GOVERNMENT APPROVED INSPECTION AUTHORITY

Mining And Surface Certification (Pty) Ltd

2015/021934/07

IN TERMS OF 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 MS/18-2258X		**Issue**	1	
Issue Date	10 August 2021		**Expiry Date**	23 July 2024	
***Based on Certificate No**	IECEx BAS 13.0057X		**Issue / Variations / Amendment**		1
Requested by	Pepperl+Fuchs (Pty) Ltd 1st fl Zerwick Forum, Glen Eagle Office Park, Cnr Monument Rd and Braambos St, Glen Erasmia, Kempton Park 1619, South Africa				
Manufacturer	Pepperl+Fuchs SE Lilienthalstrasse 200, 68307 Mannheim Germany				
Description	The Universal Temperature Converter Type KCD2-UT2-Ex1.. is designed to transfer a signal from TC/mV, RTD (2, 3 or 4-wire) or Potentiometer in a hazardous area to unspecified apparatus located in a non-hazardous area. The hazardous area circuit is galvanically isolated from the non-hazardous area circuit using a transformer and opto-couplers and the voltage and current appearing at the hazardous area connectors are limited to intrinsically safe levels. The Universal Temperature Converter Type KCD2-UT2-Ex1.. comprises a number of electronic components including an isolating transformer, two opto-isolators, fuses, zener diodes and resistors all mounted on a single printed circuit board and housed in a plastic enclosure with removable terminals and PowerRail contacts. LEDs provide status indication. Different versions are identified as follows: KCD2-UT2-Ex1-*, where * is nothing for a current output or 1 for a voltage output. See Annex for electrical data.				
Equipment	Universal Temperature Converter		**Type**	KCD2-UT2-Ex1..	
MARKING: **Original marking as per certificate * remains applicable.** **IA number to be added.**	**Type**	Universal Temperature Converter Type KCD2-UT2-Ex1..			
	Ex Marking	[Ex ia Ga] IIC (-20°C < Ta < +60°C / +70°C) [Ex ia Da] III C (-20°C < Ta < +60°C / +70°C) [Ex ia Ma] I (-20°C < Ta < +60°C / +70°C)			
	IA Number	MASC MS/18-2258X			
	Warnings	See Base Certificate * and original marking			
Quality Assurance report (QAR) / Notification (QAN):	DE/PTB/QAR06.0008/16				
Quality Assurance report (QAR) / Notification (QAN) Expiry date:	23 July 2024				

Compliance:

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

- SANS (IEC) 60079-0: 2012 Explosive atmospheres - Part 0: Equipment - General Requirements
- SANS (IEC) 60079-11: 2012 Explosive atmospheres Part 11: Equipment protection by intrinsic safety "i"

Special conditions of safe use "X":

- See "Annex A" below

Conditions of manufacture:

- See "Annex A" below

N Viljoen
TECHNICAL OFFICER

D.P Visser
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 or chief inspector of factories
Any relevant requirements of the MHS Act.

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

/. ANNEX A…

IA CERTIFICATE: MASC MS/18-2258X
Equipment: Universal Temperature Converter

ANNEX A

This document is based on and must be read in conjunction with certificate IECEx BAS 13.0057X.	
Description (According to Base Certificate *)	
"Refer to description in Base Certificate * (and any applicable schedules/issues/variations)."	
Issue	Issue 1: Supplemented for review as per ARP 0108
Standard compliance	See Base Certificate *
Special conditions of safe use ("X")	• The KCD2-UT2-Ex1.. must be installed in a controlled environment with suitably reduced pollution, i.e. a level of ingress protection of at least IP54.
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 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).