



# Mining And Surface Certification (Pty) Ltd

(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

<b>IA CERTIFICATE</b>	MASC S/19-2137X	<b>Issue</b>	01
<b>Issue Date</b>	26 November 2021	<b>Expiry Date</b>	03 December 2029
<b>Applicant</b>	ZEST WEG Group, 6 Laneshaw Street, Longlake Ext 4, Johannesburg, South Africa		
<b>Manufacturer</b>	ZEST WEG Group, 6 Laneshaw Street, Longlake Ext 4, Johannesburg, South Africa / Cnr Omuramba Rd & Computer Rd, Marconi Beam, Milnerton, Cape Town, South Africa / 51 Island Circle, River Horse Valley Business Estate, Durban, South Africa / 3 Schabert Road, Trichardt, South Africa		
<b>Description (See "Annex A" below)</b>			
<b>Equipment</b>	WEG Range of Motors	<b>Type</b>	W21 / W22
<b>Photo</b>			
<b>MARKING:</b>  <i>Must be additionally applied to the equipment</i>	<b>Applicant / Manufacturer</b>	ZEST WEG Group	
	<b>Type</b>	W21 / W22	
	<b>Ex Marking Rating:</b>	Ex ec IIC T3 Gc Ex nA IIC T3 Gc Ex tb IIIC T125°C Db 400-690V	
	<b>IA Number</b>	MASC S/19-2137X	
	<b>Serial Number</b>	See "Annex A" below	
	<b>Safety Parameters</b>	See "Annex A" below	
<b>WARNING(S)</b>	ISOLATE ELSEWHERE BEFORE OPENING THE COVER		
<b>Compliance:</b>			
The equipment as described above and in MASC report <b>19-2137-R1</b> has been allocated the rating <u>Explosion Protected Ex ec IIC T3 Gc &amp; Ex tb IIIC T125°C Db</u> utilizing the SANS/IEC Standards:			
<ul style="list-style-type: none"> <li>SANS (IEC) 60079-0:2019 General requirements</li> <li>SANS 60079-7: 2015 "Explosive atmospheres" – Part 7: Equipment protection by increased safety "e"</li> <li>SANS (IEC) 60079-15:2010 Equipment protection by type of protection "n"</li> <li>SANS 60079-31:2014 "Explosive atmospheres" –Part 31: Equipment dust ignition protection by enclosure "t"</li> <li>SANS 60529: Degrees of protection provided by enclosures (IP Code)</li> <li>ARP 0108:2014 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>J Peens</b> <b>TECHNICAL SPECIALIST</b>	 <b>M. Erasmus</b> <b>TECHNICAL SPECIALIST</b>		
<p><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.

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



**IA CERTIFICATE: MASC S/19-2137X**  
**Equipment: W21 / 22 Motor Range**  
**(Supplement 1: Aluminum And Cast Iron Material)**

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**ANNEX A**

Description	Enclosure	Populated	Unpopulated
	General	<ul style="list-style-type: none"><li>• The W21 / 22 Motor Range was manufactured by <b>WEG</b>.</li><li>• The W21 / 22 Motor Range of Small Induction Motors shaft center heights ranging from 63mm to 355mm and comprises cast iron (W22) or W21 aluminum frames for horizontal or vertical, foot and/or flange mounting.</li><li>• The flanges may be oversize or undersize as required and the shell provides a degree of protection of at least IP65 for equipment Group II and IP65 for equipment Group IIIC (EPL Db)</li><li>• The range covers 2 to 12 pole 3 phase windings for 50/60Hz and is designed for connection to supplies up to 690V for duty type S1.</li></ul>	
	Dimensions	<ul style="list-style-type: none"><li>• See Above.</li></ul>	
	Covers	<ul style="list-style-type: none"><li>• See Above.</li></ul>	
	Fasteners	See Above. <b>Note:</b> The exact entry combination by the certification drawings. All threaded entries has a pitch of 1.5 and the holes are tapped 6H.	
	Material	<ul style="list-style-type: none"><li>• The unit consisted of a Cast Iron or Aluminium housing.</li></ul>	
	Population	<b>This unit is populated with the following:</b> <ul style="list-style-type: none"><li>• Terminal block</li></ul> <b>If the population is updated from original certification a new layout drawing MUST be submitted to MASC for separate certification.</b>	
Safety Parameters	Volts: 400-690V		
Standard compliance	See “certificate” above		
Warnings	See “certificate” above		
Conditions of Certification			
Special Conditions of safe use (X)	<ul style="list-style-type: none"><li>• The equipment is only permitted to be used with an appropriately certified gland incorporating an earth ring.</li><li>• All terminations should be done in an Ex manner</li><li>• The rating(s) of the unit(s) may not be exceeded.</li><li>• All terminal nuts and screws, whether used or not, shall be correctly tightened.</li><li>• On auxiliary terminals the conductor insulation shall extend to within 1mm of the terminal throat.</li><li>• The installer must ensure that any equipment certified cable glands and stopping plugs fitted to the terminal boxes are suitably IECEx/ATEX approved. Any unused cable entries must be fitted with IECEx/ATEX certified stopping plugs. When installed the cable gland or stopping plug must maintain the marked IP rating of the enclosure.</li><li>• The paint coating of the motors in potentially explosive dust atmospheres may present an electrostatic charging hazard - see the manufacturer's instructions for further information.</li></ul>		
Conditions of manufacture	<ul style="list-style-type: none"><li>• The equipment must be provided with internal and external earthing / bonding facilities e.g. stud, spring washer and nut Non-corrosive.</li><li>• The seals of the unit must remain intact for the IP65 rating</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 will only be supported by MASC for certification purposes within the borders of South Africa and any SADC country as arranged. It is issued based on National interpretations and accepted practices