

Translation

(1) **EC-Type Examination Certificate**

**TUV NORD**

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



- (3) **Certificate Number** TÜV 05 ATEX 2905 X
- (4) for the equipment: Incremental Encoder type **ME 01-04**
- (5) of the manufacturer: **Eltomatic A/S**
- (6) Address: Fabriksvej 6  
DK-9490 Pandrup, Denmark

Order number: 8000339275

Date of issue: **2006-08-02**

- (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, notified body No. 0044 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 No. 06 YEX 339275.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN 50014: 1997+A1+A2**      **EN 50020: 2002**
- (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 2G EEx ia IIB T6**

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body

  
Schwedt

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(13) **SCHEDULE**

(14) **EC-Type Examination Certificate No. TÜV 05 ATEX 2905 X**

(15) Description of equipment

The Eltomatic encoder type ME 01-04 is an intrinsically safe 2-channel Hall encoder consisting of a die cast aluminium housing and a galvanized steel access cover. The encoder is designed as a module for linear integration onto the end of a twin-screw flow meter. An intrinsically safe wiring board carrying 3 Hall sensors, a microprocessor and auxiliary components are mounted in a cavity in the aluminium housing. The encoder shall be connected through a certified barrier module.

Electrical Data

$U_i \leq 7.2 \text{ VDC}$

$I_i \leq 170 \text{ mA}$

$P_i \leq 1.2 \text{ W}$

$L_i \cong 0$

$C_i \leq 600 \text{ nF}$

These intrinsically specifications are given inclusive a factory mounted cable of max. 2m.

(16) Test documents are listed in the test report No. 06 YEX 329275.

(17) Special conditions for safe use

The encoder is marked with an "X" after the certificate number. This "X" refers to the fact that the ambient temperature has been extended to cover the area:  $-30^{\circ}\text{C} < T_{\text{Amb}} < +70^{\circ}\text{C}$

The free end of the permanently connected cable has to be appropriately connected.

(18) Essential Health and Safety Requirements

no additional ones