



- [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: **SP 04ATEX3620X**
- [4] Equipment or Protective System: Separator Alarm type ema signal OSA
- [5] Applicant (manufacturer): AFRISO EMA AB
- [6] Address: Singelgatan 2, SE-212 28 Malmö, Sweden
- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] SP, Notified Body No. 0402 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 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 a confidential report No. P303526:A
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN 50014:1997 + A1...A2 (SS-EN 50014 ed 4 + A1...A2)
  - EN 50020:2002 (SS-EN 50020 ed 5)
  - EN 50284:1999 (SS-EN 50284 ed. 1)
- [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 or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- [12] The marking of the equipment or protective system shall include the following

 **II (1) G [EEx ia] IIB**

Borås 14 June 2004

**SP Swedish National Testing and Research Institute  
Certification**

  
Lennart Månsson  
Certification manager

  
Åke Månsson  
Certification officer

**CERTIFICATE**

SP 04ATEX3620X, dated 14.06.2004

Signed on behalf of SP, 14.06.2004: 

[13]

**Schedule**[14] **EC-TYPE EXAMINATION CERTIFICATE No. SP 04ATEX3620X**[15] **Description of equipment**

Separator alarm type ema signal OSA is connected to sensors for surveillance of fluid levels and detection of oil, petrol or grease in separation tanks. At detection of oil, grease or petrol or of a certain level of fluid, relays in the equipment are switching

The separator alarm is an associated intrinsically safe apparatus designed to be placed outside the hazardous area. Its relay outputs and power input are internally galvanically isolated from the intrinsically safe output to which external sensors in an intrinsically safe circuit are intended to be connected.

**Data**Ambient temperature ( $T_{amb}$ ):  $\pm 0$  °C to +40 °C

Power input: 250 V a.c. (maximum voltage  $U_m$ )  
230 V a.c. (rated supply voltage)

Relay output: 250 V a.c. (maximum voltage  $U_m$ )  
Maximum rating a.c: 250 V, 5 A, 100 VA  
Maximum rating d.c: 24 V, 1,5 A, 20 W

Intrinsically safe output: Maximum output voltage ( $U_o$ ): 24,9 V  
Maximum output current ( $I_o$ ): 170 mA  
Maximum output power ( $P_o$ ): 1,1 W  
Maximum external capacitance ( $C_o$ ): 0,60  $\mu$ F  
Maximum external inductance ( $L_o$ ): 2,0 mH

[16] **Report No.**

P303526:A

[17] **Special conditions for safe use**

The specifications detailed according to the section "Data" above shall be observed.

[18] **Essential health and safety requirements**

Additional requirements not applicable.

[19] **Drawings and documents**

According to the specification P303526:B