



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 CML 24.0079X** Page 1 of 3 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2025-04-29
Applicant: **LCM Systems Ltd**
Unit 15, Newport Business park
Barry way, Newport
Isle of Wight
PO30 5GY
United Kingdom
Equipment: **Load Cells type LCM593x**
Optional accessory:
Type of Protection: **Intrinsic safety**
Marking: Ex ia IIC T4 Ga
Ex ia IIIC T135°C Da
Ta = -20°C to +70°C

Approved for issue on behalf of the IECEx
Certification Body:

Stelios Rumbedakis

Position:

Certification Manager

Signature:
(for printed version)

S. Rumbedakis

Date:
(for printed version)

2025-04-29

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Certificate issued by:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom





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Manufacturer: **LCM Systems Ltd**
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Barry way, Newport
Isle of Wight
PO30 5GY
United Kingdom

Manufacturing locations: **LCM Systems Ltd**
Unit 15, Newport Business park
Barry way, Newport
Isle of Wight
PO30 5GY
United Kingdom

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:

[GB/CML/ExTR24.0154/00](#)

Quality Assessment Report:

[GB/SIR/QAR15.0012/09](#)



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Certificate No.: **IECEX CML 24.0079X**

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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Load Cells type LCM593x are a range of load cells comprising one or two resistive strain gauges in Wheatstone Bridge arrangements, mounted on stainless-steel load pins, with either an integral cable, or a bulkhead connector. The cells may contain either one or two bridge circuits.

See Certificate Annex for full Product Description and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:

See Certificate Annex.

Annex:

[IECEX CML 24.0079X Issue 0 Certificate Annex.pdf](#)

Annexe to: IECEx CML 24.0079X
Apparatus: Load Cells type LCM593x
Applicant: LCM Systems Ltd



Description

The Load Cells type LCM593x are a range of load cells comprising one or two resistive strain gauges in Wheatstone Bridge arrangements, mounted on stainless-steel load pins, with either an integral cable, or a bulkhead connector. The cells may contain either one or two bridge circuits.

The following models are available:

Model number	Type	Number of circuits
LCM5933	Load pin	1 or 2
LCM5934	Column load cell	1 or 2
LCM5935	Load link	1 or 2
LCM5936	Diaphragm load cell	1 or 2

Intrinsic safety is achieved by limiting energy storage and discharge, and by connecting to the non-hazardous area via intrinsically safe interface devices. The equipment has the following input parameters:

Single circuit versions	Dual circuit version (per circuit)
U _i = 10V	U _i = 10V
I _i = 100mA	I _i = 100mA
P _i = 0.65W	P _i = 0.32W
C _i = NOTE 1	C _i = NOTE 1
L _i = NOTE 1	L _i = NOTE 1

NOTE 1 – the equipment itself has no internal capacitance nor inductance. Where the equipment is supplied with an integral cable, the cable parameters are:

$$C_c = 0.25\text{nF/m}$$

$$L_c = 0.68\mu\text{H/m}$$



Certificate Annex IECEx
Version: 10.0 Approval: Approved



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Conditions of Manufacture

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

- i. The equipment shall be capable of withstanding an electric strength test using a test voltage of 500 Vac applied between the circuit and earth for 60 s. Alternatively, a voltage of 20% higher may be applied for 1 s. There shall be no evidence of flashover or breakdown and the maximum current flowing shall not exceed 5 mA.

Specific Conditions of Use

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

- i. The user shall ensure that all barriers connected to the equipment are connected to a common 0V and that the sum of the current and power of the barriers connected to each individual bridge circuit, shall not exceed the stated permitted input parameters.
- ii. The equipment may be provided with an integral cable. The user shall take into account the capacitance and inductance of the cable.
- iii. When installed in hazardous dust environments, under certain extreme circumstances, the non-metallic label of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces.



Certificate Annex IECEX
Version: 10.0 Approval: Approved



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