IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx ITA 14.0011X**

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Certificate history:
Issue 1 (2014-12-22)
Issue 0 (2014-08-12)

Status: **Current**

Issue No: 2

Date of Issue: 2023-10-22

Applicant: **Novaris Pty Ltd**
72 Browns Road
Kingston
Tasmania 7050
Australia

Equipment: **Surge protectors.**

Optional accessory:

Type of Protection: **Ex ia IIC T4**

Marking:

Ex ia IIC T4

IECEx ITA 14.0011X

Approved for issue on behalf of the IECEx Certification Body: **Justin Gavranich**

Position: **Certification Authority**

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

Ex Testing and Certification Pty Ltd
1/30 Kennington Drive
Tomago NSW 2322
Australia

TESTING & CERTIFICATION

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Date of issue: 2023-10-22 Issue No: 2

Manufacturer: **Novaris Technologies Malaysia Sdn Bhd**
No. 15, 2nd Floor Jalan Tembaga SD 5/2
Sri Damansara Industrial Park
52200 Kuala Lumpur
Malaysia

Manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

AU/ExTC/ExTR23.0047/00 AU/ITA/ExTR14.0017/00 AU/ITA/ExTR14.0017/01

Quality Assessment Report:

AU/ITA/QAR14.0002/08

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

This certificate covers a range of surge protection equipment. These contain clamping devices to shunt undesirable transients to earth to protect equipment connected through it.

For additional information, please refer to attached Annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:
See annex for details

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
See annex for details

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Additional information:
Job 23064

Annex:

Certificate Annex IECEx ITA 14.0011X-2 Final.pdf

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Annex

Annex to Certificate No.:	IECEx ITA 14.0011X	Issue No.:	2

Description:

IS-SL range: Slimline signal line protectors suitable for process control applications. This range of products are assembled on a single printed circuit board that is fitted in a polyamide case with external connecting pins. The enclosure measures 44mm x 40mm x 6mm.

IS-SSP6A range: This range of products are assembled on a single printed circuit board that is fitted in a polyamide case with external connecting pins. The enclosure measures 44mm x 40mm x 6mm.

IS-SLDIN range: Slimline DIN-rail bases to accommodate the IS-SL slimline signal line protectors. Gas Discharge tubes are fitted inside the EC90 bases.

IS-SLT range: Threaded instrument protectors for transmitter protection. The protector is assembled on a single printed circuit board that is fitted in a hollow stainless steel plug for mounting on an enclosure wall. The external thread may be M20, ½" NPT (N12 enclosure), or ¾" NPT (N34 enclosure).. The length of the enclosure measures 54mm. The electronics are encapsulated in a two part epoxy resin.

IS-LCP range: Load cell protectors suitable for load cell applications. The IS-LCP comes in two variants. Type 1V1 features a single printed circuit board with screw terminals, mounted within an aluminium enclosure with cable gland entries. The printed circuit board and components are encapsulated in a two part epoxy resin leaving only the screw termination points free. The enclosure measures 116mm x 66mm x 55mm. Type 2V1 is a printed circuit board with screw terminal connections and supplied without an enclosure.

The models listed below are covered by this certificate:

Model Range	Model Number	Description
IS-SL	IS-SL7V5	Slimline one-pair signal line protector
	IS-SL18	Slimline one-pair signal line protector
	IS-SL36	Slimline one-pair signal line protector
IS-SL-RTD	IS-SL-RTD	Slimline one-pair RTD protector
IS-SL-485	IS-SL-485	Slimline one-pair RS485 protector
IS-SL-PSTN	IS-SL-PSTN	Slimline one-pair PSTN protector
IS-SSP6A	IS-SSP6A-14	Slimline surface-mount MOV
	IS-SSP6A-26	Slimline surface-mount MOV
	IS-SSP6A-38	Slimline surface-mount MOV
	IS-SSP6A-65	Slimline surface-mount MOV
IS-SLDIN	IS-SLDIN-G	Slimline base module
	IS-SLDIN-EC90	Slimline base module
IS-SLT1	IS-SLT1-7V5-N34	Hazardous location one-pair signal line protector.
	IS-SLT1-18-N34	Hazardous location one-pair signal line protector.
	IS-SLT1-36-N34	Hazardous location one-pair signal line protector.
	IS-SLT1-7V5-N12	Hazardous location one-pair signal line protector.
	IS-SLT1-18-N12	Hazardous location one-pair signal line protector.

Model Range	Model Number	Description
	IS-SLT1-36-N12	Hazardous location one-pair signal line protector.
	IS-SLT1-7V5-M20	Hazardous location one-pair signal line protector.
	IS-SLT1-18-M20	Hazardous location one-pair signal line protector.
	IS-SLT1-36-M20	Hazardous location one-pair signal line protector.
IS-SLT3	IS-SLT3-7V5-N34	Hazardous location three-wire signal line protector.
	IS-SLT3-18-N34	Hazardous location three-wire signal line protector.
	IS-SLT3-36-N34	Hazardous location three-wire signal line protector.
	IS-SLT3-7V5-N12	Hazardous location three-wire signal line protector.
	IS-SLT3-18-N12	Hazardous location three-wire signal line protector.
	IS-SLT3-36-N12	Hazardous location three-wire signal line protector.
	IS-SLT3-7V5-M20	Hazardous location three-wire signal line protector.
	IS-SLT3-18-M20	Hazardous location three-wire signal line protector.
	IS-SLT3-36-M20	Hazardous location three-wire signal line protector.
IS-SLT4-RTD	IS-SLT4-RTD-N34	Hazardous location two-pair signal line protector.
	IS-SLT4-RTD-N12	Hazardous location two-pair signal line protector.
	IS-SLT4-RTD-M20	Hazardous location two-pair signal line protector.
IS-LCP	IS-LCP-18	Loadcell Protector
	IS-LCP-36	Loadcell Protector
	IS-LCP-18-PCB	Loadcell Protector (sans enclosure)
	IS-LCP-36-PCB	Loadcell Protector (sans enclosure)

Specific Conditions of Use:

a) The following parameters shall be taken into account when interconnecting in an intrinsically safe system:

Model Range	Ui (V)	Ii (A)	Pi (W)	Ci (nF)	Li (uH)
IS-SLnn	30	1.639	1.3	0	0
IS-SL-RTD	30	1.639	1.3	0	0
IS-SL-485	30	1.639	1.3	0	0
IS-SL-PSTN	30	1.639	1.3	0	0
IS-SSP6A	30	1.639	2.2	0	0
IS-SLDIN	30	3.0	2.4	0	0
IS-SLT1	30	3.0	2.2	0.2	0.2
IS-SLT3	30	3.0	2.2	0.2	0.2
IS-SLT4	30	3.0	2.2	0.2	0.2
IS-LCP	30	3.0	2.4	0	0

b) In the practical use of the Surge protectors, when the earth wire is connected to the earth terminals, then care shall be taken that the intrinsically safe circuit of the surge protector is now not isolated from the earth under fault considerations. Either the signals shall be derived from galvanically isolated associated equipment, or bonding shall be applied between the associated equipment earth and the Surge Protector earth. The equipment has been marked with an 'X' to indicate that IEC 60079-11 Clause 6.3.13 is not in compliance. Manufacturer's documentation must be followed to ensure correct installation.

c) In addition, the following model specific conditions apply:

- IS-SL, IS-SSP6A: This series of protectors are marked with an "X" as they do not satisfy the requirement for avoidance of build-up of electrostatic charge in accordance with clause 7.4.2 of 60079-0:2011. Manufactures documentation must be followed to ensure that at installation, the risk from electrostatic discharge is minimized.
- IS-LCP: This series of protectors are marked with an "X" as they do not satisfy the requirements for aluminium content in accordance with clause 8.3 of IEC 60079-0:2011. Account of this shall be taken on installation to avoid ignition hazards due to impact or friction.
  The equipment is marked with an "X" as it also does not satisfy the requirements of the dielectric strength test in accordance with clause 6.3.13 of IEC 60079-11:2011.

Manufacturer's Documents pertaining to this Issue of the Certificate:

Title:	Drawing No.:	Pages	Rev. Level:	Date:
IS-SL range				
Models IS-SLnn, IS-SL-RTD, IS-SL-485				
*IS-SL label placement	0004-A43V3	1	-	2023-09-05
*SL-xxx (Schematic and BOM information)	0004-E5V2	1	-	2016-12-22
IS-SL Enclosure and Pin Detail	0610049R-10V1	1	1	2008-04-30
*IS-SL (Mech Assembly and PCB layouts)	0004-E5V2a	4	-	2023-09-06
IS-SSP6A				
*IS-SSP6A label placement	0031-A32V2	1	-	2023-09-06
*SSP6A (Schematic and Bill of Materials)	0072-E1V2	2	-	2023-07-03
*IS-SSP6A (Mech Assembly and PCB layouts)	0072-E1V2a	4	-	2023-09-06
Model IS-SLDIN				
IS-SLDIN-xxxx	0610052R-1V1	1 of 1	2	2013-11-22
IS-SL SLIMLINE SURGE PROTECTOR	0610049R-11V1	1	1	2008-04-30
Novaris IS-SLDIN-EC90 slimline base	0068-A9V1	1	1.0	2014-06-18
Novaris IS-SLDIN-G slimline base	0068-A8V1	1	1.0	2014-06-18
IS-SLDIN-EC90 BOM	0068-B1V1	1 of 1	-	2014-07-22
IS-SLT				
Model IS-SLTx				
IS-SLT marking placement	0050-A8V1	1 of 1	1.0	2014-06-19

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Title:	Drawing No.:	Pages	Rev. Level:	Date:
Intrinsically Safe Range Threaded Signal Line Protector User Instructions (Not a Certified document)	0050-D8V1	1 to 2	-	2014-07-31
Intrinsically Safe Range Threaded Signal Line Protector User Instructions (Not a Certified document)	0050-D9V1	1 to 2	-	2014-07-31
Model IS-SLT1				
IS-SLT1-xxx-xxx Schematic	0050-E3V1	1of 1	0	2014-02-19
IS-SLT1-xxx-xxx BOTTOM LAYER	0610131R-1V3	4	1	2009-12-10
IS-SLT1 BOM	0050-B3V1	1 of 1	-	2014-07-16
Model IS-SLT3				
IS-SLT3-xxx-xxx Schematic	0050-E4V1	1 of 1	0	2014-02-19
IS-SLT3-xxx-xxx TOP LAYER	0610132R-1V4	4	1	2009-12-10
IS-SLT3-xxx-xxx BOTTOM LAYER	0610132R-1V4	5	1	2009-12-10
IS-SLT3 BOM	0050-B1V1	1 of 1	-	2014-07-16
Model IS-SLT4				
SLT4-xxx-xxx PCB	0050	1 of 1	2V1	2014-02-18
IS-SLT4-RTD-xxx BOTTOM LAYER	0701004R-1V3	3	1	2009-12-10
IS-SLT4-RTD BOM	0050-B2V1	1 of 1	-	2014-07-16
SLT Enclosure				
SLTx-xxx-M20 Housing	0050-M1V2	1 of 1	-	2013-12-18
IS-SLTx-xxx-N12 Enclosure	0702016-4V2	1 of 1	-	2008-12-16
IS-SLTx-xxx-N34 Enclosure	0702016-3V2	1 of 1	-	2008-12-16
IS-LCP				
IS-LCP Drawings				
LCP-xx-PCB *(The same schematic for the 1V1 and 2V1 version)*	0054-E1V1	1	1	2012-03-13
Load Cell Protectors User Instructions (Not a Certified document)	0054-D3V1	1 to 2	-	2014-06-26
IS-LCP BOM	0054-B1V1	1 of 1	-	2014-07-16
Model IS-LCP-1V1				
IS-LCP-XX (Mechanical drawing)	0610134R-1V1	1	1	2007-03-09
IS-LCP-xx	0610134R-1V1	1	1	2007-05-11
IS-LCP-xx-x	0610134R-1V1	2	1	2007-03-15
IS-LCP-xx-x	0610134R-1V1	3	1	2007-03-15
IS-LCP-xx-x	0610134R-1V1	4	1	2007-03-15
IS-LCP-xx-x	0610134R-1V1	5	1	2007-03-15
IS-LCP-xx-x	0610134R-1V1	6	1	2007-03-15
IS-LCP label placement	0054-A6V1	1	-	2014-06-23
Model IS-LCP-2V1				
IS-LCP-xx-PCB	0610134-2V1	1	1	2007-05-11

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Title:	Drawing No.:	Pages	Rev. Level:	Date:
IS-LCP-xx-PCB	0610134-2V1	2	1	2007-03-15
IS-LCP-xx-PCB	0610134-2V1	3	1	2007-03-15
IS-LCP-xx-PCB	0610134-2V1	4	1	2007-03-15
IS-LCP-xx-PCB	0610134-2V1	5	1	2007-03-15
IS-LCP-18-PCB artwork	IS-LCP-18-PCB	1	4.0	2014-06-17
IS-LCP-36-PCB artwork	IS-LCP-36-PCB	1	4.0	2014-06-17
User instructions IS-SL and IS-SSP6A User Instructions				
*Intrinsically Safe Range Slimline Signal Line Protectors IS-SL and IS-SSP6A User Instructions	0004-D10 V4	4	-	2023-09-26

*Note: An * is included before the title of documents that are new or revised.*

Variations permitted by Issue 1 of this certificate:

The annex to the certificate has been completely revised in Issue 1 to provide higher intrinsically safe parameter values (Ii, Pi). These changes have been assessed for compliance in AU/ITA/ExTR14.0017/01. There has been no change in the design or documentation. The description of the equipment has also been edited for clarity.

Variations permitted by Issue 2 of this certificate:

Internal circuit designs of the top cassette modules for the models IS-SL and SSP6A (available in different voltage options) have been modified and simplified, with the earlier TVS devices between the data lines and the GND removed. Existing base units remain unchanged. User Instructions have been revised.

Earlier models IS-SL-DH, IS-SL-i, SL420i have been obsoleted.