



1 **TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 09ATEX4265X** Issue: **0**

4 Equipment: **MM10072 and MM10072/110 Industrial Servomotor Units**

5 Applicant: **Autoflame Engineering Ltd**

6 Address: Unit 1-2 Concorde Business Centre
Airport Industrial Estate
Wireless Road
Biggin Hill
Kent
TN16 3YN
UK

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:

EN60079-0: 2006 EN60079-15: 2005

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 3G
Ex nA nL IIC T4
Ta = -20°C to +40°C

C Ellaby
Certification Officer

Project Number 52A18755
C. Index 22

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SCHEDULE

TYPE EXAMINATION CERTIFICATE

Sira 09ATEX4265X
Issue 0

13 DESCRIPTION OF EQUIPMENT

The MM10072 and MM10072/110 are used for electrical positioning of various process valves. They are fitted with an integral position feedback device used to indicate the angular position of the valve mechanism. The integral position feedback device used is a single 5 k Ω single-turn potentiometer.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	12 October 2009	R52A18755B	The release of the prime certificate.

15 SPECIAL CONDITIONS FOR SAFE USE

- 15.1 The equipment shall not used in an area of more than pollution degree 2 as defined in IEC 60664-1.
- 15.2 The potentiometer connections ('-', '+', and 'W') shall be terminated to an Autoflame MM controller. The potentiometer shall be connected to a +12 Vdc supply with the wiper connection terminated to an operational amplified input.

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.
- 17.3 Routine Electrical strength tests shall be undertaken, (without breakdown or flashover) in accordance with EN 60079-15:2005 clause 34.2, on all completely assembled MM10072 or MM10072/110 units. The test shall be conducted between the following connections short circuited together and the earth/case. One of the following pair of voltages shall be used:
- 500 V r.m.s. (+5%, -0%) for 60 seconds on the '-', 'W', and '+' connections, or
 - 700 V d.c. (+5%, -0%) for 60 seconds on the '-', 'W', and '+' connections
and
 - 1500 V r.m.s. (+5%, -0%) for 60 seconds on the 'L', 'CW', and 'CCW' connections, or
 - 2100 V d.c. (+5%, -0%) for 60 seconds on the 'L', 'CW', and 'CCW' connections

Alternatively, the test may be undertaken for a period of 100 ms at a test voltage of 1.2 times the values specified above.

Certificate Annexe

Certificate Number: Sira 09ATEX4265X
Equipment: MM10072 and MM10072/110 Industrial Servomotor Units
Applicant: Autoflame Engineering Ltd



Issue 0

Drawing No:	Sheets	Rev.	Date (Sira Stamp)	Description
7456	1 of 1	1	05 Oct 09	Wiring diagram for UNIC 10 Servo Motor
7368A	1 of 1	1	05 Oct 09	General assembly drawing – UNIC10
7368B	1 of 1	1	05 Oct 09	PCB assembly and enclosure earthing arrangement
7263	1 of 1	2	05 Oct 09	Thread adaptors
1.0072	1 of 1	1	05 Oct 09	UNIC 10 Servo Motor parts list (MM10072)
1.0072/110	1 of 1	1	05 Oct 09	UNIC 10 Servo Motor parts list (MM10072/110)
1.0073	1 of 1	2	05 Oct 09	ATEX Ex-n marking label

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