MTEx Laboratories

Ontploffingvoorkomingstegnologie
Explosion Prevention Technologies

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INSPECTION AUTHORITY (IA) CERTIFICATE

WIKA Instruments (Pty) Ltd.
P.O. Box 75225
Gardenview
2047

Issued: 2026/03/06
Expire: 2029/03/06
Revision: 0
Job File: 3367

Applicant:

WIKA INSTRUMENTS (PTY) LTD.

For validity purposes, the following marking must be added to all equipment covered by this certificate:

IA Number:	MTEx-S/26.0120 X
Manufacturer:	WIKA Alexander Wiegand SE & Co. KG
Supplier:	WIKA Instruments (Pty) Ltd.
Equipment:	Telemetry Unit
Model/Type:	NETRIS®2LM or NETRIS®2-*L3*
Ex Rating:	Ex ia [ia Ga] IIC T3 Ga
Serial No:	All units imported between the issue and expiry dates of this Certificate.

Standards used:

SANS 60079-0: 2019 Ed.6 **IEC 60079-0: 2017 Ed.7**	**Explosive atmospheres – Part 0: General requirements.**
SANS 60079-11: 2012 Ed.4 **IEC 60079-11: 2011 Ed.6**	**Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i".**

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

This certification indicates com31liance with R10.1 of the Mines Health and Safety Act and/or EMR 9(3) of the Occupational Health and Safety Act, provided that the apparatus is used as prescribed in accordance with the following **Notes**:

1) Compliance with any conditions set out in this Certificate.
2) This certificate only covers equipment imported between the “Issued” and “Expiry” dates of this certificate.
3) When the supporting Q.A.R. (Quality Assessment Report) or Q.A.N. (Quality Assurance Notification) of the equipment manufacturer expires, it is the responsibility of the applicant (as mentioned above) to submit a valid Q.A.R. or Q.A.N. to MTEx Laboratories, to maintain the validity of the IA certificates.
4) It is the responsibility of the supplier to ensure that the marking label complies with the requirements of the relevant regulator.
5) Once issued, the certificate remains valid for the serviceable lifecycle of the device. The state of the device is validated by visual or close inspections, by the end user, at intervals not exceeding two years.

Reviewed By + Signature (TL):	A. van Niekerk	
Approved By + Signature (CB): (MTEx Laboratories Technical Signatory)	D. Young	

1. OVERVIEW

NETRIS®2LM products are telemetry units designed for remote measurement. Data transmission is done by means of short range (Radio Frequency). NETRIS®2LM or NETRIS®2-*L3* is self-powered by a battery pack (with primary and secondary cells). The module is mainly connected to a 4-20mA sensor for measuring different data (for ex : temperature, liquid level, flowrate, etc...).

Classification of installation and use:	Fixed
Ingress protection:	IP20
Rated ambient temperature range (°C):	-40 °C … +60 °C

2. REASON FOR REVIEW

Revision 0: National Code of Practice (NCOP) Requirements.

3. DOCUMENTATION PROVIDED

- IECEx Certificate of Conformity (IECEx SEV 22.0027 X, Issue 2).
- IECEx Quality Assurance Report (DE/BVS/QAR07.0010/22).

4. ELECTRICAL / SAFETY PARAMETERS

Ratings:
Use of a manufacturer specific battery pack type or BN2D150 with a nominal voltage of 3.6 V.

Output parameters for the Sensor sub circuit:
U_o ≤ 26 V
I_o ≤ 90 mA
P_o ≤ 550 mW
C_i ≤ 3.6 nF
Li ≤ 0.3 mH

The following tables show the combinations of Lo and Co including occurring line reactance for the connection to the Sensor sub circuit in the respective gas group verified using the ISPARK-calculation program. The internal capacitance C_i = 3.6 nF and inductance L_i = 0.3 mH is already taken into account. The maximum values for L_o and C_o are highlighted in grey.

Maximum allowed capacitance and inductance for gas group IIB:

C_o [nF]	446	486	566	686
L_o [mH]	25.7	19.7	9.7	4.7

Maximum allowed capacitance and inductance for gas group IIC:

C_o [nF]	37	43	60	78
L_o [mH]	2.2	1.7	0.7	0.2

5. INSTALLATION INSTRUCTIONS

The instructions provided with the product shall be followed in detail to assure safe operation.

6. CONDITIONS OF CERTIFICATE (X)

- Under certain extreme circumstances, the non-metallic enclosure may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conductive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.

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End of Report