





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/24-8055X	Issue	1
Issue Date	23 July 2024	Expiry Date	23 July 2027
** Based on Certificate No	IECEX CES 10.0021X	Issue / Variations / Amendment	2
Requested by	Pepperl+Fuchs (Pty) Ltd Zerwick Forum, 8 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	<p>For Intrinsic Safety applications they are Associated Apparatus. The device supplies apparatus suitable for supply/interface of two wire (4 ÷ 20 mA) intrinsic safe transmitter and transfer the measure signal (as 4 ÷ 20 mA or 1 ÷ 5 V) to safe area. Additionally, the barriers are also able to measure the input signal from active intrinsically safe transmitters. A digital SMART communication may be superimposed on the transmitter measure signal as input or output and may be transferred in both directions.</p> <p>For non incandive applications (type of protection Ex ec), the SMART Transmitter is a galvanically isolated apparatus suitable to supply/ interface signal transmitter, placed in hazardous area and transfer the analog signal to a safe area. The safe area connections are the Power Supply and Output. The Hazardous Area connections (Input circuit) are for Sink Input (2-wire transmitters) or Source Input (4-wire transmitters). A digital smart communication may be superimposed on the transmitter measure signal as input or output and may be transferred in both directions. The product does not differ from that for Intrinsic Safety applications.</p> <p>See **Base certificate annex for further description.</p>		
Equipment	Galvanically isolated barrier	Type	HiC2025ES** and HiD2025ES**
MARKING: Original marking as per certificate ** remains applicable. IA number must be added.	Type: Ex Marking:	Galvanically isolated barrier, type HiC2025ES** and HiD2025ES** [Ex ia Ma] I; [Ex ia Ga] IIC; [Ex ia Da] IIIC; Ex ec IIC T4 Gc	
	IA Number: Warnings:	MASC MS/24-8055X (To be additionally marked on equipment) See Base Certificate ** (original marking must be applied)	
Quality Assurance report (QAR) / Notification (QAN):	DE/PTB/QAR06.0008/21		
Compliance: The equipment as described above has been allocated the rating <u>Explosion Protected 'as above'</u> utilizing the SANS/IEC Standards: <ul style="list-style-type: none"> SANS (IEC) 60079-0: 2019 Equipment - General requirements SANS (IEC) 60079-11: 2012 Equipment protection by intrinsic safety "i" SANS (IEC) 60079-7: 2017 Equipment protection by type of protection "n" <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"> Refer to Annex A below for more details. 		
Conditions of manufacture:	<ul style="list-style-type: none"> Refer to Annex A below for more details. 		
 S. JORDAAN TECHNICAL SPECIALIST		 N. VILOJEN TECHNICAL OFFICER	
<small>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).</small>			

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 MS/24-8055X

Equipment: Galvanically Isolated Barrier, HiC2025ES** and HiD2025ES**
(Expiry date: 23 July 2027)

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ANNEX A

This document is based on and must be read in conjunction with certificate IECEx CES 10.0021X.	
Description (According to Base Certificate) **	
"Refer to description in Base Certificate ** (and any applicable schedules/issues/variatioins)."	
Issue	Issue 1: Supplemented for review as per ARP0108.
Standard compliance	See Base Certificate **
Special conditions of safe use ("X")	<ul style="list-style-type: none">• The product shall only be used with the designated Pepperl+Fuchs HiC or HiD series, Termination Boards. <u>Other Specific Conditions for installation in areas that requiring EPL Gc equipment</u>• The equipment shall be installed in a suitably certified enclosure such that it is afforded a degree of protection of at least IP54 in accordance with IEC 60079-0, IEC 60079-7 & IEC 60529 and it shall be located and operated in a controlled environment that ensures a pollution degree 2, as defined in IEC 60664-1.• The device must be installed and operated only in an environment of overvoltage category II (or better) according to IEC/EN 60664-1.• Connection or disconnection of energized non-intrinsically safe circuits is only permitted in the absence of a potentially explosive atmosphere
Conditions of manufacture	<ul style="list-style-type: none">• None.
Conditions of Certification	<ul style="list-style-type: none">• 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:	<ul style="list-style-type: none">• 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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