

1 EU - Type Examination Certificate

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: ExVeritas 16 ATEX0171X Issue: 1

4 Equipment: atmosFIR EX Zone 1

5 Manufacturer: Extronics Ltd.

6 Address: 1 Dalton Way, Midpoint 18
Middlewich
Cheshire
CW10 0HU.
UK

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

8 ExVeritas, Notified Body number 2585 in accordance with Article 9 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems for use in potentially explosive atmospheres given in Annex II to the Directive

9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with the following Standards and section 16 of this certificate:

EN 60079-0:2012+A11:2013 EN 60079-2:2014

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 EU-Type Examination Certificate relates only to the design, construction, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment shall include the following:

 II 2 G Ex pxb IIC T4 Gb -20°C ≤ T_{amb} ≤ +45°C



No. 8613

On behalf of ExVeritas


S D'Henin
Certification Manager

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The certificate is only valid when it carries an original signature.

For help or assistance relating to this certificate, contact info@exveritas.com.

ExVeritas, Units 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, United Kingdom LL13 9UZ.

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Schedule

13 Description of Equipment or Protective System

The atmosFIR EX is a 316 stainless steel purged and pressurised cabinet, containing an analyser and associated sampling system for flammable & non-flammable industrial gasses. The enclosure measures approximately 1950mm tall by 650mm wide by 765mm deep. Access to the enclosure is via two hinged doors, each of which is secured with 10 quarter turn panel key operated compression locks. Sample lines are fitted via Swagelok fittings installed into gland plates fitted to the side or base of the enclosure. Electrical connections are via suitable glands fitted via plain holes in the gland plates. The door to the front of the enclosure is fitted with a laminated glass window with an LCD display fitted internally.

Purge control is via the Extronics iPurge Zone 1 Purge Controller.

The following purge parameters apply:

Minimum purge flow rate:	200 L/min
Minimum purge time:	25 minutes
Protective gas:	Compressed air
Minimum overpressure:	6 mBar
Maximum overpressure:	14 mBar
Minimum supply pressure:	4 Bar
Maximum supply pressure:	6 Bar
Maximum leakage rate:	29 L/min
Maximum gas sample pressure:	5mBar

14 Descriptive Documents

14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R0949/A/2	25/01/2017	1	Initial issue of the Prime Certificate

14.2 Compliance Drawings:

Issue 1

Number	Date	Issue	Description
418634	09/12/2016	REL1.0	CD Zone 1 Purged Enclosure Certification Label atmosFIR EX
419397	09/12/2016	REL1.0	CD Zone 1 Purged Enclosure Certification Drawing atmosFIR EX Sheets 1 to 2
419398	09/12/2016	REL1.0	CD Zone 1 Purged Enclosure Coin Cell Replacement PCB Assembly
419403	09/12/2016	REL1.0	CD Zone 1 Purged System Safety Instructions atmosFIR EX Pages 1 to 16

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15 Conditions of Certification

15.1 Special Conditions for Safe Use

- The sampling system uses a safety relief valve to limit the sample pressure within the sample lines connected to the purged enclosure. The pressure at which this valve operates is nominally 5mbar, the actual opening pressure shall be recorded and the minimum overpressure on the purge control unit shall be set at least 0.5mbar above the measured value but not less than 6mbar.

15.2 Conditions for Use

The manufacturer shall verify the following:

- Functional Test – EN 60079-2:2014 clause 17.1. – The performance of safety devices shall be verified.
- Leakage Test – EN 60079-2:2014 Clause 17.2 – The leakage of the protective gas shall be tested. The enclosure shall be pressurized to the maximum overpressure for normal service. With any outlet apertures closed, the leakage flow rate shall be measured at the inlet aperture. The measured flow rate shall be not greater than the maximum leakage flow rate specified by the manufacturer of 29L/min.

16 Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

The manufacturer shall inform the Notified Body of any modifications to the design of the product described by this schedule.