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 MS/26-8010X	**Issue**	0
Issue Date	15 January 2026	**Expiry Date**	15 January 2029
**** Based on Certificate No**	IECEx ULD 24.0028X	**Issue / Variations / Amendment**	0
Requested by	**Pepperl+Fuchs (Pty) Ltd** 8 Glen Eagle Office Park, Koorsboom Ave, Glen Marais, Kempton Park, 1619 , South Africa		
Manufacturer	**Pepperl+Fuchs SE** Lilienthalstrasse 200, 68307 Mannheim, Germany		
Description	The Voltage Repeater types KCD2-VR4-Ex1(.2)(.SP)* and KCD2-VR4-Ex1.B(2)(.SP)* are designed to restrict the transfer of energy from unspecified non-hazardous area apparatus to intrinsically safe vibration sensors, displacement probes and accelerometers located in the hazardous area and provide galvanic isolation between the hazardous and non-hazardous area circuits. The apparatus provides a floating output to power a vibration sensor, displacement probe or an accelerometer in a hazardous area, and transfers the signal from the sensor to the non-hazardous area. The terminal plugs and sockets are numbered and colour coded to make incorrect connections improbable. The device is powered at nominal 24V dc either via screw/spring terminals or through the Power-Rail. The devices are designed as associated apparatus and can be installed in the non-hazardous area or in areas requiring EPL Gc equipment. See Base Certificate** for full description and Annex for additional information.		
Equipment	Voltage Repeater	**Type**	KCD2-VR4-Ex1(.SP)*, KCD2-VR4-Ex1.2(.SP)*, KCD2-VR4-Ex1.B(.SP)*, KCD2-VR4-Ex1.B2(.SP)*
MARKING: **Original marking as per certificate ** remains applicable.** **IA number must be added.**	**Type:** **Ex Marking:** **IA Number:** **Warnings:**	Voltage Repeater - KCD2-VR4-Ex1(.SP)*, KCD2-VR4-Ex1.2(.SP)*, KCD2-VR4-Ex1.B(.SP)*, KCD2-VR4-Ex1.B2(.SP)* Ex ec [ia Ga] IIC T4 Gc [Ex ia Da] IIIC [Ex ia Ma] I -40°C to +70°C Any temperature range within these limits may also be printed, e.g. -20°C ≤ Ta ≤ +60°C MASC MS/26-8010X (To be additionally marked on equipment) See Base Certificate ** (original marking must be applied)	
Quality Assurance report (QAR) / Notification (QAN):	HR/FIDI/QAR24.0001/01		

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 Equipment - General requirements
- SANS (IEC) 60079-7: 2019 Equipment protection by increased safety "e"
- SANS (IEC) 60079-11: 2024 Equipment protection by intrinsic safety "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.

Specific conditions of use "X":

- Refer to Annex A below for more details.

Conditions of manufacture:

- Refer to Annex A below for more details.

S. JORDAAN
TECHNICAL SPECIALIST

N. VILOJEN
TECHNICAL OFFICER

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 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.

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

IA CERTIFICATE: MASC MS/26-8010X
Equipment: Voltage Repeater
(Expiry date: 15 January 2029)

ANNEX A

This document is based on and must be read in conjunction with certificate IECEx ULD 24.0028X.	
Description (According to Base Certificate) **	
"Refer to description in Base Certificate ** (and any applicable schedules/issues/variations)."	
Standard compliance	See Base Certificate ******
Specific conditions of use ("X")	• The device must be installed and operated only in a controlled environment that ensures a pollution degree 2 (or better) according to IEC 60664-1. Additional requirements for installation in areas requiring Equipment Protection Level Gc: • The device must be installed and operated only in the surrounding enclosure that complies with the requirements for the surrounding enclosures according to IEC 60079-0, is rated with the degree of protection IP54 according to IEC 60529. • Connection or disconnection of energized non-intrinsically safe circuits is only permitted in the absence of a potentially explosive atmosphere. Additional requirements for Associated Apparatus: • When installed in a non-hazardous area the device may be used up to an altitude of 4250 m.
Conditions of manufacture	• None.
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: 2018 / NCoP 2398: 2022 (as applicable) 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 0108:2018 / NCoP 2398: 2022 (as applicable), 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).

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
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