



Translation

(1) **EC-TYPE EXAMINATION CERTIFICATE**

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



(3) EC-Type Examination Certificate Number

**TÜV 04 ATEX 2505**

(4) Equipment: Freezing Point Process Analyser type FRP - 4/•/•

(5) Manufacturer: BENKE INSTRUMENT & ELEKTRO GMBH

(6) Address: Borsigstraße 10  
D-21465 Reinbek

(7) This equipment or protective system and any acceptable variation thereto are 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 equipment or protective system 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° 04 YEX 8000 316 066.

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

**EN 1127-1:1997**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type examination certificate relates only to the design, examination and tests of the specified equipment in accordance to the 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 or protective system must include the following:



**II 2 G Ex IIB T4 resp. Ex IIB+H<sub>2</sub> T4**

TÜV NORD CERT GmbH & Co. KG  
TÜV CERT-Certification Body  
Am TÜV 1  
D-30519 Hannover  
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Hanover, 2004-11-29



**TÜV NORD CERT**

Head of the  
Certification Body

This certificate may only be reproduced without any change, schedule included.  
Excerpts or changes shall be allowed by the TÜV NORD CERT GmbH & Co. KG

(13)

## SCHEDULE

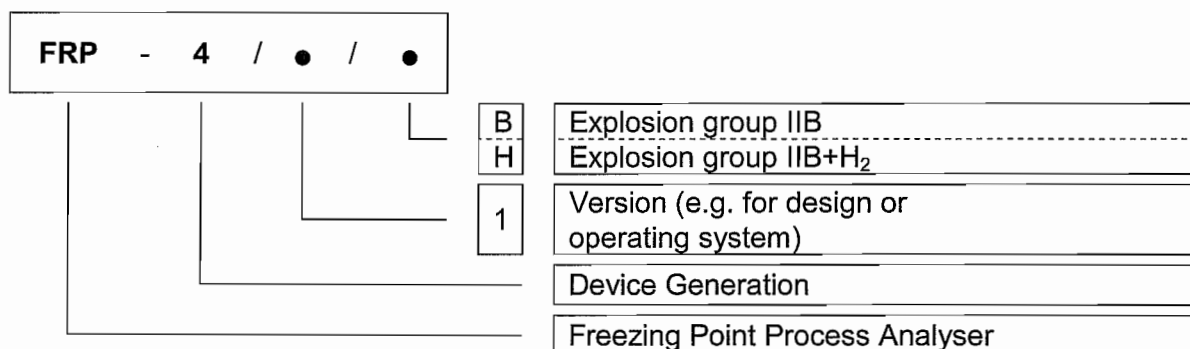
(14) **EC-TYPE EXAMINATION CERTIFICATE N° TÜV 04 ATEX 2505**

(15) Description of equipment

The Freezing Point Process Analyser (FRP) is used for automatic determination of the freezing point temperature (crystallizing temperature) of aircraft turbine kerosene. It serves for monitoring of production quality during the process and compliance with defined specifications for aviation gasoline. The Freezing Point Process Analyser is designed for the analysis of the freezing point of kerosene products. The equipment is only intended for stationary use in a building.

The aircraft turbine kerosene that is to be tested is assigned to the explosion group IIA and the temperature class T3.

### Type code



### Electrical Data

Signal circuits external digital outputs

Signal circuits external digital inputs

Signal circuits external analogues outputs

Signal circuits external analogues inputs

Data interface external

Data for pressurization

are specified in the technical file and in extracts on the label.

### Notes for erection:

1. If the Vortex-Cooler is built in at the top of the pressurized enclosure the removal of warm air in the surrounding may not be obstructed.
2. If the Vortex-Cooler is built in at the top of the enclosure G2 it has to be positioned in a way that it is ensured that only dropping water according to EN 60529 meets the analyser.

(16) Test documents are listed in the test report No.: 02 YEX 8000 316066.

(17) Special conditions for safe use  
none

(18) Essential Health and Safety Requirements  
no additional ones