



Assessment Report

Title:
ATEX Certification of the 8106, 1000 and 8200 Series PGC/NGC Analyzer

Applicant:
ABB Inc.

Report No. (Free Ref. No.):
Sira R25063A/00

CSA Report No.:
201114-2418961

Date and place of issue:
June 2011
Sira Certification Rake Lane Eccleston Chester CH4 9JN

1 Report Summary

1.1 Certification Overview

ATEX Certification of the 8106, 1000 and 8200 Series PGC/NGC Analyzer

1.2 Applicant's Name & Address

ABB Inc.
7051 Industrial Blvd,
Bartlesville,
Oklahoma
74006
USA

1.3 Manufacturer's Name & Address

As Applicant

1.4 Trademark

None

1.5 Product Name/Model Number

8106, 1000 and 8200 Series PGC/NGC Analyzer

1.6 Rating



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

1.7 Assessment Standards

EN 60079-0:2009

EN 60079-1:2007

1.8 Marking

Company Detail	ABB Inc. 7051 Industrial Blvd, Bartlesville, Oklahoma 74006 USA
Product	8200, 8100 and 8106 Series NGC Analyzer
Certificate number:	Sira 11ATEX1160
Certification code:	Ex d IIB + H ₂ T6 Gb
Ambient range:	-30°C to +60°C
Serial number:	As appropriate
Year of manufacture:	As appropriate
Ratings:	As applicable
Warnings:	"Conduit Entries: 3/4 inch NPT thread" (appears in Installation Manual) DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT
Other marking:	 0344  II 2 G

1.9 Product Description

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+H₂. 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.

1.10 Manufacturer's Documents

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

1.11 Attachments

None.

1.12 Special Conditions For Safe Use

None.

1.13 Conditions Of Manufacture

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+H₂ Gb minimum.

1.14 Conclusion

The equipment as described in the Report Summary satisfies the requirements of the listed standards, the relevant certification code being as indicated.

1.15 Signatories

Compiled by + signature (ExTL): M Banu P. Eng.
Senior Certification Engineer



Reviewed by + signature (ExTL): M Halliwell BEng (Hons) MIET
Senior Certification Engineer

