



EU Type Examination Certificate CML 19ATEX5496 Issue 1

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **Auteldac 6**
- 3 Manufacturer **GAI-Tronics (a division of Hubbell Limited)**
- 4 Address **Brunel Drive, Stretton Business Park, Burton-upon-Trent, Staffordshire, DE13 0BZ, United Kingdom**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Koopvaardijweg 32, 4906CV Oosterhout The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 12.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:
EN IEC 60079-0:2018 EN IEC 60079-7:2015+A1:2018 EN 60079-11:2012
EN 60079-18:2015+A1:2017 EN 60079-31:2014
- 10 The equipment shall be marked with the following:
 II 2 G D
Ex eb ib mb IIC T4 Gb
Ex ib tb IIIC T135°C Db
-40°C ≤ Ta ≤ +60°C



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11 Description

The Auteldac 6 is a rugged weatherproof VoIP telephone for use in explosive atmospheres. The handset may be supplied with either a front entry curly cord or a side entry stainless steel cord. The optional keypad may have up to 18 buttons.

It comprises two Printed Circuit Boards (PCB's) inside a non-metallic enclosure. The main PCB is encapsulated apart from the field wiring terminals and a programming header for factory use only.

The external terminations are made via equipment certified cable glands at Ex eb certified terminal blocks. An optional socket may be present for connections to an external headset.

The Auteldac 6 is designed to be powered over the incoming Ethernet connections from a supply conforming to IEEE802.3:2002 or via a 57V d.c. maximum supply connected to the power terminals.

All models are suitable for use in areas that require equipment protection level Gb or Db.

The equipment has the following terminal parameters:

Power Input, Ethernet Port & Isolated Output Connections (Ex eb connections)

Um= 253V rms

The Auteldac 6 is designed to be powered over the incoming Ethernet connections from a supply conforming to IEEE802.3:2002 or via a 57V d.c. maximum supply connected to the Power terminals.

Signalling output (Ex eb connections)

The isolated output is designed to switch a 250VAC 5A signal.

Optional Headset Connector (Ex ib connections)

Uo= 6.5V

Io= 97mA

Po= 157mW

Ci= 0

Li= 0

The capacitance and either the inductance or inductance to resistance ratio (L/R) of the load connected to the headset connector must not exceed the following values:

GROUP	CAPACITANCE (μ F)	INDUCTANCE (mH)	OR	L/R RATIO (μ H/ohm)
IIC	25	3.78		225
IIB	570	15.1		902
IIA	1000	30.2		1804



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The above load parameters apply where:

1. The external circuit contains no combined lumped inductance L_i and capacitance C_i greater than 1% of the above values, or
2. The inductance and capacitance are distributed as in a cable, or
3. The external circuit contains either only lumped inductance or lumped capacitance in combination with a cable.

In all other situations e.g., the external circuit contains combined lumped inductance and lumped capacitance, up to 50% of each of the L and C values is allowed. The reduced capacitance of the external circuit (including cable) shall not be greater than $1\mu\text{F}$ for Groups I, IIA and IIB, or greater than 600nF for Group IIC.

Variation 1: To permit the following changes:

- i. Changes to component values
- ii. Additional pins added to programming header

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	29 Apr 2020	R12127A/00 R12127B/00	Issue of Prime Certificate
1	28-01-2021	R13742A/00	The addition of variation 1

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- ii. Each encapsulated assembly shall be visually inspected. No damage shall be evident, such as cracks in the compound, exposure of encapsulated parts, flaking, inadmissible shrinkage, swelling, decomposition, failure of adhesion, or softening.
- iii. The equipment shall be subjected to an electric strength test in accordance with the requirements of EN 60079-7 Clause 6.1 using a test voltage of 1500 Vac applied between the supply terminals and earth point, for a period of 1 second. Alternatively, a d.c. test voltage is allowed as an alternative to the a.c. test voltage and shall be 170% of the specified a.c. r.m.s. test voltage.
- iv. Each encapsulated main board assembly shall be subjected to an electric strength test in accordance with EN 60079-18 Clause 9.2 using a test voltage of 1500 Vac applied between the terminals and the surface of the encapsulant, and between the switching contact terminals and all other terminals, for a period of 1 second.
Alternatively:
 - a voltage of 20% higher may be applied for 0.1 second



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- a d.c. test voltage is allowed as an alternative to the a.c. test voltage and shall be 170% of the specified a.c. r.m.s. test voltage.
Alternatively, the equipment may be subjected to batch testing in accordance with EN 60079-18 Ed. 4.1 Annex C.

14 Specific Conditions of Use (Special Conditions)

None.

Certificate Annex

Certificate Number CML 19ATEX5496
Equipment Auteldac 6
Manufacturer GAI-Tronics (a division of Hubbell Limited)



The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
212-01-6000-001	1 of 1	001	29 Apr 2020	Auteldac 6 Main Schematic
212-01-6000-002	1 of 1	001	29 Apr 2020	Auteldac 6 External General Arrangement
212-01-6000-003	1 of 1	001	29 Apr 2020	Auteldac 6 Internal General Arrangement
212-01-6000-004	1 of 1	001	29 Apr 2020	Auteldac 6 Component Details General Arrangement
212-01-6000-005	1 of 1	001	29 Apr 2020	Auteldac 6 Certification Label
212-01-6000-006	1 of 1	001	29 Apr 2020	Auteldac 6 Enclosure Sealing Details
212-01-6000-007	1 of 1	001	29 Apr 2020	Auteldac 6 External GA Side entry metallic handset cord
500-01-0600-001	1 of 1	001	29 Apr 2020	Auteldac 6 Main PCB physical encapsulation and potting box details
500-01-0600-002	1 of 1	001	29 Apr 2020	Auteldac 6 Main PCB physical and potting box details
999-01-1201-001	1 of 1	001	29 Apr 2020	Auteldac 6 Main PCB Overview
999-01-1201-002	1 of 1	001	29 Apr 2020	Auteldac 6 POE and Power Supplies
999-01-1201-003	1 of 1	001	29 Apr 2020	Auteldac 6 Ethernet and PHY
999-01-1201-004	1 of 1	001	29 Apr 2020	Auteldac 6 Blackfin and watchdog
999-01-1201-005	1 of 1	001	29 Apr 2020	Auteldac 6 RAM and Flash memory
999-01-1201-006	1 of 1	001	29 Apr 2020	Auteldac 6 Audio codec and keypad
999-01-1201-007	1 of 1	001	29 Apr 2020	Auteldac 6 IS current/voltage limiting
999-01-1201-008	1 of 1	001	29 Apr 2020	Auteldac 6 External connectors
999-01-1201-009	1 of 1	001	29 Apr 2020	Auteldac 6 PCB layer top elec
999-01-1201-010	1 of 1	001	29 Apr 2020	Auteldac 6 PCB layer TGND
999-01-1201-011	1 of 1	001	29 Apr 2020	Auteldac 6 PCB layer Power
999-01-1201-012	1 of 1	001	29 Apr 2020	Auteldac 6 PCB layer 4
999-01-1201-013	1 of 1	001	29 Apr 2020	Auteldac 6 PCB layer BGND
999-01-1201-014	1 of 1	001	29 Apr 2020	Auteldac 6 PCB layer bottom elec
999-01-1201-015	1 to 6	001	29 Apr 2020	Auteldac 6 PCB parts list
999-01-1157-000	1 of 5	6	29 Apr 2020	Auteldac 5 keypad
999-01-1157-000	2 of 5	6	29 Apr 2020	Auteldac 5 keypad top ident
999-01-1157-000	3 of 5	6	29 Apr 2020	Auteldac 5 keypad top artwork

Certificate Annex

Certificate Number CML 19ATEX5496
Equipment Auteldac 6
Manufacturer GAI-Tronics (a division of Hubbell Limited)



Drawing No	Sheets	Rev	Approved date	Title
999-01-1157-000	4 of 5	6	29 Apr 2020	Auteldac 5 keypad bottom artwork
999-01-1157-000	5 of 5	6	29 Apr 2020	Auteldac 5 keypad bottom ident
999-01-1157-LST	1 of 1	1	29 Apr 2020	PCB1157 Keypad parts list (18BTN)

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Drawing No	Sheets	Rev	Approved date	Title
212-01-6000-001	1 of 1	2	28-01-2021	Auteldac 6 Block Diagram
212-01-6000-004	1 of 1	2	28-01-2021	Auteldac 6 Component Details General Arrangement
999-01-1201-001	1 of 1	2	28-01-2021	Auteldac 6 A6 Main PCB Overview
999-01-1201-002	1 of 1	2	28-01-2021	Auteldac 6 PoE & Power Supplies
999-01-1201-004	1 of 1	2	28-01-2021	Auteldac 6 Blackfin & Watchdog
999-01-1201-006	1 of 1	2	28-01-2021	Auteldac 6 Audio Codec & KeyPad
999-01-1201-008	1 of 1	2	28-01-2021	Auteldac 6 External Connectors