[1] # TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU**

[3] Type Examination Certificate Number: **DEMKO 03 ATEX 0324020X Rev. 5**

[4] Product: **Process Control and Measurement Equipment, Compact RIO Modules and Chassis Types cRIO-xxxx, cDAQ-xxxx, or NI-xxxx, where xxxx represents the model number**

[5] Manufacturer: **National Instruments Corporation**

[6] Address: **11500 N. Mopac Expressway, Austin, TX 78759 USA**

[7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] UL International Demko A/S certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential report no. **4788727590.4.1**

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013 **EN 60079-15:2010**

except in respect of those requirements listed at item 18 of the Schedule.

[10] If the sign "**X**" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

[11] This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.

[12] The marking of the product shall include the following:

II 3 G Ex nA IIC T4 Gc

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product 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 product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product 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: 2003-08-07
Re-issued: 2019-03-24

Certification Body
UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

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Schedule
TYPE EXAMINATION CERTIFICATE No.
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[15] Description of Product:
The cRIO-9002, 9004, 9102, 9101, 9103, 9104, 9151, 9474, 9472, 9423, 9421, 9411, 9211, 9233, 9201, 9221, 9476 with DSUB, 9425 with DSUB, 9472 w/DSUB, 9421 w/DSUB, 9215 w/BNC, 9215 , 9265, 9401, 9853, 9201 w/ DSUB, 9221 w/ DSUB, 9203, 9205, 9205 w/ DSUB, 9206, 9217, 9237, 9477 , 9012, 9014, 9485, 9852 are measurement modules for industrial process applications and are covered under Certificate No. DEMKO 03 ATEX 0324020X. The input/output modules are intended to be connected to a chassis. The controller is intended to receive power from a SELV source. The models may be referenced as XXXX or NI XXXX or cRIO-XXXX or cDAQ-XXXX or NI cRIO-XXXX, where XXXX represents the model number. References to cRIO-XXXX represent XXXX, NI XXXX, cDAQ-XXXX, and NI cRIO-XXXX.

The models with DSUB may be referenced as “w/ DSUB”, or “with DSUB”.
The models with BNC may be referenced as “w/ BNC” or “with BNC”.

The optical radiation output of the apparatus with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is not covered in this certificate.

Temperature range
The ambient temperature range is -40 °C to +70 °C.

Electrical data

Model No.	Module Type	Electrical Ratings	Temperature Ratings	Ex Marking
CRIO-9002, -9004	Controller and Power Supply Module	9-35Vdc, 17 W Max	T4 @ 70°C Ambient	nA
CRIO-9102, -9101, -9103, -9104	8 Slot Backplane Module	N/A (30 Vdc max, powered by Controller)	T4 @ 70°C Ambient	nA
CRIO-9151	4 Slot Backplane Module	N/A (30 Vdc max., powered by PXI card)	T4 @ 70°C Ambient	nA
CRIO-9474	8 CH. Digital Output Module	24 V High-Speed Sourcing Digital Output, 30V Vsup-to-COM, 250Vrms CAT II Ch-to-Earth Isolation	T4 @ 70°C Ambient	nA
CRIO-9472	8 CH. Digital Output Module	24V Sourcing Digital Output, 30 V Vsup-to-COM, 250 Vrms CAT II Ch-to-Earth Isolation	T4 @ 70°C Ambient	nA
CRIO-9423	8 CH. High Speed Digital Input Module	24 V High-Speed Sinking Digital Input, 30V Ch-to-COM, 250Vrms CATII Ch-to-Earth Isolation	T4 @ 70°C Ambient	nA
CRIO-9421	8 CH. Low Speed Digital Input Module	24 V Sinking Digital Input, 30V Ch-to-COM, 250Vrms CAT II Ch-to-Earth Isolation	T4 @ 70°C Ambient	nA
CRIO-9411	6 CH. Differential Digital Input Module	±24V Ch-to-COM, 30V Vsup-to-COM, 60 Vdc CATI Ch-to-Earth Isolation	T4 @ 70°C Ambient	nA
CRIO-9211	4 CH. Thermocouple Input Module	±80mV 24-Bit Thermocouple Input, ±1.5V Ch-to-COM, 250Vrms CAT II Ch-to-Earth Isolation	T4 @ 70°C Ambient	nA
CRIO-9233	4 CH, ±5V, Analog Input	± 5V 24-Bit IEPE Analog Input, ±2V AI-to-Earth Ground	T4 @ 70°C Ambient	nA
CRIO-9201	8 CH, ±10V, 12 Bit Analog Input	± 10 V 12-Bit Analog Input, ±10V Ch-to-COM, 250Vrms CAT II Ch-to-Earth Isolation	T4 @ 70°C Ambient	nA
CRIO-9221	8 CH, ±60V, 12 Bit Analog Input	± 60V 12-Bit Analog Input, ±60V Ch-to-COM, 250Vrms CAT II Ch-to-Earth Isolation	T4 @ 70°C Ambient	nA
CRIO-9476 with DSUB	32 CH, 24V Digital Output	36 V Sourcing Output, 60 V DC, Measurement Category 1	T4 @ 70°C Ambient	nA
CRIO-9425 with DSUB	32 CH, 24V Digital Input	24 V Sinking Input, 60 V DC, Measurement Category I	T4 @ 70°C Ambient	nA

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Model No.	Module Type	Electrical Ratings	Temperature Ratings	Ex Marking
CRIO-9472 w/ DSUB	8 CH, 24V Digital Output	24 V Sourcing Digital Output, 30V Vsup-to-COM, 60Vdc CAT I Ch-to-Earth Isolation	T4 @ 70°C Ambient	nA
CRIO-9421 w/ DSUB	8 CH, 24V Digital Input	24 V Sinking Digital Input, 30V Ch-to-COM, 60Vdc CAT I Ch-to-Earth Isolation	T4 @ 70°C Ambient	nA
CRIO-9215 w/ BNC	4 CH, ±10V, 16 Bit Analog Input	±10V 16-Bit Simultaneous Analog Input, ±10V AI+ to AI-, 60Vdc CAT I Ch-to-Earth Isolation	T4 @ 70°C Ambient	nA
CRIO-9215	4 CH. Simultaneous Sampling Analog Input Module	±10V 16-Bit Simultaneous Analog Input, ±10V AI+ to AI-, 250Vrms CAT I Ch-to-Earth Isolation	T4 @ 70ºC Ambient	nA
CRIO-9265	4 CH, 16 Bit Analog Current Output Module	20mA 16-Bit Analog Output, 36V Vsup-to-COM, 250Vrms CAT II Signal-to-Earth Isolation	T4 @ 70ºC Ambient	nA
CRIO-9401	8 CH, TTL Digital I/O	5 V TTL High-Speed Digital Input/Output, 60Vdc CAT I Ch-to-Earth Isolation	T4 @ 70ºC Ambient	nA
CRIO-9853	2 Port High Speed CAN	2-port High-Speed CAN, 60Vdc Port-to-Earth Port-to-Port Isolation	T4 @ 70ºC Ambient	nA
CRIO-9201 w/ DSUB	8 CH, 12 Bit Analog Input Module	±10V 12-Bit Analog Input, ±10V Ch-to-COM, 60Vdc CAT I Ch-to-Earth Isolation	T4 @ 70ºC Ambient	nA
CRIO-9221 w/ DSUB	8 CH, 12 Bit Analog Input Module	± 60V 12-Bit Analog Input, ±60V Ch-to-COM, 60Vdc CAT I Ch-to-Earth Isolation	T4 @ 70ºC Ambient	nA
cRIO-9203	20mA AI Module. 250V Ch-to-Earth CAT II	±20mA 16-Bit Analog Input, 250Vrms CAT II Ch-to-Earth Isolation	T4 @ 70ºC Ambient	nA
cRIO-9205	32 CH, 10V AI Module. 250V Ch-to-Earth CAT II	± 10 V to ±200 mV 16-Bit Analog Input, ±10V Ch-to-COM, 250Vrms CAT II Ch-to-Earth	T4 @ 70ºC Ambient	nA
cRIO-9205 with DSUB	32 CH, 10V AI Module. 60Vdc Ch-to-Earth CAT I (Same as 9205 but with DSUB connector)	± 10 V to ±200 mV 16-Bit Analog Input,, ± 10 V CH to COM, 60Vdc CAT I Ch-to-Earth Isolation	T4 @ 70ºC Ambient	nA
CRIO-9206	10V AI Module. 600V Ch-to-Earth CAT I (Same as 9205 but different Transformer/Isolator), 400V Ch-to-Earth CAT I	16-Bit Analog Input for Fuel Cells, ± 10 V CH-to–COM, 600/400Vdc CAT I Ch-to-Earth Isolation	T4 @ 70ºC Ambient	nA
cRIO-9217	4 Ch 100Ω Analog Input Module, 250V Ch-to-Earth CAT II	100 Ohm 24-Bit RTD Analog Input, 250V rms Channel to Earth Iso.	T4 @ 70ºC Ambient	nA
cRIO-9477	32-Ch Sinking Digital Output Module	5-60V dc Sinking Digital Output, 60V Ch-to-COM, 60Vdc Cat I Ch-to-Earth Isolation	T4 @ 70ºC Ambient	nA
cRIO-9012 cRIO-9014	Controller and Power Supply Module	9-35 V dc, 20 Watts Max	T4 @ 70ºC Ambient	nA
cRIO-9485	SSR Module	± 60 Vdc Ch to Ch; 250 Vrms CAT II, Channel to Earth, altitudes ≤ 2000m 60Vdc CAT, I, Ch-to-Earth Iso, altitudes ≤ 5000m, 60Vdc Ch-to-Ch Iso, altitudes ≤ 5000m	T4 @ 70ºC Ambient	nA
CRIO-9852	CAN Communication Module	2-Port Low-Speed CAN, 60 Vdc Port-to-Earth Port-to-Port Isolation	T4 @ 70ºC Ambient	nA

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Routine tests:
Routine tests are not required.

[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 of Use:

- You must make sure that the transient disturbances do not exceed 140% of the rated voltage.
- The system shall be mounted in a suitable enclosure with a minimum ingress protection rating of at least IP54 as defined in EN 60079-15.
- The system shall only be used in an area of not more than Pollution Degree 2, as defined in EN 60664-1.
- The enclosure must have a door or cover accessible only by the use of a tool.

[18] Essential Health and Safety Requirements
The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The trademark NATIONAL INSTRUMENTS will be used as the company identifier on the marking label.