



Type Examination Certificate

CML 15ATEX4072X Issue 1

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment 949X-PS-XXX IS Power Supply Module
- 3 Manufacturer Controlled Systems Limited
- 4 Address Ryder Close, Swadlincote, Derbyshire, DE11 9EU UK
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of equipment intended for use in potentially explosive atmospheres given in Annex II of Directive 2014/34/EU.

The examination and test results are recorded in the confidential reports listed in Section 12.

- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of certification (affecting correct installation or safe use). These are specified in Section 14.
- 8 This Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Annex VIII apply to the manufacture of the equipment or component.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN 60079-0:2012

EN 60079-15:2010

10 The equipment shall be marked with the following:

 $\langle Ex \rangle_{II 3 (1) G or}$

1 of 3



Ex nA II* T4 Gc

Refer to CML 15ATEX2071X for Intrinsic Safe output options.

II* = IIA or IIB or IIC, depending on model

Ta = -40°C to +70°C

A Snowdon Certification Officer





11 Description

The 949X-PS-XXXX IS Power Supply Module series is an intrinsically safe power supply intended to power equipment in the hazardous area. It consists of a printed circuit board assembly mounted in a plastic enclosure. There can be two separate intrinsically safe outputs, one 'ia' and one 'ib'. It restricts the transfer of energy from unspecified safe-area apparatus to an intrinsically safe circuit by the limitation of voltage and current. A transformer provides galvanic isolation between the hazardous and non-hazardous area.

The circuit connected to the safe area terminals is designed to operate from a d.c. supply voltage of up to 30V.

When fitted inside an appropriate enclosure as defined below, the power supply may be installed in a Zone 2 area.

Variation 1

This variation introduces the following modifications to the 949X-PS-XXX IS Power Supply Module:

- i. Certificate CML 15ATEX4072X has been up-issued to bring drawings into alignment with certificate CML 15ATEX2071X.
- ii. To update the certificate reference to the 2014/34/EU Directive.

12 Certificate history and evaluation Reports

Issue	Date Associated report		Notes
0	23 July 2015	R521A/00	Issue of prime certificate
1	20 Oct 2017	R11295B/00	Introduction of Variation 1

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- 13.1 Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- 13.2 The equipment shall be designed in accordance with general electrical safety standards, e.g. IEC 60950 or IEC 61010-1
- 13.3 When supplied to provide output parameters for Zones, 0, 1, 20 or 21, refer to Certificate CML 15ATEX2071X for Intrinsic Safe output options and additional manufacturer's requirements.





14 Special Conditions for Safe Use (Conditions of Certification)

The following conditions relate to safe installation and/or use of the equipment.

- 14.1 If the equipment is installed in a zone 2 hazardous area, it shall be housed in an enclosure that is coded Ex nA, Ex e, Ex d or Ex p, suitable for operating temperatures of -40°C to +135°C and providing an ingress protection of IP54 minimum. For some types of enclosure, additional certification will be required to permit the installation of the module within the enclosure. Reference should be made to the enclosure certificate. The installer shall ensure that the maximum ambient temperature of the module when installed is not exceeded.
- 14.2 When the device is mounted in a zoned area, connection and disconnection of the modules input supply voltage while live is only permitted if the potentially explosive atmosphere is shown to be absent.

Certificate Annex



Certificate NumberCML 15ATEX4072XEquipment949X-PS-XXX IS Power Supply ModuleManufacturerControlled Systems Limited

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
9491-9492-9493-PSU ASSY	1	4	23 July 2015	9491/9492/9493 IS Power Supply Assembly Drawing
949X-PS-XXX-LABEL	1	1	23 July 2015	949X-PS-XXX ATEX/IECEx Label Drawing
9491-PS-PLUS	1	6C	23 July 2015	IS Power Supply Circuit Diagram
9491-PS-PLUS PCB	1	6	23 July 2015	IS Power Supply PCB Artworks
TFR305	1&2	2	23 July 2015	Planar Transformer – Type TFR305

Issue 1

Drawing No	Sheets	Rev	Approved date	Title
9491/9492/9493-ASSY	1 to 2	6	20 Oct 2017	9491/9492/9493 IS Power Supply Assembly Drawing
9492-PS-PLUS*	1 of 1	7	20 Oct 2017	IS Power Supply Circuit Diagram
9492-PS-PLUS PCB**	1 of 1	7	20 Oct 2017	9492-PS-PLUS Artworks

* This was previously drawing 9491-PS-PLUS

** This was previously drawing 9491-PS-PLUS PCB