



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

IA CERTIFICATE	MASC S/22-2209X	Issue	0
Issue Date	25 July 2022	Expiry Date	25 July 2032
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	Limit Switch MK1	Type	Limit Switch MK1
Photo			
MARKING: <i>Must be additionally applied to the equipment</i>	Applicant / Manufacturer Type Ex Marking Electrical Rating(s): IA Number Serial Number	Electroflame (Pty) Ltd Limit Switch MK1 Ex eb IIC T6 Gb Ex tb IIIC T85° Db IP65 See "Annex A" below MASC S/22-2209X See "Annex A" below	
WARNING(S)	"ISOLATE ELSEWHERE BEFORE OPENING THE COVER"		
Compliance:			
The equipment as described above and in MASC report 22-2209 has been allocated the rating <u>Explosion Protected Ex eb IIC T6 Gb & Ex tb IIIC T85° Db IP65</u> utilizing the SANS/IEC Standards: <ul style="list-style-type: none"> SANS (IEC) 60079-0: 2019 General requirements SANS (IEC) 60079-7: 2019 Equipment protection by increased safety "e" SANS (IEC) 60079-31: 2014 Equipment dust ignition protection by enclosure "t" ARP 0108: 2018 Regulatory requirements for explosion protected apparatus <i>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.</i>			
Special conditions of safe use X:			
<ul style="list-style-type: none"> See 'Annex A' below 			
Conditions of manufacture:			
<ul style="list-style-type: none"> See "Annex A" below 			
 C. Welthagen TECHNICAL SPECIALIST		 M. Erasmus TECHNICAL SPECIALIST	
<p style="text-align: center;">This certificate only covers the sample submitted and does not cover production units.</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;

Any restrictions and conditions enforced by the chief inspector of mines, principal inspector (Group I equipment) or chief inspector of factories (Group II equipment).



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Equipment: Limit Switch MK1

ANNEX A

Description	Enclosure	Populated	Unpopulated
	General		<ul style="list-style-type: none"> The limit Switch was manufactured by Electroflame. The Limit Switch consist of a metallic housing, lid and head unit. Supply to the unit is done with a permanently connected cable through a suitably certified gland at the tail-end of the Limit Switch.
Dimensions		The unit have approximate dimensions of 100mm in length, 40mm wide and 42mm height.	
Covers / Seals		The unit maintain an IP65 rating by means of a continuous seal between the lid and housing. An O-ring is utilised on the operating rod mechanism.	
Fasteners		Two M4 x 0.7 x 10mm (Lid of unit) Four M4 x 0.7 x 22mm (Head unit)	
Material		Aluminium Alloy	
Population		<p>This unit is populated with the following:</p> <ul style="list-style-type: none"> Limit Switch <p>If the population is updated from original certification a new layout drawing MUST be submitted to MASC for separate certification.</p>	
Electrical ratings	250VAC 5A 400VAC 2A 250VDC 0.5A		
Standard compliance	See "certificate" above		
Warnings	See "certificate" above		
Conditions of Certification			
Special Conditions of safe use (X)	<ul style="list-style-type: none"> All terminations should be done in an Ex manner The Limit Switch shall be used within its operating range and rating according to manufacturer's documents and marking. The unit to be installed with supply cable incorporating an earthing or equipotential bonding conductor. 		
Conditions of manufacture	<ul style="list-style-type: none"> The seals of the unit must remain intact for the IP65 rating. 		

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

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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, Hennospark 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