



DET NORSKE VERITAS

EC-TYPE EXAMINATION CERTIFICATE

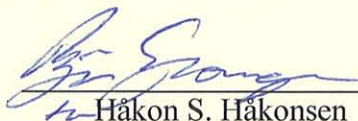
- [2] **EQUIPMENT OR PROTECTED SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 94/9/EC**
- [3] EC-Type Examination Certificate Number: **DNV-2007-OSL-ATEX-4076X** Rev.: **1**
- [4] Equipment or Protective System: **Flameproof enclosure RCU II-ExL**
- [5] Applicant – Manufacturer or Authorized representative: **Toptech Systems Inc.**
- [6] Address: **280 Hunt Park Cove
Longwood, FL 32750
USA**
- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV, notified body number 0575 in accordance with Article 9 of Council Directive 94/9/EC of 23 March 1994, 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 confidential report no. : **2007-3278**
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0: 2006, EN 60079-1: 2004 and 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 and construction of the specified equipment or protected system. If applicable, further requirements of this Directive apply to the manufacturer and supply of this equipment or protective system.
- [12] The marking of the equipment or protective system shall include the following :

 **II 2 G** **EEx dib IIB T4 -40°C ≤ Tamb ≤ + 60°C**

Høvik, 2007-07-20
for Det Norske Veritas Certification AS


for **Marianne Spæren**
Certification Manager




Håkon S. Håkonsen
Technical Reviewer

Notice: This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE No.:** DNV-2007-OSL-ATEX-4076X Rev.: 1

Certificate History

Revision	Description	Issue date
1	Original certificate	2007-07-20

[15] **Description of Equipment or Protective System:**

The RCU II is a user interface unit for use in hazardous locations. The electronics are housed in an Ex-d enclosure, and an intrinsic safety barrier board in the Ex-d box provides an intrinsically safe interface to a keypad located on the outside the enclosure. ATEX certified Ex-d bushings provide the interface from the Ex-d box to the outside of the enclosure.

Type Identification : RCU II-ExL

Electrical Data:

Intrinsic Safety Parameters: Um = 250 V

[16] **Report No.:** 2007-3278

Project No.: PRJC-06181-2007-PRC-NOR

Descriptive Documents

Number	Title	Rev.	Date
1400-A770	RCU II Barrier Assembly Drawing	1.1	2006-12-11
1400-C770	RCU II Barrier Top and Bottom Copper Layers	1.1	2006-12-11
1400-S770	RCU II Barrier Schematic, 2 sheets	1.1	2006-12-06
1403-A670	RCU II Keyboard	1.0	2007-03-02
1400-B770	RCU II Barrier BOM	1.1	2006-12-07
1403-A072	RCU II ExL Base Assembly	1.0	2007-03-07
1403-A073	RCU II ExL Cover Assembly	1.0	2007-03-07
1403-A074	RCU II ExL Unit Assembly	1.0	2007-02-08
1403-B070	RCU II ExL Assembly BOM	-	2007-07-12
1403-P070	RCU II ExL Base	1.0	2007-03-07
1403-P071	RCU II ExL Cover	1.0	2007-03-07
1403-P075	RCU II ExL Display Bracket	1.0	2007-02-08
1403-P077	Multiloading ExL Regulatory Label	1.0	2007-06-21
1403-S600	RCU II ExL SPI numeric keypad	B	2007-02-01
1403-B600	Bill of material keypad	-	2007-02-01
1403-S670	RCU II ExL SPI numeric keypad	1.0	2007-07-12

[17] **Special Conditions for Safe Use**

- Ambient temperature range is $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$
- Maximum specified gap of flange joint is 0,08 mm

[18] **Essential Health and Safety Requirements**

See part 9 of this certificate



END OF CERTIFICATE

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.