[1] # 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 14 ATEX 1387X Rev. 1**

[4] Equipment: **Graphite Series Touchscreen HMI**

[5] Manufacturer: **Red Lion Controls Inc.**

[6] Address: **20 Willow Springs Cir. York, PA 17406-8428, 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. **4786543274-14ATEX1387X**

[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 60079-11:2012**
EN 60079-15:2010 **EN 60079-31:2009**

[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 ic nA IIC T4 Gc

II 3 D Ex tc IIIC T135°C Dc

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: 2015-03-20
Re-issued: 2015-05-06

Certification Body
UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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[13] [14]

Schedule
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[15] Description of Equipment:
Graphite Series Touchscreen HMI, Models G followed by 07, 09, 10, 12 and 15, followed by C, S, or R, followed by 0 or 1, followed by 0 or 1, followed by 0, followed by 0 and U.
U =

- OEM company logo on overlay along with Red Lion unit label
- Software changes not affecting functionality
- Different overlay color

Accessories:
Single PID: GMP1SA00, GMP1SM00
Dual PID: GMP2S000, GMP2SM00
Digital I/O: GMDIOS00
Universal Input: GMUIN400
Analog Ouput: GMOUT400
Analog Input: GMTC8000, GMINI800, GMINV800, GMRTD600

These devices are open type Human Machine Interfaces(HMIs) with a touch screen display that use serial communication connections to operate with PLC's, Variable Speed Drives, Temperature Controllers, Bar Code Readers, etc. They are intended to be panel-mounted and only the front face has been investigated as the enclosure and IP66 rating. All Models are to be powered by a Class 2 or limited power supply (LPS). The Accessory Modules are installed using USB expansion ports at the rear cover of the HMIs. These Accessory Modules are communication, input and output modules for the HMI models covered by this report. The modules are secured to the rear cover by two fasteners.

The optical radiation output of the apparatus with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 94/9/EC is covered in this certificate.

Temperature range
The ambient temperature range for HMIs and Accessory Modules: -20 to 60°C

Electrical data

G07 Series:
G07C0000 rated 24 Vdc ±20%, 9 W typical, 16 W max. (37 W max with 5 accessory modules)
G07S0000 rated 24 Vdc ±20%, 10 W typical, 17 W max. (38 W max with 5 accessory modules)

G09 Series:
G09C0000 rated 24 Vdc ±20%, 13 W typical, 20 W max. (45 W max with 6 accessory modules)

G10 Series:
G10C0000, G10C0100 rated 24 Vdc ±20%, 12 W typical, 19 W max. (48 W max with 7 accessory modules)
G10R0000, G10R0100 rated 24 Vdc ±20%, 12 W typical, 19 W max. (48 W max with 7 accessory modules)
G10S0000, G10S0100 rated 24 Vdc ±20%, 18 W typical, 24 W max. (53 W max with 7 accessory modules)

G12 Series:
G12C0000, G12C1100 rated 24 Vdc ±20%, 16 W typical, 23 W max. (56 W max with 8 accessory modules)

G15 Series:
G15C0000, G15C1100 rated 24 Vdc ±20%, 20 W typical, 27 W max. (60 W max with 8 accessory modules)

Accessory Modules (24Vdc powered from Operator Interface Terminal):

GMP1: 1A@30Vdc for solid state relay
GMP2: 1A@30Vdc for solid state relay
GMDIO: 1A@30Vdc for solid state relay
GMUIN: Low voltage output
GMOUT: Low voltage output
GMTC: Low voltage output
GMINI: Low voltage output
GMINV: Low voltage output
GMRTD: Low voltage output

The system is intended to be powered by a Class 2 or Limited Power Supply (LPS).

Routine tests
Routine tests are not required.

[13] **Schedule**

[14] **TYPE EXAMINATION CERTIFICATE No.**
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[16] Descriptive Documents
The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

[17] Special conditions for safe use:

- The system shall be mounted in an ATEX-Certified enclosure with a minimum ingress protection rating of at least IP66 as defined in EN 60529 and used in an environment of not more than Pollution Degree 2 per EN/ IEC 60664-1.
- These devices have only been evaluated for low risk of mechanical impact.
- Provision should be made to prohibit the product from being exposed to UV radiation while in use.
- Care should be taken not to rub or buff the touchscreen surface in a way that might cause the accumulation of static charges.

[18] Essential Health and Safety Requirements
Met by compliance with the standards EN 60079-0:2012+A11:2013, EN 60079-11:2012, EN 60079-15:2010 and EN 60079-31:2009.