



1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 09ATEX3300U** Issue: **0**

4 Component: **Electrical Heating Cable Type ESR-**-****

5 Applicant: **Eltrace SAS**

6 Address: Les Espaces Multiservices n° 46-47, 56
Boulevard de Courcerin
Z.I. Pariest, 77183 CROISSY-BEAUBOURG
France

7 This component 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 Article 9 of Directive 94/9/EC of 23 March 1994, 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 60079-0:2006 EN 60079-30-1:2007 EN 61241-0:2006 EN 61241-1:2004

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 special conditions for safe use are listed in the schedule to this certificate.

11 This EC 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 2GD
Ex e II
Ex tD A21 IP66/68
Ta = -20°C to +65°C

D R Stubbings BA MIET
Certification Manager

Project Number 21090
C. Index 06

This certificate and its schedules may only be reproduced in its entirety and without change.



SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

**Sira 09ATEX3300U
Issue 0**

13 DESCRIPTION OF COMPONENT

The heating cable is a self-limiting heating pad intended to compensate the thermal loss of conduits, tanks and all equipment possibly not heat insulated.

Type code	ESR -10-**	ESR -20-**	ESR-30**	ESR-40**	ESR-S-15**	ESR-W-45-**	
Rated voltage	230V	230V	230V	230V	230V	230V	
Linear power	10 W/m @10°C	20 W/m @10°C	30 W/m @10°C	40 W/m @10°C	12 W/m @10°C	7 W/m @10°C	
Minimum Tamb.	- 20°C	- 20°C	- 20°C	- 20°C	- 20°C	- 20°C	
Maximum Tamb.	+65°C	+65°C	+65°C	+65°C	+65°C	+65°C	
Maximum sheath temp.	+65°C	+70°C	+75°C	+80°C	+60°C	+75°C	
Maximum length	225 m	170 m	140 m	127 m	125 m	140 m	
Minimum bending radius	27 mm	27 mm	27 mm	27 mm	27 mm	27 mm	
Starting current for 1 m	- 20°C	0.3 A	0.6 A	1.0 A	1.7 A	0.42 A	0.65 A
	+ 10°C	0.17 A	0.35 A	0.5 A	1.0 A	0.30 A	0.20 A
	+ 40°C	0.33 A	0.08 A	0.1 A	0.12 A	0.10 A	0.05 A

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 October 2009	R21090A	The release of the prime certificate.

14.3 Certificate number LCIE 09ATEX3029U last amended 16 April 2009

15 SPECIAL CONDITIONS FOR SAFE USE

15.1 The electrical power supply circuit of the heating cable shall be equipped with an appropriate electric protection unit to protect against insulation defaults.

15.2 The heating cable setting shall conform with the limitations defined in the manufacturer's descriptive documents.

15.3 Operating ambient temperature: -20°C to +65°C.

This certificate and its schedules may only be reproduced in its entirety and without change.



SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 09ATEX3300U
Issue 0

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 CERTIFICATION**

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

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

17.3 Each cable shall be successfully submitted to:

- a dielectric strength test in accordance with clause 5.2.1 of EN 60079-30-1 (2007)
- the verification of rated output in accordance with clause 5.2.2 of EN 60079-30-1 (2007)

This certificate and its schedules may only be reproduced in its entirety and without change.

Certificate Annexe

Certificate Number: Sira 09ATEX3300U

Component: Electrical Heating Cable Type ESR-**-**

Applicant: Eltrace SAS



Issue 0

Drawing No	Sheets	Rev.	Date (Sira stamp)	Title
PE065	1 of 1	0	22 Oct 09	Traceco Marking

This certificate and its schedules may only be reproduced in its entirety and without change.