





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 M/23-9021X	Issue	0
Issue Date	21 November 2023	Expiry Date	21 November 2026
** Based on Certificate No	ANZEx 10.4091X	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	<p>The Flameproof enclosure is manufactured from steel and consists of a main body with a bolt on cover forming a flanged flamepath. There is a series of threaded entries in the enclosure up to M40 x 1.5mm pitch. There is also an optional polycarbonate window and operator(s), either rotary or push button which may be fitted to the enclosure cover.</p> <p>An optional flametrap(s) (ANZEx 06.4082U) may be fitted to the threaded entries of the enclosure.</p> <p>The enclosure is designed to house low power electrical/electronic equipment or an electrical contactor.</p> <p>Electrical Ratings/Parameters 350 Volts / 350 Amps Max</p>		
Equipment	Control / Monitoring Enclosure	Type	Control / Monitoring Enclosure
MARKING: Original marking as per certificate ** remains applicable. IA number must be added.	Type: As above Ex Marking: Ex d I IP55 IA Number: MASC M/23-9021X (To be additionally marked on equipment) Warnings: 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) Equipment - General requirements SANS (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).			

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 M/23-9021X
Equipment: Control / Monitoring Enclosure
(Expiry date: 21 November 2023)

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ANNEX A

This document is based on and must be read in conjunction with certificate ANZEx 10.4091X <i>This certificate was originally approved under MASC M/20-9024X</i>	
Description (According to Base Certificate) **	
"Refer to description in Base Certificate ** (and any applicable schedules/issues/variations)."	
Standard compliance	See Base Certificate **
Special conditions of safe use ("X")	<ul style="list-style-type: none"> It is a condition of safe use that suitably certified glands and plugs be utilised on the installation. The IP rating must be at least IP55 to maintain the IP55 rating of the enclosure.
Conditions of manufacture	<ul style="list-style-type: none"> It is a condition of manufacture that the service temp of any non-metallic materials must be considered, e.g. window, cementing, cable branching points (80°C) and cable entry points (70°C). It is a condition of manufacture that the operating temperatures for the non-metallic materials (including the window, cementing and cable / gland entries) be considered according to the limitations of AS2380.1 and AS 2380.2. It is a condition of manufacture that each enclosure must be pressure tested in accordance with clause 4.3 of AS2380.2 at a pressure of 615 kPa or if it is to be used as an enclosure for pressure switches, then at 1.5 times the expected line pressure. However, the airline pressure connected to the flametraps shall not exceed 1000 kPa.
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.

This document may only be reproduced in full.
This certificate is not transferable and remains the property of the issuing body.
This document will not be supported by MASC for certification purposes outside the borders of South Africa.

Mining And Surface Certification (Pty) Ltd Reg No: 2015/021934/07
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