





## Mining And Surface Certification (Pty) Ltd

2015/021934/07

THIS CERTIFICATE IS ISSUED AS AN I.A. CERTIFICATE IN TERMS OF THE RELEVANT REGULATIONS OF THE MINERALS ACT (INCORPORATING THE MINE HEALTH AND SAFETY ACT, AND THE ELECTRICAL MACHINERY REGULATIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT.

| IA CERTIFICATE                                                                            | MASC S/19-9002                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                          | Issue             | 0                                                                 |  |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------|--|
| Issue Date                                                                                | 21 August 201                                                                                                                                                                                                                                                                                                                                                                                                                       | 19                                                                                                                                                                       | Expiry Date       | 21 August 2022                                                    |  |
| ** Based on Certificate No                                                                | IECEx ULD 19.0015                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                          | Issue / Variation | ions / Amendment 0                                                |  |
| Requested by                                                                              | VEGA Grieshaber KG, Am Hohenstein 113, 77761 Schiltach, Germany                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                          |                   |                                                                   |  |
| Manufacturer                                                                              | VEGA Grieshaber KG, Am Hohenstein 113, 77761 Schiltach, Germany                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                          |                   |                                                                   |  |
| Additional Manufacturing Location(s)                                                      | VEGA Americas, Inc., 4241 Allendorf Drive, Cincinnati, Ohio 45209, United States of America                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                          |                   |                                                                   |  |
| Description                                                                               | The controller VEGAMET 84*(*)/ 86*(*) series are industrial controllers designed for use as associated apparatus permitted to be installed in non-hazardous location only. They are able to supply up to two sensors with a intrinsically safe circuit (Ex ia) and can process and display their measurement values trough a 420 mA input or HART communication VEGAMET 86*(*) only.  ** See base certificate for full description. |                                                                                                                                                                          |                   |                                                                   |  |
| Equipment                                                                                 | Controllers                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                          | Туре              | VEGAMET 841(*), VEGAMET 842(*),<br>VEGAMET 861(*), VEGAMET 862(*) |  |
| MARKING: Original marking as per certificate * remains applicable. IA number to be added. | Type<br>Ex Marking<br>IA Number<br>Warnings                                                                                                                                                                                                                                                                                                                                                                                         | VEGAMET 841(*), VEGAMET 842(*), VEGAMET 861(*), VEGAMET 862(*) [Ex ia Ga] IIIC [Ex ia Da] IIIC -40°C to 60°C MASC S/19-9002 See Base Certificate ** and original marking |                   |                                                                   |  |
| Quality Assurance report (QAR) /<br>Notification (QAN) Expiry date:                       |                                                                                                                                                                                                                                                                                                                                                                                                                                     | DE/TUN/QAR06.0002/09                                                                                                                                                     |                   |                                                                   |  |
| O 11                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                          |                   |                                                                   |  |

The equipment as described above has been allocated the rating Explosion Protected [Ex ia Ga] IIC, [Ex ia Da] IIIC, -40°C to 60°C utilizing the SANS/IEC Standards:

- SANS (IEC) 60079-0: (2017) General requirements
- SANS (IEC) 60079-11: 2012 (2011) Intrinsic Safety 'i'

Special conditions of safe use "X":

None

Conditions of manufacture:

None

Regardt Zeelie TECHNICAL SPECIALIST

Roelof Viljoen
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 1006 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.

This certificate amay only be reproduced in full. This certificate is not transferable and remains the property of the issuing body

> Mining And Surface Certification (Pty) Ltd Unit 5 Lelyta Park, 45 Jurg Ave, Hennopspark Ext 87 Centurion, O157

## IA CERTIFICATE: MASC S/19-9002 Equipment: VEGAMET Controllers

ANNEX A

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|                                                                                                 | This document is based on and must be read in conjunction with certificate IECEx ULD 19.0015.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Description (According to Base Certificate *)                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| "Refer to description in Base Certflicate ** (and any applicable schedules/issues/variations)." |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| Standard compliance                                                                             | See Base Certificate *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |
| Special conditions of safe use ("X")                                                            | • None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |
| Conditions of<br>manufacture                                                                    | • None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |
| Conditions of<br>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 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 compiled with (if applicable).  Transformer TR101 and TR201 shall be subjected to a voltage of 2500 V rms between primary and secondary windings, for at least 60 seconds, in accordance with the requirements of Clause 11.2 of EN/IEC 60079-11. Alternatively, the test may be carried out at 1.2 times the test voltage, but with a reduced duration of at least 1 second.                                                                                                                                                                                    |  |  |  |

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

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This document will not be supported by MASC for certification purposes outside the borders of South Africa.