular	T3	-30°C to +50°C
Medium beam	Tubular	T3	-30°C to +50°C