



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx TUN 04.0013 issue No.:2

Status: **Current**

Date of Issue: **2008-10-16** Page 1 of 4

Certificate history:
Issue No. 2 (2008-10-16)
Issue No. 1 (2007-6-19)
Issue No. 0 (2004-4-28)

Applicant: **VEGA Grieshaber KG**
Am Hohenstein 113
D-77761 Schiltach
Germany

Electrical Apparatus: **Signal conditioning instrument**
Optional accessory: **VEGAMET MET624.CI*, VEGAMET MET625.CI* and VEGASCAN SCAN693.CI***

Type of Protection: **Intrinsic safety**

Marking: **[Zone 0] [Ex ia] IIC**
[Zone 20] [Ex iaD]

Approved for issue on behalf of the IECEx
Certification Body:

Karl-Heinz Schwedt

Position:

Head of the IECExCB

Signature:
(for printed version)

Date:

2008-10-16

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1
30519 Hannover
Germany





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Manufacturer: **VEGA Grieshaber KG**
Am Hohenstein 113
D-77761 Schiltach
Germany

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-26 : 2004 Edition: 1	Electrical apparatus for explosive gas atmospheres - Part 26: Construction, test and marking of Group II Zone 0 electrical apparatus
IEC 61241-11 : 2005 Edition: 1	Electrical apparatus for use in the presence of combustible dusts - Part 11: Protection by intrinsic safety 'ID'

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

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:
DE/TUN/ExTR08.0033/00

File Reference:
08 204 554578



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The signal conditioning instruments type VEGAMET 624EX, VEGAMET 625EX and VEGASCAN 693EX are used for the intrinsically safe supply of two-wire sensors and for the safe galvanic separation of the intrinsically safe circuit from the non-intrinsically safe circuits. The measuring values are converted into standardised outlet signals. The device consists of an electronic casing and a connection socket.

The maximum permissible ambient temperature is 60°C.

Electrical data

Supply voltage
(Connections K117, K118)

$U = 20 \dots 253 \text{ V a. c.}$, $U = 20 \dots 72 \text{ V d. c.}$
 $U_m = 253 \text{ V a. c./125 V d. c.}$

CONDITIONS OF CERTIFICATION: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

See annexe for 2. supplement

IECEX TR: DE/TUN/ExTR08.0033/00	File reference: 08 204 554578
IECEX QAR: DE/QAR/TUN/06.0002/00	File reference: QAR/TUN/QAR06.0002/00

The signal conditioning instruments type VEGAMET MET624.CI*, VEGAMET MET625.CI* and VEGASCAN SCAN693.CI* are used for the intrinsically safe supply of two-wire sensors and for the safe galvanic separation of the intrinsically safe circuit from the non-intrinsically safe circuits. The measuring values are converted into standardised output signals. The device consists of an electronic casing and a connection socket.

Changes:

The changes refer to the type designation mentioned above and the marking of the apparatus; no technical changes were carried out.

Marking:

[Zone 0] [Ex ia] IIC and [Zone 20] [Ex iaD]

Signal circuit (Connections KI1, KI2)	in type of protection „Intrinsic Safety“ resp. Ex ia IIC Ex ia IIB					
	Maximum values: $U_o = 23.9 \text{ V}$ $I_o = 108 \text{ mA}$ $P_o = 645 \text{ mW}$ Characteristic line: linear					
	Ex ia			IIC		IIB
max. permissible ext. inductance	0.5 mH	0.3 mH	0.2 mH	2.0 mH	1.0 mH	0.5 mH
max. permissible ext. capacitance	84 nF	100 nF	120 nF	430 nF	470 nF	560 nF
	The effective internal capacitances and inductances are negligibly small.					
	The maximum values of the table are also allowed to be used up to the permissible limits as coexistent concentrated capacitances and as concentrated inductances.					

The intrinsically safe signal circuit is also allowed to be connected to apparatus in explosion hazardous areas caused by dust.

Then, the signal circuit may be executed in type of protection intrinsic safety Ex ia IIC or Ex ia IIB.

All other details remain unchanged.