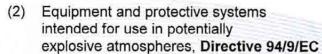
#### **Translation**

# (1) EC-Type Examination Certificate







(3) Certificate Number **TÜV 08 ATEX 555027** 

(4) for the component: Bluetooth-Module type ZUB0BLUETEX01

of the manufacturer: Nivus GmbH

Address: Im Täle 2

75031 Eppingen

Germany

Order number: 8000555027

Date of issue: 2009-02-04

This component of an equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

The TÜV NORD CERT GmbH, notified body No. 0044 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential report No. 08 203 555027.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2006

EN 60079-11:2007

- (10) If the sign "U" is placed after the certificate number, it indicates that this certificate must not be confounded with an EC-Type Examination Certificate which is destined for an equipment or protective system. This partial certificate must only be used as a basis for an EC-Type Examination Certificate.
- (11) This EC-type examination certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this
- (12) The marking of the component must include the following:

II 2 G Ex ib IIB T4

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body

Schwedt

Hanover office, Am TÜV 1, 30519 Hanover, Fon +49 (0)511 986 1455, Fax +49 (0)511 986 1590



### (13) SCHEDULE

## (14) EC-Type Examination Certificate No. TÜV 08 ATEX 555027

### (15) Description of component

The device is a Bluetooth-Module to transfer data inside an hazardous area.

### Electrical data:

The specified external reactance L  $_{\circ}$  and C  $_{\circ}$  are valid for simultaneous occurrence. Permissible combinations of the external reactance L  $_{\circ}$  and C  $_{\circ}$  have to be taken from the tables of the individual, intrinsically safe circuits.

The following input and output circuits must only be connected to certified, intrinsically safe circuits.

Supply circuit(pin 6, 7)	in type of protection Intrinsic Safety Ex ib IIB with the following maximum values:		
(bir of 1)			
	$U_{i} = 9.9 V$		
	$I_1 = 200 \text{ mA}$		
	$P_{i} = 1.2 W$		
	effective internal inductance: negligibly small effective internal capacitance: negligibly small		

Digital output	in type of protection Intrinsic Safety Ex it	o IIB	
Bluetooth-Connection	with the following maximum values:		
(pin 1)	$U_o = 9.9 \text{ V}$		
Haran San	- 10 mΔ		

l<sub>o</sub> = 10 mA characteristic line: linear

maximum external inductance L o	10 mH	0.1 mH	10 µH
maximum external capacitance C o	3.6 µF	11 µF	22 μF

 $U_i = +/-10 \text{ V}$  $I_i = +/-16.3 \text{ mA}$ 

characteristic line: linear

effective internal inductance: negligibly small effective internal capacitance: negligibly small



### Schedule EC-Type Examination Certificate No. TÜV 08 ATEX 555027

RS232 interface...... in type of protection Intrinsic Safety Ex ib IIB (output, pin 2, 3) with the following maximum values:

 $U_o = +/-10 V$  $I_o = +/-16.3 \text{ mA}$ 

characteristic line: linear

Characteriotic line: linear				
maximum external inductance L o	1 mH	0.5 mH	0.1 mH	
maximum external capacitance C o	5.8 μF	6.9 µF	11 µF	

- (16) Test documents are listed in the test report No. 08 203 555027.
- (17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones