



1 **EU-TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 17ATEX1303X** Issue: **0**

4 Equipment: **Capacitance Controller model 2880 Series,  
Capacitance Controller model 2880R Series  
Arjay probe**

5 Applicant: **ARJAY Engineering Ltd.**

6 Address: 2851 Brighton Rd  
Oakville, ON L6H 6C9  
Canada

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/A11:2013 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 T5 Gb  
Ta = -20°C to +55 °C 2880 series controller  
-40°C to +55 °C Arjay probe

Project Number 70149911

C Ellaby  
Deputy Certification Manager

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## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE

**Sira 17ATEX1303X  
Issue 0**

#### 13 DESCRIPTION OF EQUIPMENT

The Arjay 2800 Series Capacitance Controllers and Probes monitor capacitance changes in a process. The equipment sends out measurements via the serial communication port, analog output or they activate relay contacts to provide control means.

The 2880 style Controller is mounted integral to the probe. All control functions are contained within the probe mounted housing.

The 2880R style Controller is mounted remote from the probe. All control functions are contained within the remote mounted housing. A circuit at the Probe interfaces with the remote controller.

The stand-alone Probe is used when a device that is monitoring the probe is mounted outside the Hazardous Rated area.

#### 14 DESCRIPTIVE DOCUMENTS

##### 14.1 Drawings

Refer to Certificate Annexe.

##### 14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	06 October 2017	R70149911A	The release of the prime certificate.

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

15.1 Process temperature for the standard and heavy duty probes are -60°C to +200°C and for flexible probe is -60°C to +100°C. It is end-user's responsibility to ensure that the ambient around the Capacitance Controller and ARJAY Probe does not exceed the permitted ambient of +55°C.

15.2 The maximum process pressure is 1500psi/ 10342KPa.

15.3 Only approved certified entry devices shall be used.

15.4 Flameproof joints are not permitted to be repaired in the field. If the flamepath is damaged, the enclosure is to be removed from service and replaced with a new enclosure.

#### 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.

17.3 The equipment incorporates previously Ex d certified enclosures. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with this device, and the manufacturer shall inform CSA Group of any modifications of the device that may impinge upon the explosion safety design of the product.

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# Certificate Annexe



**Certificate Number:** Sira 17ATEX1303X  
**Equipment:** Capacitance Controller model 2880 Series,  
Capacitance Controller model 2880R Series  
Arjay probe  
**Applicant:** ARJAY Engineering Ltd.

## Issue 0

Drawing no.	Sheets	Rev.	Date (Sira stamp)	Title
20140610	1 of 1	1	29 Sep 17	2880 Series Explosion Proof Probe Mount 1 Dimensional overview
20140620	1 of 1	1	29 Sep 17	2880 series Explosion Proof Probe Mount 2 Dimensional overview
20140630	1 of 1	1	29 Sep 17	2880W series Explosion Proof mount 3 Dimensional overview
20140611	1 of 1	1	29 Sep 17	2880R Series Explosion Proof Remote Mount 1 Dimensional overview
20140621	1 of 1	1	29 Sep 17	2800R Series Explosion Proof Remote Mount 2 Dimensional overview
20140631	1 of 1	1	29 Sep 17	2800RW Series Explosion Proof Remote Mount3 Dimensional overview
20140670	1 of 1	1	29 Sep 17	Probe with PMC2800 Pulse Card Dimensional Overview 1
20140680	1 of 1	1	29 Sep 17	Probe with PMC2800 Pulse Card Dimensional Overview 2
20140973	1 of 1	1	29 Sep 17	Potted Probe Assembly
20140970A	1 of 1	0	29 Sep 17	"P" Series Standard Duty Probe Assembly
20140971A	1 of 1	0	29 Sep 17	"P" Series Heavy Duty Probe Assembly
20140972A	1 of 1	0	29 Sep 17	"P" Series Flexible Probe Assembly
20140980	1 of 1	0	29 Sep 17	Standard Duty Probe Fitting (female) Part # ALP009A (REF. 20507)
20140981	1 of 1	0	29 Sep 17	Standard Duty probe Fitting (male) Part # ALP009B (REF. 20506)
20140982	1 of 1	0	29 Sep 17	Heavy Duty Probe Fitting (Female) Part # ALP010A (REF. 19674)
20140983	1 of 1	0	29 Sep 17	Heavy Duty Probe Fitting (male) Part # ALP010B (REF. 19675)
20140984	1 of 1	0	29 Sep 17	Standard Probe Ring and Ferrule Part # ALP003 and ALP004A
20140985	1 of 1	0	29 Sep 17	Heavy Duty Probe Ring and Ferrule Part # ALP001 and ALP002
20140954	1 of 1	2	29 Sep 17	2800/2800R/ ARJAY Probe

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## Sira Certification Service

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