

(Pty) Ltd

7 Spanner Rd / PO Box 467 Olifantsfontein

1665

Tel: +27 (11) 316 4601 Fax: +27 (11) 316 5670

E-mail: admin-mgr@explolabs.co.za

GOVERNMENT APPROVED TEST LABORATORY

IN TERMS OF ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"

IA CERTIFICATE

Date Issued: 02 May 2017 *Expiry date: 02 May 2020

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Ex – Type Examination Certificate

S-XPL/17.0491 X Certificate Number:

Three phase induction motor Equipment:

Model / Type: Series MGF, MGI, MGL, MGR and MGW

Applicant: Zest WEG Electric (Pty) Ltd

PRIVATE BAG X 10011 SANDTON

2146

Manufacturer: WEG Equipamentos Eletricos S.A

Serial No: All serial numbers imported between issued- and expire date and all serial

numbers covered by a valid report or acceptable product certification mark.

Supplied by

Zest WEG Electric (Pty) Ltd Identified by Inspection Authority number

S-XPL/17.0491 X

And as described in the Explolabs file number XPL/18489/17.0491 is hereby certified "Explosion Protected Ex px IIC T4 or T3 / Ex pz IIC T4 or T3 ", having been examined and inspected in accordance with the relevant requirements of South African Standards.

SANS 60079-0: 2012 Ed 5	Explosive atmospheres Part 0: Equipment — General requirements
IEC 60079-0: 2011 Ed 6	
SANS 60079-2: 2015 Ed 4	Explosive atmospheres Part 2: Equipment protection by pressurized enclosures < <p>>></p>
IEC 60079-2: 2014 Ed 6	Explosive difficulties fait 2. Equipment protocolor by procedures cholocolog caps

Locations Zone 2 Gas: Surface

Frequency Continuous / Intermittent as could occur under normal operation

Group IIC Propane to Hydrogen plus Acetylene Environment

T4/T3 Limiting Temp. 135°C / 200 °C

This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 9(2) of the Occupational Health and Safety Act, provided 🎒 that the apparatus is used as relevant in accordance with:

SANS 10086 and IEC/SANS 61241-14 requirements as applicable;

Any conditions mentioned in the above report:

iii) Any relevant requirements and codes of practice enforced in terms of the Mine Health and Safety Act or Occupational Health and Safety Act;

Any restrictions and conditions enforced by the Chief Inspector of Mines or the Principal Inspector or the Chief Inspector: Occupational Health and Safety.

A revision certificate replaces all previous version of the certificate

- Only covers equipment Imported between the "Issued" and "Expire" dates.

If and when your QAN (Quality Assurance Notification) Certificate for your equipment manufacturer expires during the valid period of the IA Certification (issued for your equipment) and a new certificate is not submitted the existing IA Certification will then be cancelled. It is thus the client's responsibility to always submit the updated and valid QAN certificate(s) to Explolabs (Pty) Ltd.

> DOCUMENT No: XPL0213 RELEASE DATE: 06/10/2015





ANNEX TO CERTIFICATE NO S-XPL/17.0491 X

GENERAL

The M line range of induction motors (types: MGI, MGF, MGL, MGR, MGW sizes: 400, 450, 500, 560, 630, 710, 800, 900, 1000, 1120, 1250 (NEMA equivalent) with a range of 2 to 24 poles, 3 phase winding for 50Hz or 60Hz and up to 13.8kV, material comprised cast iron or fabricated mild steel frames for horizontal or vertical, foot or flange mounting) is currently certified under IECEx TUR 10.0013X and has been assessed to IEC 60079-0:2007-10, IEC 60079-2:2007-02. The motor can optionally be used as a generator.

- The possible ambient temperature range changed to -60°C to +55°C. It has to be verified for each motor individually and depends on the range of suitable materials, accessories, equipment and use of the de-rating data.
- Standard update to IEC 60079-0:2011 and IEC 60079-2:2014
- additional equipment and components were added

2. INSTALLATION INSTRUCTIONS

It is the manufacturer's responsibility to supply installation instructions with each unit offered for sale as required by IEC/SANS 60079-0 Clause 30.

- **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after certificate number) 3.
 - 1. The installer must ensure that any equipment certified cable gland and stopping plugs fitted to the terminal box are suitably IECEx/ATEX certified. Any unused cable entries must be fitted with IECEx/ATEX certified stopping plugs. When installed the cable grand or stopping plugs must maintain the marked IP rating of the enclosure.
 - 2. On auxiliary terminals the conductor insulation shall extend to within 1mm of the terminal throat.
 - 3. Motor designed for T4 and variable frequency drives are fitted with stator winding temperature detection devices that must be connected to the motor control circuit. For other stating methods, the connection of the winding temperature detectors is optional. The stator RTDs and thermistors can be connected via a standard industrial controller provided that the controller is located in a non-hazardous area.
 - 4. Anti-condensation heaters shall not be energized when the machine is energized.
 - 5. When auxiliary apparatus is fitted that is not covered by this certificate the installer and/or user, as appropriate, must ensure that it is suitable for the conditions of use and that it does not invalidate this certificate.
 - 6. The special conditions from each accessories that have their own IECEx/ATEX certificate has to be fulfilled.
 - 7. When the machine is being used as an asynchronous generator precautions must be taken for start-up and operation to ensure the requirements of the certification are meet. Refer to the manufacturers Installation, Operation and Maintenance Manual for full details.
 - 8. The manufacturer has to declared each motor according to Zone and temperature class which the motor can be used.
 - 9. The equipment must have a label indicating the direction of rotation.
 - 10. It is the users responsibility to assure that the motors will be installed in accordance with the pertinent standard for "Electric Installations in Explosives Atmospheres" (IEC 60079 -14) and to manufacturer's recommendationalt is the users responsibility to assure that the motors will be installed in accordance with the pertinent standard for "Electric Installations in Explosives Atmospheres" (IEC 60079 -14) and to manufacturer 's recommendations

Based on the following documentation: IECEX TUR 10.0013X

DOCUMENT No: XPL0213

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ANNEX TO CERTIFICATE NO S-XPL/17.0491 X CONDITIONS OF CERTIFICATION

• All production units must be covered by a QAN (Quality Assurance Notification), Product Mark Scheme or batch evaluation.

5. MARKING

The following (or similar) information have to be clearly and permanently marked on all units:

Supplier : Zest WEG Electric (Pty) Ltd
Manufacturer : WEG Equipamentos Eletricos S.A
Equipment : Three phase induction motor

Model/Type : Series MGF, MGI, MGL, MGR and MGW

Serial No. : ---

Ex Rating : Ex px IIC T4 or T3 / Ex pz IIC T4 or T3

IA Certificate No : S-XPL/17.0491 X

Responsible Testing Officer:

Reviewed by:

D Maree Senior Testing Officer

H De Wet Testing Officer

EXPLOLABS EXPLOSION PREVENTION SERVICES

This report/certificate shall not be reproduced except in full without the written approval of the company Explolabs (Pty) Ltd shall not be liable for any losses or damages sustained on account of any failure or omission to properly perform our duties in terms of any contract undertaken by us. This disclaimer is immutable and automatically incorporated in any contract undertaken by us; notwithstanding anything to the contrary, save for the express written waiver of our managing director. By marking the equipment in accordance with the documentation/standard, the manufacturer attests on his own responsibility that the equipment has been constructed in accordance with the applicable requirements of the relevant standards and that the routine verifications and tests have been successfully completed and that the product complies with the documentation and standard(s). The contents of electronic reports/certificates cannot be guaranteed. Original certification documents will be kept on file at Explolabs (Pty) Ltd

DOCUMENT No: XPL0213 RELEASE DATE: 06/10/2015 REV