





# Mining And Surface Certification (Pty) Ltd

(Pty) Ltd: 2015/021934/07

IN TERMS OF REGULATION 21.17.2 OF THE MINERALS ACT (INCORPORATION THE MINE HEALTH AND SAFETY ACT) AND REGULATION 9 (1) OF THE ELECTRICAL MACHINERY REGULATIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT

<b>IA CERTIFICATE</b>	MASC MS/21-9016X	<b>Issue</b>	1
<b>Issue Date</b>	17 May 2024	<b>Expiry Date</b>	14 June 2031
<b>Applicant</b>	Pratley Manufacturing (Pty) Limited 14 Jackson Street, Fectoria, Krugersdorp, 1745, Gauteng, South Africa		
<b>Manufacturer</b>	Pratley Manufacturing (Pty) Limited 14 Jackson Street, Fectoria, Krugersdorp, 1745, Gauteng, South Africa		
<b>Description (See "Annex A" below)</b>			
<b>Equipment</b>	Flameproof Envirobox N° 1 x 4	<b>Type</b>	Flameproof Envirobox N° 1 x 4
<b>MARKING:</b> <i>Must be additionally applied to the equipment</i>	<b>Applicant / Manufacturer</b> <b>Type</b> <b>Ex Marking</b>  <b>IA Number</b> <b>Serial Number</b> <b>Rating</b>	Pratley Manufacturing (Pty) Limited Refer to description Ex db I Mb Ex db IIB + H2 T* Gb Ex tb IIIC T°C Db IP66/68 (300m) *Refer to table 3 below in description -40°C to +55°C MASC MS/21-9016X See "Annex A" below As per description below	
<b>WARNING(S)</b>	As per conditions below		
<b>Compliance:</b>			
The equipment as described above and in report <b>ZA/ICS/ExTR21.0006/00</b> has been allocated the rating <u>Explosion Protected as above</u> utilizing the SANS/IEC Standards:			
<ul style="list-style-type: none"> <li>SANS (IEC) 60079-0: 2019 General requirements</li> <li>SANS (IEC) 60079-1: 2015 Explosive atmospheres Part 1: Equipment protection by flameproof enclosures d</li> <li>SANS (IEC) 60079-31: 2014 Equipment dust ignition protection by enclosure "t"</li> <li>ARP 0108: 2018 Regulatory requirements for explosion protected apparatus</li> </ul>			
<b>Special conditions of safe use X:</b>			
<ul style="list-style-type: none"> <li>See "Annex A" below</li> </ul>			
<b>Conditions of manufacture:</b>			
<ul style="list-style-type: none"> <li>See "Annex A" below</li> </ul>			
 <b>Terine Orsmond</b> <b>TECHNICAL OFFICER</b>		 <b>Regardt Zeelie</b> <b>TECHNICAL SPECIALIST</b>	
<p style="text-align: center;"><b>This certificate only covers the sample submitted and does not cover production units.</b></p> <p>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).</p>			



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 and code of practice enforced in terms of regulations 21.17.2 of the minerals 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).

This certificate may only be reproduced in full.  
This certificate is not transferable and remains the property of the issuing body

Mining And Surface Certification (Pty) Ltd  
Unit 5 Lelyta Park, 45 Jurg Ave. Hennospark Ext 87  
Centurion, 0157



**IA CERTIFICATE: MASC MS/21-9016X**  
**Equipment: Flameproof Envirobox N° 1 x 4**  
**Rev 1: Header update**

ANNEX A

<b>Description</b>	<p>The Flameproof Envirobox serves as a junction box or enclosure to house small components within the defined limits of the schedule drawings and power dissipation table below. It is manufactured from Pratley glass-fibre reinforced thermoset plastic in a cylindrical shape with a diameter of 145mm and height of 102mm. The cable entry locations are orthogonally fitted in the curved sidewall and may consist of a M25, M20 or any other thread form and size (Metric or NPT) smaller than M25. The entry point locations are available in various quantities too. The lid is fitted with an elastomeric gasket and is fixed to the base with eight M6 x 1.0 x 30 SHCS (A2-70).</p> <p>There is a facility for the connection of an earthing or equipotential bonding conductor provided inside and with the provision for an optional external connection outside the main body by an earth connection arrangement. The certification details are shown below.</p> <p>Combinations of terminals and/or other components may be fitted, provided the maximum power dissipation does not exceed the maximum rated dissipated power in table 3 below. No energy storing electronics, cells, batteries or switch gear components may be fitted inside the enclosure.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3" style="background-color: yellow;">Table 3 - Operating Temperatures</th> </tr> <tr> <th style="background-color: yellow;">Temp Range:</th> <td colspan="2" style="background-color: yellow;">-40 to 55C</td> </tr> <tr> <th rowspan="2" style="background-color: yellow;">T amb. [C]</th> <th style="background-color: yellow;">T6</th> <th style="background-color: yellow;">T5</th> </tr> <tr> <th colspan="2" style="background-color: yellow;">Diss. Power [W]</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">40</td> <td style="text-align: center;">2.22</td> <td style="text-align: center;">4.04</td> </tr> <tr> <td style="text-align: center;">45</td> <td style="text-align: center;">1.62</td> <td style="text-align: center;">3.44</td> </tr> <tr> <td style="text-align: center;">50</td> <td style="text-align: center;">1.01</td> <td style="text-align: center;">2.83</td> </tr> <tr> <td style="text-align: center;">55</td> <td style="text-align: center;">0.4</td> <td style="text-align: center;">2.22</td> </tr> </tbody> </table>	Table 3 - Operating Temperatures			Temp Range:	-40 to 55C		T amb. [C]	T6	T5	Diss. Power [W]		40	2.22	4.04	45	1.62	3.44	50	1.01	2.83	55	0.4	2.22
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<b>Standard compliance</b>	See "certificate" above																							
<b>Warnings</b>	See "certificate" above																							
<b>Conditions of Certification</b>																								
<b>Special Conditions of safe use (X)</b>	<ul style="list-style-type: none"> <li>• No energy storing electronics, cells, batteries or switch gear components may be fitted inside the enclosure.</li> <li>• Only suitably certified glands, adaptors, blanking plugs may be used in all apertures. All unused entries must be sealed using suitably certified blanking elements</li> <li>• The internal power losses for the enclosure may not exceed the values as per Table 3 in the description above.</li> <li>• Installation/supply cable must comply with suitable current rating as applicable, keeping in mind the deratings for ambient/service temperatures.</li> <li>• Use only fasteners with grade (or higher) as per equipment description in the general product information.</li> </ul>																							
<b>Conditions of manufacture</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>																							

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

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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