

Translation

(1) **2<sup>nd</sup> 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 00 ATEX E 061**

(4) Equipment: **Temperature-Transmitter type TT302/303 \*\*-\*-.\*\***

(5) Manufacturer: **smar Equipamentos Industriais Ltda.**

(6) Address: **Av. Dr. Antonio Furlan Jr., 1028, 14170 -480 Sertaozinho-SP, Brasil**

(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 00.2058 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:

**EN 60079-0:2012 + A11:2013 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 2G Ex ia IIC T4/T5/T6 Gb**  
**I M2 Ex ia I Mb**

DEKRA EXAM GmbH  
Bochum, dated 2015-07-27

Signed: Simanski

Certification body

Signed: Dr. Wittler

Special services unit



- (13) Appendix to
- (14) **2<sup>nd</sup> Supplement to the EC-Type Examination Certificate DMT 00 ATEX E 061**

(15) 15.1 Subject and type  
 Temperature-Transmitter type TT302/303 \*\*-\*\_\*\*  
 Type code: no change

15.2 Description  
 The status of applied standards in the certificate has been subjected to update as listed in item (9).  
 Previous electronic assemblies of the temperature transmitter may be replaced optionally by new variants.  
 Applicable requirements of EN 60079-27:2008 (FISCO Model) are included in the updated standards.  
 Safety-relevant constructive details and parameters remain unchanged.

15.3 Parameters

15.3.1 Supply circuit for the connection to an intrinsically safe FISCO fieldbus-circuit

Voltage	$U_i$	DC	24	V
Current	$I_i$		380	mA
Power	$P_i$		5.32	W
Effective internal capacitance	$C_i$	$\leq$	5	nF
Effective internal inductance	$L_i$		negligible	

Parameters of the supply circuit comply with FISCO model according to Annex G EN 60079-11:2012, replacing EN 60079-27:2008.

15.3.2 2-wire / 3-wire / 4-wire-measuring circuit in type of protection Ex ia I / IIC for the connection to intrinsically safe thermocouples or resistance temperature indicators

Voltage	$U_o$	DC	6.5	V
Current	$I_o$		20	mA
Power	$P_o$		30	mW
Effective internal capacitance	$C_i$	$\leq$	300	nF
Effective internal inductance	$L_i$		negligible	
Maximum external capacitance	$C_o$	$\leq$	700	nF
Maximum external inductance	$L_o$	$\leq$	20	mH

The 2-wire / 3-wire / 4-wire-measurement circuit provides safe galvanic separation from the fieldbus circuit.

15.3.2 Ambient temperature range:  
 $-40^\circ\text{C} \leq T_a \leq +60^\circ\text{C}$  (T4)  
 $-40^\circ\text{C} \leq T_a \leq +50^\circ\text{C}$  (T5)  
 $-40^\circ\text{C} \leq T_a \leq +40^\circ\text{C}$  (T6)


(16) Test and Assessment Report  
 BVS PP 00.2058 EG as of 2015-07-27

(17) Special conditions for safe use  
 None



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, 2015-07-27  
BVS-Scha/Mu A 20121119

  
\_\_\_\_\_  
Certification body

  
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Special services unit

