



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 ITA 12.0007X** Page 1 of 5 Certificate history:
Status: **Current** Issue No: 2 [Issue 1 \(2015-11-23\)](#)
Date of Issue: 2021-08-18 [Issue 0 \(2012-09-03\)](#)
Applicant: **Nautitech Mining Systems Pty Ltd.**
Unit 3/9 Packard Avenue
Castle Hill
NSW 2154
Australia
Equipment: **Camera or Display / Instrument housing**
Optional accessory:
Type of Protection: **Flameproof "d"**
Marking: Ex d I/IIC T5 Mb Gb
-20°C ≤ T_{amb} ≤ 60°C

Approved for issue on behalf of the IECEx
Certification Body:

Ajay Maira

Position:

Certification Authority

Signature:
(for printed version)

Ajay Maira

Date:

2021-08-18

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:

Ex Testing and Certification Pty Ltd
1/30 Kennington Drive
Tomago NSW 2322
Australia



TESTING & CERTIFICATION



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Date of issue: 2021-08-18

Issue No: 2

Manufacturer: **Nautitech Mining Systems Pty Ltd.**
Unit 3/9 Packard Avenue
Castle Hill
NSW 2154
Australia

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 60079-0:2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-1:2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:6

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:

[AU/ITA/ExTR12.0010/00](#)

[AU/ITA/ExTR15.0055/00](#)

Quality Assessment Report:

[AU/MSQ/QAR21.0001/00](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The range of enclosures are manufactured from stainless steel with no welded parts. Optional glass lenses can be cemented in different configurations in the front cover and secured with a suitable threaded stainless steel retaining ring. The cover is secured with six recessed stainless steel M6 x 1.25 x 16mm socket head cap screw.

See Annexe for details

SPECIFIC CONDITIONS OF USE: YES as shown below:

See Annexe for details



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
See Annexe for details



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Additional information:

Job 21105

Annex:

[Annex IECEx ITA 12.0007X-2 - final.pdf](#)

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Annexe



Annexe for Certificate No.:

IECEX ITA 12.0007X

Issue No.:

2

Description (Continued from certificate):

The range of enclosures consists of a single body and a range of covers for different applications:

- Camera enclosure cover (ME5060-0-18-002)
Small Germanium glass-IR lens with external retaining ring.
- Small LCD display cover (ME5060-0-18-009)
Large toughened glass lens with internal retaining ring.
- Large LCD display cover or LED light cover (ME5060-0-18-008)
Large toughened glass lens with external retaining ring.
- Junction box cover (ME5060-0-18-010)
Full metallic stainless steel cover with up to two M20 x 1.5 threaded entries.

The enclosure has the following threaded entry configurations:

- - Up to four M20 x 1.5 threaded entries equally spaced on the circumference of the cylindrical body of the enclosure.
- - Up to two M20 x 1.5 threaded entries on the bottom base plate of the enclosure.
- - Up to two M20 x 1.5 threaded entries on the cover of the enclosure, applicable to the metallic cover only.

The cover O-ring is utilised to maintain the IP66 rating. A single type CR1220 Manganese Dioxide / Lithium battery (Type C as per IEC60086-1) is approved with its associated circuit for use inside the enclosure.

Note: Any Intrinsically safe equipment that may be fitted is not covered by this approval and must be additionally considered for the installation rules.

Specific Conditions of Use pertaining to Issue 0 of this Certificate:

- Only a suitably certified gland or blanking plug may be used in the threaded entry(s). All unused entries must be blanked.
- Since the cylindrical joint of the cover relies on a radial gap of 0.15mm all round, cover cylindrical joint is achieved by the dowel pins on the cover of the enclosure, and it is a condition of certification that the dowel pins must be in good condition and utilized on each enclosure assembly.
- Equipment used in the equipment is limited to a total power dissipation of less than 10.5W. When used with equipment rated above 4.7W, a cable rated at least 105°C must be used and cable glands rated at least for 82°C. **
- When used with LED unit (10.9W maximum rated) a cable rated at least 92°C must be used and cable glands rated at least for 78°C. **

** Note that these two conditions have been replaced by a revised condition specified in Issue 1 of this certificate.

Conditions of Certification (Manufacturer's Responsibility) pertaining to Issue 0 of this Certificate:

- It is a condition that instructions complying with clause 30 of IEC 60079-0 and a copy of the certificate must be provided with each enclosure.

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Annexe



Annexe for Certificate No.:

IECEx ITA 12.0007X

Issue No.: 2

Drawing list pertaining to Issue 0 of this Certificate:

Manufacturer's Documents

Title:	Drawing No.:	Pages	Rev. Level:	Date:
ASSY-FLP ENCL – CAMERA DISPLAY JUNCTION BOX	ME5060-2-99-114-A (sheets 1 to 9)	9	C	2012-06-20
BATTERY CIRCUIT FOR FLP ENCLOSURES	ME5060-2-12-017-A	1	2	2012-06-29

Variations permitted by Issue 1 of this certificate:

Additional temperature testing was completed which allowed the unit to be used at higher levels of dissipated power without high temperature cables.

Specific Conditions of Use pertaining to Issue 1 of this certificate:

The following completely replaces all conditions given by the previous certificate:

- Equipment will have a maximum rating of 10W and 3A. Any equipment rated at 7.3W or greater is to have cable and gland rated at 90°C or better.

Drawings Associated with the Issue 1 of this Certificate:

There are no drawings applicable to this issue of the certificate

Variations permitted by Issue 2 of this certificate:

- The manufacturer's Quality Assessment was changed from Ex Testing and Certification to another IECEx Certification Body, Mine Safety Technology Centre. QAR reference has been changed accordingly.

Specific Conditions of Use pertaining to Issue 2 of this certificate:

There are no changes to the conditions of use.

Drawings Associated with the Issue 2 of this Certificate:

There are no drawings applicable to this issue of the certificate.