



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

Certificate No.: IECEx DEK 17.0047X

Issue No: 0

Certificate history:

Issue No. 0 (2018-06-25)

Status: **Current**

Page 1 of 3

Date of Issue: **2018-06-25**

Applicant: **Mettler Toledo, GmbH**
IM Langacher 44, CH-8606
Greifensee
Switzerland

Equipment: **Junction Box Models AJB641SX and AJB841SX**

Optional accessory:

Type of Protection: **Ex ia ib nA tc**

Marking:

Ex ia IIC T4 Gb

Ex ib IIIC T70 °C ... T90 °C Db

Ex ic IIC T4 Gc

Ex nA IIC T4 Gc

Ex tc IIIC T70 °C ... T90 °C Dc

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

L.G. van Schie

Position:

Certification Manager

*Signature:
(for printed version)*

Date:

2018-06-25

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](http://www.iecex.com).

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands





IECEX Certificate of Conformity

Certificate No: IECEx DEK 17.0047X

Issue No: 0

Date of Issue: **2018-06-25**

Page 2 of 3

Manufacturer: **Mettler Toledo, GmbH**
IM Langacher 44, CH-8606
Greifensee
Switzerland

Additional Manufacturing location(s):

Mettler-Toledo (Changzhou) Measurement Technology Ltd.

111 West Taihu Rd, Xinbei District
Changzhou, Jiangsu 213125 CN
China

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 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:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-31 : 2013 Edition:2	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:

[NL/DEK/ExTR17.0060/00](#)

Quality Assessment Report:

[NL/DEK/QAR11.0008/06](#)



IECEx Certificate of Conformity

Certificate No: IECEx DEK 17.0047X

Issue No: 0

Date of Issue: 2018-06-25

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Junction Box models AJB641SX and AJB841SX provide connection of load cells to an interface. The connection means (and electronics where applicable) are fitted in a stainless steel enclosure.

Ambient temperature range -20 °C to +60 °C.

The specified temperature T 70 °C or T 90 °C, for application in explosive atmospheres caused by air/dust mixtures, is based upon an ambient temperature of 40 °C or 60 °C respectively.

The enclosures provide a degree of protection of IP65 in accordance with IEC 60079-0.

Electrical Data:

Models in type of protection intrinsic safety

Signal and supply circuits:

in type of protection intrinsic safety Ex ia and ib IIC only for connection to a certified intrinsically safe circuit, with the following maximum total values (combining the parameters of all circuits):

$U_i = 17.3 \text{ V}$; $I_i = 300 \text{ mA}$; $P_i = 1.2 \text{ W}$; $C_i = 0$; $L_i = 0$. (only a resistively limited barrier may be used)

or

$U_i = 6.0 \text{ V}$; $I_i = 200 \text{ mA}$; $P_i = 1.2 \text{ W}$; $C_i = 0$; $L_i = 0$.

Signal and supply circuits:

in type of protection intrinsic safety Ex ic IIC, only for connection to a certified intrinsically safe circuit, with the following maximum total values (combining the parameters of all circuits):

$U_{i\equiv} = 10.5 \text{ V}$; $I_{i\equiv} = 500 \text{ mA}$; $C_i = 0$; $L_i = 0$.

Signal and supply circuits of all models:

in type of protection intrinsic safety Ex ia IIC and Ex ib IIC; the maximum values of U_o , I_o , P_o , C_o and L_o are determined by the combined parameters of all the interface circuits connected to the Junction Box.

Models in type of protection Ex nA or Ex tc

Signal and supply circuits: Maximum 30 V and 1 A. The applicable combination of the voltage and current to and from the Junction Box is determined by the interface circuits connected to the Junction Box.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The Junction Boxes shall be installed in such a way that the risk of mechanical danger is low.

For applications in explosive atmospheres caused by dust, electrostatic charges of the marking label on the enclosure shall be avoided.

For the ambient temperature range see "Equipment".