Translation

(1) # EC TYPE-EXAMINATION CERTIFICATE

(2) Equipment or protective system intended for use in potentially explosive atmospheres **- Directive 94/9/EC**

(3) EC-Type Examination Certificate Number

TÜV 99 ATEX 1463

(4) Component: POUR POINT ANALYSER type PPA - •.•.•.

(5) Manufacturer: BENKE INSTRUMENT & ELEKTRO GMBH

(6) Address: Borsigstraße 10
D-21465 Reinbek

(7) This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH & Co. KG, TÜV CERT-Certification Body, notified body number N° 0032 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this component 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 confidential report N° 00PX04500.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50 014:1997 **EN 50 016:1996** **EN 50 018:1994**

EN 50 019:1994 **EN 50 020:1994**

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This Component Certificate only serves as a basis for the issuing of certificates for equipment or protective systems.

(11) This EC-type examination certificate relates only to the design, examination and tests of the specified component in accordance to Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

(12) The marking of the component must include the following:

Ex II 2 G EEx dpe IIB T4 resp. EEx dpe[ia] IIB T4 resp.
EEx dpe IIB+H_2 T4 resp. EEx dpe[ia] IIB+H_2 T4

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Head of the Certification Body

TÜV NORD CERT

Hanover, 2005-01-07

TÜV NORD CERT GmbH & Co. KG
legal successor of the notified body of
TÜV Hannover/Sachsen-Anhalt e.V.
German original certificate
issued on 2001-03-23

(13) **SCHEDULE**

(14) EC-TYPE EXAMINATION CERTIFICATE N° TÜV 99 ATEX 1463

(15) Description of component

The Pour Point Analyser type PPA - •.•.•. is used for determination of the lowest temperature at which a liquid fuel (according to DIN ISO 3016, ASTM D-97) still flows. The fuels are assigned to the explosion group IIA and the temperature class T3.

Type code

PPA - • . • . •

B:	Explosion group II B
H:	Explosion group II B + H_2
1:	Version
4:	Flameproof enclosure for the analysis Pressurization for the control
Pour **P**oint **A**nalyser	

Electrical Data

pressurized enclosure

Connections:	+J1-X1/	1..3	L/N/PE	
central mains supply:		max.	750V a.c. 50..60Hz 2.0kW	fuse protection 16A

Input circuits

Connections:	+J1-X1/	05 06	Modem card	
		17 18	0 V d.c. Analyser Reset	max. 24 V d.c.
		19 20	0 V d.c. Validation Input	max. 24 V d.c.

BA 02 03.02

Output circuits

Connections:				
	+J1-X1/	07 08	Ready	max. 24 V d.c.
		09 10	Alarm NC	max. 24 V d.c.
		11 12	Alarm NO (option)	max. 24 V d.c.
		13 14	Validation	max. 24 V d.c.
		15 16	Alarm Cooling system	max. 24 V d.c.
		21 22	4 - 20 mA output	

Intrinsically safe circuit (output circuit; option)
in the type of protection Intrinsic Safety ia IIC

Connections:			
	+J1-X1/	21 22	4 - 20 mA output

U_o	31.5	V
I_o	89	mA
P_o	730	mW
C_o	47.4	nF
L_o	1.4	mH

Data for pressurization

Protective gas:	optional instrument air or nitrogen	
Free enclosure volume:	0.2	m^3
Minimum quantity of protective gas (air) for purging:	1.4	m^3
Initial pressure	300 .. 600	kPa

(16) Test documents are listed in the test report No.: 00PX04500.

(17) Special conditions for safe use
none

(18) Essential Health and Safety Requirements
no additional ones