

GOST R CERTIFICATION SYSTEM

FEDERAL AGENCY ON TECHNICAL REGULATING AND METROLOGY

CERTIFICATE ON CONFORMITY

№ POCC GB.ГБ06.В00825

is valid from 22.06.2010 until 22.06.2013

No 0271607

CERTIFICATION AUTHORITY POCC RU.0001.11ГБ06
AUTHORITY FOR CERTIFICATION OF EXPLOSION PROOF MEASURING TOOLS,
CONTROL DEVICES AND AUTOMATION COMPONENTS FSUE «VNIIFTRI» OS VSI
«VNIIFTRI»

Russia, 141570, Moscow oblast, Solnechnogorsky rayon, p/o Mendeleevo,
FSUE «VNIIFTRI», tel./fax: +7 (495)744-8183

PRODUCTS: Telephone models Auteldac 4 and Auteldac 4 Voip with head phone
serial production
see Ex-annex

OK 005 (OKP) code
66 7310

CORRESPONDS TO THE NORMATIVE DOCUMENTS REQUIREMENTS

GOST R 51330.0-99, GOST R 51330.8-99
GOST R 51330.10-99, GOST R 51330.17-99

customs code of Russia
8517 19 900 0

MANUFACTURER

GAI-tronics, a division of Hubbell Limited (Great Britain)
Brunel Drive, Stretton Park, Burton Upon Trent, Staffordshire, DE13, 0BZ, UK

CERTIFICATE IS ISSUED TO


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ON THE BASIS OF

1. Test report No 10.901 dated 16.06.2010.
IL VSI «VNIIFTRI» (POCC RU.0001.21ИП09)
2. Act on results of production status analysis dated 17.04 2010.

ADDITIONAL INFORMATION

(seal)	Head of the authority	(signature)	G.E. Epikhina
	Expert	(signature)	N.S. Olkhov

<p style="text-align: center;">FGUP «VNIIFTRI» Certification centre for certification of explosion proof measuring tools control devices and automation components CC VSI «VNIIFTRI» Accreditation certificate OS No POCC RU.0001.11ГБ06 dated 27.04.10 Accreditation certificate IL No POCC RU.0001.21ИП09 dated 27.04.10 141570, Moscow region, p/b Mendeleevo, tel/fax +7 (495) 744-8183</p>			
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EX – ANNEX

to the Certificate of Conformity **No POCC GB.ГБ06.B00825**
Validity **from 22.06.2010 until 22.06.2013**

1 Telephone of models Auteldac 4 and Auteldac 4 Voip with head phone

Customs code of Russia 8517 19 900 0
OK 005 (OKP) code 66 7310

2 Explosion proof mark
see paragraph 5, table 1

3 Manufacturer
«GAI-Tronics, a division of Hubbell Limited» (Great Britain)
Brunel Drive, Stretton Park, Burton Upon Trent, Staffordshire, DE13 0BZ, UK

4 Terms of application

- 4.1 Telephones of models Auteldac 4 and Auteldac 4 Voip with the head phone must be applied in accordance with assigned explosion proof mark, GOST R 51330.13 requirements, working «Regulations for construction of electrical installations» (PUE ch. 7.3), «Operating regulations on consumer electric installations» (PTEEP ch. 3.4), other normative documents, regulating electric equipment application in explosion hazard zones, and manufacturer installation and operation manual.
- 4.2 Possible explosion hazard zones and application conditions, categories and groups of explosion hazard gas and vapor mixtures with air – in accordance with the requirements of GOST R 51330.9, GOST R 51330.11 and «Regulations for construction of electrical installations » (PUE ch. 7.3).
- 4.3 Not used electric connectors must be closed with plugs.
- 4.4 Telephone with head telephone construction alterations concerned with explosion proof means must be agreed with accredited test organization.

5 Composition, design version and specification of the product

Certificate of Conformity covers telephone of models Auteldac 4 and Auteldac 4 Voip with head phone. Telephone may be supplied in 2 versions – with torsade or with cord with steel reinforcement. Ex-proof mark of the devices is presented in table 1

Table 1

Device	Ex-proof mark
Telephone model Auteldac 4	2Exem[ib]IICT5
Telephone model Auteldac 4 Voip	2Exem[ib]IICT4
Head phone	1ExibIICT4

Specification of telephone with head phone – in accordance with the technical documentation of the manufacturer.

6 Purpose and scope of application

Telephone with head phone is applied for providing communication.

Telephone with head phone belongs to the explosion proof equipment of group II as per GOST R 51330.0 and is designed for application in explosion hazard zones in accordance with assigned explosion proof mark.

7 Major technical data

7.1 Explosion hazard mixtures as per GOST R 51330.11categories IIA, IIB, IIC groups T1...T4/T5
7.2 Explosion proof type sparking safe electrical circuit of level “ib” protection of type “e” sealing with compound (m)

7.3 Explosion proof mark see paragraph 5, table 1

7.4 Enclosure protection degree as per GOST 14254

- version with torsade IP66
- version with cord with steel reinforcement..... IP55

7.5 Protection against electric shock hazard as per GOST 12.2.007.0class I

7.6 Electrical parameters

- maximum voltage U_m , V
model Auteldac 4 Voip.....254
model Auteldac 4.....250

model Auteldac 4 Voip slot Ethernet (CON2, CON3, CON4):
- nominal DC input voltage, V57
- Power consumption, W 13

model Auteldac 4 Voip slot CON5:
- nominal input DC voltage, V53

model Auteldac 4 Voip slot CON15:
- maximum input current, A5

model Auteldac 4 telephone line slot TB1:
- nominal DC input voltage, V70
- nominal voltage of calling signal, V 100
- power consumption, W 15

model Auteldac 4 connector contact TB3:
- maximal input current, mA200

model Auteldac 4 ring connector contact TB4:
- maximum input current, A5

7.7 Electrical parameters of sparking safe circuits

model Auteldac 4 headphone board (Head I/F PCB):
- maximum output voltage U_o , V 5,6
- maximum output current I_o , mA 50

- maximum output power P_o , mW.....	164
model Auteldac 4 Voip headphone board (Head I/F PCB):	
- maximal output voltage U_o , V.....	6
- maximal output current I_o , mA.....	314
- maximal output power P_o , mW.....	618
7.8 Terms of exploitation	
- ambient temperature, °C	
telephone.....	from - 40 to + 50
head phone.....	from - 40 to + 40
7.9 Overall dimensions, weight.....	in accordance with technical documentation of manufacturer

8 Construction elements and explosion proof means description

8.1 Telephone case is made of plastic material on the base of polyesters filled with glass fibre. Keypad of the telephone has 12, 15 or 18 keys depending on version. Telephone contains printed boards: base plate, keypad plate and headphone plate. Base plate is connected via cable stub to the keypad plate, to which the headphone plate is connected. All conducting elements of the base plate are isolated from parts which user may touch for mode selection or to enable the telephone. External connectors are made using Exe-cable inputs and Exe-terminal connectors and are mounted on the base plate.

8.2 Explosion protection of type «sparking safe electrical circuit» is provided by the following means.

8.2.1 Galvanic isolation of sparking safe circuits of the telephone from the power supply circuit and external signal circuits is performed via transformers, optrons and relays. For voltage and internal electrical circuits current limitation of the main circuit board (Main PCB) stabilitrons and resistors are used. To protect electrical circuits from overloads fuses are used.

8.2.2 Sparking safety of output electrical circuits of the head phone board is acquired through application of stabilitrons and resistors providing limitation of current and voltage to the values meeting the GOST R 51330.10 requirements to the circuits of subgroup IIC.

8.2.3 Leakage passes, electrical gaps and electric strength of insulation, electrical parameters of printed circuit boards and contact connectors meet the requirements of GOST R 51330.10.

8.2.4 Electrical load of active and passive components of sparking safe circuits and sparking protection components does not exceed 2/3 of nominal values.

8.2.5 Maximal values of summary electric capacitance and inductance of communication line of telephone and head phone do not exceed admissible values as per GOST R 51330.10 for the electrical equipment of subgroup IIC.

8.3 Explosion protection of type «e» is provided by following means.

8.3.1 Cable inputs and terminal connectors are mounted on the main plate using Exe-cable inputs and Exe-terminal connectors.

8.3.2 Internal connections are performed so that the possibility of mechanical loads influence on them is excluded.

8.3.3 Leakage passes and electrical gaps between non-insulated conducting parts having different potential exceed minimal values stated by GOST R 51330.8.

8.3.4 Terminals for connection of external circuits have dimensions enough for the reliable connection of wires with cross-section corresponding to nominal current, are impacted and have construction excluding their self- detaching and self-unfastening.

8.4 Explosion protection of type «m» is provided by the following means.

Components and connections of main circuit board of the telephone, hazard for spark ignition of gas mixtures are isolated from surrounding gas medium via compound filling. Compound filling is performed in accordance with the requirements of GOST R 51330.17. Mechanical and thermalphysic parameters of the filling compound preserve their characteristics in established conditions of exploitation of telephone.

8.5 Maximal telephone and head phone surface heating temperature in established conditions of exploitation does not exceed the admissible value for the corresponding temperature class as per GOST R 51330.0.

8.6 Telephone design is performed subject to general requirements of GOST R 51330.0 for the electrical equipment situated in explosion hazard zones. Sealing and connections of construction components provide type of protection IP55/IP66 as per GOST 14254. Construction materials provide frictional sparking safety as per GOST R 51330.0.

8.7 On the telephone and head phone case are situated necessary warning notices, plates with indication of explosion proof mark.

9 Data on tests passed

Telephone models Auteldac 4 and Auteldac 4 Voip with head phone is certified on the conformance to the requirements of the European standards EN 50014, EN 50019, EN 50020, EN 50028.

Results of construction check and tests of the telephone models Auteldac 4 and Auteldac 4 Voip with head phone on conformity of explosion protection to the requirements of GOST R 51330.0, GOST R 51330.8, GOST R 51330.10, GOST R 51330.17 are presented in the test report of IL VSI «VNIIFTRI» No 10.901 dated 16.06.2010.

Maintenance documentation contains necessary guidelines on mounting conditions and safe exploitation.

10 Explosion proof mark

Subject to technical and maintenance documentation inspection, examinations and tests of construction on explosion proof and in conformity to GOST R 51330.0, GOST R 51330.8, GOST R 51330.10, GOST R 51330.17 requirements to the electrotechnical devices in composition of the telephone of models Auteldac 4 and Auteldac 4 Voip with head phone is assigned explosion proof mark presented in the table 1.

11 List of the documents containing data on explosion proof

Installation and operation manual	w/n
EC-Type examination Certificate	Baseefa03ATEX0617 Baseefa09ATEX0261 TUV03ATEX2124
Design documentation	212-01-2000-000 Page 1-Page 7 212-01-7000-000 Page 1-Page 7 999-01-1048-000 Page 1-Page 6 999-01-1050-000 Page 1-Page 3 999-01-1047-000 Page 1-Page 4
IL VSI «VNIIFTRI» test report	10.901

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