



# Mining And Surface Certification (Pty) Ltd

2015/021934/07



**Certificate Number:** MASC M/15-1813  
**Issue:** 27 June 2024  
**Expire:** 05 January 2026  
**Page:** 1 of 3

## IA – CERTIFICATE (Supplement 4 – to include dimensional changes)

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

Ex – Type Examination

Certificate number:

**MASC M/15-1813**

Equipment:

Stop / Start Station

Serial No:

(See “Conditions of Certification”)

Applicant:

Electroflame (Pty) Ltd

Address:

83 Brand Street,  
President Park  
Midrand  
South Africa

Manufacturer:

Electroflame (Pty) Ltd

Address:

83 Brand Street,  
President Park,  
Midrand  
South Africa

### DESCRIPTION:

The Stop / Start Station consist of a machined steel billet body with bolted lid and base plate. Six M6 (grade A2-70) fasteners is used to secure the lid to the body. The lid housed a Stop and a Start switch. The unit have approximate dimensions of 130mm in diameter by 85mm in height.

### Entries on the enclosure:

The unit have either two M20 x 1.5 or M25 x1.5 threaded entries.

### Supplementary 4:

The Stop / Start Station consist of a machined steel billet body with bolted lid and base plate. Six M6 (grade A2-70) fasteners is used to secure the lid to the body. The lid housed a combination of a Stop and a Start switch with a maximum of three Switches. The unit have dimensions of 130mm in diameter by 91.5mm in height.

The unit have an option two x M25 x1.5 threaded entries or a maximum of three M20 x 1.5 threaded entries

**Note:** The exact entry combination by the certification drawings. All threaded entries have a pitch of 1.5 and the holes are tapped 6H.

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**IA CERTIFICATE NUMBER: MASC M/15-1813**  
**Stop / Start Station**

Page 2 of 3

**MARKING:**

**Applicant:** Electroflame (Pty) Ltd  
**Manufacturer:** Electroflame (Pty) Ltd  
**Type:** Stop / Start Station  
**Serial No:** (See "Conditions of Certification")  
**Ex Rating:** Ex db I Mb  
**I.A. No:** MASC M/15-1813

**WARNING:** "ISOLATE ELSEWHERE BEFORE OPENING THIS COVER" and  
"DO NOT OPEN WHEN ENERGIZED OR AN EXPLOSIVE ATMOSPHERE IS PRESENT".

**COMPLIANCE:**

The equipment as described above and in MASC report 15-1813-R3 is hereby certified Explosion Protected Ex db I Mb 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:**

- i) SANS (IEC) 60079-0: 2019 General Requirements
- ii) SANS (IEC) 60079-1: 2015 Equipment protection by flameproof enclosures 'd'
- iii) ARP 0108: 2018 "Regulatory requirements for explosion protected apparatus".

*Note: This certificate covers only the listed standards and does not imply compliance to any other standard, related or inferred. It is up to the manufacturer to ensure that the product complies to all relevant standards for the application.*

|                      |                |   |
|----------------------|----------------|---|
| Location             | Zone 1 & 2     | Mining  |
| Hazard Frequency     | ---            | Intermittent as could occur under normal operating conditions in hazardous area |
| Environment          | Group I        | Methane (coal dust)   |
| Limiting Temperature |                | 150°C   |
| Ambient Temperature  | -20°C to +40°C |   |

**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 report;
- iii. Any restrictions and conditions enforced by Chief Inspectors of Mines, Principal Inspector (Group I equipment) of Chief Inspector of Factories (Group II equipment);
- iv. Any relevant requirements of the MHS Act or the OHS Act.

**CONDITIONS OF CERTIFICATION:**

**SPECIAL CONDITIONS OF USE "X":**

- None

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**IA CERTIFICATE NUMBER: MASC M/15-1813**  
**Stop / Start Station**

Page 3 of 3

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**CONDITIONS OF MANUFACTURE:**

- A routine overpressure test of 600kPa must be conducted on each compartment of all production enclosures, according to the requirements of SANS 60079-1.
- The equipment must be provided with internal and external earthing / bonding facilities e.g. stud, spring washer and nut (Stainless steel) Non-corrosive.
- The hole under the fastener must comply with a tolerance of H13.
- No cells or batteries may be used/ housed in the equipment.
- The flame path lengths shall not be less than (L = 19.5mm, l = 9.4mm) and the flame path gap shall not exceed 0.4mm.
- The equipment shall comply with the safety requirements of the applicable industrial standards.
- A copy of the type MASC certificate must be issued with each enclosure.
- A copy of the instruction / parts manual and the type certificate must be provided with each enclosure.

**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.)**

**Approved on behalf of MASC**

**W. Haywood**  
**TECHNICAL SPECIALIST**

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

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