1 # EC - TYPE EXAMINATION CERTIFICATE

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres**
Directive 94/9/EC

3 EC - Type Examination Certificate Number: **Baseefa12ATEX0197**

4 Equipment or Protective System: **Telephone Type A103**

5 Manufacturer: **GaiTronics Ltd.**

6 Address: **Burton-Upon-Trent, Staffordshire. DE13 0BZ**

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

8 Baseefa, Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. **12(C)0062-1**

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

EN 60079-0:2012 EN 60079-11:2012

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 equipment or protective system 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 or protective system. 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 or protective system shall include the following :

Ex I M1 Ex ia I Ma

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **0752**

Project File No. **12/0062**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa

Baseefa
Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.

13 **Schedule**

14 **Certificate Number Baseefa12ATEX0197**

15 **Description of Equipment or Protective System**

The Telephone Type A103 is an intrinsically safe telephone designed for use in mining applications. It comprises a non-metallic and a metallic frame incorporating a terminal chamber.

The non-metallic enclosure containing two printed circuit board (PCB) upon which are mounted electronic components. It is fitted with pushbuttons on one of the side walls, and a telephone handset with integral switch attached to the non-metallic enclosure via an integral cable.

The metallic terminal chamber contains two loud speakers mounted in the side walls, an internal battery pack type BP004 and terminals for the connection of external circuits.

The relay contacts are suitable for use in a hazardous area when supplied via a suitable zener barrier or isolator, or for use in a safe area. The programming port is for manufacturing and service use only when the equipment is in a safe area.

TERMINAL PARAMETERS

Line Connections – Terminals 1 to 5

U_i = 27.3V

I_i = 500mA

P_i = 3.54W

C_i = 220nF

L_i = 0

U_o = 9.6V*

I_o = 0

P_o = 0

Note * - This is the maximum voltage from the internal battery supply that may charge up external capacitance via the series blocking diodes.

Relay Contacts – Terminals B1 & B2

U_i = 25V

I_i = 2.5A

P_i = 5.0W

C_i = 0

L_i = 0

U_o = 0

I_o = 0

P_o = 0

U_m = 253V*

Note * - Only to be applied while in a safe area.

16 Report Number

12(C)0062-1

17 Specific Conditions of Use

None

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
022-01-0069-001	1 of 3	001	08/02/12	A103 Certification Block Diagram
022-01-0069-001	2 of 3	2	31.07.12	A103 General Arrangement External
022-01-0069-001	3 of 3	5	02.10.12	A103 General Arrangement Internal & Cert Label
500-01-0656-001	1	1	19-10-09	Potted: Transformer & Relay Module
500-01-0657-001	1	1	19-10-09	Potted: Prog Interface Module
501-01-0514-001	1 of 2	001	10.05.12	Enclosure A103 Mine Phone White or Light Blue
501-01-0514-001	2 of 2	002	31.07.12	Enclosure A103 Mine Phone White or Light Blue
501-20-0543-001	1	2	06Jun00	Bracket: Terminal I.S. Telephone
501-40-0396-001	1	002	04.07.12	Enclosure Gasket A103 Mine Phone (gland hole to terminal chamber seal)
999-01-1125-000	1	001	23/04/12	A103 Main Schematic Analogue
999-01-1125-000	2	001	23/04/12	A103 Main Schematic Uproc
999-01-1125-000	3	001	23/04/12	A103 Main PCB Top Artwork
999-01-1125-000	4	001	23/04/12	A103 Main PCB Layer Two
999-01-1125-000	5	001	23/04/12	A103 Main PCB Layer Three
999-01-1125-000	6	001	23/04/12	A103 Main PCB Bottom Artwork
999-01-1125-000	7	001	23/04/12	A103 Main PCB Ident Top
999-01-1126-000	1	001	16/08/10	A103 Keypad PCB Schematic
999-01-1126-000	2	001	16/08/10	A103 Keypad PCB Top Artwork
999-01-1126-000	3	001	16/08/10	A103 Keypad PCB Bottom Artwork
999-01-1126-000	4	001	16/08/10	A103 Keypad PCB Ident Top
999-01-1127-000	1	001	23/04/12	A103 Transformer & Relay PCB Schematic
999-01-1127-000	2	001	16/08/10	A103 Transformer & Relay PCB Top Artwork
999-01-1127-000	3	001	16/08/10	A103 Transformer & Relay PCB Bottom Artwork
999-01-1127-000	4	001	16/08/10	A103 Transformer & Relay PCB Ident Top & Bottom
999-01-1137-000	1	001	16/08/10	A103 Prog Interface PCB Schematic
999-01-1137-000	2	001	16/08/10	A103 Prog Interface PCB Top Artwork
999-01-1137-000	3	001	16/08/10	A103 Prog Interface PCB Bottom Artwork
999-01-1137-000	4	001	16/08/10	A103 Prog Interface PCB Ident Top