



TYPE EXAMINATION CERTIFICATE

Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

Certificate Number: Sira 04ATEX4061

Equipment: HDL227 Floodlight Luminaires

Applicant: Hadar Lighting Limited

Address: Jubilee Industrial Estate
Ashington
Northumberland
NE63 8UG
UK

This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

Sira Certification Service certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 3 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in confidential report numbers R53A10799A, R51V12495A, R51A15451A and R51A15863A.

Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 60079-15:2003

EN 50281-1-1:1998

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

This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

The marking of the equipment shall include the following:



II 3 G D

EEx nR II T2 (400 W SON or MBI)

EEx nR II T3 (150 W SON, 250 W SON or 250 W MBI)

Project Number 51A15863
Date 23 April 2004
Latest issue 16 November 2006
C. Index: 05

C. Ellaby
Certification Officer

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Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England



SCHEDULE

TYPE EXAMINATION CERTIFICATE NUMBER:

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Re-issued 16 November 2006 to recognise an alternative manufacturer and product references, this re-issue also incorporates previous variations 1 and 2 dated 19 July 2005 and 2 October 2006 respectively.

13 DESCRIPTION OF EQUIPMENT

The Floodlight Luminaire is rated 220 to 240 Volts, 50 or 60 Hz a.c. The enclosure comprises an aluminium main body with a hinged diffuser lid. The diffuser lid comprises of a hinged aluminium frame with a glass window, silicone sealed into position and further held with four corner brackets on the inside, screwed into position on the frame. Six screws, made captive by means of O-ring seals on the screw shaft, close the lid into place.

The control gear is located inside the main body. It consists of a ballast, ignitor, PF capacitor and mains terminal block. The control gear is separated from the lamp holder by means of a zinc galvanised partition, which also acts as a support for the smooth or dimpled reflector, located on the other side of the partition than the control gear. The control gear auxiliaries are incorporated on a zinc plated base plate. The conductors to the lamp holder are accommodated through the partition by means of a grommet. Cable gland(s) allow entry into the control gear side of the enclosure assembled into two 20 mm cable entry holes. An external bracket is attached for mounting the luminaire.

Internal Lamp Options

SON	MBI
150W – T	-
250W – T	250W – T
400W – T	400W – T

Ratings

Attitude positions

0° vertical to horizontal lamp down at 90°

Attitude	Ambient Temperature (°C)					
	With Power Correction Capacitor			Without Power Correction Capacitor		
	150 W	250 W	400 W	150 W	250 W	400 W
0°	+ 40°C	+ 40°C	+ 35°C	+ 56°C	+ 56°C	+ 35°C
30°	+ 38°C	+ 38°C	+ 35°C	+ 56°C	+ 56°C	+ 35°C
45°	+ 37°C	+ 37°C	+ 30°C	+ 56°C	+ 56°C	+ 35°C
60°	+ 35°C	+ 35°C	+ 25°C	+ 56°C	+ 56°C	+ 25°C
90°	+ 31°C	+ 31°C	+ 25°C	+ 45°C	+ 45°C	+ 25°C

The rating marking, including the voltage rating, the type of lamp and the power rating is indicated on the product label.

Note:

When the 150 W and 250 W higher ambients are required, without the use of the power correction capacitor, the conductors are to be removed as prescribed within the manufacturer's installation instructions.

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14 DESCRIPTIVE DOCUMENTS

14.1	Drawing No.	Sheet	Rev.	Date	Title
	CED3033-1.GA	1 of 4	0	14 Oct 03	Floodlight General Arrangement Drawing
	CED3033-2.GA	2 of 4	0	02 Mar 04	Floodlight Capacitor Drawing
	CED3033-3.GA	3 of 4	0	14 Oct 03	Floodlight Ballast Drawing
	CED3033-4.GA	4 of 4	0	02 Mar 04	Floodlight Ignitor Drawing
	CED3100	1 of 1	0	04 Feb 04	Floodlight Wiring Schematic and Label Drawing
	CED3224-GA	1 of 1	2	01 Oct 06	Certification Labels
	ALC0007	1 of 1	-	17 Nov 06	Alternative Nameplates for Zone 2 Floodlight

14.2 Report numbers R53A10799A, R51V12495A, R51A15451A and R51A15863A.

15 SPECIAL CONDITIONS FOR SAFE USE

None

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in report numbers R53A10799A, R51V12495A, R51A15451A and R51A15863A.

17 CONDITIONS OF CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of Type Examination Certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

17.3 Each enclosure shall be subjected 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 27 s, as required by clause 27.2.3 of EN 60079-15:2003.

17.4 All luminaires to be subjected to a routine insulation resistance and electric strength test in accordance with IEC60598-2, as required by clause 11.2.12 of EN 60079-15:2003.

17.5 Each enclosure shall be fitted with a suitably ingress protected EEx d IIC elastomeric sealed cable gland, with the use of a smoothed faced nylon entry thread sealing washer and earth tag when necessary. Both seals suitable for use in a temperature range of -40°C to +100°C (having regard for a maximum ambient of 56°C). The outer diameter of the sealing washer dimensionally is equal to or larger than the cable gland interface diameter or across flats of 24 mm.

Or

A Peppers EExd A3LF IP 68 cable gland certified By Sira, certificate number Sira01ATEX1272X.

17.6 Conductor connections to the lamp holder are to have a maximum protrusion of 0.5 mm of bare conductor from their terminal connectors.

17.7 The label affixed to these products shall not contain any information that conflicts with the marking requirements defined in the confidential Sira reports associated with this certificate.

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