Mining And Surface Certification (Pty) Ltd

2015/021934/07

FOR USE AS PART OF COMPLIANCE TO 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

IA CERTIFICATE	MASC M/18-2619X	**Issue**	1	
Issue Date	10 February 2022	**Expiry Date**	10 February 2025	
**** Based on Certificate No**	IECEx TSA 13.0005X	**Issue / Variations / Amendment**	5	
Requested by	CMI Electrical Products A Division of CMI Operations (Pty) Ltd, 18-20 Railway Road, Meadowbank, NSW 2144, Australia			
Manufacturer	CMI Electrical Products A Division of CMI Operations (Pty) Ltd, 18-20 Railway Road, Meadowbank, NSW 2144, Australia			
Description	Range of 300/425 Amp 3300/1100/660 V Restrained Plugs, Dummy Plugs, Phase Condition Indicator Plugs, Back to Back Receptacles, Restrained Receptacles and Restrained Receptacles with cable gland and bracket			
Equipment	Range of 300/425 Amp 3300/1100/660 V Restrained Plugs, Dummy Plugs, Phase Condition Indicator Plugs, Back to Back Receptacles, Restrained Receptacles and Restrained Receptacles with cable gland and bracket	**Type**	Range of 300/425 Amp 3300/1100/660 V Restrained Plugs, Dummy Plugs, Phase Condition Indicator Plugs, Back to Back Receptacles, Restrained Receptacles and Restrained Receptacles with cable gland and bracket	
MARKING: **Original marking as per certificate ** remains applicable.** **IA number must be added.**	**Type:** **Ex Marking:**	*As stated above 1. # Volts: 6=660V, 1=1100V, 3=3300V. 2. @ Nose Cone: S=ST. Steel, Blank=Bronze. 3. * Gland: 3=Small, 4=large.		
	IA Number:	MASC M/18-2619X (To be additionally marked on equipment)		
	Warnings:	See Base Certificate ** (original marking must be applied)		
Quality Assurance report (QAR) / Notification (QAN) Expiry date:	AU/TSA/QAR11.0009/07 (Expiry: 12/11/2023)			

Compliance:

The equipment as described above has been allocated the rating Explosion Protected 'as above' utilizing the SANS/IEC Standards:

- SANS (IEC) 60079-0: 2019 (2017) Equipment - General requirements
- SANS (IEC) 60079-1: 2015 (2007-4) Equipment protection by flameproof enclosures 'd'

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.

Special conditions of safe use "X":

- Refer to Annex A below for more details.

Conditions of manufacture:

- Refer to Annex A below for more details.

G Schepers
TECHNICAL SPECIALIST

R.F Booysen
TECHNICAL SPECIALIST

This certificate covers all units sold as long as the QAR/QAN remains valid.
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).

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 report
Any restrictions and conditions enforced by the chief inspector of mines and chief inspector of factories
Any relevant requirements of the MHS Act

Mining And Surface Certification (Pty) Ltd
Unit 5 Lelyta Park, 45 Jurg Avenue, Hennopspark, Ext 87
Centurion 0157

IA CERTIFICATE: MASC M/18-2619X

Equipment: Range of Plugs, Receptacles and Cable Gland Bracket

(Expiry date: 10 February 2025)

ANNEX A

This document is based on and must be read in conjunction with certificate IECEx TSA 13.0005X

Description (According to Base Certificate) **

"Refer to description in Base Certificate ** (and any applicable schedules/issues/variations)."

Standard compliance

The equipment as described below is hereby certified "Explosion Protected" Ex d I Mb IP66/68* 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 : 2012 "Explosive atmospheres – Part 0: Equipment — General requirements"
- SANS (IEC) 60079-1 : 2009 "Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures 'd'"
- SANS 1489-1 : 2014 "Electrical connectors in group I and group II hazardous areas – Part 1: General requirements for group I hazardous areas"
- SANS 1489-2 : 2013 "Electrical connectors in group I and group II hazardous areas – Part 2: Restrained type plugs and sockets for group I hazardous areas"

Location	Zone 1	Mining
Hazard Frequency	---	Intermittent as could occur under normal operating conditions in hazardous area
Environment	Group I	Methane / Coal dust
Surface Temperature	Surface 150°C	
Service/Ambient Temperature	-20 ºC to +40 ºC	

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.

Special conditions of safe use ("X")

- Some flameproof joints have dimensions that are different than the values given in Table 1 of IEC 60079-1. Refer to the manufacturer's drawings for details.
- The width of flamepath flange joint between the receptacle and the Ex d Enclosure shall be with flamepath minimum width L = 12.5 mm and maximum gap i = 0.4 mm. Refer to the manufacturer's drawings for details.

Conditions of manufacture

- As above

Conditions of Certification

- This IA Certificate covers all units sold from the date of this document to the expiry date of this certificate.
- As per ARP 0108 a maximum three yearly review is required on this IA Certificate (expiry is determined as per the QAR/QAN/QMS expiry date).
- The apparatus must be additionally marked with the MASC marking details above.
- 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.
- The equipment does not need to be re-tested when used on the conditions and with such restrictions as prescribed by the certificate on which this IA Certificate is based and any other conditions in this IA Certificate.
- The certification on which this IA Certificate is based must remain valid.
- The extent of the requirements in the ARP 0108 (or regulations), SANS 10108 and any other applicable regulations on the certification of the equipment must remain unchanged.
- 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 as per the Base Certificate **.
- The routine tests for production units according to the Base Certificate ** must be complied with (if applicable).

Mining and Surface Certification (Pty) Ltd Reg No: 2015/021934/07
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