



1 **EU-TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 08ATEX4310X** Issue: **1**

4 Equipment: **9491-PS 12VDC IS Power Supply Module**

5 Applicant: **Controlled Systems Ltd.**

6 Address: **Ryder Close
Cadley Hill
Swadl ote
Derbyshire DE45 9EU
United Kingdom** (These products may be manufactured at any facility listed on Quality Assurance Notification Sira 98 ATEX M 034 that has been audited for the manufacture of the type of protection listed)

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

8 CSA Group Netherlands B.V., Notified Body Number 2813 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 60079-0:2006 EN 60079-11:2007 EN 60079-15:2005 EN 60079-26:2007
IEC 60079-0:2007 (for guidance on marking)

10 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.

12 The marking of the equipment shall include the following:



II 3G (1)G (2)G
Ex nAc [ia] [ib] IIB T4
(Ta = 0°C to +70°C)

Project Number 3022

Signed: 

Title: Director of Operations

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CSA Group Netherlands B.V.
Utrechtseweg 310,
6812 AR, Arnhem,
Netherlands



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

Sira 08ATEX4310X
Issue 1

13 DESCRIPTION OF EQUIPMENT

The 9491-PS 12VDC IS Power Supply Module is an intrinsically safe power supply intended to be mounted in a Zone 2 hazardous area. It consists of a printed circuit board assembly mounted within a plastic enclosure. There are two separate intrinsically safe outputs, one 'ia' and one 'ib'.

The power supply is intended to be either DIN rail mounted or backplane mounted (the backplane does not form part of this certified equipment).

External I.S. connections are made via 'plug-in' terminals at the top of the enclosure, one for each of the two separate I.S. circuits.

External non-I.S. connections are made via either 'plug-in' terminals at the side of the enclosure when the power supply is DIN rail mounted, or via a connector at the bottom of the enclosure when the equipment is backplane mounted.

The parameters for the power supply are as follows:

Terminals 13 and 14 or 8 pin connector		
Rated voltage	30V d.c.	
Um	250 V	
Terminals 1 and 3 (linear characteristic, resistive current limit, source) Certification code Ex [ia IIB]		
Uo	12.4 V	
Io	2.67 A	
Po	8.27 W	
Co	Group IIB	7.9 μ F
	Group IIA	30 μ F
Lo/Ro	Group IIB	17.2 μ H/ Ω
	Group IIA	34.4 μ H/ Ω
Terminals 5 and 6 (non-linear, active current 'switch-off', source) Certification code Ex [ib IIB]		
Uo	12.4 V	
Io	505 mA	
Po	6.3 W	
Co	500 nF	
Lo	100 μ H	

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	10 December 2008	R52L19701A	The release of the prime certificate.
1	31st October 2019	3022	<ul style="list-style-type: none">Transfer of certificate Sira 08ATEX4310X from Sira Certification Service to CSA Group Netherlands B.V..



SCHEDULE

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Issue 1**

			<ul style="list-style-type: none"> • EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. <i>(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.)</i>
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15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)

15.1 The equipment shall be installed in an additional enclosure that is certified as meeting or exceeding the enclosure requirements of EN/IEC 60079-0 and EN/IEC 60079-15 (e.g. a certified Ex e enclosure). The minimum level of ingress protection provided shall be IP 54.

15.2 When using the option to connect the power supply module to an external backplane via connector X1, the following conditions apply:

- The external backplane shall be fitted with two retention clips type MTL 012-533 (Honeywell part no. 51153961-100) that allow the power supply module to be 'clipped' to the backplane.
- The power supply module being 'clipped' to the backplane forms part of the hazardous area protection and as such the retention clips shall always be in place when the power supply module is energised.
- Any backplane used does not form part of this certified equipment and as such shall be separately certified or assessed for use in Zone 2.

15.3 The maximum current drawn from terminals 1, 3, 5 and 6 combined shall not exceed 480mA in normal operation.

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.

Certificate Annexe



Certificate Number: Sira 08ATEX4310X

Equipment: 9491-PS 12VDC IS Power Supply Module

Applicant: Controlled Systems Ltd.

Issue 0

Number	Sheet	Rev.	Date (Sira stamp)	Description
9491-PSU	1 of 1	4	05 Sep 08	12V I.S. Power Supply Circuit Diagram
9491-ASSY	1 of 1	1	05 Sep 08	9491 IS Power Supply Assembly Drawing
9491-PSU PCB	1 of 1	4	05 Sep 08	12V I.S. Power Supply Artworks
9491-Label IECEx ZONE 2	1 of 1	2	03 Dec 08	9491-PS 12VDC IS Power Supply IECEx Zone 2 Cert Label
9401-Label ATEX ZONE 2	1 of 1	2	03 Dec 08	9491-PS 12VDC IS Power Supply ATEX Zone 2 Cert Label
TRF305	1 of 2	2	25 Apr 08	MTL Planar Transformer – Type TRF305
TRF305	2 of 2	2	25 Apr 08	MTL Planar Transformer – Type TRF305
9491-Zone 2	1 of 1	1	03 Dec 08	9491 IS Power Supply Additional Notes for Zone 2

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