



THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

COMMUNICATION CONCERNING THE APPROVAL GRANTED <sup>(1)</sup> TO A COMPONENT TYPE-APPROVAL CERTIFICATE IN RESPECT OF A NON-ORIGINAL EXHAUST SYSTEM FOR TWO-WHEEL MOPEDS PURSUANT TO COUNCIL DIRECTIVE 97/24/EC – CHAPTER 9 AS LAST AMENDED BY 2009/108/EC.

EC Component type-approval No: e11\*97/24/9/III\*2009/108\*0925\*00

Report No: 14-00041-CM-MIL-00, by technical service: TÜV SÜD Auto Service GmbH, date: 10 November 2014

Reason(s) for extension: Not applicable

1. Make of exhaust: Termignoni
2. Type of exhaust: GI02
3. Name and address of manufacturer:  
Termignoni S.p.A.  
Via della Rampina, 1  
15077 Predosa (AL)  
Italy
4. If applicable, name and address of the manufacturer's authorized representative:  
Not applicable
5. Make(s) and type(s) and any variant(s) or version(s) of the vehicle(s) for which the exhaust system is designed: See list enclosed
6. Date system submitted for testing: 10 November 2014
7. Component type-approval GRANTED<sup>(1)</sup>

8. Place: BRISTOL

9. Date: 03 DECEMBER 2014

10. Signature: 

A.W.STENNING  
Head of Technical and Quality Support Group

(1) Delete as appropriate





THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

APPROVAL NUMBER: e11\*97/24/9/III\*2009/108\*0925\*00

**INFORMATION PACKAGE CONTENTS**

**INDEX REVISION NUMBER: Not applicable**

Total number of sheets: 08 (Eight)

Reasons for Revision: Not applicable

Revision date  
&  
Office stamp

EAQ310667

An executive agency of the Department for Transport  
April 2013 Revision 3





**INFORMATION DOCUMENT**  
**N° GI02/97/24 rev. 00**

**Date: 10/11/2014**  
**Page 1/2**

***Information Document relating to EC type approval as separate technical unit of exhaust systems for motorcycles (Directive 97/24/EC amended 2009/108/EC)***

1. *Make (trade name of manufacturer):* Termignoni
2. *Type and general commercial description:* GI02
3. *Name and address of manufacturer:* Termignoni S.p.A.  
via della Rampina, 1  
I-15077 Predosa (AL)
4. *Name and address of manufacturer's authorized representative:* Not applicable
5. *Parts list:* Notice enclosure 1 of the test report
6. *Make and motorcycle type of the field of application:* See list enclosed
7. *Restriction and instructions for installing:* Notice assembly manual and field of application

*Further details according to directive 97/24/EC, chapter 9, annex III, enclosure 2 A including amendment 2009/108/EC are mentioned in the motorcycle homologation (notice enclosure 2 of the test report).*





**INFORMATION DOCUMENT**  
**N° GI02/97/24 rev. 00**

**Date: 10/11/2014**  
**Page 2/2**

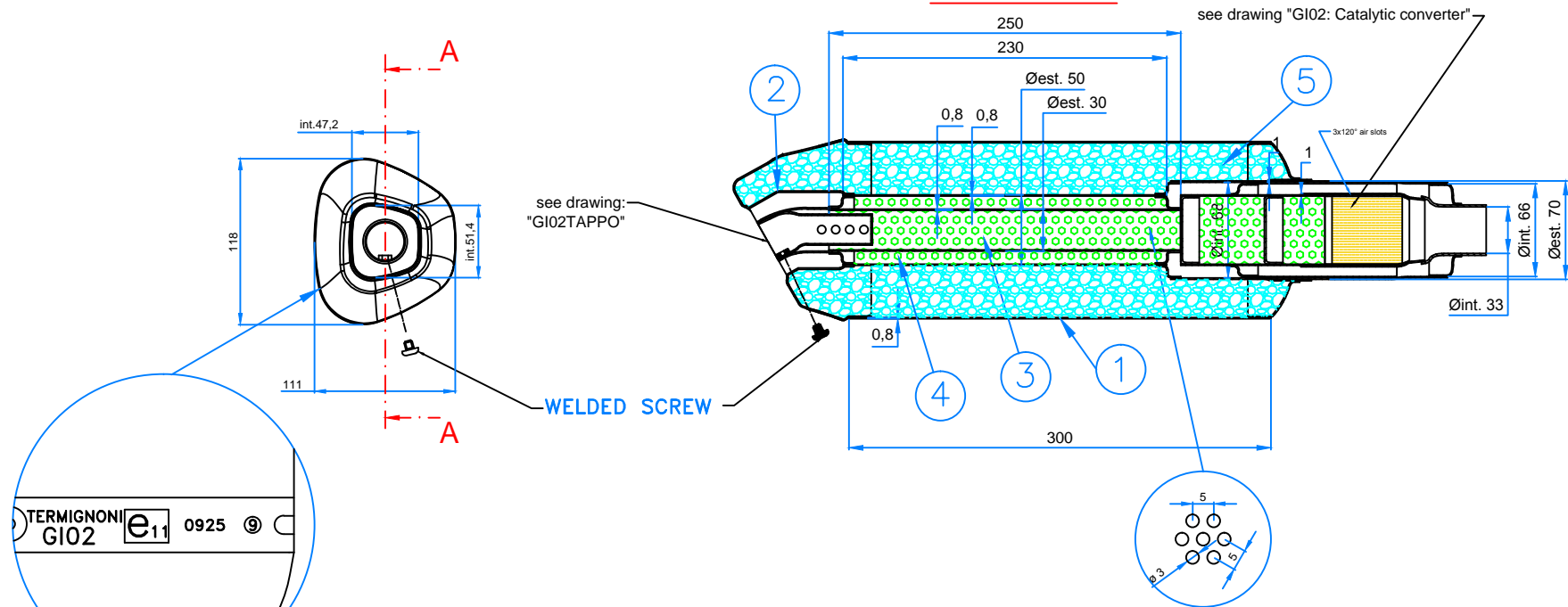
***Information Document relating to EC type approval as separate technical unit of exhaust systems for motorcycles (Directive 97/24/EC amended 2009/108/EC)***

<i>Enclosures</i>	<i>Drawing no.</i>	<i>Date</i>
<i>Drawing of silencer</i>	GI02: SILENCER	20/10/2014
<i>Drawing of catalytic converter</i>	GI02: CATALYTIC CONVERTER	31/10/2014
<i>Drawing of reduction</i>	GI02: TAPPO	07/11/2014
<i>Drawing of composition</i>	GI02: ASSEMBLY	30/10/2014
<i>List of vehicles</i>		
<i>Fitting instructions</i>		

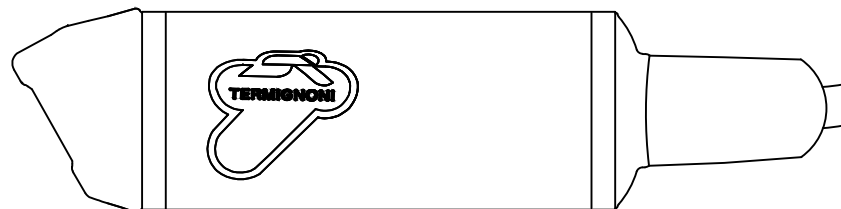


General tolerance:  $\pm 1 \text{ mm}$

## SEZIONE A-A



### DETAIL (NOT IN SCALE)



## PART LIST

PART LIST				
Nr	Part name	Material	Dimensions	QT
1	Shell	Stainless Steel	See Drawing	1x
		Titanium	See Drawing	1x
		Carbon fiber	See Drawing	1x
		Aluminium	See Drawing	1x
2	Outlet Pipe	Stainless Steel	See Drawing	1x
		Titanium	See Drawing	1x
3	Perforated inner pipe 1	Stainless Steel	Ø 30x0,8	1x
		Titanium	Ø 30x0,8	1x
4	Perforated inner pipe 2	Stainless Steel	Ø 50x0,8	1x
		Titanium	Ø 50x0,8	1x
5	Soundproof material	Fiberglass	550 gr.	1x

**SCALE:**

	<b>MODEL:</b>	

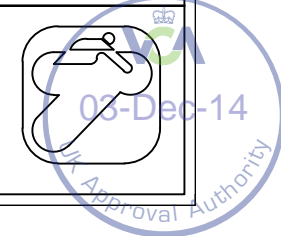
**DATE:** 20/10/2014

GILERA NEXUS 300  
1 SIL. Cod. GI02  
GI02 e11 0925 ⑤ ⑨

**NAME:**  
M. Garampazzi

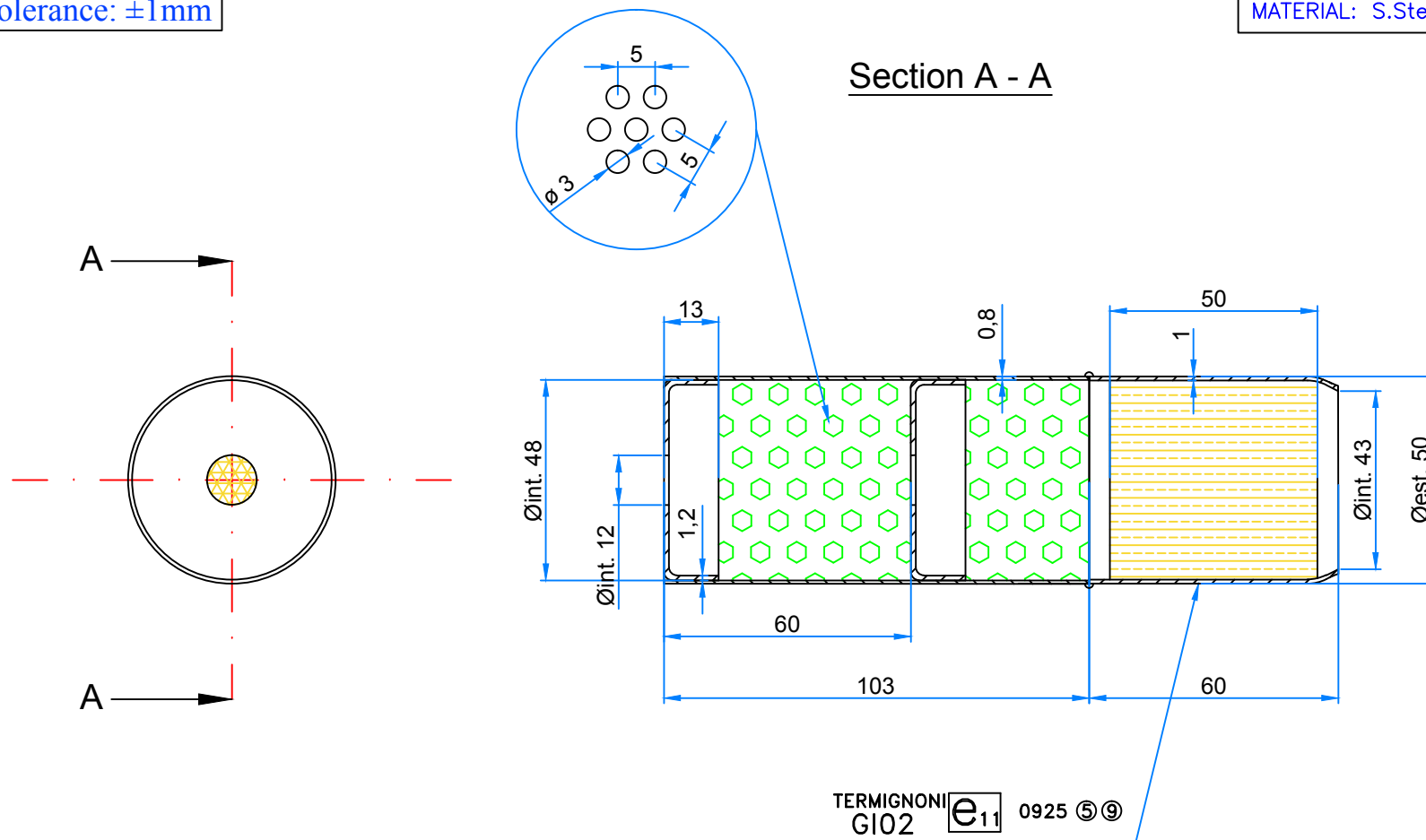
TYPE:	GI02: SILENCER
-------	----------------

Termignoni s.p.a.



General tolerance:  $\pm 1\text{mm}$

MATERIAL: S.Steel or Titanium



### CHARACTERISTICS

DIMENSIONS :  $\varnothing i$  48x50 mm.

CPSI : 200

FORMULATION : Pt/Pd/Rh

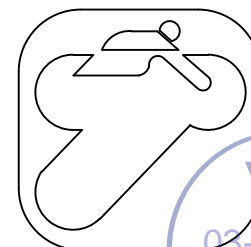
RATIO : 0/10/1

LOADING : 40 gr/ft<sup>3</sup>

Cod. TERMIGNONI TGI003

SCALA:	1:1	MODEL:	GILERA NEXUS 300
DATUM:	31/10/2014		Catalytic converter
NAME:	M. Garampazzi		GI02 e11 0925 ⑤ ⑨
Type:	GI02: Catalytic converter		

Termignoni s.p.a.



info@termignoni.it

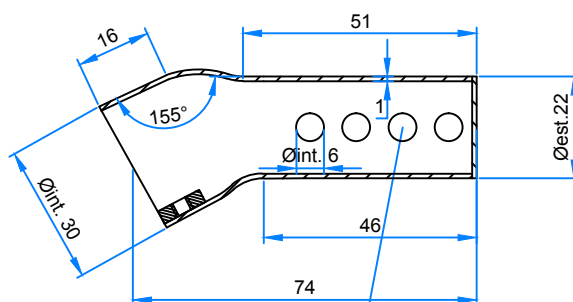
03-Dec-14

Approval Authority

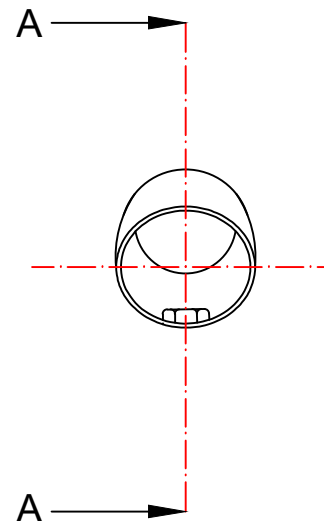
General tolerance:  $\pm 1\text{mm}$

MATERIAL: S.Steel or Titanium

### Section A - A

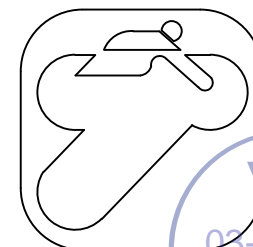


4 rows of  $\text{Ø}6$  holes at  $120^\circ$



<b>SCALA:</b>	1:1	<b>MODEL:</b>	GILERA Nexus 350
<b>DATUM:</b>	07/11/2014	<b>NAME:</b>	M. Garampazzi
<b>NAME:</b>	M. Garampazzi	<b>MODEL:</b>	GI02 e11 0925 ⑤⑨
<b>TYPE:</b>	GI02: Tappo		

Termignoni s.p.a.



info@termignoni.it

Cod. TERMIGNONI TER548

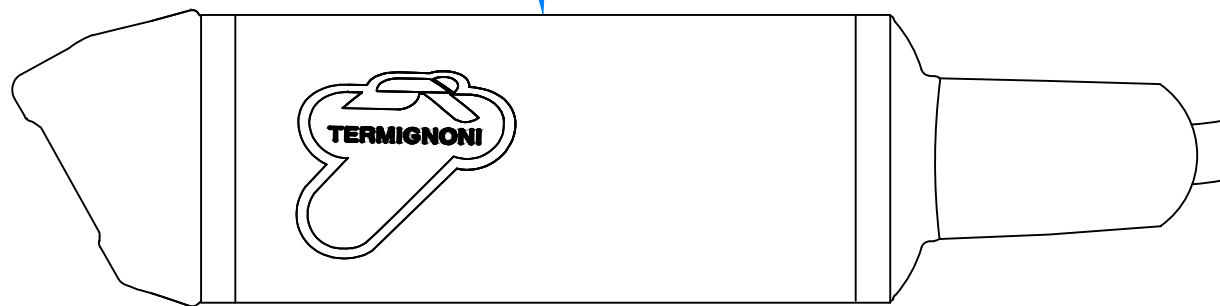
03-Dec-14

Approval Authority

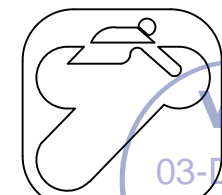


Material: Stainless steel or titanium

SILENCER  
see drawing "GI02: Silencer"



<b>SCALE:</b>	<b>MODEL:</b>
<b>DATE:</b> 30/10/2014	GILERA NEXUS 300
<b>NAME:</b> M. Garampazzi	1 SIL. Cod. GI02
<b>TYPE:</b> GI02: ASSEMBLY	GI02 e11 0925 ⑤ ⑨
Termignoni s.p.a.	
www.termignoni.it	



03-Dec-14

www.termignoni.it

Approval Authority

**INFORMATION DOCUMENT N° GI02/97/24 rev. 00 - List of the vehicles**

No. of vehicle	Manufacturer	Make	Commercial name	Vehicle type (and no. of homologation)	Engine type	Stroke	Engine capacity in cm <sup>3</sup>	Rated maximum engine power in kW/min <sup>-1</sup>	Additional remarks:	Composition as shown in enclosure no. 1
1)	PIAGGIO & C. S.p.A.	GILERA	NEXUS 300	M35 e3*2002/24*0402*	M356M	4-stroke	278	16,1 / 7250	with cat	1) 2) 3) 4)
2)			NEXUS 250		M353M		244	16,2 / 8250		
3)		DERBY	RAMBLA 250	RA e9*2002/24*0267*	M288M		244	16,5 / 8000		
4)			RAMBLA 300i		M28LM		278	16,5 / 7250		
5)		PIAGGIO	CARNABY CRUISER 300	M60 e3*2002/24*0459*	M604M		278	16,1 / 7250		
6)			MP3 250	M63 e11*2002/24*0761*	M632M		244	16,5 / 8250		
7)			MP3 300		M633M M634M		278	16,5 / 7500		
8)			MP3 250 LT		M632M		244	16,5 / 8250		
9)			MP3 300 LT	M64 e11*2002/24*0794*	M633M M634M		278	16,5 / 7500		
10)		APRILIA	SR MAX300	M35 e3*2002/24*0402*	M356M		278	16,1 / 7250		



Termignoni s.p.a.  
Via della Rampina, 1  
15077 PREDOSA (AL) Italy  
Telef. +39 0131.71666  
Fax +39 0131.71696  
[www.termignoni.it](http://www.termignoni.it)  
Part. IVA - C.F. 00862780061  
Iscriz. C.C.I.A.A. AL 130295  
Iscriz. Tribunale Reg. Soc. 7721  
N. Export AL 009063  
C.C. IT 00862780061  
Cap. Soc. € 1.000.000,00 int. vers.

## **FITTING INSTRUCTIONS**

### **For Termignoni exhaust systems**

#### **A. Dismantling the original exhaust system**

1. Remove any casing impeding clear access
2. Detach the silencer support(s) and the original silencer from the branch pipe and/or exhaust manifold

#### **B. Fitting Termignoni silencer(s)**

1. Fit the Termignoni silencer(s) to the original branch pipe, or use the Termignoni branch pipe to fit the exhaust manifold
2. Attach the silencer(s) with the mounting(s) supplied with the vehicle, leaving the screws and bolts loose
3. Adjust the exhaust system so that when fully inserted it is at least 5 mm from any other component of the vehicle
4. Tighten all screws and bolts
5. Test the vehicle and check all connections, tightening the screws and bolts if necessary
6. After about 100 km check all the connections again and tighten the screws and bolts if necessary

#### **WARNING:**

Take care when working on the exhaust system after testing the vehicle since the surfaces could be very hot



Techn. Report No.: 14-00041-CM-MIL-00  
Manufacturer: Termignoni S.p.A  
Type: GI02

Page 1/6

## TEST REPORT

### No. 14-00041-CM-MIL-00

about a test of a non-original exhaust system or a component  
as a separate technical unit for motorcycles according to the directive of the Council of the  
European Community for adaptation to the laws of the Member States relating to the  
permissible sound level, pollution and exhaust systems for two or three-wheel motor vehicles

No. 97/24/EC including the amendment 2009/108/EG  
Concerning chapter 9, annex III

Approval status	
<input checked="" type="checkbox"/>	Granting of a type approval
<input type="checkbox"/>	Extension/correction to type approval no. --

Techn. Report No.: 14-00041-CM-MIL-00  
Manufacturer: Termignoni S.p.A  
Type: GI02

Page 2/6

### Reason for extension:

It will be changed: Not applicable

It will be updated: Not applicable

## 0. General information

- 0.1. Make: TERMIGNONI
- 0.2. Type: GI02
- 0.2.1. Variants n.a.
- 0.3. Name and address of manufacturer: Termignoni S.p.A.  
Via della Rampina, 1  
I-15077 Predosa (AL)  
Italy
- 0.4. Name and address of authorized agent: n.a.
- 0.5. No. of information document: GI02/97/24 rev. 00  
Date: 10.11.2014
- 1.0. Class of the vehicles the unit is used for: L3e and L5e
- 1.1. Description of the vehicles  
the unit is used for: notice enclosure 2

## 2. Composition of the separate technical unit

- 2.1. Kind of technical unit: Non-original exhaust system, consisting out of one silencer on the right, maximum shape 118x111 mm, absorption-reflection principle with outlet pipe  $\varnothing$  30 mm according to drawings no. GI02: Silencer and GI02: Tappo, in combination with original header system. Equipped with catalytic converter inside of the inlet section of system according to drawing no. GI02: Catalytic converter. Aluminium- alternatively stainless steel alternatively titanium alternatively carbon fiber-cover.

Techn. Report No.: 14-00041-CM-MIL-00  
Manufacturer: Termignoni S.p.A  
Type: GI02

Page 3/6

- 2.2. Place of marking: On the silencer, see drawing:  
GI02: Silencer
- 2.3. Assembly of the exhaust system for testing  
(no. of parts, enclosure 1): Notice 3.4
- 2.4. Position and direction of the tail pipe: On the rear right side of the vehicle

### 3. Test report

The tests were carried out in 2 series A at 26/09/2014 and B at 01/10/2014

#### 3.1. **Vehicle**

- (0.1) Make: GILERA
- 3.1.1. Type / Variant / Version: M35/6/00
- 3.1.1.1 Model: NEXUS 300
- 3.1.2. Manufacturer: PIAGGIO & C. S.p.A.
- 3.1.3. Homologation no.: e3\*2002/24\*0402\*  
3.1.3.1 Extension: 07
- 3.1.4. Vehicle identification no.: \*ZAPM3560000006656\*
- 3.1.5. Year of manufacture: 2011
- 3.1.6. Kilometers: 1840
- 3.1.7. Total weight: 188 kg

#### 3.2. **Engine**

- 3.2.1. Manufacturer: Notice 3.1.2  
Trade name: GILERA
- 3.2.2. Type: M356M

Techn. Report No.: 14-00041-CM-MIL-00  
Manufacturer: Termignoni S.p.A  
Type: GI02

Page 4/6

3.2.3. Engine capacity: 278 cm<sup>3</sup>

3.2.4. Rated maximum engine power: 16,1 kW at 7250 min<sup>-1</sup>

### 3.3. Transmission

3.3.1. Kind of transmission: Automatic

3.3.4. Gearbox: --

3.3.5. Transmission ratios:  
primary / final Notice vehicle homologation no. s. 3.1.3

Top speed: 125 km/h

Tires:  
front 120/70 - 15 56P  
rear 140/60 - 14 64P

3.4. **Assembly of the exhaust system**  
(no. of parts, enclosure 1): 1) 2) 3) 4)

### 3.5. Acoustic measurements

3.5.1. Manufacturer of the sound  
level meter: Brüel & Kjaer

3.5.2. Type of the sound level meter: 2236

3.5.3. Drive by noise, stationary noise:  
according to the Council Directive No. 97/24/EC with the amendment 2009/108/EC  
chapter 9 III.

3.5.4. Load condition during drive by test: Unloaded weight plus 80kg driver

3.5.5. Deviation at calibration: < 0.2 dB(A)

Techn. Report No.: 14-00041-CM-MIL-00  
Manufacturer: Termignoni S.p.A  
Type: GI02

Page 5/6

### 3.6. Power measurement

#### 3.6.1. Testing of max. power with non-original exhaust system:

The tested max. power und the engine speed are in the 5% tolerance in comparison with the original exhaust system. (see enclosure)

#### 3.6.2. Testing of top speed with non-original exhaust system:

Not applicable, because vehicle class: Motorcycle L3e

### 3.7. Conditioning

by pulsation

### 3.8. Pollution Test

Testing of pollution with aftermarket catalytic converter in combination with non-original exhaust system against the limits mentioned in 97/24/Chap. 5 Annex II, regarding the type approval of the test bikes.

### 3.9. Test results

- The results of
- 3.9.1. Noise testing
  - 3.9.2. Power measurement
  - 3.9.3. Top speed
  - 3.9.4. Emission test
- are attached in the enclosure.

All motorcycles with the same serial exhaust system and same or fewer performance mentioned in enclosure 2, can be taken into the field of application due to the measurement with the above named motorcycle/s.

- 3.9.5. The described non-original exhaust system / technical unit is suitable for an application at the vehicles listed in enclosure 2.
- 3.9.6. The general specifications concerning 97/24/EC capt.9 annex III point 3.5.1 were checked and fulfilled regarding the technical possibilities by the non-original exhaust system / technical unit.



Techn. Report No.: 14-00041-CM-MIL-00  
Manufacturer: Termignoni S.p.A  
Type: GI02

Page 6/6

#### 4. Enclosures

Enclosure 1, Composition of the non original exhaust system  
Enclosure 2, Field of application  
Enclosure 3, Test results  
Enclosure 4, Test results according pollution  
Information Document

#### 5. Summary

The information folder as mentioned under No. 0.5 and the type described therein are in compliance with the test specification mentioned above. The worst-case was selected in accordance with document "Preparation of Test Reports".  
The test report may be reproduced and published in full and by the client only. It can be reproduced partially with the written permission of the test laboratory only.

Designated as Technical Service by:

Approval authority	Country	Registration-number	Actual scope list
Kraftfahrt-Bundesamt (KBA)	Deutschland/ Germany	KBA-P 00100-10	<a href="http://www.kba.de">www.kba.de</a>
Vehicle Certification Agency (VCA)	Vereintes Königreich/ United Kingdom	VCA-TS-006	<a href="http://ec.europa.eu/enterprise/sectors/automotive/approval-authorities-technical-services/technical-services/index_en.htm">http://ec.europa.eu/enterprise/sectors/automotive/approval-authorities-technical-services/technical-services/index_en.htm</a>
Approval Authority of the Netherlands (RDW)	Niederlande/ The Netherlands	RDW-99050009 01	
National Standards Authority of Ireland (NSAI)	Irland/ Ireland	Technical Service Number: 49	
Vehicle Safety Certification Center (VSCC)	Taiwan/ Taiwan	DE04-06-1	<a href="http://www.vsc.org.tw/English/Default.aspx">http://www.vsc.org.tw/English/Default.aspx</a>

München, 10.11.2014



Pietro Vergani  
Authorized Signatory

**ENCLOSURE 1**

**To test report no.**

**Type:**

**Manufacturer:**

**14-00041-CM-MIL-00**

**GI02**

**Termignoni S.p.A.**

**Composition of the original exhaust system + original parts**

Page 1/1

No.	Components parts, dimensions in mm	Dimensions of the part in mm or original part / replacement part	Part no. or homologation no.
1)	Collectors	Original parts	--
2)	Catalytic converter	Ø 48 x 50 mm	Drawing GI02: Catalytic converter
3)	Reduction	Notice drawing	Drawing GI02: Tappo
4)	Silencer (outlet pipe Ø 30 mm)	One silencer on the right, maximum shape 118x111 mm, absorption-reflection principle with outlet pipe Ø30 mm	Drawing GI02: Silencer

## ENCLOSURE 2

To test report no.

Type:

Manufacturer:

14-00041-CM-MIL-00

GI02

Termignoni S.p.A.

### Field of application

Page 1/1

No. of vehicle	Manufacturer	Make	Commercial name	Vehicle type (and no. of homologation)	Engine type	Stroke	Engine capacity in cm <sup>3</sup>	Rated maximum engine power in kW/min <sup>-1</sup>	Additional remarks:	Composition as shown in enclosure no. 1
1)	PIAGGIO & C. S.p.A.	GILERA	NEXUS 300	M35 e3*2002/24*0402*	M356M	4-stroke	278	16,1 / 7250	with cat	1) 2) 3) 4)
2)			NEXUS 250		M353M		244	16,2 / 8250		
3)		DERBY	RAMBLA 250	RA e9*2002/24*0267*	M288M		244	16,5 / 8000		
4)			RAMBLA 300i		M28LM		278	16,5 / 7250		
5)		PIAGGIO	CARNABY CRUISER 300	M60 e3*2002/24*0459*	M604M		278	16,1 / 7250		
6)			MP3 250	M63 e11*2002/24*0761*	M632M		244	16,5 / 8250		
7)			MP3 300		M633M		278	16,5 / 7500		
8)			MP3 250 LT		M634M		244	16,5 / 8250		
9)			MP3 300 LT	M64 e11*2002/24*0794*	M632M		278	16,5 / 7500		
10)			MP3 300 LT		M633M		244	16,5 / 7500		
		APRILIA	SR MAX300	M35 e3*2002/24*0402*	M356M		278	16,1 / 7250		

**ENCLOSURE 3**

**To test report no.**

**Type:**

**Manufacturer:**

**14-00041-CM-MIL-00**

**GI02**

**Termignoni S.p.A.**

**Test results**

Page 1/1

No. of vehicle	Engine power original kW/min <sup>-1</sup>	Engine power non original kW/min <sup>-1</sup>	Vmax original km/h	Vmax non original km /h	measured in gear ratio	Limit Value **)	Original mea- sured	Non original measured	at km/h	Vehicle type hom.	Original mea- sured	Non original measured	at min <sup>-1</sup>
1) A*	16,1/7250	15,7 / 7250	-	-	-	80	80	80	50	81	83	84	3625

\*) *Test series*

\*\*) *Limit value of directive which was valid by vehicle type homologation*

# **ENCLOSURE 4**

**To test report no.**

**Type:**

**Manufacturer:**

**14-00041-CM-MIL-00**

**GI02**

**Termignoni S.p.A.**

## **Test results according pollution**

Page 1/1

Test series: B

Type I

Equivalent flywheel mass	350 kg
--------------------------	--------

	CO [g/km]	HC [g/km]	NO <sub>x</sub> [g/km]
Test 1	0,326	0,088	0,089
Test 2	-	-	-
Test 3	-	-	-
Average	0,326	0,088	0,089
Limits B, II (Vh≥150cm³)	2,00	0,30	0,15

Type II

Running condition	CO [Vol %]	Engine rpm [min <sup>-1</sup> ]	Engine oil temperature [K]
Nominal idle speed	0,10	1600	374
Exceeded idle speed	0,08	2300	374