

Translation

(1) 3rd Supplement to the EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6
- (3) No. of EC-Type Examination Certificate: **DMT 02 ATEX E 203 X**
- (4) Equipment: **Level switch NIVOTESTER type FTW325-C*****
- (5) Manufacturer: **Endress + Hauser GmbH + Co. KG**
- (6) Address: **Hauptstr. 1, 79689 Maulburg, Germany**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment 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 Test and Assessment Report BVS PP 02.2105 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- EN 60079-0:2012 General requirements**
EN 60079-11:2012 Intrinsic safety "i"
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the appendix to this certificate.
- (11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to 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 certificate.
- (12) The marking of the equipment shall include the following:

 **II (1) G [Ex ia Ga] IIC/IIB**
II (1) D [Ex ia Da] IIIC

DEKRA EXAM GmbH
Bochum, dated 2014-08-25

Signed: Simanski

Certification body

Signed: Dr. Eickhoff

Special services unit

(13) Appendix to

(14) **3rd Supplement to the EC-Type Examination Certificate
DMT 02 ATEX E 203 X**

(15) 15.1 Subject and type

Level switch NIVOTESTER type FTW325-C***

15.2 Description

The Level switch NIVOTESTER can be modified according to the descriptive documents as mentioned in the pertinent Test and Assessment Report. The Level switch has been modified slightly (modified power supply) and assessed in acc. with the current standard versions.

15.3 Parameters

15.3.1 Power supply circuit (terminals 1 - 2)

Voltage	type FTW325-C*A*	AC	85 ... 253	V
	type FTW325-C*B*	DC	20 ... 60	V
		AC	20 ... 30	V
max. voltage		AC	253	V

15.3.2 Relay circuits (terminals 4 - 6 and 15 - 17)

Rated voltage	AC	250 V	DC	40 V
Rated current		2 A		2 A
Rated power	at $\cos \varphi \geq 0.7$	500 VA		≤ 80 W

15.3.3 Intrinsically safe output circuits

15.3.3.1 Max. probe circuit (terminals 9 - 7)

Voltage	U_o	DC	12.9V	
Current	I_o		9.3mA	
Power	P_o		70 mW	
Internal resistance	R_i		3.3k Ω	
trapezoid output characteristic				

15.3.3.2 Min. probe circuit (terminals 8 - 7)

Voltage	U_o	DC	12.9 V	
Current	I_o		6.2mA	
Power	P_o		46 mW	
Internal resistance	R_i		4.9 k Ω	
trapezoid output characteristic				

15.3.3.3 Sum of max. probe and min. probe circuit (terminals 8, 9 - 7)

Voltage	U_o	DC	12.9V
Current	I_o		15.5mA
Power	P_o		116 mW

Circuits type of protection Ex ia IIC

max. external capacity C_o and max. external inductance L_o in acc. with the following table:

Ex ia IIC		Ex ia IIB/Ex ia IIIC	
L_o [mH]	C_o [nF]	L_o [mH]	C_o [μ F]
0	1000	0	6.5
0,5	710	1	3
1	550	2	2.9
5	385	5	2.1
10	0	15	0

15.3.3.4	Master/Slave circuit (terminals 10 – 7)				
	Voltage	U_o	DC	12.9	V
	Current	I_o		6.2	mA
	Power	P_o		46	mW
	Internal resistance	R_i		4.9	k Ω
	trapezoid output characteristic				
	for connection of a master/slave circuit of another module				
	Sum of current			12.5	mA
15.3.4	Ambient temperature range	T_a			
	Stand-alone mounting			-20 °C up to +60 °C	
	Row mounting			-20 °C up to +50 °C	

(16) Test and Assessment Report

BVS PP 02.2105 EG as of 2014-08-25

(17) Special conditions for safe use

All apparatus connected to the intrinsically safe circuits shall be included into the equipotential bonding.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH
44809 Bochum, 2014-08-25
BVS-Schu/Ma A20131100



Certification body



Special services unit