

# TYPE EXAMINATION CERTIFICATE



- [2] **Equipment or Protective System intended for use  
in Potentially Explosive Atmospheres  
Directive 94/9/EC**
- [3] Type Examination Certificate Number: **DEMKO 10 ATEX 0945420 Rev. 3**
- [4] Equipment: **Solenoid, Models A420-068485-00 and A420-068485-01**
- [5] Manufacturer: **Guardian Electric Manufacturing Co.**
- [6] Address: **1425 Lake Avenue, Woodstock, IL 60098 USA**
- [7] This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- [8] UL International Demko A/S certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of **Category 3** equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to the European Union Directive 94/9/EC of 23 March 1994.
- The examination and test results are recorded in confidential report no. **4786797813**
- [9] Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to Standards:
- EN 60079-0:2012 + A11:2013** **EN 60079-15:2010**
- [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 Type examination certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.
- [12] The marking of the equipment or protective system shall include the following:

 **II 3 G Ex nA IIC T3/T2 Gc**

**Certification Manager**  
Jan-Erik Storgaard

This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer is solely and fully responsible for conformity of all equipment to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

**Date of issue:** 2010-09-01

**Re-issued:** 2016-01-19

**Certification Body**

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark  
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## Schedule

### TYPE EXAMINATION CERTIFICATE No.

DEMKO 10 ATEX 0945420 Rev. 3

Report: 4786797813

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Description of Equipment:

The solenoid is magnetically operated consisting of a bobbin, core tube, coil, spacer and ring, gasket, plug, plunger extension and enclosure. The enclosure is constructed out of steel, having a rectangular and round end flange welded onto the tube body. The plug is press-fitted into the rectangular end flange and the plunger extension forms a cylindrical joint with the plug. The round end flange forms a flat joint with the cap of the solenoid.

Models A420-068485-00 and A420-068485-01

Temperature range

The relation between the solenoid model, ambient temperature, and the assigned temperature class is as follows:

| Solenoid Model | Ambient Temperature Range                    | Temperature Class |
|----------------|--|-------------------|
| A420-068485-00 | $-20\text{ °C} \leq T_a \leq +82\text{ °C}$  | T3                |
| A420-068485-01 | $-20\text{ °C} \leq T_a \leq +130\text{ °C}$ | T2                |

Electrical data

Voltage – 125 V dc  
Amperage – 0.8 Amps  
Wattage – 100 Watts

Installation instructions

For ATEX installations utilizing protection method 'nA' an Ex certified cable gland with IP54 or higher ratings must be installed per manufacturer's instructions.

Routine tests

Routine tests shall be performed on the solenoids according to EN 60079-15: 2010 cl. 23.2.1.

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Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [ 8 ] on page 1 of this Type Examination Certificate.

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Special conditions for safe use:

None.

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Essential Health and Safety Requirements

Met by compliance with the standards EN 60079-0:2012+A11:2013 and EN 60079-15:2010.

Additional information

The solenoid has in addition passed the tests for Ingress Protection to IP 64 in accordance with EN60529: 1991/A1 2000.