



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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEX SIR 08.0025U**

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Certificate history:

Status: **Current**

Issue No: 6

[Issue 5 \(2021-03-31\)](#)

[Issue 4 \(2018-03-06\)](#)

[Issue 3 \(2016-03-09\)](#)

[Issue 2 \(2012-12-14\)](#)

[Issue 1 \(2010-11-16\)](#)

[Issue 0 \(2008-05-06\)](#)

Date of Issue: 2021-10-07

Applicant: **International Metal Engineering Pte Limited**
Blk 13 Toa Payoh Lorong 8
#06-05 Braddell Tech Park
Singapore 319261
Singapore

Ex Component: V2081, 7092 & 8092 Series Instrument Enclosures & Junction Boxes

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Flameproof db and Dust Protection by Enclosure**

Marking: Ex db IIC Gb
Ex tb IIIC Db
Ta = -40°C to +85°

Approved for issue on behalf of the IECEx
Certification Body:

Neil Jones

Position:

Certification Manager

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 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





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Manufacturer: **International Metal Engineering Pte Limited**
Blk 13 Toa Payoh Lorong 8
#06-05 Braddell Tech Park
Singapore 319261
Singapore

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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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/CSAE/ExTR21.0089/00
GB/SIR/ExTR12.0264/00
GB/SIR/ExTR21.0026/00

GB/SIR/ExTR08.0044/00
GB/SIR/ExTR16.0052/00

GB/SIR/ExTR10.0277/00
GB/SIR/ExTR18.0014/00

Quality Assessment Report:

GB/SIR/QAR07.0040/08



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Ex Component(s) covered by this certificate is described below:

The V2081, 7092 & 8092 Series Instrument Housings & Junction Boxes are cylindrical single compartment enclosures comprising a base and threaded cover with a maximum internal volume of 610 cm³. The enclosures are manufactured from stainless steel or cast aluminium that may have an epoxy paint coating. The cover may be blind or contain a circular tempered glass window. Each enclosure may have a number of conduit openings and sizes as detailed in the Annexe.

The 8092WT product range may optionally comprise of a T079 base enclosure arrangement which utilises an existing 8092WT enclosure base having four additional blind M5 mounting holes located at the bottom entry and two M8 mounting holes. The T1 cable entry is located on a surface angled at 2 degrees on the existing enclosure base, whereas on the T079 base enclosure, the angle is not present, to allow entry devices fitted to sit perpendicular and enable conductive contact. The cover remains unchanged.

Refer to the Annexe for additional information, the Schedule of Limitations and Conditions of Manufacture.

SCHEDULE OF LIMITATIONS:

Refer to Annexe



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Date of issue: 2021-10-07

Issue No: 6

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

This issue, Issue 6, recognises the following changes; refer to the certificate annex to view a comprehensive history:

1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2011 Edition 6.0 is replaced by IEC 60079-0:2017 Edition 7.0.
2. Amendment to the markings and schedule of limitations to update/address electrostatic assessment for build-up of electrostatic charge for Group II and III.
3. Notified body number change from XXXX to 2813 on label drawings.

Annex:

[IECEx SIR 08.0025U Issue 6 Annexe.pdf](#)

Annexe to: IECEx SIR 08.0025U Issue 6

Applicant: International Metal Engineering Pte Limited



Apparatus: V2081, 7092 & 8092 Series Instrument Enclosures & Junction Boxes

Table 1. Design Options

Model no.	No. of entries	½" NPT	¾" NPT	1" NPT	M20 x 1.5	M25 x 1.5	M27 x 1.5	None
V2081	3	✓	✓	X	X	X	X	✓
7092	1	✓	✓	X	✓	X	X	✓
7092	2 @ 90°	✓	✓	X	✓	X	X	✓
7092	2 @ 180°	✓	✓	X	✓	X	X	✓
7092	3	✓	✓	X	✓	X	X	✓
7092	4	✓	✓	X	✓	X	X	✓
8092	3	✓	✓	✓	✓	✓	✓	✓

V2081 Series:

Model V20815E6, cast aluminium with blind cover

Model V20816E6, cast aluminium with window cover *

7092 Series:

Model 7092WM, cast aluminium with window cover *

Model 7092WT, cast aluminium with window cover

Model 7092CM, cast aluminium with window cover *

Model 7092CT, cast aluminium with window cover

Model 7092AM, cast aluminium with blind cover *

Model 7092AT, cast aluminium with blind cover

Model 7092NM, cast aluminium with blind cover *

Model 7092NT, cast aluminium with blind cover

Model 7092TM, stainless steel with blind cover *

Model 7092TT, stainless steel with blind cover

Model 7092SM, stainless steel with window cover *

Model 7092 ST, stainless steel with window cover

Model Nos. 7092WT, 7092WM, 7092AT & 7092AM are coated with epoxy paint.

8092 Series:

Model 8092AT, cast aluminium with blind cover

Model 8092AM, cast aluminium with blind cover *

Model 8092WT, cast aluminium with window cover

Model 8092WM, cast aluminium with window cover *

Model 8092TT, stainless steel with blind cover

Model 8092TM, stainless steel with blind cover *

Model 8092ST, stainless steel with window cover

Model 8092SM, stainless steel with window cover *

* Denotes that an adhesive label is fitted detailing the threadform when a metric threadform is selected

Annexe to: IECEx SIR 08.0025U Issue 6

Applicant: International Metal Engineering Pte Limited

Apparatus: V2081, 7092 & 8092 Series Instrument Enclosures & Junction Boxes



Schedule of Limitations

- i. The window cement has an upper service temperature limit of +95°C.
- ii. The window has an upper service temperature limit of +85°C.
- iii. The contents of the V2081, 7092 & 8092 Series Instrument Housings & Junction Boxes may be placed in any arrangement provided that an area of at least 40% of each cross-sectional area remains free to permit unimpeded gas flow and, therefore, unrestricted development of an explosion. Separate relief areas may be aggregated provided that at each area has a minimum dimension in any direction of 12.5 mm.
- iv. Warning: potential electrostatic charging hazard - see instructions.

Full certificate change history

Issue 1 – this Issue introduced the following change:

1. The recognition of the introduction of 1" NPT, M25 and M27 cable entries in the 8092 range of enclosures, table 1 above has been amended to reflect this.

Issue 2 – this Issue introduced the following change:

1. Following appropriate re-assessment to demonstrate compliance with the requirements of later standards, the following, previously listed documents, IEC 60079-0:2004 Ed 4, IEC 61241-0:2004 Ed 1 and EN 61241-1:2004 Ed 1, were replaced by those currently specified, the marking was amended accordingly.

Issue 3 – this Issue introduced the following changes:

1. The addition of an alternative option within the 8092WT product range, which introduces the T079 base enclosure arrangement. Documents 8092-108-XX and 8092WT-XX T079 were introduced to reflect this modification, the product description being amended accordingly.
2. Correction of a typographical error.

Issue 4 – this Issue introduced the following changes:

1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-1:2007 Ed.6 and IEC 60079-31:2008 Ed.1 were replaced by IEC 60079-1:2014 Ed.7 and IEC 60079-31:2013 Ed.2, the markings were updated accordingly to recognise the new standards, and a Schedule of Limitations was added.
2. BSP threaded entries are not provided as an option in IEC 60079-1:2014 Clause 5.3, therefore a condition of manufacture is added to ensure these entries are not included in this certificate.

Issue 5 – this Issue introduced the following changes:

1. Remove all references to BSP thread types in the certificate product description and drawings, in relation to cable entry options, resulting in the removal of two schedule of limitations in the certificate.
2. Replace current external label with an internal label.

Issue 6 – this Issue introduced the following changes:

1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2011 Edition 6.0 is replaced by IEC 60079-0:2017 Edition 7.0.
2. Amendment to the markings and schedule of limitations to update/address electrostatic assessment for build-up of electrostatic charge for Group II and III.
3. Notified body number change from XXXX to 2813 on label drawings.

Date: 07 October 2021

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