



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 SIR 13.0148X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 3 [Issue 2 \(2018-07-10\)](#)
Date of Issue: 2023-04-17 [Issue 1 \(2014-08-18\)](#)
[Issue 0 \(2014-06-11\)](#)
Applicant: **Sensy SA**
Z.I of Jumet
Allée Centrale
B-6040 JUMET
Belgium
Equipment: **Options I4, I6, C6 and C6-rond/carre Force Transducers**
Optional accessory:
Type of Protection: **Intrinsically Safe "ia"**
Marking: Ex ia IIC T6 Ga
Ex ia IIIC T₂₀₀81°C Da (Vol => 580cms³)
Ex ia IIIC T80°C Dc (Vol < 580cms³)
Ta = -55°C to +60°C

Approved for issue on behalf of the IECEx
Certification Body:

Michelle Halliwell

Position:

Director Operations, UK & Industrial Europe

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:

CSA Group Testing UK Ltd
Unit 6, Hawarden Industrial Park
Hawarden, Deeside CH5 3US
United Kingdom





IECEX Certificate of Conformity

Certificate No.: **IECEX SIR 13.0148X**

Page 2 of 4

Date of issue: 2023-04-17

Issue No: 3

Manufacturer: **Sensy SA**
Z.I of Jumet
Allée Centrale
B-6040 JUMET
Belgium

Manufacturing locations: **Sensy SA**
Z.I of Jumet
Allée Centrale
B-6040 JUMET
Belgium

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 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[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:

[GB/SIR/ExTR14.0065/01](#)

[GB/SIR/ExTR18.0114/00](#)

[GB/SIR/ExTR23.0031/00](#)

Quality Assessment Report:

[GB/SIR/QAR14.0006/09](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX SIR 13.0148X**

Page 3 of 4

Date of issue: 2023-04-17

Issue No: 3

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Force Transducers are designed to convert an applied load into a proportional analogue output signal. The equipment comprises of a load sensing strain-gauge bridge and optional resistors, all housed and encapsulated within a metal enclosure. The only differences between the Force Transducers in the range are their physical size and magnitude of load measurements. Each model may vary, within defined limits, in size and shape to cover a variety of load capacities. Additional mechanical attachments may be added to create loading assemblies.

Refer to the Annexe for Configuration options and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. When the apparatus is used in dust atmospheres, connectors, plugs and cable glands used shall have an ingress protection of at least IP6X.
2. The equipment is not capable of withstanding the 500V dielectric strength requirement in accordance with clause 6.3.13 of IEC 60079-11:2011. This shall be taken into account when installing the equipment.
3. The enclosure of the C6 CARRE amplifier box is manufactured from aluminium. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation.



IECEX Certificate of Conformity

Certificate No.: **IECEX SIR 13.0148X**

Page 4 of 4

Date of issue: 2023-04-17

Issue No: 3

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1 – this Issue introduced the following changes:

1. Issued to allow GB/SIR/ExTR14.0065/00 to be replaced by GB/SIR/ExTR14.0065/01.

Issue 2 – this Issue introduced the following changes:

1. To extend the lower ambient temperature to -55°C for certain encapsulation materials, as a result an additional Condition of Manufacture was introduced.

Issue 3 – this Issue introduced the following changes:

1. Correction to the revision level for the following drawings CI-5000-2001 and CI-5510-1999.
2. Revised user instructions.
3. Correction to the model nomenclature and introduction of a Specific Condition of Use.
4. Marking requirements as a result of the appropriate assessment to demonstrate compliance with the requirements of the IEC 60079 series of standards, the standards IEC 60079-0:2011 Ed 6 were replaced by IEC 60079-0:2017 Ed. 7.0 respectively, the markings were amended accordingly.

Annex:

[IECEX SIR 13.0148X Annexe Issue3.pdf](#)

The various configuration options are detailed below:

Option	I4	I6	C6	C6-rond C6-carré	
Body	CE-500Y-XXXXXXXXXX CE-505Y-XXXXXXXXXX CE-530Y-XXXXXXXXXX CE-560Y-XXXXXXXXXX CE-556Y-XXXXXXXXXX CE-260Y-XXXXXXXXXX CE-296Y-XXXXXXXXXX CE-510Y-XXXXXXXXXX CE-510Y-XXXXXXXXXX	CE-500Y-XXXXXXXXXX CE-505Y-XXXXXXXXXX CE-530Y-XXXXXXXXXX CE-560Y-XXXXXXXXXX CE-556Y-XXXXXXXXXX CE-260Y-XXXXXXXXXX CE-296Y-XXXXXXXXXX CE-510Y-XXXXXXXXXX CE-510Y-XXXXXXXXXX	CE-500Y-XXXXXXXXXX CE-505Y-XXXXXXXXXX CE-530Y-XXXXXXXXXX CE-560Y-XXXXXXXXXX CE-556Y-XXXXXXXXXX CE-260Y-XXXXXXXXXX CE-296Y-XXXXXXXXXX CE-510Y-XXXXXXXXXX CE-510Y-XXXXXXXXXX	CE-500Y-XXXXXXXXXX CE-505Y-XXXXXXXXXX CE-530Y-XXXXXXXXXX CE-560Y-XXXXXXXXXX CE-556Y-XXXXXXXXXX CE-260Y-XXXXXXXXXX CE-296Y-XXXXXXXXXX CE-510Y-XXXXXXXXXX CE-510Y-XXXXXXXXXX	CE-500Y-XXXXXXXXXX CE-505Y-XXXXXXXXXX CE-530Y-XXXXXXXXXX CE-560Y-XXXXXXXXXX CE-556Y-XXXXXXXXXX CE-260Y-XXXXXXXXXX CE-296Y-XXXXXXXXXX CE-510Y-XXXXXXXXXX CE-510Y-XXXXXXXXXX
Strain Gauges	Transducer-class strain gauges (no resistance limitation < 350Ω)	Transducer-class strain gauges: Resistance < 1000Ω	Transducer-class strain gauges: Resistance < 1000Ω	Transducer-class strain gauges: Resistance < 1000Ω	
Correction Circuit	CI-5000XXX CI-5510XXX CI-2712XXX	CI-5000XXX CI-5510XXX CI-2712XXX	CI-5000XXX CI-5510XXX CI-2712XXX	CI-5000XXX CI-5510XXX CI-2712XXX	
Amplifier	-	-	ICA5A amplifier	ICA5A amplifier	
Output	Connector or cable gland in function of environmental conditions	Connector or cable gland in function of environmental conditions	Connector or cable gland in function of environmental conditions	Connector or cable gland in function of environmental conditions	
Cable	4 Wires Cable (6 wires if Sense)	4 Wires Cable (6 wires if Sense)	2 Wires Cable	4 Wires / 2 Wires Cable	
Total combination of Ui, Ii and Pi, at power supply and signal output lines	Ui = 28.0V; Ii = 160mA; Pi = 0.7W; Ci = 0 nF; Li = 0 μH	Ui = 28.0V; Ii = 160mA; Pi = 0.7W; Ci = 0 nF; Li = 0 μH	Ui = 28.0V; Ii = 160mA; Pi = 0.7W; Ci = 0 nF; Li = 15.92 μH	Ui = 28.0V; Ii = 160mA; Pi = 0.7W; Ci = 0 nF; Li = 15.92 μH	

Conditions of Manufacture

The Manufacturer shall comply with the following:

- When the Dowsil encapsulants Type 3140 and 3145 are used in the equipment a lower ambient temperature of -55°C, from -40°C, can be permitted for the equipment.