



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX LCIE 14.0036X** issue No.: **0** Certificate history:

Status: **Current**

Date of Issue: **2014-10-28** Page 1 of 3

Applicant: **SCAIME**  
Technosite ALTEA  
294 rue Georges Charpak  
74100 JUVIGNY  
France

Electrical Apparatus: **Junction box type ALCJB1, ALCJB-A4, ALCJB-A6, ALCJB-A8, ALCJB-X4**  
Optional accessory:

Type of Protection: **ia, nA, tb**

Marking: Ex ia IIC T6 Ga  
Ex ia IIIC T80°C Da  
Ex tb IIIC T80°C Db  
Ex nA IIC T6 Gc  
IECEX LCIE 14.0036 X  
(see attachment)

Approved for issue on behalf of the IECEx  
Certification Body:

Remi HANOT

Position:

Certification Officer

Signature:  
(for printed version)

Date:

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 the Official IECEx Website.

Certificate issued by:

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

Documents relative to LCIE certification activities (Certificates, QARs, ExTRs) can be registered under the references "LCI" or "LCIE".





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Manufacturer: **SCAIME**  
Technosite ALTEA  
294 rue Georges Charpak  
74100 JUVIGNY  
France

Additional Manufacturing location  
(s):

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 electrical apparatus 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:

<b>IEC 60079-0 : 2011</b> Edition: 6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-11 : 2011</b> Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
<b>IEC 60079-15 : 2010</b> Edition: 4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
<b>IEC 60079-31 : 2008</b> Edition: 1	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical 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/ExTR14.0040/00

Quality Assessment Report:  
FR/LCIE/QAR14.0005/00



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

These apparatus permits to link electrically one or some strain gauges sensors to a signal charge conditioner. In option, the boxes ALCJB-A4, ALCJB-A6, ALCJB-A8 and ALCJB-X4 can be equipped with surge arresters to provide lightning protection (version GDT).  
(see attachment)

**Electrical parameters** : see attachment.

### CONDITIONS OF CERTIFICATION: YES as shown below:

Models with the option GDT : the housing must be connected to ground.

ALCJB1, ALCJB-A4, ALCJB-A6, ALCJB-A8 : the apparatus must not be submitted to mechanical impacts or frictions.

Operating ambient temperature :

ALCJB1 : - 40°C to + 60°C.

ALCJB-A4, ALCJB-A6, ALCJB-A8, ALCJB-X4 : - 40°C to + 40°C

Version "ia" : The apparatus must be only connected to a certified associated intrinsically safe equipment. This combination must be compatible regarding intrinsic safety rules (see electrical parameters).

Version "nA and tb" : The apparatus must be only connected to an equipment whose electrical parameters are compatible with the electrical parameters of the apparatus.



## IECEX LCIE 14.0036 X issue 00 Attachment n°01



### **Equipment :**

These apparatus permits to link electrically one or some strain gauges sensors to a signal charge conditioner. This box could be set up with a junction cable diameter 7.3mm Cu screened (6 wires) type.

In option, the boxes ALCJB-A4, ALCJB-A6, ALCJB-A8 and ALCJB-X4 can be equipped with surge arresters to provide lightning protection (version GDT).

The apparatus is formed of a metallic body with a metallic cover. The cover is fixed on the body with 4 screws. The body is equipped of individual cable gland for inputs and one cable gland for output.

Inside the box, there is a printed board equipped with terminal blocks (individual terminal block for input and common terminal block for output), potentiometers and resistors (and overvoltage protection (GDT) in option).

Following the type, the number of terminal block and cable gland is :

- ALCJB1 : 1 terminal block and 2 cable glands.
- ALCJB-A4 : 5 terminal blocks and 5 cable glands.
- ALCJB-A6 : 7 terminal blocks and 7 cable glands.
- ALCJB-A8 : 8 terminal blocks and 9 cable glands.
- ALCJB-X4 : 3 double terminal blocks and 5 cable glands.

Types ALCJB1, ALCJB-A4, ALCJB-A6 and ALCJB-A8 are made in aluminum with a neoprene gasket.

Type ALCJB-X4 is made in stainless steel with a silicon gasket.

### **Marking :**

SCAIME

Address : ...

Sensor : ALCJB1 or ALCJB-A4 or ALCJB-A6 or ALCJB-A8 or ALCJB-X4

Serial number : ...

Year of construction : ...

Ex ia IIC T6 Ga

Ex ia IIIC T80°C Da

Ex tb IIIC T80°C Db

Ex nA IIC T6 Gc

IECEX LCIE 14.0036 X

Version "ia" only :  $U_i \leq 28V$ ,  $I_i \leq 0,6A$ ,  $P_i \leq 2W$ ,  $C_i \approx 0$ ,  $L_i \approx 0$

### **Electrical parameters :**

Version "ia" : the electrical parameters must not exceed any of the following values :

$U_i \leq 28V$ ,  $I_i \leq 0,6A$ ,  $P_i \leq 2W$ ,  $C_i \approx 0$ ,  $L_i \approx 0$

Version "nA" :

$U \leq 28V$ ,  $I \leq 0,6A$ ,  $P \leq 2W$

Version "tb" :

$U \leq 28V$ ,  $I \leq 0,6A$ ,  $P \leq 2W$