



CERTIFICADO DE CONFORMIDADE

Certificate of Conformity

Nº: IEx 15.0272X

Emissão / Issue Date: 09/12/2015

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Solicitante / Endereço:

Applicant / Address
Solicitante / Dirección

CHALMIT LIGHTING

388 Hillington Road

Glasgow - G52 4BL - United Kingdom

Produto / Modelo / Marca:

Product / Model / Trademark / Bar Code
Producto / Modelo / Marca / Código de Barras

LED Luminaires

Scotia

Chalmit

Família de Produto:

Product's Family
Familia de productos

N/A

Número de Série / Lote:

Serial number / Batch number
Número de serie / Número de lote

N/A

Marcação:

Marking
Marcación

Ex de IIB T* Gb

Ex tb IIIC T** °C Db IP66

Normas Aplicáveis:

Applicable Standards
Normas aplicables

ABNT NBR IEC 60079-0:2013 (IEC 60079-0:2011),
ABNT NBR IEC 60079-7:2008 (IEC 60079-7:2006),
ABNT NBR IEC 60079-31:2014 (IEC 60079-31:2013) and
ABNT NBR IEC 60079-1:2009 (IEC 60079-1:2007).

Modelo de Certificação:

Certification Model
Modelo de certificación

Model 5, according to ISO/IEC 17067:2013

Portaria Inmetro Nº / Escopo:

Inmetro Decree n° / Scope
Ordenanza Inmetro / Alcance

179:2010 / Equipamentos Elétricos e Eletrônicos para Atmosferas
Explosivas - Electrical and electronic equipment for use in hazardous
locations

Concessão para:

Concession for
Concesión

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 Scotia luminaires are LED based units that have integrated driver electronics and are rated at 120 to 277 V ac 50/60 Hz. The enclosures are cast from an aluminium alloy, EN1706 AC-44100KF LM6. The cover of the luminaire is secured to the main enclosure using twelve M8 fastening screws, forming a flanged joint, and has a tempered glass rectangular window cemented into position.

The array of LEDs is mounted inside a flameproof compartment, behind the window. There is a separate flameproof compartment housing the driver circuit which is segregated from the LED compartment by a component approved bushing. There is a flanged joint formed by a cover on the other side of the driver circuit compartment, on the back of the luminaire, secured by another twelve M8 fasteners. This back cover has another compartment moulded into it which houses some component approved increased safety terminals.

This increased safety compartment is segregated from the driver circuit compartment by another bushing, has a cover which is secured by four fastening screws and has two M20 entries with the alternative option of M25 threaded entries in the sides. The luminaires may be fitted externally with a handle, a reflector and a wire guard. There are several variants with different ratings, these are described in the tables below:

Type identification	Watts (W)	Current (A)	T* at Ta: +40 °C	T* at Ta: +55 °C	T** at Ta: +40 °C	T** at Ta: +55 °C
SCOD/12L/LE/**	125	1.0 – 0.5	T6	T5	T76 °C	T91 °C
SCOD/11L/LE/**	110	0.9 – 0.4	T6	T5	T76 °C	T91 °C
SCOD/08L/LE/**	105	0.9 – 0.4	T6	T5	T76 °C	T91 °C
SCOD/07L/LE/**	90	0.8 – 0.4	T6	T5	T76 °C	T91 °C

Type Identification /**	Description
LT	Low temperature version, lower Ta = -50 °C
M25	M25 entry option
H ₂	Gas group IIB+H ₂

All fasteners used to secure flameproof joints are stainless steel with a minimum grade of A4.

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MAB Roque

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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Temperature class (T*), temperature rating (T**) and ambient temperature range (T_{amb}):

Ex de IIB T* Gb (+ H₂ optional)

Ex tb IIIC T °C Db IP66**

T* T _{amb} = +40 °C	T* T _{amb} = +55 °C	T** T _{amb} = +40 °C	T** T _{amb} = +55 °C
T6	T5	T76 °C	T91 °C
T6	T5	T76 °C	T91 °C
T6	T5	T76 °C	T91 °C
T6	T5	T76 °C	T91 °C

Standard Version:

T6 / T76 °C: -20 °C ≤ T_{amb} ≤ +40 °C

T5 / T91 °C: -20 °C ≤ T_{amb} ≤ +55 °C

Low Temperature Version:

T6 / T76 °C: -50 °C ≤ T_{amb} ≤ +40 °C

T5 / T91 °C: -50 °C ≤ T_{amb} ≤ +55 °C

Audit date: 27 and 28/08/2015.

Documents:

Title	Number	Revision	Date
Conformity Assessment Report	RACT-Ex 686.384.15C (79)	0	24/11/2015
Test Report issued by cml Ex	GB/CML/ExTR14.0037/00	0	12/2014

The approved documents are listed in the Conformity Assessment Report RACT-Ex 686.384.15C (79).

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MAB Rogue

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Observations:

- a) All products provided to Brazilian market shall be in conformity with product description and schedule documents approved in this certification process;
- b) Only the units commercialized during the validity of this Certificate are covered by this certification;
- c) 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;
- d) 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
- 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 requirements and according to manufacturer recommendations.
- j) The letter "X" in the Certificate Number refers to the following special conditions for safe use of the product:
 - The critical dimensions of all non-threaded flamepaths are: 9.5 mm minimum in length with a 0.05 mm max gap.
 - The leads connected to the terminals shall be insulated for the appropriate voltage and this insulation shall extend to within 1 mm of the metal of the terminal throat.
 - All terminal screws, used and unused, shall be tightened down to between 1.2 Nm and 2 Nm.
 - The fixture shall only be installed and wired in an ambient temperature of -10 °C to +80 °C.
- k) The LED compartment of each unit marked for a low ambient temperature of -50 °C and gas group IIB + H₂ shall be subjected to a 13 bar hydrostatic routine overpressure test, for 10 seconds;

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- l) Each unit manufactured shall be subjected to a dielectric strength test of $(1000+2U) \times 1.2$ which shall be applied for a minimum of 100 ms in accordance with IEC 60079-7 (ABNT NBR IEC 60079-7), clause 6.1. LED driver may be disconnected for the test. There shall be no breakdown.
- m) The warning Label must be placed on the outside surface of the equipment in an easily visible place, with the following information:
- WARNING: Do not open when an explosive atmosphere is present.
 - WARNING: Cable temperature rises 35 °C above the ambient temperature.

Revision history:

Revision	Date	Description
0	09/12/2015	Initial issue.

Quotation: 14.0.686.384.15.

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M. A. B. Roque

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