

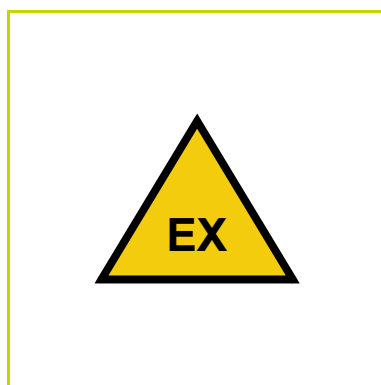
EX CERTIFICATE – IECEx

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vibro-meter®

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IECEx LCIE 21.0006X  
for  
IQS9xx signal conditioners



Note: Although the Ex certificate may be included in more than one language, the liability of the notified body applies only on the text of the original copy of the certificate that it published.

Document reference IECEx LCIE 21.0006X  
Edition 2 – October 2022

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## IECEx Certificate of Conformity

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Issue No: 0

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Certificate No.: **IECEx LCIE 21.0006X**

Date of issue: 2021-04-01

Manufacturer: **MEGGITT SA**  
Route de Moncor 4  
1752 Villars-sur-Glâne  
**Switzerland**

Additional 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 60079-0:2017 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 Report:  
[FR/LCIE/EXTR21.0015/00](#)

Quality Assessment Report:  
[FR/LC/QAR06.0006/15](#)



## IECEx Certificate of Conformity

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**INTERNATIONAL ELECTROTECHNICAL COMMISSION**  
**IEC Certification System for Explosive Atmospheres**  
for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEx LCIE 21.0006X**

Status: **Current**

Date of issue: 2021-04-01

Applicant: **MEGGITT SA**  
Route de Moncor 4  
1752 Villars-sur-Glâne  
**Switzerland**

Equipment: **IQS 9\*\* Signal conditioner**

Optional accessory:

Type of Protection: **Ex Ia**

Marking: **Ex Ia IIC T6 or T5 Ga**  
**Ex Ia IIIC T200 80°C...T200 115°C Da**


(Refer to the annex of the certificate for the full marking)

Certificate history:



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Approved for issue on behalf of the IECEx Certification Body:

Position: **Julien GAUTHIER**

Signature:   
(for printed version)

Date: **LABORATOIRE CENTRAL DES INDUSTRIES ELECTRIQUES**  
13 avenue du Général Leclerc  
FR-92260 Fontenay-aux-Roses  
F - 92256 FONTENAY AUX ROSES 0021-04-01

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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](http://www.iecex.com) or use of this QR Code.

Certificate issued by:

**Laboratoire Central des Industries Electriques (LCIE)**  
33 Avenue du General Leclerc  
FR-92260 Fontenay-aux-Roses  
France

# IECEx Certificate of Conformity



Certificate No.: **IECEX LCIE 21.0006X**

Date of issue: 2021-04-01

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Issue No: 0

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

The IQS 9\*\* is a signal conditioner which is used in a proximity measurement system.

The signal conditioner is composed of an aluminum enclosure, which houses an encapsulated printed circuit board, two terminal blocks "J1 and J2", one connector "J0" and with an optional clip for DIN rail.

The signal conditioner can be power supplied with two configuration, either by 2 wire transmission (I/P) or 3 wire transmission (OP).

Refer to the annex of the certificate for the full description.

**SPECIFIC CONDITIONS OF USE: YES as shown below:**

- The apparatus must only be connected to galvanically isolated associated intrinsically safe apparatus or simple apparatus. This combination must be compatible as regard the intrinsic safety rules according to requirements of IEC 60079-25 standard.
- Temperature class of the signal conditioner depending on the ambient operating temperature range:

Temperature class	Ambient temperature	
Gas	T6	$-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +70^{\circ}\text{C}$
	T5	$-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +85^{\circ}\text{C}$
Dust	T <sub>200</sub> 80°C	$-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +50^{\circ}\text{C}$
	T <sub>200</sub> 95°C	$-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +65^{\circ}\text{C}$
	T <sub>200</sub> 115°C	$-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +85^{\circ}\text{C}$

- The enclosure of the signal conditioner is made of aluminium. It must be mounted in such a manner as to eliminate the risk of sparks caused by impact or friction.
- The apparatus must be installed per drawing n° PZ 9010 rev. 00 dated 2021/03/25.

**Annex:**

[IECEX LCIE 21.0006X issue 00 - Annex 01 - Meggitt SA.pdf](#)



**FULL EQUIPMENT DESCRIPTION**

The IQS 9\*\* is a signal conditioner which is used in a proximity measurement system.

The signal conditioner is composed of an aluminum enclosure, which houses an encapsulated printed circuit board, two terminal blocks "J1 and J2", one connector "J0" and with an optional clip for DIN rail.

The signal conditioner can be power supplied with two configuration, either by 2 wire transmission (I/P) or 3 wire transmission (OP).

Title	Reference	Rev. Level	Date
Technical file	DT-1076	00	2021/03/25
Installation manual	MAPROX9xxE	--	--

**MARKING**

**Complete marking :**

vibro-meter® or MEGGITT SA or MFR S3960  
 Address: ...  
 Type: 204-9\*-000-\*\*\* (1)  
 Serial number: ...  
 Year of construction: ...  
 Ex Ia IIC T6 or T5 Ga (2)  
 Ex Ia IIIC T<sub>200</sub> 80°C...T<sub>200</sub> 115°C Da (2)  
 IECEX LCIE 21.0006 X  
 $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +85^{\circ}\text{C}$   
 U; ...; I; ...; P; ...; C; ...; L; ... (3)  
 U; ...; I; ...; P; ...; C; ...; L; ... (3)  
 U; ...; I; ...; P; ...; C; ...; L; ... (3)  
 (1): completed with type designation.  
 (2): see the specific conditions of use.  
 (3): completed by intrinsic safety electrical parameters of the connection concerned.

**Reduced marking :**

vibro-meter® or MEGGITT SA or MFR S3960  
 Type: 204-9\*-000-\*\*\* (1)  
 Serial number: ...  
 Year of construction: ...  
 Ex Ia IIC T6 or T5 Ga (2)  
 Ex Ia IIIC T<sub>200</sub> 80°C...T<sub>200</sub> 115°C Da (2)  
 IECEX LCIE 21.0006 X  
 $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +85^{\circ}\text{C}$   
 (1): completed with type designation.  
 (2): see the specific conditions of use



**Annex 01 to Certificate  
IECEX LCIE 21.0006X issue 00**



**RANGE DETAILS**

204 - 9 * * - 000 - * * *	<p><b>Minor modification number (FFF = Form Fit Function)</b> 0 to 9 (Each modification increase the number by 1)</p> <p><b>Customized version (special target material or mounting)</b> 00 to 99</p> <p><b>Conditioner type</b>                      00 = Analog output                      10 = 4-20mA output                      11 to 99 = Other</p>
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**RATINGS**

Connection	Intrinsic safety electrical parameters
Terminal block "J1" - 2 wire transmission (I/P)	$U_i$ : 28 V; $I_i$ : 100 mA; $P_i$ : 700 mW; $L_i$ : 4.96 $\mu$ H; $C_i$ : 2.2 nF
Terminal block "J1" - 3 wire transmission (O/P)	$U_i$ : 28 V; $I_i$ : 100 mA; $P_i$ : 700 mW; $L_i$ : 9.92 $\mu$ H; $C_i$ : 4.4 nF
Terminal block "J2" - Raw O/P	$U_o$ : 28 V; $I_o$ : 4.57 mA; $P_o$ : 32 mW; $L_o$ : 1.7 H; $C_o$ : 82 nF
Terminal block "J2" - Test I/P	$U_o$ : 28 V; $I_o$ : 0.057 mA; $P_o$ : 0.4 mW; $L_o$ : 1 1098 H; $C_o$ : 82 nF
Connector "J0" - Sensor I/P	$U_o$ : 28 V; $I_o$ : 53.2 mA; $P_o$ : 372.4 mW; $L_o$ : 12.5 mH; $C_o$ : 82.4 nF

**ROUTINE TESTS**

None.

