



1 **TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 15ATEX4193X** Issue: **0**

4 Equipment: **U2-S series Flame Monitoring Viewing Head**

5 Applicant: **Maxon Corporation**

6 Address: **A Honeywell Company
201 E. 18th Street,
Muncie
Indiana 47302
USA**

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

8 Sira Certification Service certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 3 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

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 of this certificate, has been assessed by reference to:

EN 60079-0:2012

EN 60079-15:2010

EN 60079-31:2014

10 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

12 The marking of the equipment shall include the following:



II 3 GD

Ex nA nC IIC T5 Gc

Ex tc IIIC T85°C Dc

IP66

Ta = -40 °C to +70 °C

Project Number 70026870

C Ellaby
Deputy Certification Manager

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Sira Certification Service

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



SCHEDULE

TYPE EXAMINATION CERTIFICATE

**Sira 15ATEX4193X
Issue 0**

13 DESCRIPTION OF EQUIPMENT

U2-101*S model series Flame Monitoring Viewing Head and Signal Processor is type “n” method of protection and dust ignition “t” enclosure.

The asterisk (*) shown above may be replaced by digits: 0, 2, 6 or 8 corresponding to the type of sensor(s) employed.

The U2-S series is part of a flame monitoring or burner control system which senses the presence of ignition via Ultraviolet (UV) photo detector and/or Infrared (IR) solid state sensor and/or UV solid state sensor. The permanently mounted single-compartment cylindrical enclosure includes a threaded cover, two cemented window joints, and one 12-pin threaded circular receptacle. The internal circuitry consists of the UV and/or IR sensors, the signal processor which can communicate externally via 2-wire Modbus, two sealed output relays, and a touch-sensitive touchwheel control with numeric display.

The overall physical dimensions of the U2-S series enclosure are 11.7 cm x 15.5 cm (Ø x L) cylindrical. The mass is approximately 2.8 kg.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	22 July 2015	R70026870A	The release of prime certificate.

15 SPECIAL CONDITIONS FOR SAFE USE

15.1 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 equipment shall only be cleaned with a damp cloth.

15.2 The apparatus is not capable of withstanding the 500 Vrms insulation test required by IEC 60079-15:2010 clauses 23.2.1 and 6.5.1. This must be taken into account when installing the equipment.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSRs)

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

17 CONDITIONS OF CERTIFICATION

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

17.2 Holders of Type Examination Certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

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Sira Certification Service
Unit 6, Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Certificate Annexe



Certificate Number: Sira 15ATEX4193X

Equipment: U2-S series Flame Monitoring Viewing Head

Applicant: Maxon Corporation

Issue 0

Drawing	Rev.	Pages	Date (Sira Stamp)	Title / Description
32-00015	03	1 to 16	30 Jun 15	U2-S series user manual
50108549-001	01	1 of 1	29 Jun 15	U2-S series enclosure bi-convex lens
50108556-001	A02	1 of 1	29 Jun 15	U2-S series enclosure cover machining
50108557-001	B01	1 of 1	29 Jun 15	U2-S series enclosure window
50110252-001	01	1 of 1	29 Jun 15	U2-S series enclosure window retention ring
50110254-001	A02	1 of 1	29 Jun 15	U2-S series enclosure convex lens retention ring
50121837-001-01	B01	1 to 6	20 Jul 15	U2-S series sensor board BOM
50121837-001-03	B01	1 to 3	20 Jul 15	U2-S series sensor board schematic
50121838-001-01	A01	1 to 4	29 Jun 15	U2-S series display board BOM
50121838-001-03	A01	1 to 2	29 Jun 15	U2-S series display board schematic
50122050-001	00	1 of 1	29 Jun 15	U2-S series enclosure body machining
50122054-001	00	1 to 6	29 Jun 15	U2-S series assembly
50122489-001	00	1 of 1	29 Jun 15	U2-101*S 12-pin threaded circular receptacle assembly
50122719-001-01	A01	1 of 1	29 Jun 15	U2-S series touchwheel board BOM
50122719-001-03	00	1 of 1	29 Jun 15	U2-S series touchwheel board schematic
50122724-001	A01	1 of 1	16 Jul 15	U2-1010S marking label
50122726-001	A01	1 of 1	16 Jul 15	U2-1012S marking label
50122728-001	A01	1 of 1	16 Jul 15	U2-1016S marking label
50122730-001	A01	1 of 1	16 Jul 15	U2-1018S marking label
50125697-001	00	1 of 1	02 Jul 15	U2-101*S warning label
50125698-001	00	1 of 1	30 Jun 15	U2-S series flamepath drawing

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