



1 **EU-TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 14ATEX1107U** Issue: **1**

4 Component: **XDA & XDS Flameproof Temperature Transmitter Housings**

5 Applicant: **Yung Chan Metal Industry Company Limited**

6 Address: No 30 Keji 1<sup>st</sup> Road  
Tainan Technology Industrial Park  
Tainan City 709  
Taiwan

7 This component and any acceptable variation thereto are 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 component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of a component 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      EN 60079-31:2014

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 The sign 'U' is placed after the certificate number to indicate that the product assessed is a component and may be subject to further assessment when incorporated into equipment. Any limitations of use are listed in the schedule to this certificate.


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

12 The marking of the component shall include the following:



II 2G D  
Ex db IIC T6 Gb  
Ex tb IIIC T100°C Db

Project Number 70082849

  
N Jones  
Certification Manager

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## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE

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**Issue 1**

#### 13 DESCRIPTION OF COMPONENT

The equipment is a temperature transmitter housing manufactured from either stainless steel or aluminium alloy, where the model designation determines which material is used, i.e. XDA = Aluminium Alloy & XDS = Stainless Steel.

The equipment is considered a component, and as such bears a symbol 'U' after the certificate reference. The equipment must be re-certified for Apparatus after appropriate evaluation the to the listed standards on page 1 of this certificate to ensure continued compliance with the flameproof and dust exclusion requirements.

**Variation 1** - This variation introduced the following change:

- i. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, EN 60079-0:2006, EN 60079-1:2004, EN 61241-0:2006 and EN 61241-1:2004, were replaced by EN 60079-0:2012+A11:2013, EN 60079-1:2014 and EN 60079-31:2014. As a result the marking and specific conditions of use were modified to recognise the new standards.

#### 14 DESCRIPTIVE DOCUMENTS

##### 14.1 Drawings

Refer to Certificate Annexe.

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

Issue	Date	Report number	Comment
0	27 May 2014	R70006501A	The release of the prime certificate.
1	27 April 2017	R70082849A	This Issue covers the following changes: <ul style="list-style-type: none"><li>• EC-Type Examination Certificate in accordance with 94/9/EC updated to EU-Type Examination Certificate in accordance with Directive 2014/34/EU. (In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC-Type Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</li><li>• The introduction of Variation 1.</li></ul>

#### 15 SCHEDULE OF LIMITATIONS

- 15.1 Cables for entry into the device must be rated to at least 85°C.
- 15.2 XDA & XDS considered a component enclosure and must be re-certified as apparatus only after evaluation of weld methods for flameproof collar assembly.
- 15.3 Temperature rise testing conducted considering maximum power dissipation within the unit. Equipment, components or connection within the unit must not dissipate more than 10 W.
- 15.4 IP68 rating was tested at 1m depth (pressure of 0.1 bar) for a duration period of 1 hour.

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### Sira Certification Service

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## SCHEDULE

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- 15.5 Potential Electrostatic Charging Hazard – Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the enclosure shall only be cleaned with a damp cloth.
- 15.6 Refer to drawing number XD0001 for details associated with the threaded cable entry hole provided in the enclosure for the accommodation of a suitably certified cable entry device.
- 15.7 Oil-filled circuit breakers and contactors shall not be used.
- 15.8 The content of this Ex Component enclosure may be placed in any arrangement provided that an area of at least 40 % of each cross-sectional area remains free to permit unimpeded gas flow and, therefore, unrestricted development of an explosion. Separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12.5 mm.
- 15.9 The Ex Component enclosure incorporates parts which are required to be welded as specified by the original manufacturer of the enclosure. The complete enclosure, with welded parts and internal arrangement, shall be submitted to an appropriate Notified Body/Certification Body for assessment and testing as necessary for certification as Ex equipment.
- Refer to drawing numbers XD0005, XD0006, and XD0007 and the Instruction Manual for details with respect to the welding of parts. Following the required welding procedures, the enclosure shall be pressure tested at a minimum value of 11.25 bar for at least 10 seconds with no damage, permanent deformation or leakage permitted.
- 15.10 After final assembly the probe travel shall not exceed 6mm. Refer to the instruction manual for details with respect to assembly and re-certification as an Ex Equipment
- 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 14ATEX1107U**  
Component: **XDA & XDS Flameproof Temperature Transmitter Housings**  
Applicant: **Yung Chan Metal Industry Company Limited**

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## Issue 0

Drawing No.	Sheets	Rev.	Date (Sira Stamp)	Title
XD0008	8 of 14		22 May 14	XDA & XDS ATEX EXD Label

## Issue 1

Drawing	Sheets	Rev.	Date (Sira Stamp)	Title
XD0001	1 of 10	F	22 Feb 17	Type XD Body Machining
XD0002	2 of 14	E	22 Feb 17	Type XD Assembly
XD0003	3 of 10	D	22 Feb 17	Type XD Cap Certified Drawing
XD0004	4 of 14	E	22 Feb 17	Type XD Bush Flame Path Fitting For $\varnothing$ 6 to $\varnothing$ 9.525 Sensor
XD0005	5 of 14	E	22 Feb 17	Type XD Collar Flame Path Fitting Machining
XD0006	6 of 14	E	22 Feb 17	Type XD Collar Flame Path Assembly
XD0007	7 of 14	E	22 Feb 17	Temperature Probe Welding Assembly
XD0008	8 of 14	G	22 Feb 17	XDA & XDS ATEX EXD Label
XD0012	12 of 14	F	22 Feb 17	XDA & XDS YC Company Label
XD0013	13 to 14	D	22 Feb 17	XDA & XDS Label Dimensions

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