

Issue Date: 30 November 2017 Expiry Date: 30 November 2020



IA Certificate Number: Our ref

MASC S/17-2554 17-2554

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IA – CERTIFICATE

(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)

Explosion proof light fittings for fluorescent lamp Type: BAY51.-..

This document is based on and must be read in conjunction with certificate LCIE 09 ATEX 3046.

Further to your request, we have evaluated the supplied documentation.

| Description | | Detail | |
|--|--------------|--|--|
| Requested By : | | ACDC Dynamics 26 Nguni Drive, Longmeadow West, Edenvale, South Africa | |
| Equipment | : | Explosion proof light fittings for fluorescent lamp | |
| Manufacturer | : | WAROM Technology Incorporated Company No 555 Baoqian Road, Jiading District, Shanghai, China | |
| Model(s) / Type(s) | : | BAY51 | |
| Rating | : | II 2 G D Ex d IIC T6 Gb | |
| | | Ex tb IIIC T80°C Db IP66 | |
| Certification body | : | LCIE | |
| Type Certificate No : | | LCIE 09 ATEX 3046 | |
| Variations/Issue/Amendment : | | 03 | |
| Assessment Report No : | | No 116276-632188-05 | |
| Quality Assurance report / Notification (QAN) | : (QAR) : | It is a requirement under ATEX that all equipment for category 1 and 2 areas must have 3rd party quality assurance from a notified body. This is accepted to cover the equipment's quality requirements. | |

The following is applicable:

| Standards: | - EN 60079-0 | (2009) | "General requirements" |
|------------|---------------|--------|---|
| | - EN 60079-1 | (2007) | "Equipment protection by flameproof enclosures 'd'" |
| | - EN 60079-31 | (2009) | "Equipment dust ignition protection by enclosures 't' |

/. Standards...

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Mining And Surface Certification (Pty) Ltd Reg No: 2015/021934/07 Directors: Roelof Viljoen & Francoius du Toit Unit #5, Lelyta Park, 45 Jurg Avenue, Hennopspark Ext 87, Centurion, 0157 0 P.O. Box 14344, Clubview, 0014 Tel: 012 653 2959 ◊ Fax: 086 605 8568 e-mail: info@masc-ex.co.za

COMPLIANCE:

The equipment as described below is hereby certified <u>"Explosion Protected" Ex d IIC T6 Gb, Ex tb IIIC T80°C Db</u> <u>IP66</u> and is suitable for use in hazardous locations as stated below and as tested, assessed and inspected in accordance with the relevant requirements of SANS / IEC Standards:

The evaluation was conducted according to the requirements of:

- SANS (IEC) 60079-0 : 2011 "Explosive atmospheres Part 0: Equipment General requirements"
- SANS (IEC) 60079-1 : 2009 "Explosive atmospheres Part 1: Equipment protection by flameproof enclosures 'd'"
- SANS (IEC) 60079-31 : 2009 "Explosive atmospheres Part 31: Equipment dust ignition protection by enclosures 't'"

| Location | Zone 1, 2 Zone 21, 22 | Gas Surface Dust |
|-----------------------------|--------------------------|---|
| Hazard Frequency | | Intermittent as could occur under normal operating conditions in hazardous area |
| Environment | Group IIC Group IIIC | Propane to Hydrogen/Acetylene Conductive dust |
| Surface Temperature | T6 T80°C | 85°C |
| Service/Ambient Temperature | | |

The use of apparatus in hazardous locations is subject to the following provisions as applicable, which shall be adhered to:

- i. SANS 10086 requirements;
- ii. Any conditions mentioned in the above document;
- iii. Codes of Practice enforced in terms of Regulations 21.17.2 of Minerals Act, by Chief Inspector of Mines;
- iv. Any restrictions and conditions enforced by Chief Inspectors of Mines, Principal Inspector (Group I equipment) of Chief Inspector of Factories (Group II equipment);
- v. Any relevant requirements of the MHS Act or the OHS Act.

DESCRIPTION OF EQUIPMENT (According to LCIE Certificate):

The light fitting consists of one or two flameproof enclosures.

Each enclosure consists mainly of:

- An aluminium alloy compartment (including a built-in electronic ballast and terminals)
- A glass tube containing the light source (fluorescent lamp)

The apparatus can be single or dual, and pole, ceiling or pendant mounted.

Specific parameters of the mode(s) of protection concerned:

Rated Voltage:100-300V ACPower:1x18W and 2x18W, 1x36W and 2x36W, 1x58W and 2x58WWarning (on label):

• Do not open when energized

MARKING:

LCIE marking remains applicable. The following MASC Certificate number (IA number) must be additionally applied to the equipment.

IA No: MASC S/17-2554

/. CONDITIONS...

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CONDITIONS OF MANUFACTURE:

- None

SPECIAL CONDITIONS OF USE (X):

- None

CONDITIONS OF CERTIFICATION:

- 1. This IA Certificate covers all units sold from the date of this document to 30 November 2020.
- 2. As per ARP 0108 a three yearly review is required on this IA Certificate.
- 3. The apparatus must be additionally marked with the MASC marking details above.
- 4. 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.
- 5. The equipment does not need to be re-tested when used on the conditions and with such restrictions as prescribed by LCIE and in this approval.
- 6. The LCIE certification must remain valid.
- 7. The extent of the requirements in the ARP 0108 (or regulations) and SANS 10108 on the certification of the equipment must remain unchanged.
- 8. The Ex quality assurance notification/report for the equipment must remain valid.

CONCLUSION:

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 by LCIE.

The routine tests for production units according to the LCIE Certificate must be complied with (if applicable).

Yours faithfully

A. Kodekemoer TECHNICAL SPECIALIST

F du Toit TECHNICAL SPECIALIST

Mining And Surface Certification

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 is representative and accurately performed, and that a report is accurate in the quoted results and conclusions drawn from the test / assessment, MASC or its members/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 issued pursuant to a test / assessment.

MASC takes no responsibility for any non-conformances, exclusions or any results / assessments not in compliance with the standards. 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 routine tests have been successfully completed and the product 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 practises.

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