



Translation

# 1<sup>st</sup> Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

## to the EC-Type Examination Certificate DMT 00 ATEX E 061

**Equipment:** Temperature-Transmitter Type TT302/303 \*\*\_\*\*\_\*\*  
**Manufacturer:** smar Equipamentos Industriais Ltda.  
**Address:** BR 14170-480 Sertaozinho-SP (Brazil)

### Description

The Temperature-Transmitter can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report.

The Essential Health and Safety Requirements of the modified equipment are assured by compliance with:

EN 60079-0:2006 General requirements  
EN 60079-11:2007 Intrinsic safety 'i'  
EN 60079-27:2008 FISCO Model

The marking of the modified equipment shall include the following:

 **II 2G Ex ia IIC T6**  
**I M2 Ex ia I**

### Parameters

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 EN 60079-27:2008)

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-measuring circuit is galvanically separated from the fieldbus circuit.

3. With regard to explosion protection requirements the Temperature-Transmitter is suitable for operation in the following ambient temperature range:  
 $-40\text{ }^\circ\text{C} \leq T_a \leq +60\text{ }^\circ\text{C}$

Special conditions for safe use

None

Test and assessment report

BVS PP 00.2058 EG as of 26.02.2009

**DEKRA EXAM GmbH**

Bochum, dated 26. February 2009

Signed:

Simanski  
Certification body

Signed:

Dr. Wittler  
Special services unit

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.

44809 Bochum, 26. February 2009  
BVS-Scha/Sz A 20070673

**DEKRA EXAM GmbH**

[Signature]

Certification body

[Signature]

Special services unit