



Mining And Surface Certification (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

IA CERTIFICATE	MASC S/25-2083X	Issue	0
Issue Date	17 April 2025	Expiry Date	17 April 2035
Applicant	Electroflame (Pty) Ltd, 83 Brand Street, President Park, Midrand, South Africa		
Manufacturer	Electroflame (Pty) Ltd, 83 Brand Street, President Park, Midrand, South Africa		
Description (See "Annex A" below)			
Equipment	Light module	Type	Comet Light Bulkhead & Comet Light Fitting
Photo			
MARKING: <i>Must be additionally applied to the equipment</i>	Applicant / Manufacturer Type Ex Marking IA Number Rating	Electroflame (Pty) Ltd. As applicable "Type" above Ex ec mc IIC T4 Gc Ex tb IIIC T85°C Db IP65 MASC S/25-2083X As per description below	
WARNING(S)	"DO NOT OPEN WHEN ENERGIZED"		
Compliance:			
The equipment as described above and in report MASC 25-2083 has been allocated the rating <u>Explosion Protected "as above"</u> utilizing the SANS/IEC Standards:			
<ul style="list-style-type: none"> SANS 60079-0: 2019 General requirements SANS 60079-7: 2023 Equipment protection by increased safety "e" SANS 60079-18: 2022 Equipment protection by encapsulation "m" SANS 60079-31: 2023 Equipment dust ignition protection by enclosure "t" SANS 60529: 2013 Degrees of protection by enclosures (IP Code) ARP 0108: 2018 Regulatory requirements for explosion protected apparatus NCOP 2398: 2022 National Code of Practice for Electrical Machinery in Hazardous Locations - Regulatory requirements for explosion-protected apparatus 			
Conditions:			
<ul style="list-style-type: none"> This certificate covers only a national implementation of above standards for use in South African industry. It is up to the manufacturer to ensure that the product complies to all relevant standards for the application. This document will not be supported by MASC outside the borders of South Africa and may not be used for other/international certification purposes. This certificate may only be reproduced in full, is not transferable and remains the property of the issuing body. This certificate only covers the sample submitted and does not cover production units. 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 markscheme or batch testing by an accredited test laboratory). 			
Specific conditions of use:		Conditions of manufacture:	
• See "ANNEX A" below		• See "ANNEX A" below	
M. Erasmus TECHNICAL SPECIALIST		W. Haywood TECHNICAL SPECIALIST	



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;
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
The certificate is not transferable and remains the property of the issuing body.

IA CERTIFICATE: MASC S/25-2083X
Equipment: Comet light Bulkhead & Comet Light Fitting

ANNEX A

Description	Enclosure	Populated	Unpopulated
		General	<p>LIGHT MODULE: The Light Module includes a cast aluminium head piece and cast aluminium base plate attached back-to-back to each other by 4 screws and 4 rubber sealing grommets.</p> <p>The head piece is populated with the LED PCB and optional lenses and is enclosed with a 4mm glass diffuser and 5mm seal clamped in place by means of stainless steel retaining plates bolted in place with 18 fasteners and spring washers.</p> <p>The base plate is populated with the control gear, optional encapsulated surge arrestor and male electrical supply plug.</p> <p>Supply cables from the head piece to the base plate control gear box are protected and sealed off by means of a through wire rubber seal.</p> <p>LID ASSEMBLY: The Lid Assembly includes a female electrical supply socket that aligns with the Light Module male electrical supply plug. Six stainless steel clips are attached to the Lid assembly, three per side, by means of retainer plates and M4 screws.</p> <p>Furthermore, the lid provides for up to two threaded entries for the supply cable glands.</p> <p>COMET LIGHT BULKHEAD: The Comet Light Bulkhead consist of a <u>Light Module</u> attached to a <u>Lid Assembly</u> by means of the 6 stainless-steel clips. One clip on each side includes a M4 safety lock screw. Sealing between the Light Module and Lid Assembly is accomplished with a continuous seal between the components.</p> <p>The Lid Assembly is typically mounted to a fixed point with the Light Module being able to be detached off the Lid Assembly and replaced using the stainless-steel clips.</p> <p>Where the Bulkhead is to be supplied as a field installed fitting, suitably approved Ex glands are used. In this case up to 6A through wire installation may be utilised.</p> <p>COMET LIGHT FITTING: The Comet Light Fitting consist of up to three Comet Light Bulkheads and an optional Terminal Box secured to a stainless-steel frame to be used as one fitting.</p> <p>The optional Terminal Box includes supply terminal connections and an optional encapsulated surge arrestor. Furthermore, the Terminal Box provides two threaded entries for cable glands.</p> <p>Interconnection cables between the Bulkheads and Terminal Box that are factory installed may be steel industrial gland. All field connections are made utilizing suitably approved Ex glands.</p>
	Dimensions	Comet Module 205mm x 120mm x 85mm	
	Ratings	The Comet can be supplied in three variants: <ul style="list-style-type: none"> • 7 LED PCB 32V • 9 LED PCB 32V • 9 LED PCB 50V with a maximum of 60 watts 	
Standard compliance	See "certificate" above		
Warnings	See "certificate" above		
Conditions of Certification			
Specific conditions of use	<ul style="list-style-type: none"> • This approval only covers the equipment as tested. It is incumbent on the client/end-user to maintain the Ex-characteristics of the equipment as required by the relevant legislation and standards mentioned above. • The manufacturer's ratings of the equipment may not be exceeded. • M4 Lock Screws must be installed during maintenance of the unit. • A maximum looping current of 6A on the Comet Light Bulkhead only, is permitted. • Installation / supply cable shall comply with suitable current rating as applicable, keeping in mind the deratings for ambient / service temperatures. • Special conditions of individually certified components remain applicable (if applicable). 		

This document may only be reproduced in full.
 This certificate is not transferable and remains the property of the issuing body.
 This document will not be supported by MASC for certification purposes outside the borders of South Africa.

IA CERTIFICATE: MASC S/25-2083X
Equipment: Comet light Bulkhead & Comet Light Fitting

Page 3 of 3

	<ul style="list-style-type: none">• Only suitably certified glands, adaptors, blanking plugs may be used in all apertures.<ul style="list-style-type: none">○ The equipment / components' certification conditions / schedule of limitations must be complied with.○ All unused entries must be sealed using suitably certified blanking elements.
Conditions of manufacture	<ul style="list-style-type: none">• The labels with information / certification details as indicated in this certificate must be maintained on the enclosure, the label must be legible and indelible permanently fixed to the apparatus.• It is a condition of certification that a copy of this certificate and instructions must be provided / made available with each assembly.

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.

This document may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing body.

This document will not be supported by MASC for certification purposes outside the borders of South Africa.

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
P.O. Box 14344, Clubview, 0014
Tel: 012 653 2959 ♦ Fax: 086 605 8568
e-mail: info@masc-ex.co.za
