CERTIFICATE

EC-Type Examination

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC
- (3) EC-Type Examination Certificate Number: DEKRA 11ATEX0075 X Issue Number: 1
- (4) Equipment: Submersible waste water pumps series DP(E)..., EF(E)..., SL1(E)...,

SLV(E)... and SEG(E)...

- (5) Manufacturer: Grundfos Holding A/S
- (6) Address: Poul Due Jensens Vej 7, DK-8850 Bjerringbro, Denmark
- (7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) DEKRA Certification B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment 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 confidential test report number NL/DEK/ExTR11.0042/xx.

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

EN 60079-0 : 2009 EN 60079-1 : 2007 EN 60079-11 : 2007 EN 13463-1 : 2009 EN 13463-5 : 2003 EN 13463-6 : 2005

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment 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 according 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 shall include the following;



II 2 G Ex b c d ib IIB T4 Gb

This certificate is issued on 3 August 2011 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

DEKRA Certification B.V.

C.G. van Es.

Certification Manager

Page 1/2





All testing, inspection, auditing and certification activities of the former KEMA Quality are an integral part of the DEKRA Certification Group



(13) SCHEDULE

(14) to EC-Type Examination Certificate DEKRA 11ATEX0075 X

Issue No. 1

(15) Description

Submersible waste water pumps series DP(E)..., EF(E)..., SL1(E)..., SLV(E)... and SEG(E)... are driven by a single or three-phase electric motor assembly with permanently connected supply cable. The electronic controls, including logic and alternation control, starter, motor protection and water level measurement and detection, are integrated in the motor enclosure.

Dry run sensors guarantee the disconnection of the supply if a critical submerge level of the pump is reached. This safety function complies with the requirements for SIL 2.

A thermal protector in the stator windings with a nominal switching temperature of 150 °C is used for direct temperature control.

Ambient temperature range -20 °C to +40 °C. Maximum process temperature +40 °C.

Electrical data

Rated voltage	415 Vac max.
Rated output power	5,2 kW max.
Rated frequency	up to 50 or 60 Hz

Installation instructions

The manual provided with the equipment shall be followed in detail to assure proper and safe operation.

(16) Test Report

NL/DEK/ExTR11.0042/xx.

(17) Special conditions for safe use

Contact the manufacturer for information on the dimensions of the flameproof joints. The motors are provided with special fasteners of property class A2-80.

(18) Essential Health and Safety Requirements

Covered by the standards listed at (9).