

Physical Technical Testing Institute Ostrava-Radvanice



(1) EC-Type Examination Certificate

(2) Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 06 ATEX 0027X

(4) Equipment or protective system: Submersible Transmitter type NivuBar H II

(5) Manufacturer: NIVUS GmbH

(6) Address: Im Täle 2, 75031 Eppingen-Mühlbach, Germany

- (7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 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 confidential Report N°

06/0027 dated 30.01.2006

(9) Compliance with Essential Health and safety requirements has been assured by compliance with:

EN 50014: 1997+A1,A2; EN 50020: 2002; EN 50284: 1999; EN 50281-1-1: 1998

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and testing of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- (12) The marking of the equipment or protective system shall include following:

Ex II 1GD EEx ia IIB/IIC T4 T85°C

This EC-Type Examination Certificate is valid till:

31. 01. 2011

Responsible person:

NSIIIU

Date of issue: 31.01.2006

Dipl. Ing. Sindler Jaroslav

Head of certification body

Number of pages: 3

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This certificate may only be reproduced in its entirety and without any change, schedule included.

VB 1026



Physical Technical Testing Institute Ostrava-Radvanice

(13) Schedule

(14) EC-Type Examination Certificate N° FTZÚ 06 ATEX 0027X

(15) Description of Equipment or Protective System:

The Submersible Transmitter type NivuBar H II is designed for continuous level measurements of liquid in the hazardous area. Electronic circuitry is mounted on several printed circuit boards which are housed together with a pressure sensor in a stainless steel enclosure.

External connection is made via permanently connected cable.

Input parameters:

 $U_i = 28 \text{ V}$; $I_i = 93 \text{ mA}$; $P_i = 660 \text{ mW}$; $C_i^* = 27 \text{ nF}$; $L_i^* = 5 \text{ }\mu\text{H}$ * plus cable inductivity 1 $\mu\text{H/m}$ and cable capacity 100 pF/m.

Ambient temperature:

 $T_a = -25^{\circ}C \text{ to } +70^{\circ}C$

Degree of protection:

IP 68

(16) Report No.: 06/0027

- (17) Special conditions for safe use:
- 17.1 Ambient temperature range is limited to $T_a = -20^{\circ}\text{C}$ to $+60^{\circ}\text{C}$ for installation where are required devices of 1G category.
- 17.2 When installed in gas group IIC as a device of 1G category, the connecting cable must be protected by a steel tube.
- 17.3 All metal parts of the level transmitter and a cable protecting tube must be connected to the system for earthing or equipotential bonding.
- (18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by standards mentioned in (9), according which the product was verified and in manufacturer's instruction for use.

Responsible person:

Date of issue: 31.01.2006

Dipl. Ing. Šindler Jaroslav

Head of certification body Page: 2/3

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(13) Schedule

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(19) **LIST OF DOCUMENTATION**

	Documentation:			Date:
•	Technical description of	of LMK 358H, LMK381H	, LMK382H and LMK457F	H 15.08.2005
•	Draft of labels LMK35	8		15.08.2005
•	Instruction manual Niv	us (26 pages)		02.01.2006
•	Drawings No.:	Date:	Drawings No.:	Date:
	56.654.700	09.06.2005	EL.852.002	16.08.2005
	06.600.704	04.08.2005	EL.852.004	17.08.2005
	06.010.710	26.11.2004	EL.860.001 (3 pages)	06.06.2005
	56.082.000	20.12.1999	EL.860.002	06.06.2005
	56.110.000 D	09.08.2004	EL.860.004	06.06.2005
	56.134.700	09.06.2005	EL.860.005	06.06.2005
	56.163.500	18.05.2001	EL.860.104	16.08.2005
	MS.100.040	07.05.2003	EL.604.704	04.08.2005
	ST.040.000	13.06.2002	ST.742.001	22.04.2005
	ZB.200.000	08.12.2000	ST.742.002	12.03.2004
	ZB.200.001	18.08.2003	ST.742.004	16.08.2005
	EL.700.154	03.08.2005	ST.742.005	15.03.2004
	EL.032.100 C	16.08.2005	ST.361.001	24.03.2003
	EL.200.050	18.11.2002	ST.306.002	24.03.2003
	EL.852.001 (2 pages)	11.02.2005	ST.360.004	02.12.2002
	EL.850.002	13.06.2005	ST.360.005	02.12.2002

Responsible person:

AO 210 NB 1026

Date of issue: 31.01.2006

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