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EU-TYPE EXAMINATION CERTIFICATE

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

3 Certificate Number: Sira 16ATEX1091X Issue: 1

4 Equipment: **F4 Solenoid Coil**

5 Applicant: G. W. Lisk, Co. Lisk Ireland Limited

6 Address: 2 South Street Ennis Road

Clifton Springs Gort
NY 14432 Co. Galway
USA Ireland

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

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.

- 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.
- The marking of the equipment shall include the following:



II 2G D

Ex db IIC T① Gb or Ex tb IIIC T②°C Db

- The Temperature Class that the manufacturer marks on individual products may be either T6, T4 or T3, as appropriate to their customer requirements.
- ② The Surface Temperature for Dust that the manufacturer marks on individual products may be either T85°C, T135°C or T200°C, as appropriate to their customer requirements.
- 3 The Maximum Ambient Temperature that the manufacturer marks on individual products is appropriate to their customer requirements but must not exceed 100°C.

Project Number 70110197

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C Ellaby

Deputy Certification Manager

Sira Certification Service

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





SCHEDULE

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13 **DESCRIPTION OF EQUIPMENT**

The F4 Coils comprise two, metallic, rectangular enclosures; these are known as either the Housing Enclosure or the Cover Enclosure. Four bolts are used to fasten the enclosures together.

The Housing Enclosure contains the coil assembly and is closed by means of the threaded Housing Cap. The Cover Enclosure has a cable/conduit entry for electrical connection. The following model numbers are used to identify the different options:

Housing Enclosure, F4ab	Cover Enclosure, F4cd
Where:	Where:
a = Power type	c = Conduit orientation
D for dc voltage	H for Horizontal, axis of entry in parallel plane of coil axis plane
K for ac rectified voltage	V for Vertical, axis of entry in perpendicular plane of coil axis plane
b = Housing size	d = Gland opening
08 for 13 mm ID and 40 mm length	M for M20 x 1.5
10 for 16 mm ID and 50 mm length	T for ½ NPT

The F4 Coil Enclosures are capable of maintaining an Index Protection Rating of IP6X without the use of an O-ring seal.

Variation 1 - This variation introduced the following change:

 The introduction of an alternative manufacturing location: Lisk Ireland Limited, Ennis Road, Gort, Co. Galway, Ireland, was recognised.

14 **DESCRIPTIVE DOCUMENTS**

14.1 **Drawings**

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	19 May 2016	R70039030A	The release of the prime certificate.
1	01 November 2017	R70110197A	The introduction of Variation 1.

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

- 15.1 The temperature of the fluid flowing through the valve and the solenoid must not exceed the ambient temperature specified on the nameplate.
- The temperature at the entry point may be as high as 140°C for T3, 130°C for T4, 80°C for T6, this shall be taken into account when selecting suitable cable and entry devices.
- 15.3 Do not open the cover while solenoid is energized.
- 15.4 The special fasteners that are used in these devices are type M4 x 0.7 with a yield stress of the 700 MPa; any replacement fasteners shall conform to these requirements.

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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 Temperature Class, Surface Temperature for Dust and Maximum Ambient Temperature that the manufacturer applies to these products shall comply with the following requirements, in addition, the manufacturer shall ensure that the marked information has been selected in accordance with their defined procedures.
 - The Temperature Class that the manufacturer marks on individual products shall be either T6, T4 or T3
 - The Surface Temperature for Dust that the manufacturer marks on individual products shall be either T85°C, T135°C or T200°C.
 - The Maximum Ambient Temperature that the manufacturer marks on individual products shall not exceed 100°C.

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Certificate Annexe

Certificate Number: Sira 16ATEX1091X

Equipment: F4 Solenoid Coil

Applicant: G. W. Lisk, Co.



Issue 0

Drawing	Sheets	Rev.	Date(Sira stamp)	Title
H31556	1 to 5	-	17 May 16	Coil Layout

Issue 1

Drawing	Sheets	Rev.	Date(Sira stamp)	Title
H-24883	1 of 1	-	01 Nov 17	Coil Marked Layout

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