

Translation

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

TÜV NORD

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



(3) **Certificate Number** TÜV 10 ATEX 386498 X

(4) for the equipment: Grain Watch

(5) of the manufacturer: **AB Liros Electronic**

(6) Address: Galoppgatan 1
200 39 Malmö, Sweden

Order number: 8000386498

Date of issue: 2011-10-05

- (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. 10 203 386498.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN 60079-0:2009** **EN 60079-31:2009** **EN 61241-11:2006**
- (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 (1D) 2D Ex tb [ia] IIIC T85°C

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified 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 notified body

Schwedt

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(13) **SCHEDULE**

(14) **EC-Type Examination Certificate No. TÜV 10 ATEX 386498 X**

(15) Description of equipment

Grain Watch Temperature Monitoring System is comprised by the Grain Watch Network Controller, GWAB11/12, connected to max 68 Sensor Cables, GWSL, which can each be provided with up to 32 sensor points. Sensorlines, GWSL, can be connected directly to GWAB, through junction boxes or through GWNET11s. It is possible to connect up to 4 GWNET11 to each input in GWAB11 and 4 sensorlines to each GWNET11 and up to 5 sensorlines to the last GWNET11.

Drawing no A712B20 provides a detailed overview on the possibilities.

Sensor Cables are considered being 'Simple Apparatus'.

Ambient temperature: -20°C to +50°C

U_m: 230 Vac (-01 versions) or 115 Vac (-02 versions)

(16) Test documents are listed in the test report No. 10 203 386498.

(17) Special conditions for safe use

Temperature is determined without layers of dust
Only suitable certified cable glands may be used
GWAB12-01 and GWAB12-02 may be placed in safe area only.

(18) Essential Health and Safety Requirements

no additional ones