Issue Date: 07 September 2020
Expiry Date: 07 September 2023

IA Certificate Number: **MASC S/20-8356X**
Our ref: **20-8356**

IA – CERTIFICATE

(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)

Gas Detector Type NSx-yL III, NSx-yL III LCD, NSx-yL III LCD RE

This document is based on and must be read in conjunction with certificate **FTZÚ 15 ATEX 0022X.**

Further to your request, we have evaluated the supplied documentation.

The following is applicable:

Description	**Detail**
Requested By :	DEGA CZ s.r.o. Malešická 2850/22c, 130 00 Praha 3, Czech Republick
Equipment :	Gas Detector Type NSx-yL III, NSx-yL III LCD, NSx-yL III LCD RE
Manufacturer :	DEGA CZ s.r.o. K Žižkovu, 9/640, 190 00 Praha 9, Czech Republic
Model(s) / Type(s) :	NSx-yL III, NSx-yL III LCD, NSx-yL III LCD RE
Rating :	Ex d IIB+H2 T6 Gb
Certification body :	FTZÚ
Type Certificate No :	FTZÚ 15 ATEX 0022X
Variations/Issue/Amendment :	0
Quality Assurance report (QAR) / Notification (QAN) :	“It is a requirement under ATEX that all equipment for category 1 and 2 areas must have 3rd party quality assurance from a notified body. This is accepted to cover the equipment’s quality requirements.”

Standards:	- EN 60079-0	(2012)	“General requirements”
	- EN 60079-1	(2007)	“Equipment protection by flameproof enclosures ‘d’”

COMPLIANCE:

The equipment as described below is hereby certified "Explosion Protected" Ex d IIB+H2 T6 Gb 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 : 2007 "Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures 'd'"**

Location	Zone 1, 2	Gas Surface
Hazard Frequency	---	Intermitted as could occur under normal operating conditions in hazardous area
Environment	Group IIB+H2	Propane to Ethylene and Hydrogen
Surface Temperature	T6	85ºC

Service/Ambient Temperature: -40°C to +60°C

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.

DESCRIPTION OF EQUIPMENT (According to UL Certificate):

The gas detector type NSx-yL Ill, NSx-yL Ill LCD and NSx-yL Ill LCD RE consists of cover and enclosure bottom made by aluminium alloy. Enclosure is equipped with electronic circuits. Stainless steel sensing head with sinter is screw in to the enclosure. Enclosure and head are protected by type of protection "d" - flameproof enclosure. The enclosure is alternatively equipped with a sight glass for display.

An enclosure is equipped with two M20 x 1.5 threaded holes for installation of appropriate certified Ex equipment cable glands.

The measuring function according to annex II paragraph 1.5.5 of the directive 94/9/EC is not matter of this EC-Type Examination.

/. Technical…

Technical Specification:

Nominal voltage:	8VDC ÷ 30VDC	
Maximum input power:	3.7 W	30V/3A
Outputs:	Current loop: 4-20mA,	
	RS485	
	Relay, Maximal load 250 V/3 A (type NSx-yL III LCD RE)	

MARKING:

The UL marking remains applicable. In addition, the following MASC Certificate number (IA number) must be applied to the equipment.

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CONDITIONS OF MANUFACTURE:

- None

SPECIAL CONDITIONS OF USE (X):

- Verified values of the maximum gaps and minimum constructional length of flameproof joints of this enclosure are different from relevant minimum and maximum values mentioned in the standard. To obtain information about joints dimensions it is necessary to contact the manufacturer.
- Fasteners with a minimum property class A4-80 must be used for the closing of the flameproof enclosure cover.

CONDITIONS OF CERTIFICATION:

1. This IA Certificate covers all units sold from the date of this document to 07 September 2023.
2. As per ARP 0108 a maximum three yearly review is required on this IA Certificate.
3. The apparatus must be additionally marked with the MASC marking details above.
4. 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.
5. The equipment does not need to be re-tested when used on the conditions and with such restrictions as prescribed by UL and in this approval.
6. The UL certification must remain valid.
7. The extent of the requirements in the ARP 0108 (or regulations) and SANS 10108 on the certification of the equipment must remain unchanged.
8. 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 by FTZÚ.

The routine tests for production units according to the Certificate must be complied with (if applicable).

Yours faithfully

D.P Visser
TECHNICAL SPECIALIST

Charl Welthagen
TECHNICAL SPECIALIST

Mining And Surface Certification

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 is representative and accurately performed, and that a report is accurate in the quoted results and conclusions drawn from the test / assessment, MASC or its members/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 issued pursuant to a test / assessment.

MASC takes no responsibility for any non-conformances, exclusions or any results / assessments not in compliance with the standards. By marking the equipment in accordance with the documentation / standard, the manufacturer attests on his own responsibility that the equipment has been constructed in accordance with the applicable requirements of the relevant standards and that the routine verifications and routine tests have been successfully completed and the product 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 practises.