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# TYPE EXAMINATION CERTIFICATE

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

3 Certificate Number: Sira 09ATEX4309X Issue: 2

4 Equipment: Barracuda 19 BOP

5 Applicant: **Azonix Corporation** 

6 Address: 101 Billerica Ave

Building #4 North Billerica Massachusetts 01862 USA

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 CSA Group Netherlands B.V. certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of Category 3 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 60079-15:2010

- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.
- 11 This Type Examination Certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured. 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:

 $\langle \epsilon_{\rm x} \rangle$ 

II 3G Ex nA IIC T3 Gc

 $Ta = 0^{\circ}C \text{ to } +50^{\circ}C$ 

Project Number 1878

Signed:

Title: Director of Operations

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Page 1 of 4





#### **SCHEDULE**

#### TYPE EXAMINATION CERTIFICATE

Sira 09ATEX4309X Issue 2

# 13 **DESCRIPTION OF EQUIPMENT**

The Barracuda 19 BOP is a rugged, stand-alone 19" display/workstation that is designed for use in harsh industrial conditions. The IP56 chromium-finished aluminium alloy enclosure has a touch screen in the cover that is bonded to the enclosure for protection against hose-down cleaning or lement weather conditions. The workstation version orporates a single board computer. The display is passively enhanced for full sunlight viewability.

The equipment has two power supplies: the main supply is in a separate enclosure (external to main unit) and the heater power supply is installed inside the unit. Both supplies are 100-240 Vac, 50/60 Hz, 2.6 A maximum. The mains input goes into the external power supply enclosure and then branches to supply the main power supply in the same enclosure and the heater power supply in the display/workstation unit.

The Barracuda 19 BOP contains the following sub-assemblies, some of which are optional:

- i. Front panel user controls: Kontron T21-1001-0610 5V/12V button board.
- ii. Touch enable button membrane switch.
- iii. LITEMAX LID19A01, 12V, 2.83A LED controller board.
- iv. Litemax DLF1054 TFT flat-panel display.
- v. C h P60-200006 tempered anti-glare glass/Mylar touchscreen.
- vi. Bergquist 500326-02 touchscreen controller board.
- vii. PQI DK0320G85RP01P11 32GB Flash Drive.
- viii. Y.S.Tech Model NYW06015012BH DC Brushless Fan.
- ix. Mechatronics G4020M12B, DC Brushless fan.
- x. Ipox IP-4MTS5V Motherboard (single board computer, with Panasonic PS2302 lithium polycarbon monofluoride cell).
- xi. Kontron T21-1001-0576 5Vdc USB Interface board.
- xii. Azonix T10-500497 audio sounder board.
- xiii. Kontron T21-1001-0601 IDE RHDD board.
- xiv. Sixnet ET-5RS-4ST-E1 10-50V Ethernet board.
- xv. Siemens CP5512 3.3Vdc PCMCIA Profibus card.
- xvi. ICC BPS4228L-12-CS-DA12Vdc piezo alarm.
- xvii. C h 10-140 Series terminal strips.
- xviii. The external power supply may be mounted on the back of the unit or remotely and comprises the following sub-assemblies in an aluminium alloy enclosure:
  - XP Power model ECM100US12 power supply.
  - Corcom model 3VDKx filter.
  - Wiedmuller 014080000012-way terminal strip, 12-way, 12 AWG max.
- xix. The Ethernet/Fiber gland box comprises:
  - Wiedmuller 014050000012-way terminal strip, 8-way, 12 AWG max.
  - L-COM fiber coupler.

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#### TYPE EXAMINATION CERTIFICATE

Sira 09ATEX4309X Issue 2

Variation 1 - This variation introduced the following changes:

- The introduction of:
  - A Litemax DFL1968 flat-panel display as a replacement to the DFL1954.
  - A Syba SD-ADA45006 2.5" IDE to dual CF adapter drive as a replacement for the PQI 2.5" flash drive.
  - The IBASE ODM-IB950EF-AZ1 single board computer as a replacement for the IPOX IP-4MTS5V.
  - A Minibox picoPSU-80 12 VDC input, ATX output power supply.
  - The ADEX PCI-FLEX32FM PCI bus extender cable.
  - The Sixnet SLX-6RS-4ST-D1 Ethernet fibre switch as a replacement to the ET-5RS-4ST-E1.
  - The Siemens CP5611 PCI Profibus Card as a replacement for the CP5512.
  - The Weidmüller 0104620000 12-way, 12 AWG terminal strip as a replacement to the 0140800000 12-way, 12 AWG terminal strip.
  - An external Floyd Bell Ultra UT-09-515-Q piezo horn.
  - An Azonix custom PCA Ethernet adapter to the SBC.
  - An Azonix custom PCA button board signal inversion to the SBC.
  - A Mesa CFA-series compact flash adapter.
  - An iKey DT-5K keyboard and associated connector.
  - A fibre cable gland Sealcon CD22MR-BR.
  - 'Cohrlastic' sponge rubber as an alternative gasket material.
- ii. The components associated with the fibre-optic link were designated as optional.
- iii. A new Special Condition for Safe Use relating to connection and disconnection of fibre-optic cable was recognised.
- iv. The bezel was modified to accommodate a new gasket.
- v. Following appropriate assessment, EN 60079-0:2004 and, EN 60079-15:2005, were replaced by EN 60079-0:2009 and EN 60079-15:2010, in addition, IEC 61010-1:2001 was removed from the list of standards and therefore the associated Conditions of Certification that detail a dielectric strength test and an earth continuity test are no longer applied.
- vi. The certification code was changed from 'Ex nA II T4' to 'Ex nA IIC T3 Gc', a new Condition of Certification that requires all new units to be marked with the latest marking was applied.
- vii. The manufacturer's address was changed:

From:

900 Middlesex Turnpike

Billerica

Massachusetts 01821

USA

To:

101 Billerica Ave, Building #4

North Billerica

Massachusetts 01862

USA

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#### **SCHEDULE**

## **TYPE EXAMINATION CERTIFICATE**

Sira 09ATEX4309X Issue 2

#### 14 **DESCRIPTIVE DOCUMENTS**

#### 14.1 Drawings

Refer to Certificate Annexe.

# 14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	27 November 2009	R21212A	The release of the prime certificate.
1	11 June 2014	R70005583A	The introduction of Variation 1.
2	31st October 2019	1878	<ul> <li>Transfer of certificate Sira 09ATEX4309X from Sira Certification Service to CSA Group Netherlands B.V</li> <li>Type-Examination Certificate in accordance with 94/9/EC updated to Type-Examination Certificate in</li> </ul>
			accordance with Directive 2014/34/EU. (In accordance with Article 41 of Directive 2014/34/EU, Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)

#### 15 SPECIAL CONDITIONS FOR SAFE USE

- 15.1 The equipment shall be protected against transients in excess of 40% of the rated voltage at the power supply terminals.
- 15.2 When energised, the optical port shall be connected to a cable at all times when the equipment is used in a hazardous area. The fibre-optic cable shall only be connected or disconnected when the equipment is de-energised or an explosive atmosphere is known to be absent.
- 15.3 Refer to manual for cleaning instructions.

## 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSRs)

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

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# **Certificate Annexe**



Certificate Number: Sira 09ATEX4309X
Equipment: Barracuda 19 BOP
Applicant: Azonix Corporation

## Issue 0

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Description
17-200238	1 to 7	Α	25 Nov 09	General arrangement
38-100065	1 of 1	0	25 Nov 09	Wiring diagram
E16-100520	1 of 2	В	25 Nov 09	Marking
E17-101846	1 of 1	2	25 Nov 09	Bezel, Front 19" barracuda
P60-200006	1 of 1	Α	25 Nov 09	19.1 resistive touchscreen
T22-1001-0610	1 to 3	В	25 Nov 09	Schematic - button board

#### **Issue 1**

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
E16-100494	1 of 1	С	09 Jun 14	Marking - keyboard
E16-100520	1 of 1	K	09 Jun 14	Marking
E17-102120	1 of 1	В	09 Jun 14	Assembly - front bezel
E17-200328	1 to 7	E	09 Jun 14	General arrangement
E19-101638	1 of 1	Α	09 Jun 14	Keyboard, rework instruction

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