



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 BVS 15.0001X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 2	Issue 1 (2018-09-03) Issue 0 (2015-01-15)
Date of Issue:	2021-07-01		
Applicant:	WIKA Alexander Wiegand SE & Co. KG Alexander-Wiegand-Straße 63911 Klingenberg Germany		
Equipment:	Universal Pressure Transmitter type UPT-2* and DMSU21SA		
Optional accessory:			
Type of Protection:	Intrinsic Safety "i", Equipment Protection Level (EPL) Ga		
Marking:	See Annex		

Approved for issue on behalf of the IECEx
Certification Body:

Jörg Koch

Position:

Head of Certification Body

Signature:
(for printed version)

01.07.2021

Date:

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 Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

 **DEKRA**
On the safe side.



IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 15.0001X**

Page 2 of 4

Date of issue: 2021-07-01

Issue No: 2

Manufacturer: **WKA Alexander Wiegand SE & Co. KG**
Alexander-Wiegand-Straße
63911 Klingenberg
Germany

Additional
manufacturing
locations:

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

IEC 60079-26:2014-10 Explosive atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga
Edition:3.0

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:

DE/BVS/ExTR15.0002/02

Quality Assessment Report:

DE/BVS/QAR07.0010/16



IECEX Certificate of Conformity

Certificate No.: **IECEX BVS 15.0001X**

Page 3 of 4

Date of issue: 2021-07-01

Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

General product information:

The Universal Pressure Transmitter revision 2 (short UPT-2*) is a precision scalable transmitter for pressure measurement. The transmitter type UPT-2* includes one pressure transducer type TIS-2* (IECEX BVS 14.0051U). The transmitter includes also a LC display DI-PT-U* (option) for local reading. The main board and the display are placed in an electrically conductive plastic housing or cast chromium-nickel stainless steel housing. The pressure sensor unit type TIS-2* is externally attached to the housing and fixed by means of an internal snap ring.

For measurements inside Zone 0 resp. Zone 20 the UPT-2* pressure transmitter has to be installed in a way that only the pressure sensor unit type TIS-2* is in contact with Zone 0 resp. 20 (Ga/Gb or Da/Db).

The model UPT-20 is used in the model DMSU21SA. With this, the display and operation of the model UPT-20 is used with adapted firmware and extended electronics. A pressure switch, mounted in addition, constantly monitors a double diaphragm to ensure the separation of particularly sensitive media. As soon as the first measuring diaphragm breaks, the electronics of the UPT-20 also issues a warning via the HART® signal.

Type Code:

See Annex

Parameters

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

For use in partition wall:

For functional reasons, the partition wall (membrane) to the wetted area has a wall thickness < 0.2 mm. In the application it has to be ensured, that an impairment of the separation wall e.g. by aggressive media or mechanical hazards is excluded.



IECEX Certificate of Conformity

Certificate No.: **IECEX BVS 15.0001X**

Page 4 of 4

Date of issue: 2021-07-01

Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Model DMSU21SA added and model code revised
- Update of documentation
- PCB is modified for additional digital input

Annex:

BVS_15_0001X_Wika_Annex_issue2.pdf



IECEx Certificate of Conformity



Certificate No.: IECEx BVS 15.0001X issue No: 2
Annex
Page 1 of 3

Marking

Type UPT - 2* - **B - ***** - ***** - **
Ex ia IIC T6...T3 Ga/Gb
Type UPT - 2* - **C - ***** - ***** - **
Ex ia IIC T6...T3 Gb
Type UPT - 2* - **D - ***** - ***** - **
Ex ic IIC T6...T3 Gc
Type UPT - 2* - **F - ***** - ***** - **
Ex ia IIIC T135°C Da/Db
Type UPT - 2* - **G - ***** - ***** - **
Ex ia IIIC T135°C Db
Type DMSU21SA - **C
Ex ia IIC T6...T3 Gb
Type DMSU21SA - **D
Ex ic IIC T6...T3 Gc
Type DMSU21SA - **G
Ex ia IIIC T135°C Db



IECEx Certificate of Conformity



Certificate No.: IECEx BVS 15.0001X issue No: 2
Annex
Page 2 of 3

Type Code:

All characters "*" are not relevant for explosion protection.

Transmitter UPT-2*:

UPT - 2* - abc - ***** - ***** - de**** - **

a Explosion protection approval

A, I, W, E, G, J, K, P, U, 1, 2, 3, 4 or 5 = IECEx and ATEX
C, D, F = IECEx

b Type of ignition protection

I = intrinsic safety

c Zone

B = Zone 1 adjacent to Zone 0 [Ex ia IIC T6...T3 Ga/Gb]
C = Zone 1 Gas [Ex ia IIC T6...T3 Gb]
D = Zone 2 Gas [Ex ic IIC T6...T3 Gc]
F = Zone 21 adjacent to Zone 20 Dust [Ex ia IIIC T135°C Da/Db]
G = Zone 21 Dust [Ex ia IIIC T135°C Db]

de Process connection

d = any character

e = "4" or "2" model TIS-21 with cooling element for high medium temperature

e = any character other than "4" or "2" for standard model

Transmitter DMSU21SA:

DMSU21SA - abc

a Explosion protection approval

A, I, W, E, G, J, K, P, U, 1, 2, 3, 4 or 5 = IECEx and ATEX
C, D, F = IECEx

b Type of ignition protection

I = intrinsic safety

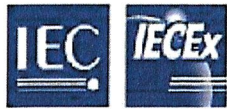
c Zone

C = Zone 1 Gas [Ex ia IIC T6...T3 Gb]
D = Zone 2 Gas [Ex ic IIC T6...T3 Gc]
G = Zone 21 Dust [Ex ia IIIC T135°C Db]

Display module DI-PT:

DI - PT - U*****

The display module is an optional component of the transmitter. It may be in the scope of delivery of the transmitter or delivered separately for an installation by the customer.



IECEx Certificate of Conformity



Certificate No.: IECEx BVS 15.0001X issue No: 2
Annex
Page 3 of 3

Parameters:

1. Electrical parameters (terminal "+" and terminal "-")

Maximum voltage	U_i	DC	30	V
Maximum current	I_i		100	mA
Maximum power (Group II)	P_i		1000	mW
Maximum power (Group III, depending on the max. ambient temperature)	P_i		750/650/550	mW
Effective internal capacitance	C_i		11	nF
Effective internal inductance	L_i		100	μ H

2. Temperature range

Surface and ambient temperature for combustible dust applications

Surface temperature:	T135 °C
Ambient temperature:	-40 °C $\leq T_a \leq$ +40 °C for $P_i = 750$ mW
	-40 °C $\leq T_a \leq$ +70 °C for $P_i = 650$ mW
	-40 °C $\leq T_a \leq$ +80 °C for $P_i = 550$ mW

Temperature class and ambient temperature for gas applications

Temperature class	Maximum media temperature [°C]	Ambient temperature T_a [°C]	
		UPT-20 UPT-21 without cooling element	DMSU21SA UPT-21-*I*-*****-*****-4****-** UPT-21-*I*-*****-*****-2****-** (UPT-21 with cooling element)
T3	+150	N / A	-40 $\leq T_a \leq$ +40
T4	+120	-40 $\leq T_a \leq$ +30	-40 $\leq T_a \leq$ +50
T4	+105	-40 $\leq T_a \leq$ +40	-40 $\leq T_a \leq$ +50
T4	+80	-40 $\leq T_a \leq$ +80	-40 $\leq T_a \leq$ +80
T5, T6	+60	-40 $\leq T_a \leq$ +60	-40 $\leq T_a \leq$ +60