EXAM
BBG Prüf- und Zertifizier GmbH

Translation

2nd Supplement

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

to the EC-Type Examination Certificate
DMT 03 ATEX E 065 X

Equipment: **Measurement Devices type MONIMET / ANNOVEX series**

Manufacturer: **WOELKE Industrieelektronik GmbH**

Address: **45239 Essen, Germany**

Description

The Measurement Devices type MONIMET / ANNOVEX series can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report

The Gas or Temperature Measurement Devices type MONIMET / ANNOVEX series are extended optionally by the following new versions:

Gas or Temperature Measurement Devices		type MONIMET GMM	**.**.***
	or	type ANNOVEX GMA	**.**.***
Flow-meter		type MONIMET WMM	**.**.***
	or	type ANNOVEX WMA	**.**.***

First to sixth digit

No change

Seventh digit: signal-outputs of limit-value indicators (switch contact)

without limit-value indicator	= 0
2 opto-couplers	= 1
2 relays	= 3
1 opto-coupler, 1 relay	= 5
2 relays, both providing a switch to change the contact from active open to active closed	= 7

The Measurement Devices type MONIMET *MM **.**.*** / ANNOVEX *MA **.**.*** optionally consist of a universal evaluator electronic circuitry (Transmitter type AMT 100 and type AMT 200) subjected to small change and uncharged sensors.
The signal-outputs of limit-value indicators (switch contact) are extended by option "7"; two relays, both providing a mechanical switch to change the contact from active open to active closed.
The parameters of the signal outputs relevant to intrinsic safety remain unchanged.

Dinnendahlstrasse 9 44809 Bochum Germany Phone +49 234/3696-105 Fax +49 234/3696-110
(until 31.05.2003: Deutsche Montan Technologie GmbH Am Technologiepark 1 45307 Essen Germany)

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

EN 50014:1997+A1-A2	General requirements
EN 50020:2002	Intrinsic safety 'i'
EN 50303:2000	Equipment Group I Category M1

The marking of the equipment shall include the following:

⟨Ex⟩ I M1 EEx ia I

Parameters

Connection facilities: connector X1 or 12-pole terminal block

1. Power supply circuit
   Connector pins No. 1 (GND) and 2 (+) or marked terminals
   No change

2. Frequency-signal output (opto-coupler output)
   Connector pins No 4 (-) and 5 (+) or marked terminals
   No change

3. Current output (alternative to 15.3.2)
   Connector pins No. 4 (-) and 5 (+) or marked terminals

Voltage	U_o	DC 9.55	V
Current	I_o	10	mA
Power	P_o	24	mW
Voltage	U_i	DC ≤ 2.2	V
Power	P_i	333	mW
Effective internal capacitance	C_i	negligible	
Effective internal inductance	L_i	negligible	

4. Alarm-signal circuits providing relay-contacts
   Alarm 1: Connector pins No 7(-) and 15(+) or marked terminals
   Alarm 2: Connector pins No 9(-) and 10(+) or marked terminals

Voltage	U_i	DC 30	V
Current	I_i	1	A
Power	P_i	30	W
Effective internal capacitance	C_i	negligible	
Effective internal inductance	L_i	negligible	

5. Alarm-signal circuits providing opto-couplers (alternative to 15.3.5)
   Alarm 1: Connector pins No 7(-) and 15(+) or marked terminals
   Alarm 2: Connector pins No 9(-) and 10(+) or marked terminals
   No change

6. Ambient temperature range:
   No change

Dinnendahlstrasse 9 44809 Bochum Germany Phone +49 234/3696-105 Fax +49 234/3696-110
(until 31.05.2003: Deutsche Montan Technologie GmbH Am Technologiepark 1 45307 Essen Germany)

EXAM
BBG Prüf- und Zertifizier GmbH

Special conditions for safe use

No change

Test and assessment report
BVS PP 03.1047 EG as of 02.11.2005

EXAM BBG Prüf- und Zertifizier GmbH
Bochum, dated 02. November 2005

Signed: Dr. Jockers
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, 02.11.2005
BVS-Scha/Mi A 20050618
EXAM BBG Prüf- und Zertifizier GmbH

Certification body

Special services unit

Dinnendahlstrasse 9 44809 Bochum Germany Phone +49 234/3696-105 Fax +49 234/3696-110
(until 31.05.2003: Deutsche Montan Technologie GmbH Am Technologiepark 1 45307 Essen Germany)