



CERTIFICADO DE CONFORMIDADE

Certificate of Conformity

Nº: IEx 15.0300

Emissão / Issue Date: 30/11/2015

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Solicitante / Endereço: <i>Applicant / Address</i> <i>Solicitante / Dirección</i>	CHALMIT LIGHTING 388 Hillington Road Glasgow - G52 4BL - United Kingdom
Produto / Modelo / Marca: <i>Product / Model / Trademark / Bar Code</i> <i>Producto / Modelo / Marca / Código de Barras</i>	LED Luminaires Solas (with or without emergency) Chalmit
Família de Produto: <i>Product's Family</i> <i>Familia de productos</i>	N/A
Número de Série / Lote: <i>Serial number / Batch number</i> <i>Número de serie / Número de lote</i>	N/A
Marcação: <i>Marking</i> <i>Marcación</i>	Ex d e IIB T5 Gb Ex tb IIIC T100 °C Db IP6X (T_{amb} = See table)
Normas Aplicáveis: <i>Applicable Standards</i> <i>Normas aplicables</i>	ABNT NBR IEC 60079-0:2008 (IEC 60079-0:2007-10), ABNT NBR IEC 60079-1:2009 (IEC 60079-1:2007-04), ABNT NBR IEC 60079-7:2008 (IEC 60079-7:2006-07) and ABNT NBR IEC 60079-31:2011 (IEC 60079-31:2008).
Modelo de Certificação: <i>Certification Model</i> <i>Modelo de certificación</i>	Model 5, according to ISO/IEC 17067:2013
Portaria Inmetro Nº / Escopo: <i>Inmetro Decree n° / Scope</i> <i>Ordenanza Inmetro / Alcance</i>	179:2010 / Equipamentos Elétricos e Eletrônicos para Atmosferas Explosivas - Electrical and electronic equipment for use in hazardous locations
Concessão para: <i>Concession for</i> <i>Concesión</i>	Uso do Selo de Identificação da Conformidade sobre o(s) produto(s) relacionado(s) neste Certificado - Use of the conformity identification label on the product(s) listed in this certificate

Associação IEx Certificações, that is a Product Certification Body accredited by Cgcre/INMETRO, under the registration OCP 0064, confirms that the product is in conformity with the Standards and Regulation above.

Revisão: **N/A**

Revision / Revisión

Validade: **27/10/2016**

Validity / Validad


Marco A. Bucciarelli Roque
Signatário autorizado
Authorized signatory
Persona autorizada



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Fabricante / Endereço:

*Manufacturer / Address
Fabricante / Dirección*

**CHALMIT LIGHTING
388 Hillington Road
Glasgow - G52 4BL - United Kingdom**

Unidade Fabril / Endereço:

*Production Site / Address
Unidad de Fabricación / Dirección*

**CHALMIT LIGHTING
388 Hillington Road
Glasgow - G52 4BL - United Kingdom**

Representante Legal / Endereço:

*Legal Representative / Address
Representante Legal / Dirección*

**FÁBRICA DE PEÇAS ELÉTRICAS DELMAR LTDA
Rodovia Antonio Romano Schincariol, S/N - Km 113
18279-125 - Tatuí - SP - Brazil
CNPJ: 72.183.759/0001-68**

Product Description:

The Solas & Solas (with or without 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 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, 262-*** model or MK6 model. The rear wall of the terminal box is fitted with up to 2 line bushings flameproof approval, Chalmit model or optionally 07-91... model, 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 equivalents, are provided in the side wall of the terminal box for the accommodation of the cable entry devices, suitably certified in the Brazilian System for Conformity Assessment (SBAC). 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.

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M.A.B. Rogue

Associação IEx Certificações (CNPJ: 12.845.838/0001-65)
Alameda Tocantins, 75 sala 609 Barueri SP ZIP Code 06455-020 Brazil
Tel +55 11 4195-0705 contato@iexcert.com.br



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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 ^{a)}	Maintained or Non-maintained ^{b)}	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 +45 °C	Maintained	Yes
	-20 °C to +45 °C	Maintained	No

a) The permissible ambient temperature can be restricted to other settings within the ranges as shown above.

b) All units with the option of emergency have a battery charger. Units powered by battery Non-maintained option only operate in the event of power failure. The units of the maintained option can be used as a normal luminaire.

Documents:

Title	Number	Revision	Date
Quality Assessment Report	RAF 686.F1.M1	0	27 and 28/08/2015
Conformity Assessment Report	RACT-Ex 686.504.15B (79)	0	26/11/2015
Test Report issued by Baseefa	GB/BAS/ExTR13.0155/00	0	12/07/2013
Test Report issued by Baseefa	GB/BAS/ExTR11.0282/00	0	08/12/2011
Test Report issued by Baseefa	GB/BAS/ExTR11.0092/00	0	14/04/2011

The approved documents are listed in the Conformity Assessment Report RACT-Ex 686.504.15B (79).

Observations:

- All products provided to Brazilian market shall be in conformity with product description and schedule documents approved in this certification process;
- Only the units commercialized during the validity of this Certificate are covered by this certification;
- This Certificate is valid only for products identical to the assessed products. Any modification in the project, as well, use of different components and/or materials specified in the schedule drawings/documents without IEx authorization, will invalidate this Certificate;
- The validity of this certificate depend on carrying out the surveillance audits and treating of possible non-conformances in according with the Associação IEX guidelines and according with the Inmetro's Product Conformity Assessment Requirements – RAC # : 179/2010 – Electrical and Electronic Equipment for Explosive Atmospheres.

To check the current validity of this certificate, please, access the Inmetro's database for certified products and services

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- e) The Conformity Identification Label must be placed on the outside surface of the equipment in an easily visible place.
- f) This authorization is linked to a contract and to the address mentioned above;
- g) The products shall be installed according to the applicable standard for explosive atmospheres installations (ABNT NBR IEC 60079-14)
- h) This certification refers only and exclusively to the conformity assessment requirements for electrical equipment for explosive atmospheres, not covering any other regulation applicable to the product;
- i) The activities of installation, inspection, maintenance, repair, revision and recuperation of equipment are the responsibility of the end users and shall be performed according to the applicable technical standards
- j) The product was approved with 1.5 times the reference pressure and 100% of production shall be submitted to the overpressure routine test;
- k) 100% of production shall be submitted to the routine test of dielectric strength;
- l) The marking Label must be placed on the outside surface of the equipment in an easily visible place; with following information:
 - Warning - Do not open when an explosive atmosphere is present.

Revision history:

Revision	Date	Description
0	30/11/2015	Initial issue.

Quotation: 14.0.686.504.15.

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