IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

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

Certificate No.:	**IECEx DEK 14.0048X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 5	Issue 4 (2021-06-22) Issue 3 (2017-11-10) Issue 2 (2016-10-14) Issue 1 (2016-03-21) Issue 0 (2015-05-20)
Date of Issue:	2022-01-18		
Applicant:	**VEGA Grieshaber KG** Am Hohenstein 113 77761 Schiltach **Germany**		
Equipment:	**Display and adjustment Unit VEGADIS 82, type DIS82(*).**X****** and type DIS82(*).**H********		
Optional accessory:			
Type of Protection:	**Ex ia**		
Marking:	Ex ia IIC T6...T1 Ga Ex ia IIC T6...T1 Gb		

Approved for issue on behalf of the IECEx Certification Body: **R. Schuller**

Position: **Certification manager**

Signature: (for printed version)

Date: 2022-01-18

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3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

DEKRA Certification B.V.
Meander 1051
6825 MJ Arnhem
Netherlands

IECEx Certificate of Conformity

Certificate No.: **IECEx DEK 14.0048X**

Date of issue: 2022-01-18

Issue No: 5

Manufacturer:
VEGA Grieshaber KG
Am Hohenstein 113
77761 Schiltach
Germany

Additional manufacturing locations:

VEGA Americas, Inc
4241 Allendorf Drive
Cincinnati, Ohio 45209
United States of America

VEGA India Level and Pressure Measurement Pvt. Ltd.
Plot No. 1
Gat No. 181
Village - Phulgaon
Tal. Haveli
Pune 412216
India

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 equipment 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 60079-0:2017 Edition:7.0 — Explosive atmospheres - Part 0: Equipment - General requirements

IEC 60079-11:2011 Edition:6.0 — Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

This Certificate **does not** indicate compliance with 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:

Test Report:

NL/DEK/ExTR14.0060/05

Quality Assessment Report:

DE/TUN/QAR06.0002/10

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

VEGADIS 82, type DIS82(*).**X******, is used for separate scaling, parameter adjustment and visualization of measured values in conjunction with 4 … 20 mA, interfaced sensors.
VEGADIS 82, type DIS82(*).**H******, is for in conjunction with 4 … 20 mA + HART interfaced sensors.

The VEGADIS 82 is looped into the intrinsically safe 4 … 20 mA, or 4 … 20 mA + HART, circuit of the sensor.

Optionally, the VEGADIS 82 can be provided with the display and adjustment module called “PLICSCOM”.
The user can readily replace the PLICSCOM by an alternative display and adjustment module that is specified by VEGA.

The enclosure of the VEGADIS 82 can be made of plastic, aluminium or stainless steel, and has a cover with or without a plastic window.
Or the VEGADIS 82 has a plastic enclosure, with a transparent cover, for panel mounting
For more detailed information, see the Annex to this certificate.

SPECIFIC CONDITIONS OF USE: YES as shown below:
For electrical and thermal data, see Annex 1 to Report No. NL/DEK/ExTR14.0060/05.

If the enclosure of the VEGADIS 82 is made of aluminium (Type DIS82(*).***A*****) and if it is mounted in an area where the use of EPL Ga equipment is required, it must be installed such, that even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

Electrostatic charges on all Units VEGADIS 82 shall be avoided, except for the VEGADIS 82, type DIS82(*).***V**X** which is made of unpainted steel and has no window.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
- additional manufacturing location
- change of type code
- minor constructional change

Annex:

226248200-Annex1_to ExTR14.0060.05.pdf

Thermal data

Minimum ambient temperature is - 40 °C.

The relation between temperature class and maximum ambient temperature is as listed in the following table:

	T6	T5	T4...T1
Type DIS82(*).**X******	45 °C	60 °C	60 °C
Type DIS82(*).**H******	42 °C	57 °C	60 °C

Electrical data

Supply circuit (terminals 3, 4):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
U_i = 30 V, I_i = 131 mA, P_i = 983 mW (linear barrier), P_i = 700 mW (electronically limited barrier);
for Type DIS82(*).**X******: C_i = 0 nF, L_i = 5 µH,
for Type DIS82(*).**H******: C_i = 3.5 nF, L_i = 75 µH.

Sensor circuit (terminal 1, 2):
the type of protection, and the electrical values U_o, I_o and P_o of the sensor circuit are the same as those of the external supply circuit, as connected to terminals 3 and 4.
C_o is the same as C_o of the external supply circuit (terminals 3, 4).
L_o is the same as L_o of the external supply circuit (terminals 3, 4), decreased with (L_i) 5 µH.
for Type DIS82(*).**H******:
C_o is the same as C_o of the external supply circuit (terminals 3, 4), decreased with (C_i) 3.5 nF.
L_o is the same as L_o of the external supply circuit (terminals 3, 4), decreased with (L_i) 75 µH.
If an active sensor is applied, the combination of sensor circuit and supply circuit shall not result in exceeding the maximum electrical values U_i, I_i and P_i of the supply circuit.

The intrinsically safe circuits are infallibly separated from parts which can be earthed.

Type designation

Detailed Nomenclature of the approved versions of the VEGADIS 82 is as follows:

DIS82(*).	a	b	c	d	e	f	g	h	i
	scope								
	A	europe							
	I	worldwide							
	*	other scope; not relevant for safety							
		approval							
		C	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb						
		O	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb + Schiffszulassung						
		H	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb + ATEX II 1D, 2D Ex t IIIC T* Da, Db IP66						
		C	IEC Ex ia IIC T6 Ga, Gb						
		O	IEC Ex ia IIC T6 Ga, Gb + ship approval						
		H	IEC Ex ia IIC T6 Ga, Gb + IEC Ex t IIIC T* Da, Db IP66						
			electronic						
			X	4…20mA					
			H	4…20mA/HART					
				housing					
				K	plastic / IP66,IP67				
				A	aluminum / IP66, IP68(0,2 bar)				
				V	stainless steel (precision casting) 316L / IP66, IP68(0,2 bar)				
				S	for panel mounting (72 x 72 mm)				
				H	aluminum special color / IP66, IP68(0,2 bar)				
					protection				
					I	IP66/IP67 NEMA 4X			
					N	IP66/IP68 NEMA 6P (0,2 bar)			
					S	IP40 NEMA 1			
						cable entry / connection			
						X	without		
						M	M20x1.5 / cable gland PA black		
						K	M20x1.5 / cable gland PA blue		
						L	M20x1.5 / cable gland stainless steel		
						O	M20x1.5 / cable gland brass nickle-plated		
						6	M20x1.5 / cable gland brass nickle-plated;		
						D	M20x1.5 / blind plug		
						J	1/2NPT / cable gland PA black		
						P	1/2NPT / cable gland brass nickle-plated		
						8	1/2NPT / cable gland brass nickle-plated;		
						N	1/2NPT / blind plug		
						*	another (certified) cable glands, blind plugs, cable bushings, plug connectors		
								adjustment and indication unit PLICSCOM	
							X	without	
							A	built-in	
							F	without; cover with display window	
							K	mounted; with Bluetooth, magnetic operation	
								kind of mounting	
								C	for carrier rail, wall-mounting with plastic
								E	for tube mounting (29…60 mm) incl.
								A	for wall-mounting with aluminium or
								D	for carrier rail with aluminium or
								F	for panel mounting
									certificate
									X without
									M with
DIS82(*).	*	*	*	*	*	*	*	*	*

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

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

Certificate No.:	**IECEx DEK 14.0048X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 4	Issue 3 (2017-11-10) Issue 2 (2016-10-14) Issue 1 (2016-03-21) Issue 0 (2015-05-20)
Date of Issue:	2021-06-22		

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

Equipment: **Display and adjustment Unit VEGADIS 82, type DIS82(*).I*X****** and type DIS82(*).I*H******

Optional accessory:

Type of Protection: **Ex ia**

Marking: Ex ia IIC T6...T1 Ga
Ex ia IIC T6...T1 Gb

Approved for issue on behalf of the IECEx Certification Body: **R. Schuller**

Position: **Certification manager**

Signature: (for printed version)

Date: 2021-06-22

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 www.iecex.com or use of this QR Code.

Certificate issued by:

DEKRA Certification B.V.
Meander 1051
6825 MJ Arnhem
Netherlands

IECEx Certificate of Conformity

Certificate No.: **IECEx DEK 14.0048X**

Date of issue: 2021-06-22

Issue No: 4

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

Additional manufacturing locations: **VEGA Americas, Inc**
4241 Allendorf Drive
Cincinnati, Ohio 45209
United States of America

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with 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:

Test Report:

NL/DEK/ExTR14.0060/04

Quality Assessment Report:

DE/TUN/QAR06.0002/10

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

VEGADIS, type DIS82(*).I*X******, is used for separate scaling, parameter adjustment and visualization of measured values in conjunction with 4 … 20 mA, interfaced sensors.
VEGADIS, type DIS82(*).I*H******, is for in conjunction with 4 … 20 mA + HART interfaced sensors.

The VEGADIS DIS82 is looped into the intrinsically safe 4 … 20 mA, or 4 … 20 mA + HART, circuit of the sensor.

Optionally, the VEGADIS DIS82 can be provided with the display and adjustment module called "PLICSCOM".
The user can readily replace the PLICSCOM by an alternative display and adjustment module that is specified by VEGA.

The enclosure of the VEGADIS DIS82 can be made of plastic, aluminium or stainless steel, and has a cover with or without a plastic window.
Or the VEGADIS DIS82 has a plastic enclosure, with a transparent cover, for panel mounting
For more detailed information, see the Annex to this certificate.

SPECIFIC CONDITIONS OF USE: YES as shown below:
For electrical and thermal data, see the Annex to this certificate.

If the enclosure of the VEGADIS is made of aluminium (Type DIS82(*).I**A*****) and if it is mounted in an area where the use of EPL Ga equipment is required, it must be installed such, that even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

Electrostatic charges on all Units VEGADIS DIS82(*).I******** shall be avoided, except for the VEGADIS DIS82(*).I**V**X** which is made of unpainted steel and has no window.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
- assessed per IEC 60079-0 : Ed 7
- change of type code
- PLICSCOM modified

Annex:

225595000-Annex1_to ExTR14.0060.04.pdf

Thermal data

Minimum ambient temperature is - 40 °C.

The relation between temperature class and maximum ambient temperature, for EPL Ga and EPL Gb, is as listed in the following table:

	T6	T5	T4...T1
Type DIS82(*).I*X******			
EPL Ga *	28 °C	40 °C	60 °C
EPL Gb	45 °C	60 °C	60 °C
Type DIS82(*).I*H******			
EPL Ga *	25 °C	37 °C	60 °C
EPL Gb	42 °C	57 °C	60 °C

* for EPL Ga equipment, the rated maximum ambient temperatures are specified such, that the maximum surface temperature does not exceed 80% of the auto ignition temperature of the combustible gas or liquid, as required by EN1127-1, clause 6.4.2.

Electrical data

Supply circuit (terminals 3, 4):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
U_i = 30 V, I_i = 131 mA, P_i = 983 mW (linear barrier), P_i = 700 mW (electronically limited barrier);
for Type DIS82(*).I*X******: C_i = 0 nF, L_i = 5 µH,
for Type DIS82(*).I*H******: C_i = 3.5 nF, L_i = 75 µH.

Sensor circuit (terminal 1, 2):
the type of protection, and the electrical values U_o, I_o and P_o of the sensor circuit are the same as those of the external supply circuit, as connected to terminals 3 and 4.
C_o is the same as C_o of the external supply circuit (terminals 3, 4).
L_o is the same as L_o of the external supply circuit (terminals 3, 4), decreased with (L_i) 5 µH.
for Type DIS82(*).I*H******:
C_o is the same as C_o of the external supply circuit (terminals 3, 4), decreased with (C_i) 3.5 nF.
L_o is the same as L_o of the external supply circuit (terminals 3, 4), decreased with (L_i) 75 µH.
If an active sensor is applied, the combination of sensor circuit and supply circuit shall not result in exceeding the maximum electrical values U_i, I_i and P_i of the supply circuit.

The intrinsically safe circuits are infallibly separated from parts which can be earthed.

Type designation

Detailed Nomenclature of the approved versions of the VEGADIS 82 is as follows:

DIS82(*).	a	b	c	d	e	f	g	h	i
	scope								
	A	europe							
	I	worldwide							
		approval							
		C	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb						
		O	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb + Schiffszulassung						
		H	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb + ATEX II 1D, 2D Ex t IIIC T* Da, Db IP66						
		C	IEC Ex ia IIC T6 Ga, Gb						
		O	IEC Ex ia IIC T6 Ga, Gb + ship approval						
		H	IEC Ex ia IIC T6 Ga, Gb + IEC Ex t IIIC T* Da, Db IP66						
			electronic						
			X	4…20mA					
			H	4…20mA/HART					
				housing					
				K	plastic / IP66,IP67				
				A	aluminum / IP66, IP68(0,2 bar)				
				V	stainless steel (precision casting) 316L / IP66, IP68(0,2 bar)				
				S	for panel mounting (72 x 72 mm)				
				H	aluminum special color / IP66, IP68(0,2 bar)				
					protection				
					I	IP66/IP67 NEMA 4X			
					N	IP66/IP68 NEMA 6P (0,2 bar)			
					S	IP40 NEMA 1			
						cable entry / connection			
						X	without		
						M	M20x1.5 / cable gland PA black		
						K	M20x1.5 / cable gland PA blue		
						L	M20x1.5 / cable gland stainless steel		
						O	M20x1.5 / cable gland brass nickle-plated		
						6	M20x1.5 / cable gland brass nickle-plated;		
						D	M20x1.5 / blind plug		
						J	1/2NPT / cable gland PA black		
						P	1/2NPT / cable gland brass nickle-plated		
						8	1/2NPT / cable gland brass nickle-plated;		
						N	1/2NPT / blind plug		
						*	another (certified) cable glands, blind plugs, cable bushings, plug connectors		
							adjustment and indication unit PLICSCOM		
							X	without	
							A	built-in	
							F	without; cover with display window	
							K	mounted; with Bluetooth, magnetic operation	
								kind of mounting	
								C	for carrier rail, wall-mounting with plastic
								E	for tube mounting (29…60 mm) incl.
								A	for wall-mounting with aluminium or
								D	for carrier rail with aluminium or
								F	for panel mounting
									certificate
									X without
									M with
DIS82(*).	*	*	*	*	*	*	*	*	*

Form 124
Version 4 (2019-10)
48870-EN-210622

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 DEK 14.0048X	Issue No: 3	Certificate history:
			Issue No. 3 (2017-11-10)
Status:	**Current**		Issue No. 2 (2016-10-14)
		Page 1 of 4	Issue No. 1 (2016-03-21)
Date of Issue:	**2017-11-10**		Issue No. 0 (2015-05-20)

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

Equipment: **Display and adjustment Unit VEGADIS, type DIS82(*).I*X****** and type DIS82(*).I*H******

Optional accessory:

Type of Protection: **Ex ia**

Marking:
Ex ia IIC T6...T1 Ga
Ex ia IIC T6...T1 Gb

Approved for issue on behalf of the IECEx Certification Body: R. Schuller

Position: Certification manager

Signature:
(for printed version)

Date: 2017-11-10

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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.

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands

DEKRA

IECEx Certificate of Conformity

Certificate No:	IECEx DEK 14.0048X	Issue No: 3
Date of Issue:	**2017-11-10**	Page 2 of 4
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

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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	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.*

TEST & ASSESSMENT REPORTS:

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

Test Report:

NL/DEK/ExTR14.0060/03

Quality Assessment Report:

DE/TUN/QAR06.0002/07

IECEx Certificate of Conformity

Certificate No: IECEx DEK 14.0048X Issue No: 3

Date of Issue: **2017-11-10** Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

VEGADIS, type DIS82(*).I*X******, is used for separate scaling, parameter adjustment and visualization of measured values in conjunction with 4 ... 20 mA, interfaced sensors.
VEGADIS, type DIS82(*).I*H******, is for in conjunction with 4 ... 20 mA + HART interfaced sensors.

The VEGADIS DIS82 is looped into the intrinsically safe 4 ... 20 mA, or 4 ... 20 mA + HART, circuit of the sensor.

Optionally, the VEGADIS DIS82 can be provided with the display and adjustment module called "PLICSCOM".
The user can readily replace the PLICSCOM by an alternative display and adjustment module that is specified by VEGA.

The enclosure of the VEGADIS DIS82 can be made of plastic, aluminium or stainless steel, and has a cover with or without a plastic window.
Or the VEGADIS DIS82 has a plastic enclosure, with a transparent cover, for panel mounting
For more detailed information, see the Annex to this certificate.

SPECIFIC CONDITIONS OF USE: YES as shown below:

For electrical and thermal data, see the Annex to this certificate.

If the enclosure of the VEGADIS is made of aluminium (Type DIS82(*).I**A*****) and if it is mounted in an area where the use of EPL Ga equipment is required, it must be installed such, that even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

Electrostatic charges on all Units VEGADIS DIS82(*).I******** shall be avoided, except for the VEGADIS DIS82(*).I**V**X** which is made of unpainted steel and has no window.

IECEx Certificate of Conformity

Certificate No: IECEx DEK 14.0048X Issue No: 3

Date of Issue: **2017-11-10** Page 4 of 4

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

- PLICSCOM modified

Annex:

Annex to IECEx DEK 14.0048, issue3.pdf

Annex to Certificate of Conformity IECEx DEK 14.0048 X, issue 3
Annex to Report NL/DEK/ExTR14.0060/03

Thermal data

Minimum ambient temperature is - 40 °C.

The relation between temperature class and maximum ambient temperature, for EPL Ga and EPL Gb, is as listed in the following table:

	T6	T5	T4...T1
Type DIS82(*).I*X******			
EPL Ga *	28 °C	40 °C	60 °C
EPL Gb	45 °C	60 °C	60 °C
Type DIS82(*).I*H******			
EPL Ga *	25 °C	37 °C	60 °C
EPL Gb	42 °C	57 °C	60 °C

* for EPL Ga equipment, the rated maximum ambient temperatures are specified such, that the maximum surface temperature does not exceed 80% of the auto ignition temperature of the combustible gas or liquid, as required by EN1127-1, clause 6.4.2.

Electrical data

Supply circuit (terminals 3, 4):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
U_i = 30V, I_i = 131 mA, P_i = 983 mW (linear barrier), P_i = 700 mW (electronically limited barrier);
for Type DIS82(*).I*X******: C_i = 0 nF, L_i = 5 µH,
for Type DIS82(*).I*H******: C_i = 3.5 nF, L_i = 75 µH.

Sensor circuit (terminal 1, 2):
the type of protection, and the electrical values U_o, I_o and P_o of the sensor circuit are the same as those of the external supply circuit, as connected to terminals 3 and 4.
C_o is the same as C_o of the external supply circuit (terminals 3, 4).
L_o is the same as L_o of the external supply circuit (terminals 3, 4), decreased with (L_i) 5 µH.
for Type DIS82(*).I*H******:
C_o is the same as C_o of the external supply circuit (terminals 3, 4), decreased with (C_i) 3.5 nF.
L_o is the same as L_o of the external supply circuit (terminals 3, 4), decreased with (L_i) 75 µH.
If an active sensor is applied, the combination of sensor circuit and supply circuit shall not result in exceeding the maximum electrical values U_i, I_i and P_i of the supply circuit.

The intrinsically safe circuits are infallibly separated from parts which can be earthed.

Annex to Certificate of Conformity IECEx DEK 14.0048 X, issue 3
Annex to Report NL/DEK/ExTR14.0060/03

Type designation

Detailed Nomenclature of the approved versions of the VEGADIS DIS82 is as follows:

DIS82(*).	a	b	c	d	e	f	g	h	i

scope
- A europe
- I worldwide

approval
- C ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb
- O ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb + Schiffszulassung
- H ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb + ATEX II 1D, 2D Ex t IIIC T* Da, Db IP66
- C IEC Ex ia IIC T6 Ga, Gb
- O IEC Ex ia IIC T6 Ga, Gb + ship approval
- H IEC Ex ia IIC T6 Ga, Gb + IEC Ex t IIIC T* Da, Db IP66

electronic
- X 4...20mA
- H 4...20mA/HART

housing
- K plastic / IP66,IP67
- A aluminum / IP66, IP68(0,2 bar)
- V stainless steel (precision casting) 316L / IP66, IP68(0,2 bar)
- S for panel mounting (72 x 72 mm)
- H aluminum special color / IP66, IP68(0,2 bar)

protection
- I IP66/IP67 NEMA 4X
- N IP66/IP68 NEMA 6P (0,2 bar)
- S IP40 NEMA 1

cable entry / connection
- X without
- M M20x1.5 / cable gland PA black
- K M20x1.5 / cable gland PA blue
- L M20x1.5 / cable gland stainless steel
- O M20x1.5 / cable gland brass nickle-plated
- 6 M20x1.5 / cable gland brass nickle-plated;
- D M20x1.5 / blind plug
- J 1/2NPT / cable gland PA black
- P 1/2NPT / cable gland brass nickle-plated
- 8 1/2NPT / cable gland brass nickle-plated;
- N 1/2NPT / blind plug
- * another (certified) cable glands, blind plugs, cable bushings, plug connectors

adjustment and indication unit PLICSCOM
- X without
- A built-in
- F without; cover with display window
- K mounted; with Bluetooth, magnetic operation
- U mounted; with Bluetooth, battery, magnetic

kind of mounting
- C for carrier rail, wall-mounting with plastic
- E for tube mounting (29...60 mm) incl.
- A for wall-mounting with aluminium or
- D for carrier rail with aluminium or
- F for panel mounting

certificate
- X without
- M with

DIS82(*).	*	*	*	*	*	*	*	*	*

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 DEK 14.0048X	Issue No: 2	Certificate history:
Status:	**Current**	Page 1 of 4	Issue No. 2 (2016-10-14)
			Issue No. 1 (2016-03-21)
			Issue No. 0 (2015-05-20)
Date of Issue:	**2016-10-14**		

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

Equipment: **Display and adjustment Unit VEGADIS, type DIS82(*).I*X****** and type DIS82(*).I*I******

Optional accessory:

Type of Protection: **Ex ia**

Marking:
Ex ia IIC T6...T1 Ga
Ex ia IIC T6...T1 Gb

Approved for issue on behalf of the IECEx Certification Body: L.G. van Schie

Position: Certification manager

Signature:
(for printed version)

Date: 2016-10-14

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.

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands

DEKRA

IECEx Certificate of Conformity

Certificate No: IECEx DEK 14.0048X Issue No: 2

Date of Issue: **2016-10-14** Page 2 of 4

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

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 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

*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

Test Report:

NL/DEK/ExTR14.0060/02

Quality Assessment Report:

DE/TUN/QAR06.0002/06

IECEx Certificate of Conformity

Certificate No:	IECEx DEK 14.0048X	Issue No: 2
Date of Issue:	**2016-10-14**	Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

VEGADIS, type DIS82(*).I*X******, is used for separate scaling, parameter adjustment and visualization of measured values in conjunction with 4 … 20 mA, interfaced sensors.
VEGADIS, type DIS82(*).I*H******, is for in conjunction with 4 … 20 mA + HART interfaced sensors.

The VEGADIS DIS82 is looped into the intrinsically safe 4 … 20 mA, or 4 … 20 mA + HART, circuit of the sensor.

Optionally, the VEGADIS DIS82 can be provided with the display and adjustment module called “PLICSCOM”.
The user can readily replace the PLICSCOM by an alternative display and adjustment module that is specified by VEGA.

The enclosure of the VEGADIS DIS82 can be made of plastic, aluminium or stainless steel, and has a cover with or without a plastic window.
Or the VEGADIS DIS82 has a plastic enclosure, with a transparent cover, for panel mounting
For more detailed information, see the Annex to this certificate.

CONDITIONS OF CERTIFICATION: YES as shown below:

For electrical and thermal data, see the Annex to this certificate.

If the enclosure of the VEGADIS is made of aluminium (Type DIS82(*).I**A*****) and if it is mounted in an area where the use of EPL Ga equipment is required, it must be installed such, that even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

Electrostatic charges on all Units VEGADIS DIS82(*).I******** shall be avoided, except for the VEGADIS DIS82(*).I**V**X** which is made of unpainted steel and has no window.

IECEx Certificate of Conformity

Certificate No: IECEx DEK 14.0048X Issue No: 2

Date of Issue: **2016-10-14**

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

Issue 0 - 217282800 - initial approval
Issue 1 - 218047900 - addition of type DIS82(*).I*H*****.
Issue 2 - 219597800 - approval of electronically limited supply
- approval of connection of active sensors
- change of type code
- alternative PLICSCOM added

Annex:

Annex to IECEx DEK 14.0048, issue 2.pdf

Annex to Certificate of Conformity IECEx DEK 14.0048 X, issue 2
Annex to Report NL/DEK/ExTR14.0060/02

Thermal data

Minimum ambient temperature is - 40 °C.

The relation between temperature class and maximum ambient temperature, for EPL Ga and EPL Gb, is as listed in the following table:

	T6	T5	T4...T1
Type DIS82(*).I*X******			
EPL Ga *	28 °C	40 °C	60 °C
EPL Gb	45 °C	60 °C	60 °C
Type DIS82(*).I*H******			
EPL Ga *	25 °C	37 °C	60 °C
EPL Gb	42 °C	57 °C	60 °C

* for EPL Ga equipment, the rated maximum ambient temperatures are specified such, that the maximum surface temperature does not exceed 80% of the auto ignition temperature of the combustible gas or liquid, as required by EN1127-1, clause 6.4.2.

Electrical data

Supply circuit (terminals 3, 4):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
U_i = 30V, I_i = 131 mA, P_i = 983 mW (linear barrier), P_i = 700 mW (electronically limited barrier);
for Type DIS82(*).I*X******: C_i = 0 nF, L_i = 5 µH,
for Type DIS82(*).I*H******: C_i = 3.5 nF, L_i = 75 µH.

Sensor circuit (terminal 1, 2):
the type of protection, and the electrical values U_o, I_o and P_o of the sensor circuit are the same as those of the external supply circuit, as connected to terminals 3 and 4.
C_o is the same as C_o of the external supply circuit (terminals 3, 4).
L_o is the same as L_o of the external supply circuit (terminals 3, 4), decreased with (L_i) 5 µH.
for Type DIS82(*).I*H******:
C_o is the same as C_o of the external supply circuit (terminals 3, 4), decreased with (C_i) 3.5 nF.
L_o is the same as L_o of the external supply circuit (terminals 3, 4), decreased with (L_i) 75 µH.
If an active sensor is applied, the combination of sensor circuit and supply circuit shall not result in exceeding the maximum electrical values U_i, I_i and P_i of the supply circuit.

The intrinsically safe circuits are infallibly separated from parts which can be earthed.

Annex to Certificate of Conformity IECEx DEK 14.0048 X, issue 2
Annex to Report NL/DEK/ExTR14.0060/02

Type designation

Detailed Nomenclature of the approved versions of the VEGADIS DIS82 is as follows:

DIS82(*).	a	b	c	d	e	f	g	h	i
	scope								
	A	europe							
	I	worldwide							
		approval							
		C	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb						
		O	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb + Schiffszulassung						
		H	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb + ATEX II 1D, 2D Ex t IIIC T* Da, Db IP66						
		C	IEC Ex ia IIC T6 Ga, Gb						
		O	IEC Ex ia IIC T6 Ga, Gb + ship approval						
		H	IEC Ex ia IIC T6 Ga, Gb + IEC Ex t IIIC T* Da, Db IP66						
			electronic						
			X	4…20mA					
			H	4…20mA/HART					
				housing					
				K	plastic / IP66,IP67				
				A	aluminum / IP66, IP68(0,2 bar)				
				V	stainless steel (precision casting) 316L / IP66, IP68(0,2 bar)				
				S	for panel mounting (72 x 72 mm)				
				H	aluminum special color / IP66, IP68(0,2 bar)				
					protection				
					I	IP66/IP67 NEMA 4X			
					N	IP66/IP68 NEMA 6P (0,2 bar)			
					S	IP40 NEMA 1			
						cable entry / connection			
						X	without		
						M	M20x1.5 / cable gland PA black		
						K	M20x1.5 / cable gland PA blue		
						L	M20x1.5 / cable gland stainless steel		
						O	M20x1.5 / cable gland brass nickle-plated		
						6	M20x1.5 / cable gland brass nickle-plated;		
						D	M20x1.5 / blind plug		
						J	1/2NPT / cable gland PA black		
						P	1/2NPT / cable gland brass nickle-plated		
						8	1/2NPT / cable gland brass nickle-plated;		
						N	1/2NPT / blind plug		
						*	another (certified) cable glands, blind plugs, cable bushings, plug connectors		
							adjustment and indication unit PLICSCOM		
							X	without	
							A	built-in	
							F	without; cover with display window	
							K	mounted; with Bluetooth, magnetic operation	
							U	mounted; with Bluetooth, battery, magnetic	
								kind of mounting	
								C	for carrier rail, wall-mounting with plastic
								E	for tube mounting (29…60 mm) incl.
								A	for wall-mounting with aluminium or
								D	for carrier rail with aluminium or
								F	for panel mounting
									certificate
									X without
									M with
DIS82(*).	*	*	*	*	*	*	*	*	*

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 DEK 14.0048X	Issue No: 1	Certificate history:
			Issue No. 1 (2016-03-21)
Status:	**Current**	Page 1 of 4	Issue No. 0 (2015-05-20)
Date of Issue:	**2016-03-21**		
Applicant:	**VEGA Grieshaber KG** Am Hohenstein 113 77761 Schiltach **Germany**		
Electrical Apparatus:	**Display and adjustment Unit VEGADIS, type DIS82(*).I*X***** and type DIS82(*).I*H*******		
Optional accessory:			
Type of Protection:	**Ex ia**		
Marking:	Ex ia IIC T6...T1 Ga Ex ia IIC T6...T1 Gb		

Approved for issue on behalf of the IECEx Certification Body: R. Schuller

Position: Certification manager

Signature:
(for printed version)

Date: 2016-03-21

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.

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands

DEKRA

IECEx Certificate of Conformity

Certificate No:	IECEx DEK 14.0048X	Issue No: 1
Date of Issue:	**2016-03-21**	Page 2 of 4

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

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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	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.*

TEST & ASSESSMENT REPORTS:

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

Test Report:

NL/DEK/ExTR14.0060/01

Quality Assessment Report:

DE/TUN/QAR06.0002/06

IECEx Certificate of Conformity

Certificate No: IECEx DEK 14.0048X Issue No: 1

Date of Issue: **2016-03-21** Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

VEGADIS, type DIS82(*).I*X*****, is used for separate scaling, parameter adjustment and visualization of measured values in conjunction with 4 ... 20 mA, interfaced sensors.
VEGADIS, type DIS82(*).I*H*****, is for in conjunction with 4 ... 20 mA + HART interfaced sensors.

The VEGADIS DIS82 is looped into the intrinsically safe 4 ... 20 mA, or 4 ... 20 mA + HART, circuit of the sensor.

Optionally, the VEGADIS DIS82 can be provided with the display and adjustment module called "PLICSCOM".
The user can readily replace the PLICSCOM by an alternative display and adjustment module that is specified by VEGA.

The enclosure of the VEGADIS DIS82 can be made of plastic, aluminium or stainless steel, and has a cover with or without a plastic window.
Or the VEGADIS DIS82 has a plastic enclosure, with a transparent cover, for panel mounting
For more detailed information, see the Annex to this certificate.

CONDITIONS OF CERTIFICATION: YES as shown below:

For electrical and thermal data, see the Annex to this certificate.

If the enclosure of the VEGADIS is made of aluminium (Type DIS82(*).I**A****) and if it is mounted in an area where the use of EPL Ga equipment is required, it must be installed such, that even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

Electrostatic charges on all Units VEGADIS DIS82(*).I******* shall be avoided, except for the VEGADIS DIS82(*).I**V*X** which is made of unpainted steel and has no window.

IECEx Certificate of Conformity

Certificate No: IECEx DEK 14.0048X Issue No: 1

Date of Issue: **2016-03-21** Page 4 of 4

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

Addition of type DIS82(*).I*H*****.

Annex:

Annex to IECEx DEK 14.0048, iss 1.pdf

Annex to Certificate of Conformity IECEx DEK 14.0048 X, issue 1
Annex to IECEx Test Report NL/DEK/ExTR14.0060/01

Thermal data

Minimum ambient temperature is - 40 °C.

The relation between temperature class and maximum ambient temperature, for EPL Ga and EPL Gb, is as listed in the following table:

	T6	T5	T4...T1
Type DIS82(*).I*X*****			
EPL Ga *	38 °C	50 °C	60 °C
EPL Gb	55 °C	60 °C	60 °C
Type DIS82(*).I*H*****			
EPL Ga *	25 °C	37 °C	60 °C
EPL Gb	42 °C	57 °C	60 °C

* for EPL Ga equipment, the rated maximum ambient temperatures are specified such, that the maximum surface temperature does not exceed 80% of the auto ignition temperature of the combustible gas or liquid, as required by EN1127-1, clause 6.4.2.

Electrical data

Supply circuit (terminals 3, 4):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
U_i = 30V, I_i = 131 mA *, P_i = 983 mW,
for Type DIS82(*).I*X*****: C_i = 0 nF, L_i = 5 µH,
for Type DIS82(*).I*H*****: C_i = 3.5 nF, L_i = 75 µH.
* the supply current shall be resistively limited (linear barrier)

Sensor circuit (terminal 1, 2):
the type of protection, and the electrical values U_o, I_o and P_o of the sensor circuit are the same as those of the external supply circuit, as connected to terminals 3 and 4.
C_o is the same as C_o of the external supply circuit (terminals 3, 4).
L_o is the same as L_o of the external supply circuit (terminals 3, 4), decreased with (L_i) 5 µH.
for Type DIS82(*).I*H*****:
C_o is the same as C_o of the external supply circuit (terminals 3, 4), decreased with (C_i) 3.5 nF.
L_o is the same as L_o of the external supply circuit (terminals 3, 4), decreased with (L_i) 75 µH.

The sensor circuit may only be connected to a passive device.

The intrinsically safe circuits are infallibly separated from parts which can be earthed.

Type designation

Detailed Nomenclature of the approved versions of the VEGADIS DIS82 is as follows:

	directive / scope of application							
	A	ATEX / europe						
	I	IEC / worldwide						
		approval						
		C	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb					
		O	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb + ship approval					
		H	ATEX II 1D, 2D Ex t IIIC T* Da Db IP66 + II 1G, 2G Ex ia IIC T6 Ga Gb					
		C	IEC Ex ia IIC T6 Ga, Gb					
		O	IEC Ex ia IIC T6 Ga, Gb + ship approval					
		H	IEC Ex ia IIC T6 Ga, Gb + IEC Ex t IIIC T* IP66 Da, Db					
			electronic					
			X	4...20mA				
			H	4...20mA/HART				
				housing / protection				
				K	plastic / IP66,IP67			
				A	aluminium / IP66, IP68(0,2 bar)			
				V	stainless steel (precision casting) 316L/IP66,IP68 (0,2 bar)			
				S	for panel mounting (72 x 72 mm)			
					cable entry / connection			
					X	without		
					M	M20x1.5 / cable gland PA black		
					K	M20x1.5 / cable gland PA blue		
					L	M20x1.5 / cable gland stainless steel		
					O	M20x1.5 / cable gland brass nickle-plated		
					6	M20x1.5 / cable gland brass nickle-plated; for shielded cable		
					D	M20x1.5 / blind plug		
					J	1/2NPT / cable gland PA black		
					P	1/2NPT / cable gland brass nickle-plated		
					8	1/2NPT / cable gland brass nickle-plated; for shielded cable		
					N	1/2NPT / blind plug		
						adjustment and indication unit PLICSCOM		
						X	without	
						A	built in	
							kind of mounting	
							C	for carrier rail, wall-mounting with plastic housing
							E	for tube mounting (29...60 mm) incl. Mounting material
							A	for wall-mounting with aluminium or stainless steel housing
							D	for carrier rail with aluminium or stainless steel housing
							F	for panel mounting
								peripheral equipment
								X without
DIS82(*).	A/I	C/O/H	*	*	*	*	*	*

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 DEK 14.0048X	Issue No: 0	Certificate history: Issue No :0 (2015-05-20)
Status:	**Current**	Page 1 of 3	
Date of Issue:	**2015-05-20**		
Applicant:	**VEGA Grieshaber KG** Am Hohenstein 113 77761 Schiltach **Germany**		
Electrical Apparatus:	**Display and adjustment Unit VEGADIS, DIS82(*).I*X*******		
Optional accessory:			
Type of Protection:	**Ex ia**		
Marking:	Ex ia IIC T6...T1 Ga Ex ia IIC T6...T1 Gb		

Approved for issue on behalf of the IECEx Certification Body: R. Schuller

Position: Certification manager

Signature:
(for printed version)

Date: 2015-05-20

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.

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands

DEKRA

IECEx Certificate of Conformity

Certificate No:	IECEx DEK 14.0048X	Issue No: 0
Date of Issue:	2015-05-20	Page 2 of 3

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

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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	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.*

TEST & ASSESSMENT REPORTS:

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

Test Report:

NL/DEK/ExTR14.0060/00

Quality Assessment Report:

DE/TUN/QAR06.0002/06

IECEx Certificate of Conformity

Certificate No:	IECEx DEK 14.0048X	Issue No: 0
Date of Issue:	2015-05-20	Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description

The VEGADIS DIS82 is used for separate scaling, parameter adjustment and visualization of measured values in conjunction with 4 ... 20 mA sensors.

The VEGADIS DIS82 is looped into the intrinsically safe 4 ... 20 mA circuit of the sensor.

The VEGADIS DIS82 consists out of a 4..20 mA PCB and an optional display and adjustment module called "PLICSCOM".
The enclosure of the VEGADIS DIS82 can be made of plastic, aluminum or stainless steel, and has a cover with or without a plastic window or it is made as a panel mounted version, with a #FFFFFF cover.

The user can readily replace the PLICSCOM by an alternative display and adjustment module that is specified by VEGA.

Thermal and Electrical Data
See the Annex to this certificate.

Type designation / Nomenclature
See the Annex to this certificate.

CONDITIONS OF CERTIFICATION: YES as shown below:

For electrical and thermal data, see the Annex to this certificate.

If the enclosure of the VEGADIS is made of aluminium, and if is is mounted in an area where the use of EPL Ga equipment is required, it must be installed such, that even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

For all Display and adjustment Units, except for the unpainted metal units without window, measures shall be taken to minimize the risk of ignition from to electrostatic discharge.

Annex:

Annex to IECEx DEK 14.0048 issue 0.pdf

Annex to Certificate of Conformity IECEx DEK 14.0048, issue 0
Annex to IECEx Test Report NL/DEK/ExTR14.0060/00

Thermal data

Minimum ambient temperature is - 40 °C.

The relation between temperature class and maximum ambient temperature, for EPL Ga and EPL Gb, is as listed in the following table:

	T6	T5	T4...T1
EPL Ga *	38 °C	50 °C	60 °C
EPL Gb	55 °C	60 °C	60 °C

* for EPL Ga equipment, the rated maximum ambient temperatures are specified such, that the maximum surface temperature does not exceed 80% of the auto ignition temperature of the combustible gas or liquid, as required by EN1127-1, clause 6.4.2.

Electrical data

Supply circuit (terminals 3, 4):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

U_i	I_i	P_i	C_i	L_i
30 V	131 mA	983 mW	0 nF	5 µH

* the supply current shall be resistively limited (linear barrier)

Sensor circuit (terminal 1, 2):
the type of protection, and the electrical values U_o, I_o ,P_o and C_o are the same as those of the external supply circuit, as connected to terminals 3 and 4.
L_o of the sensor circuit is the same as L_o of the supply circuit as connected to terminals 3 and 4, decreased with (L_i) 5 µH.
The sensor circuit may only be connected to a passive device.

The intrinsically safe circuits are infallibly separated from parts which can be earthed.

Circuit of the display and adjustment module (spring contacts inside the enclosure):
only for connection to:

- the display and adjustment module PLICSCOM
- an alternative display and adjustment module that is specified by VEGA.

Type designation

Detailed Nomenclature of the approved versions of the VEGADIS DIS82 is as follows:

	directive / scope of application							
	A	ATEX / europe						
	I	IEC / worldwide						
	approval							
	C	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb						
	O	ATEX II 1G, 2G Ex ia IIC T6 Ga, Gb + ship approval						
	H	ATEX II 1D, 2D Ex t IIIC T* Da Db IP66 + II 1G, 2G Ex ia IIC T6 Ga Gb						
	C	IEC Ex ia IIC T6 Ga, Gb						
	O	IEC Ex ia IIC T6 Ga, Gb + ship approval						
	H	IEC Ex ia IIC T6 Ga, Gb + IEC Ex t IIIC T* IP66 Da, Db						
		electronic						
		X	4…20mA					
		~~H~~	~~4…20mA/HART~~					
			housing / protection					
			K	plastic / IP66,IP67				
			A	aluminium / IP66, IP68(0,2 bar)				
			V	stainless steel (precision casting) 316L/IP66,IP68 (0,2 bar)				
			S	for panel mounting (72 x 72 mm)				
				cable entry / connection				
				X	without			
				M	M20x1.5 / cable gland PA black			
				K	M20x1.5 / cable gland PA blue			
				L	M20x1.5 / cable gland stainless steel			
				O	M20x1.5 / cable gland brass nickle-plated			
				6	M20x1.5 / cable gland brass nickle-plated; for shielded cable			
				D	M20x1.5 / blind plug			
				J	1/2NPT / cable gland PA black			
				P	1/2NPT / cable gland brass nickle-plated			
				8	1/2NPT / cable gland brass nickle-plated; for shielded cable			
				N	1/2NPT / blind plug			
					adjustment and indication unit PLICSCOM			
					X	without		
					A	built in		
						kind of mounting		
						C	for carrier rail, wall-mounting with plastic housing	
						E	for tube mounting (29…60 mm) incl. Mounting material	
						A	for wall-mounting with aluminium or stainless steel housing	
						D	for carrier rail with aluminium or stainless steel housing	
						F	for panel mounting	
							peripheral equipment	
							X	without
DIS82(*).	A/I	C/O/H	*	*	*	*	*	*