



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 16ATEX1297X** Issue: **0**

4 Equipment: **Photocell type SG-EX RFE Series**

5 Applicant: **Sermatex Grün Equipamentos Eletricos Ltda**

6 Address: Rua Coronel Tristão 203  
CEP 02925-030  
Sao Paulo  
Brazil

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

8 Sira Certification Service, notified body number 0518 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012/A11 EN 60079-1:2014

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 2G  
Ex db IIC T6 Gb  
Ta = -40°C to +70°C

Project Number 70059948

This certificate and its schedules may only be reproduced in its entirety and without change.

  
N Jones  
Certification Manager

**Sira Certification Service**

Unit 6 Hawarden Industrial Park,  
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900  
Fax: +44 (0) 1244 681330  
Email: [ukinfo@csagroup.org](mailto:ukinfo@csagroup.org)  
Web: [www.csagroupuk.org](http://www.csagroupuk.org)



**SCHEDULE**

**EU-TYPE EXAMINATION CERTIFICATE**

**Sira 16ATEX1297X  
Issue 0**

**13 DESCRIPTION OF EQUIPMENT**

Photocell type SG-EX RFE is designed and intended for installation in category 2G (gas).

The photocell is used to switch lights on or off depending on the light in the surrounding area. It consists essentially of a 2 piece cast aluminum enclosure with integrated bushing, a signal transparent element made of plastic material and the internal control unit.

It is provided with a non-replaceable adapter for cylindrical M32 x 1.5 or 1" NPT threads and it is screwed into a flameproof enclosure or increase safety enclosure in accordance with EN 60079-0.

For both applications, the photocell shall be tightened and secured against turning and loosening.

**Type Code**

<b><u>SGEX</u></b>	<b><u>RFE</u></b>	<b><u>XX</u></b>
a	b	c

Where

- a = Marking for explosion-proof equipment
- b = Photocell
- c = Thread sizes:  
M32 = M32x1.5  
1NPT = 1" NPT

**14 DESCRIPTIVE DOCUMENTS**

**14.1 Drawings**

Refer to Certificate Annexe.

**14.2 Associated Sira Reports and Certificate History**

Issue	Date	Report number	Comment
0	30 November 2016	R70059948A	The release of the prime certificate.

**15 SPECIFIC CONDITIONS OF USE** (denoted by X after the certificate number)

- 15.1 The photocell shall only be installed in Ex d or Ex e enclosures approved according to EN60079-1 or EN60079-7.
- 15.2 For installation of the photocell in a flameproof enclosure, the photocell enclosure shall only be threaded in enclosure walls having a minimum length of 8.0 mm, and at least 5 threads engaged according to table 4, from EN 60079-1.
- 15.3 For installation of the photocell in an increase safety enclosure, the photocell enclosure shall only be threaded in enclosure wall having a minimum length of 3.0 mm, taking in consideration the mechanical resistance of the enclosure and keeping the minimum required degree of protection.

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## SCHEDULE

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Issue 0**

16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)**

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 **CONDITIONS OF MANUFACTURE**

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

17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

# Certificate Annexe



**Certificate Number:** Sira 16ATEX1297X

**Equipment:** Photocell type SG-EX RFE Series

**Applicant:** Sermatex Grün Equipamentos Eletricos Ltda

## Issue 0

Drawing	Sheets	Rev.	Date (Sira Stamp)	Title
DTRE-000.1	1 of 1	2	28 Oct 16	Joint Dimensions of SGEXRFE
DTRE-000.2	1 of 1	5	28 Oct 16	Mounting Examples – Ex d Enclosure
DTRE-000.3	1 of 1	5	28 Oct 16	Mounting Examples – Ex e Enclosure
DTRE-001.1.2	1 of 1	2	28 Oct 16	Section Vision of Photoelectric Relay
DTRE-001.2	1 of 1	6	28 Oct 16	Section Vision and Dimensions of External Thread Adaptors
DTRE-001.4.1	1 of 1	4	28 Oct 16	Dimensions of Photoelectric Relay – Base and Cover
DTRE-001.4.3	1 of 1	5	28 Oct 16	Dimensions of Photoelectric Relay –Bushing Body and Corpo2NRFE
DTRE-001.6	1 of 1	9	28 Oct 16	Marking Design – Photoelectric Relay
DTRE-001.7	1 of 1	0	28 Oct 16	Earth Washer for RFE- Mounting in Non-metallic Enclosure

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Web: [www.csagroupuk.org](http://www.csagroupuk.org)