



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 11ATEX1160** Issue: **0**

4 Equipment: **8106, 1000 and 8200 Series PGC/NGC Analyzer**

5 Applicant: **ABB Inc**

6 Address: **7051 Industrial Blvd  
Bartlesville  
Oklahoma 74006  
USA**

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

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of 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 intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2009 EN 60079-1:2007

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 and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 2 G  
Ex d IIB + H<sub>2</sub> T6 Gb  
Ta = -30°C to +60°C

D R Stubbings BA MIET  
Certification Manager

Project Number 25063

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**SCHEDULE**

**EC TYPE-EXAMINATION CERTIFICATE**

Sira 11ATEX1160  
Issue 0

**13 DESCRIPTION OF EQUIPMENT**

The 8106, 1000 and 8200 Series PGC/NGC Analyzer are electronically controlled gas chromatographs designed to sample natural gas, natural gas contaminants and other light hydrocarbons, determine composition and store measurements information. The equipment is suitable for use in Group IIB+H<sub>2</sub>. The different versions incorporate electronics circuitry and have a rated input of 10.5 to 16Vdc, 0.6A or 18 to 28Vdc, 0.3A.

The 8200 Series NGC Transmitter is designed to be mounted onto a 2" diameter pipe or alternatively by a flange, bolted to the bottom hub. It comprises a stainless steel flameproof enclosure fitted with internal electronics. The 8200 Series NGC Transmitter has an LCD display and is provided with three 3/4 inch NPT conduit openings for signal and power wiring to and from the electronics.

The 8106 series utilises the same enclosure and external protective components as the 8200 Series gas analyser. The Model 8106 uses a configuration (2102027-003) of the Feed Through which has six (6) flame path openings (gas port flame suppression), while Models 1000 and 8200 have nine (9) flame path openings (Refer to section 3.3.2.1 construction of the flame path E for understanding the gas port flame suppression). The Model 8106 does not have a LCD display, but has LEDs to turn on or off for user information.

The 8106, 1000 and 8200 Series PGC/NGC Analyzers are rated:

10.5-16 VDC, 4AMP (8.2Amp Max with Optional Heater) or  
21-28VDC, 3AMP (6 AMP Max with Optional Heater)

**14 DESCRIPTIVE DOCUMENTS**

**14.1 Drawings**

Refer to Certificate Annexe.

**14.2 Associated Sira Reports and Certificate History**

Issue	Date	Report number	Comment
0	09 August 2011	R25063A/00	The release of the prime certificate.

**15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)**

None

**16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)**

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

**17 CONDITIONS OF CERTIFICATION**

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

17.3 A sealing device such as a stopping box with setting compound shall be provided, either as part of the flameproof enclosure or immediately at the entrance thereto. The sealing device is to be ATEX certified as Ex d IIB+H<sub>2</sub> Gb minimum.

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**Sira Certification Service**

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# Certificate Annexe

Certificate Number: Sira 11ATEX1160  
Equipment: 8106, 1000 and 8200 Series PGC/NGC Analyzer  
Applicant: ABB Inc

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## Issue 0

Drawing No.	Sheets	Rev.	Date (Sira Stamp)	Title
2102250	1 to 6	AD	08 Jul 11	Control Drawing NGC 8200, Ex d, ATEX
2102251	1 to 9	AE	08 Jul 11	Construction Drawing NGC 8200, Ex d, ATEX
2101854	1 to 7	AF	14 Jun 11	Flamepath Overview Dwg 8200

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