



Mining And Surface Certification (Pty) Ltd

2015/021934/07

THIS CERTIFICATE IS ISSUED AS AN I.A. CERTIFICATE IN TERMS OF THE MINE HEALTH AND SAFETY ACT, ACT NO 29 OF 1996 (AND REGULATIONS), THE OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993) AND REGULATION 17 OF THE ELECTRICAL MACHINERY REGULATIONS

IA CERTIFICATE	MASC MS/23-9020X		Issue	0
Issue Date	21 November 2023		Expiry Date	21 November 2026
** Based on Certificate No	IECEX ITA 12.0007X		Issue / Variations / Amendment	2
Requested by	Nautitech Mining Systems Pty Ltd Unit 3, 9 Packard Avenue, Castle Hill, NSW 2154, Australia			
Manufacturer	Nautitech Mining Systems Pty Ltd Unit 3, 9 Packard Avenue, Castle Hill, NSW 2154, Australia			
Description	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. Refer to below Annex below for full description			
Equipment	Camera or Display / Instrument housing	Type	ME5060 (refer to description)	
MARKING: Original marking as per certificate ** remains applicable. IA number must be added.	Type: Ex Marking: IA Number: Warnings:	As above Ex d I/IIC T5 Mb Gb -20°C ≤ T _{amb} ≤ 60°C MASC MS/23-9020X (To be additionally marked on equipment) See Base Certificate ** (original marking must be applied)		
Quality Assurance report (QAR) / Notification (QAN) Expiry date:		AU/MSC/QAR21.0001/01		
Compliance: The equipment as described above has been allocated the rating <u>Explosion Protected 'as above'</u> utilizing the SANS/IEC Standards: <ul style="list-style-type: none">SANS (IEC) 60079-0: 2012 (2011) Explosive atmospheres - Part 0: Equipment - General requirementsSANS (IEC) 60079-1: 2009 (2007) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" <i>Note: This certificate covers only the listed standards and does not imply compliance to any other standard, related or inferred. It is up to the manufacturer to ensure that the product complies to all relevant standards for the application.</i>				
Special conditions of safe use "X": <ul style="list-style-type: none">Refer to Annex A below for more details.				
Conditions of manufacture: <ul style="list-style-type: none">Refer to Annex A below for more details.				
Terine Orsmond PROJECT MANAGER		Regardt Zeelie TECHNICAL SPECIALIST		
This certificate covers all units sold as long as the QAR/QAN remains valid. According to the relevant requirements of the MHS Act and the OHS Act, production units of explosion protected equipment are required to comply with third party quality assurance (an approved mark scheme or batch testing by an accredited test laboratory).				

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Apparatus in hazardous locations is subject to the following provisions as applicable, which shall be adhered to:
 SANS 10086 requirements;
 Any conditions mentioned in the above certificate;
 Any relevant requirements of the MHS Act;
 Any restrictions and conditions enforced by the chief inspector of mines, principal inspector (Group I equipment) or chief inspector of factories (Group II equipment).

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IA CERTIFICATE: MASC MS/23-9020X
Equipment: Camera or Display / Instrument housing
(Expiry date: 21 November 2026)

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ANNEX A

This document is based on and must be read in conjunction with certificate IECEx ITA 12.0007X <i>This certificate was originally approved under MASC MS/14-0066X</i>	
Description (According to Base Certificate) **	
"Refer to description in Base Certificate ** (and any applicable schedules/issues/variants)."	
Description	<p>The range of enclosures is 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</p> <p>The range of enclosures consists of a single body and a range of covers for different applications:</p> <ul style="list-style-type: none"> • 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. <p>The enclosure has the following treaded entry configurations</p> <ul style="list-style-type: none"> • 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. <p>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.</p> <p>Note: Any Intrinsically safe equipment that may be fitted is not covered by this approval and must be additionally considered for the installation rules.</p>
Standard compliance	See Base Certificate **
Special conditions of safe use ("X")	<ul style="list-style-type: none"> • 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.
Conditions of manufacture	<ul style="list-style-type: none"> • 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.
Conditions of Certification	<ul style="list-style-type: none"> • This IA Certificate covers all units sold from the date of this document to the expiry date of this certificate. • As per ARP 0108 a maximum three yearly review is required on this IA Certificate (expiry is determined as per the QAR/QAN/QMS expiry date). • The apparatus must be additionally marked with the MASC marking details above. • This approval only covers the equipment as certified above and does not include any scheduled additions or variations / amendments / new issues to the certificate(s), made after the above date. • The equipment does not need to be re-tested when used on the conditions and with such restrictions as prescribed by the certificate on which this IA Certificate is based and any other conditions in this IA Certificate. • The certification on which this IA Certificate is based must remain valid. • The extent of the requirements in the ARP 0108 (or regulations), SANS 10108 and any other applicable regulations on the certification of the equipment must remain unchanged. • The Ex quality assurance notification/report for the equipment must remain valid.
Conclusion:	<ul style="list-style-type: none"> • From the above and the selective examination of the documentation, nothing contrary to the requirements of the applicable standards was found, provided that the equipment / component is used as described in the above document / certificate and according to the MASC conditions below. A MASC IA certificate is issued based on the work done as per the Base Certificate **. • The routine tests for production units according to the Base Certificate ** must be complied with (if applicable).

This document is issued based on Mining And Surface Certification's Standard Contract terms and conditions available on request.

While every endeavour is made to ensure that a test / assessment / inspection is representative and accurately performed, and that a report / certificate is accurate in the quoted results and conclusions drawn from the test / assessment / inspection, MASC or its directors/employees shall in no way be liable for any error made in carrying out the test / assessment or for any erroneous statement, whether in fact or in opinion, contained in a report / certificate issued pursuant to a test / assessment / inspection.

MASC takes no responsibility for any non-conformances, exclusions or any results / assessments / inspections not in compliance with the standards. By marking the equipment in accordance with the documentation / standard, the manufacturer / applicant attests on his own responsibility that the equipment / installation has been designed and constructed in accordance with the applicable requirements of the relevant standards and documentation, that the routine verifications / routine tests have been correctly completed and the equipment / installation complies with the documentation and standard(s).

This document is only for use and application in South Africa. It is issued based on National interpretations and accepted practices.

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This document will not be supported by MASC for certification purposes outside the borders of South Africa.

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