





# Mining And Surface Certification (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 S/19-2047X	<b>Issue</b>	0
<b>Issue Date</b>	31 July 2019	<b>Expiry Date</b>	31 July 2029
<b>*Based on Certificate No</b>	<b>S-XPL/10.1126 &amp; LR 50962-9</b>	<b>Issue / Variations / Amendment</b>	1
<b>Requested by</b>	ZEST WEG Group, 47 Galaxy Avenue, Linbro Business Park, Sandton, South Africa		
<b>Manufacturer</b>	ZEST WEG Group, 47 Galaxy Avenue, Linbro Business Park, Sandton, South Africa		
<b>Description</b>	See "Annex A" below		
<b>Equipment</b>	Squirrel Cage Induction Motor Ex 61G Frame Size 56.		
<b>MARKING: Original marking as per certificate * remains applicable. IA number to be added.</b>	<b>Manufacturer Type</b> <b>Voltage</b> <b>Amperage</b> <b>Kilowatt</b> <b>Frame size</b> <b>Insulation Class</b> <b>Ex Marking</b> <b>IA Number</b> <b>Warnings</b>	WEG Squirrel Cage Induction Motor Ex 61G 220 6.20 / 5.45A 0.55kW / 0.75kW Ex61G H / B  Ex db IIA T3 Gb MASC S/19-2047X See Base Certificate * and original marking	
<b>Quality Assurance report (QAR) / Notification (QAN):</b>	All units must be covered by batch testing or a valid accepted product certification mark.		
<b>Compliance:</b>	The equipment as described above has been allocated the rating <u>Explosion Protected</u> utilizing the SANS/IEC Standards: <ul style="list-style-type: none"> <li>SANS (IEC) 60079-0 2018 General requirements</li> <li>SANS (IEC) 60079-1 2015 Flameproof enclosures "d"</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>J Peens</b> <b>TECHNICAL OFFICER</b>		 <b>F du Toit</b> <b>TECHNICAL SPECIALIST</b>	
<p>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).</p>			

/ . ANNEX A...

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 report  
Any restrictions and conditions enforced by the chief inspector of mines or chief inspector of factories  
Any relevant requirements of the MHS Act.

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 S/19-2047X**  
**Equipment: Squirrel Cage Induction Motor**  
**Ex 61G Frame Size 56**

**ANNEX A**

This document is based on and must be read in conjunction with certificate **XPL/11694/10.1126 REV 1**

**Description (According to Base Certificate \*)**

<b>Description According to Base Certificate</b>	<p>Induction motors, squirrel cage, continuous duty, Types EXM, EXT, EPM, XPM and XPT for hazardous locations are described below. See Appendix "A" for details of typical characteristics</p> <p>The motors and terminal boxes are constructed of cast iron and bolted together. The gaps were measured on the samples and found to be between 0.0015 in and 0.003 in, generally, on non-moving mating parts well within the required dimensions.</p> <p>Note: Induction motors, squirrel cage, continuous duty Class B insulation, 50/60Hz TEFC, temperature code T3C, Type EXM, fame 61G, rated 1/3 through 1 hp, 230V max, 1 ph, 4-pole; Type EXT, fame 61G, rated ½ through 1 hp, 600V max, 3 ph, 4-pole; Type XPM, fame 56, rated ¼ through 1 hp, 230V max, 1 ph, 4-pole; Type XPT, fame 56, rated ¼ through 1 hp, 600V max, 3 ph, 4-pole.</p>
<b>Standard compliance</b>	See Base Certificate *
<b>Special conditions of safe use ("X")</b>	<ul style="list-style-type: none"> <li>• The characteristics of cables and accessories must be suitable for the admitted temperature.</li> <li>• The accessories used for cable entries and holes shall be certified and in compliance to the relevant standards.</li> <li>• The accessories used for cable glands entries and for closing holes shall guarantee a degree of protection IP66 according with EN 60034-5 standard and shall be certified according to EN 60079-0 and EN 60079-1 for motor and in according with EN 60079-0.</li> <li>• Only suitably certified glands may be used. All unused entries must be sealed using suitably certified blanking elements.</li> <li>• Supply to the unit must be done in an Ex manner</li> <li>• Corrosion inhibiting grease in accordance with clause 5.2.1 of SANS60079-1 should be used on flamepaths.</li> </ul>

<b>Conditions of manufacture</b>	See Base Certificate *
<b>Conditions of Certification</b>	<ul style="list-style-type: none"> <li>• This IA Certificate covers all units sold from the date of this document to the expiry date of this certificate.</li> <li>• The apparatus must be additionally marked with the MASC marking details above.</li> <li>• 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.</li> <li>• 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.</li> <li>• The certification on which this IA Certificate is based must remain valid.</li> <li>• 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.</li> <li>• The Ex quality assurance notification/report for the equipment must remain valid.</li> <li>• Flame paths must have a surface roughness of less than 6.3µm.</li> </ul>
<b>Conclusion:</b>	<ul style="list-style-type: none"> <li>• 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 *.</li> <li>• The routine tests for production units according to the Base Certificate * must be complied with as well as batch testing or valid mark scheme.</li> </ul>

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