



NSAI

Certification

ECE TYPE-APPROVAL CERTIFICATE

Communication concerning approval extended of a type of ~~Vehicle~~/Vehicle Alarm System (VAS)/~~Immobiliser~~ pursuant to Part (I), (II), ~~(III)~~ of Regulation No. 97.



Approval No:

E24 97R A-010051

Extension No: **01.**

Reason for extension:

-Addition of 2 new variants

1. Trade name or mark of the ~~Vehicle~~/VAS/~~Immobiliser~~: **GEMINI**
2. Type of ~~Vehicle~~/VAS/~~Immobiliser~~: **864 family**
Vehicle Alarm System.
- Variant(s): **See manufacturers technical documentation for details**
3. Manufacturer's name and address: **GEMINI Technologies S.p.A.,**
Via L Galvani, 12
I-21020 Bodio Lomnago
Italy.
4. If applicable, name and address of manufacturer's representative: **N/A.**
5. Brief description of the ~~Vehicle~~/VAS/~~Immobiliser~~ (if applicable): **See technical report 55 0304 09 up to Vers.1 and accompanying manufacturer's documentation.**
6. Type of vehicle on which the VAS/~~Immobiliser~~ has been tested: **In the laboratory on installation conditions using simulators**
7. ~~Vehicle~~/ VAS /~~Immobiliser~~ submitted for approval on: **2008.10.20 - 2009.03.04**
8. Technical service responsible for conducting approval tests: **TÜV Rheinland Italia S.r.l**

- 9. Date of report issued by that service: *As before and 2010.04.12*
- 10. Number of report issued by that service: *55 0304 09 Vers.1*
- 11. Approval has been ~~granted/refused/extended/withdrawn~~: *extended*
- 12. Reason(s) for extension of approval: *Additional variants*
- 13. If applicable, position of the approval mark(s) on the ~~vehicle~~/main components: *On the housing of the unit.*
- 14. Place: *Dublin.*
- 15. Date: *19th April 2010*

16. Signature: 



17. The following documents, bearing the approval number shown above, are attached to this communication:
-list of components, duly identified, constituting the VAS;
 -~~brief description of the immobiliser and the vehicle part(s) on which it (they) act(s),~~
 -list of files deposited with the Administrative Service which has granted type approval, and which can be obtained upon request.

14. Documentation: *32 Pages.*

Prüfbericht Nr.: 55 0304 09, Ausf. / Vers. 1
Test Report No.:
ECE-R97
Hersteller/Manufacturer: GEMINI Technologies S.p.A.
I-21020 Bodio Lomnago (VA)
Typ/Type: 864 family



TECHNICAL REPORT

No. 55 0304 09, vers. 1

issued by the

TÜV Rheinland Italia S.r.l.

Via Gavardina di Sopra Traversa II N° 42 I-25010 Ponte S. Marco (BS)

Test of a component type as an alarm system with immobilizer
pursuant to

ECE-R97

(including Supplement 5 to the 01 series of amendments dated 2007.06.18)

Approval status	
ECE	Number of approval
	E24 97RA-010051 Extn.01 (approval number allocated in advance)

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Reasons of extension :

Added no. 2 new variants codes customized for PIAGGIO: code B005705 and 862PI. The HW is the same of the Type(s) already homologated. The difference of the Commercial name is a PIAGGIO request for distinguish the SW version with the different string related to the insertion time of the volumetric sensors. Information Folder released only with update of the Family table.

0. Technical description

- 0.1. Trade mark or trade name: GEMINI
- 0.2. Type: 864 family
- 0.2.1. Models: All variants listed by the Technical Documentation 5550304-09-01 2010-04-12 released
- 0.3. Type identification: 864
- 0.4. Position of the mark: at the top side of the housing of the control unit
- 0.5. Kind of marking: adhesive label
- 0.6. Manufacturer's name and address: GEMINI Technologies S.p.A.
Via L. Galvani, 12
I-21020 Bodio Lomnago (VA)
- 0.7. Production Plant's: idem 0.6
- 0.8. Manufacturer's authorized representative: n.a.
- 0.9. No. information document: 5550304-09-01
Issue on date: 2009-09-16
Last modification : 2010-04-12

1. Details of the test device:

1.0. Type of VAS

The Vehicle Alarm System family type 864 is a system which includes one external self powered siren, one external ultrasonic module with anti-lifting sensor (optional) (for a description of all functions, see the information document) using a specific coded signal transmitted through a GEMINI protocol.

Components of the technical unit:

1)	864 family	Central Control Unit
2)	type 848	Remote Control
3)	type CDE2	Electronic key
4)	type US	Ultrasonic volumetric protection
5)	type 7746-S	Supplementary Siren (optional)
6)	type 7725	Supplementary Siren (optional)

1.1. Type(s) of vehicle, on which the system has been tested:

The alarm system has been tested in the laboratory on installation conditions using simulators.

The VAS in accordance with par. 7.2.11, par. 7.2.13 and 7.2.15 of the Part I of the ECE Regulation No. 97 has been tested in a real installation on vehicle suggested by the manufacturer, car type MAZDA 3 chassis no.A015320NO04

1.2. Vehicle Alarm System:

1.2.1. Operation	audible	: - supplementary siren or vehicle's claxon
	optical	: - on all direction indicators
	panic alarm	: - by remote control type 848
	radio alarm	: - none

- others : - activation of central door locking
- controlled command for window closure
- emergency disarming using the electronic key insert into the receptacle
- 1.2.2. Activation : - boot contact
- bonnet contact
- doors contacts
- unintentional use of ignition switch
- wires disconnection
- ultrasonic protection
- anti-lifting sensor
- 1.2.3. Mode of setting/unsetting
- 1.2.3.1 Setting : - by the remote control in acc. to 5.3 of ECE-R97, it is possible set and unset the VAS with a radio transmission comply with the ETSI std. EN301489-3 V1.4.1 and EN300220-3 V2.1.2, TX-RX at freq. 433,92 MHz.
- in automatic, 20s after un-setting the system, if no vehicles doors or boot/bonnet has been activated
- in automatic, 35s after the last activation of door/boot/bonnet contacts
- 1.2.3.2 Unsetting : - by the remote control handset type 848
- in emergency, by the electronic key insert into the receptacle
- 1.2.4. Status display : - LED in the vehicle compartment
- Indication of short-term „dynamic“ processes by the direction indicators

2. Test record

2.1. **Vehicle alarm system:**

2.1.1. The general requirement of paragraph 5, Part I, ECE-R97 have been complied.

The electromagnetic compatibility (EMC) of the device according to ECE-R97, Annex IX is ensured.

The Electromagnetic Compatibility tests according to paragraph 7.2.12., Part I, ECE-R97 have been carried out by TÜV Rheinland Italia S.r.l. according to the test methods as described in Annex IX of ECE-R97; test results see enclosure 2.

2.1.2. The particular specifications according to paragraph 6., Part I, ECE-R97, have been complied with.

Audible alarm signal device	:	supplementary siren type 7725 noise level according to point 6.1 and 6.2, Part I, ECE-R28: 109 dB(A)
Duration of the acoustic signal	:	25 - 30 s
Optional audible alarm signal device	:	n.a.
Duration of the optical signal	:	25 - 30 s
Self-check, automatic breakdown indication is showed through	:	- direction indicators - generally by the LED

2.1.3. Operation parameters and test conditions according to paragraph 7., Part I, ECE-R97 are fulfilled by all components of the VAS.

Additional information:

point 7.2.2.: the climatic tests have been performed at
-40°C and +85°C

point 7.2.3.: the grade of protection IP40 for the central unit and for ultrasonic
modules in installation condition have been controlled; for the

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supplementary siren the grade of protection IP54 has been controlled

point 7.2.8.: the vibration tests have been carried out according to type 1 for all components

point 7.2.9.: the durability test has been controlled with the external siren

point 7.2.10.: the tests for external key switch - not applicable

2.1.4. Instructions:

An instruction for installation has been checked in accordance with par. 8. of the Annex I of the ECE Regulation No. 97.

2.2. Date of tests : ---

2.3. Place of tests : ---

2.4. Remarks : ---

2. **Enclosures:**

No modification in the Appendixes for this Extension.

	<u>Ref. Doc. No:</u>	<u>Rev. Date:</u>
INFORMATION DOCUMENT	55A0304-09-01	2010-04-12
Information Folder (23 pages)	5550304-09-01	2010-04-12

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4. Summary:

The described type, 864 family, and the above mentioned information document, comply with the requirements of regulation ECE-R97, Part I and Part II; it is therefore suitable for an application on generic vehicles having a negatively earthed 12 volt battery powered electrical system. The use of the ultrasonic module is not permitted for roadsters/convertibles and cars with moveable roof-panel, if the installation requires a higher degree of protection than IP40.

There are no technical objections against granting an ECE approval.

The publication or duplication of this technical report with enclosures, or part of this technical report with enclosures, without a written consent of the test laboratory is not permitted.

This technical report includes the pages 1 to 7.
No new annexes are presents in this extension project.

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Bundesrepublik Deutschland
Federal Republic of Germany

I-Ponte San Marco (BS), 2010.04.12
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