### GRAND-DUCHÉ DE LUXEMBOURG Ministère du Développement durable et des Infrastructures Département des Transports

SOCIÉTÉ NATIONALE DE CERTIFICATION ET D'HOMOLOGATION

s.à r.l.

Registre de Commerce: B 27180



L-5201 Sandweiler

**Référence:** e13\*168/2013\*00176\*00

L-2938 Luxembourg

Annexes: - Rapport technique

- Fiche de renseignements du constructeur

Luxembourg, le 28 mars 2017

### FICHE DE RÉCEPTION UE PAR TYPE D'UN VÉHICULE ENTIER

EU WHOLE-VEHICLE TYPE-APPROVAL CERTIFICATE

#### **Communication concernant:**

Communication concerning:

- la réception UE par type d'un véhicule entier EU whole-vehicle type-approval
- l'extension de la réception UE par type d'un véhicule entier extension of EU whole-vehicle type-approval
- le refus de la réception UE par type d'un véhicule entier refusal of EU whole-vehicle type-approval
- le retrait de la réception UE par type d'un véhicule entier withdrawal of EU whole-vehicle type-approval

pour un type de véhicule complet of a complete vehicle type

en vertu du règlement (UE) N° 168/2013, modifié en dernier lieu par le règlement (délégué de la Commission) (UE) Nº .../... complété par les règlements (UE) N° 3/2014, N° 44/2014 et N° 134/2014 modifiés en dernier lieu  $par\ le\ r\`eglement\ (UE)\ N^{\bullet}\ 2016/1824$  with regard to Regulation (EU) N° 168/2013, as last amended by (Commission Delegated) Regulation (EU) N° .../...

supplemented by regulations (EU) N° 3/2014, N° 44/2014 and N° 134/2014 as last amended by regulation (EU) N° 2016/1824

Numéro de réception UE par type:

e13\*168/2013\*00176\*00 EU type-approval number:

Raison de l'extension:

not applicable Reason for extension:

### **SECTION I** SECTION I

0.1. Marque (dénomination commerciale du

constructeur):

Make (trade name of manufacturer):

XINRI, SUNRA, APACHI, ISILDAR APACHI, ISILDAR, Wayscral, KRAL, ZTECH, EvoMotion, SYMEX, GBF, ARORA, MASU, MOTOLUX, ALF MOTO, MOTODELL,

MOTOMZ, MEEZ, MEZZ, ORAIO, MONASSO

0.2. Type:

Type:

**GRACE** 

0.2.1. Variante(s): Variant 1: 25 km/h/Lead acid batteries

> Variant(s): Variant 2: 45 km/h/Lead acid batteries Variant 3: 25 km/h/lithium battery

> > Variant 4: 45 km/h/lithium battery

0.2.2. Version(s):

Version(s):

00

0.2.3. Appellation(s) commerciale(s) (le cas

échéant):

Commercial name(s) (if available):

GRACE, ZT-25, BE BOLD, CRYSTAL, Zeroporte, Crystal, E-START, E-MATE, E-CRUISER, E-ROAD, ANKA 3000, ANKA, KR-42, E-legant, JAGUAR, wave, urban, MARS,

ElectroJet

0.3. Catégorie, sous-catégorie et sous-sous-

catégorie du véhicule:

Category, subcategory and sub-subcategory of vehicle:

L1e-B

0.4. Raison sociale et adresse du constructeur du

véhicule complet:

Company name and address of manufacturer of the

complete vehicle:

Jiangsu Xinri E-Vehicle Co., Ltd.

No. 501, Xishan Avenue, Xishan District, Wuxi City,

Jiangsu Province, China

0.4.1 Nom(s) et adresse(s) de(s) usines

d'assemblage:

Name(s) and addresse(s) of assembly plant(s):

Jiangsu Xinri E-Vehicle Co., Ltd.

No. 501, Xishan Avenue, Xishan District, Wuxi City,

Jiangsu Province, China

0.4.2. Nom et adresse du mandataire du

constructeur (le cas échéant):

Name and address of manufacturer's authorised

representative, if any:

Z-TECH BIKE KFT

HU-1044 Budapest, Ezred utca 7.II.ép.A.Iház.fszt.3

### **SECTION II**

SECTION II

1. Service technique responsable de la Luxcontrol SA B.P. 349

réalisation des essais:

Technical service responsible for carrying out the tests::

L-4004 Esch-sur-Alzette

2. Date du rapport d'essais:

17.03.2017 Date of test report:

3. Numéro du rapport d'essais:

LCA 51 1215 002 16 Number of test report:

### SECTION III SECTION III

Le soussigné certifie l'exactitude de la description, faite par le constructeur dans la fiche de renseignements jointe, du type de véhicule décrit ci-dessus, dont un ou plusieurs échantillons représentatifs, sélectionnés par l'autorité compétente en matière de réception UE par type, ont été présentés en tant que prototypes du type de véhicule, et que les résultats d'essais joints s'appliquent au type de véhicule.

The undersigned hereby certifies the accuracy of the manufacturer's description in the attached information document of the vehicle type described above, for which one or more representative samples, selected by the EU type-approval authority, have been submitted as prototypes of the vehicle type and that the attached test results apply to the vehicle type.

1. Le type de véhicule complet satisfait/ ne satisfait pas à l'ensemble des prescriptions pertinentes énumérées dans l'annexe II du règlement (UE) N° 168/2013.

The complete vehicle type meets/does not meet all relevant requirements as listed in Annex II to Regulation (EU)  $N^{\circ}$  168/2013.

The complete vehicle type meets all relevant requirements as listed in Annex II to Regulation (EU)  $N^{\circ}$  168/2013

1.1. Restrictions de validité:

Restrictions of validity: not applicable

1.2. Dérogations accordées:

Waivers applied: not applicable

1.2.1. Raisons des dérogations:

Reasons for the waivers: not applicable

1.2.2. Autres exigences applicables:

Alternative requirements: not applicable

 La réception est accordée/étendue/refusée/ retirée:

The approval is granted/extended/refused/withdrawn: the approval is granted

2.1. La réception est accordée conformément à l'article 40 du règlement (UE) N° 168/2013 et sa validité expire, par conséquent, le jj/mm/aaaa.

The approval is granted in accordance with Article 40 of Regulation (EU) N° 168/2013 and the validity of the approval is thus limited to dd/mm/yyyy.

not applicable

Lieu: Luxembourg Place: Date: 28 mars 2017 Date: Signature: Signature: Pour le Ministre du Développement durable Pour la SNCH et des Infrastructures **Marco FELTES Claude LIESCH** Inspecteur Principal 1er en rang **Directeur** Pièces jointes: - Dossier de réception Attachments: Information package - Résultats d'essai Test results - Nom(s) et spécimen(s) de signature de la ou des personnes autorisées à signer les certificats de conformité et indication de leurs fonctions dans la société

Name(s) and specimen(s) of the signature(s) of the person(s)

authorised to sign certificates of conformity and a statement of their position in the company

Spécimen complété du certificat de conformité A completed specimen of the certificate of conformity

NB: not applicable NB:

### Addendum à la fiche de réception UE par type Addendum to the EU type-approval certificate

### Liste des actes réglementaires aux prescriptions desquels le type de véhicule satisfait List of regulatory acts with which the type of vehicle complies

refer to Page 4 & 5 of technical report  $N^{\circ}$  LCA 51 1215 002 16

# GRAND-DUCHÉ DE LUXEMBOURG Ministère du Développement durable et des Infrastructures Département des Transports

L-2938 Luxembourg



s.à r.l.

Registre de Commerce: B 27180



L-5201 Sandweiler

**Référence:** e13\*168/2013\*00176\*00

**Annexes:** - Rapport technique

- Fiche de renseignements du constructeur

Luxembourg, le 28 mars 2017

### Index du dossier de réception

Index to type-approval report

Numéro de réception:

Approval number: e13\*168/2013\*00176\*00

Révision:

Revision: 00

Marque de fabrique ou de commerce:

Trade name or mark: Wayscral, KRAL, ZTECH, EvoMotion, SYMEX, GBF,

ARORA, MASU, MOTOLUX, ALF MOTO, MOTODELL,

XINRI, SUNRA, APACHI, ISILDAR APACHI, ISILDAR,

 $MOTOMZ,\,MEEZ,\,MEZZ,\,ORAIO,\,MONASSO$ 

Type:

Type: GRACE

1. Procès-verbal d'essai:

Test report: N° LCA 51 1215 002 16

- Technical report: Page 1 to 42; - Index: Annex A - Page 1.

2. Dossier du constructeur:

Report of the manufacturer: Annex B (N° 168/2013/EU-GRACE-00)

- Approval history: Page 1;
- Content: Page 2;
- Index: Page 3;

- Technical description: Page 4;
- Information document: Page 5, 6

- Information document: Page 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35,

- List of Annexes: 36, 37, 38, 39, 40, 41, 42, 43, 44 & 45;

- Technical documentation: Refer to Index;

- EMC test report : Annex C - Page 1 to 24.

Autres documents annexés: 3.

not applicable Other documents annexed:

Date de délivrance de la réception initiale: Date of issue of initial type approval: 4.

28.03.2017

Date de la dernière délivrance de pages 5.

**révisées:**Date of last issue of revised pages: not applicable

Date de la dernière délivrance d'une réception 6.

révisée:

not applicable Date of last extension:

# GRAND-DUCHÉ DE LUXEMBOURG Ministère du Développement durable et des Infrastructures Département des Transports

L-2938 Luxembourg

SOCIÉTÉ NATIONALE DE CERTIFICATION ET D'HOMOLOGATION

s.à r.l.

Registre de Commerce: B 27180



L-5201 Sandweiler

**Référence:** e13\*168/2013\*00176\*00

**Annexes:** - Rapport Technique

- Fiche de Renseignements du constructeur

Luxembourg, le 28 mars 2017

### Annexe VIII Annex VIII

### Fiche des résultats d'essais

Test results sheet

refer to Page 7 to 16 of technical report  $N^{\circ}$  LCA 51 1215 002 16



### TECHNICAL REPORT

### No.: LCA 51 1215 002 16

Inspection concerning the

## Approval and market surveillance of two- or three-wheel vehicles and quadricycles

performed according to the Regulation (EU)

### No. 168/2013

of the European Parliament and of the Council

Type: **GRACE** 

Manufacturer: Jiangsu Xinri E-Vehicle Co., Ltd.

No.501, Xishan Avenue, Xishan District, Wuxi City, Jiangsu

Province, China

### Extension -- to EU Type Approval no.: --

### **Index:**

1.	General	2
2.	Inspections and their results	6
3.	Evaluation of test results	41
4.	Statement of compliance	42

A reproduction of this report and its annexes, except in full, is prohibited without the written permission of Luxcontrol s.a.

Fortis Banque Luxembourg IBAN: LU56 0030 1612 0727 0000 BIC: BGLLLULL Dexia-BIL IBAN: LU48 0026 1824 1543 2600 BIC: BILLLULL



### 1. <u>General</u>

### **1.1.** Test Provisions

The inspection was carried out according to the requirements of Regulation (EU) No. 168/2013 of the European Parliament and of the Council of 15 January 2013.

### 1.2. <u>Information concerning the vehicle type and the requested approval</u>

The statements below apply to the previous EU type-approval as referred to on page 1.

- 1.2.1. () Numbering according to the EU whole-vehicle type-approval certificate for a complete vehicle type following Regulation (EU) No. 901/2014, as last amended by Regulation (EU) No. 2016/1825, Annex VI, Appendix 1, Section I
- (0.1.) Make (trade name of manufacturer):

XINRI, SUNRA, APACHI, ISILDAR APACHI, ISILDAR, Wayscral, KRAL, ZTECH, EvoMotion, SYMEX, GBF, ARORA, MASU, MOTOLUX, ALF MOTO, MOTODELL, MOTOMZ, MEEZ, MEZZ,

### 

(0.2.) Type:

### **GRACE**

(0.2.1.) Variant(s):

Variant 1: 25 km/h/Lead acid batteries Variant 2: 45 km/h/Lead acid batteries Variant 3: 25 km/h/lithium battery Variant 4: 45 km/h/lithium battery

(0.2.2.) Version(s):

00

(0.2.3.) Commercial name(s):

GRACE, ZT-25, BE BOLD, CRYSTAL, Zeroporte, Crystal, E-START, E-MATE, E-CRUISER, E-ROAD, ANKA 3000, ANKA, KR-42, E-legant, JAGUAR, wave, urban, MARS, ElectroJet

(0.3.) Category, subcategory and sub-subcategory of vehicle:

L1e-B



(0.4.)Company name and address of manufacturer of the complete vehicle:

Jiangsu Xinri E-Vehicle Co., Ltd.

No. 501, Xishan Avenue, Xishan District, Wuxi City, Jiangsu

Province, China

(0.4.1.)Name(s) and addresse(s) of assembly plant(s):

**See item (0.4.)** 

(0.4.2.)Name and address of manufacturer's authorised representative:

**Z-TECH BIKE KFT** 

1044 Budapest, Ezred utca 7.II.ép.A.Iház.fszt.3.

1.2.2. () Numbering according to the EU whole-vehicle type-approval certificate for a complete vehicle type following Regulation (EU) No. 901/2014, as last amended by Regulation (EU) No. 2016/1825, Annex VI, Appendix 1, Section III

> The undersigned hereby certifies the accuracy of the manufacturer's description in the attached information document of the vehicle type described above, for which one or more representative samples, selected by the EU type-approval authority, have been submitted as prototypes of the vehicle type and that the attached test results apply to the vehicle type.

(1.)The complete vehicle type meets / does not meet all relevant requirements as listed in Annex II to Regulation (EU) No. 168/2013:

(1.1.)Restrictions of validity : not applicable

Wavers applied : not applicable (1.2.)

(1.2.1.)Reasons for the waivers : not applicable

(1.2.2.)Alternative requirements : not applicable



### 1.2.3. Addendum to the EU type-approval certificate

### List of regulatory acts with which the type of vehicle complies

Item	Subject	Regulatory act reference	As amended by	Applicable to version
Envir	onmental and propulsion unit performance requi	rements (EPPR)		
1	Tailpipe emissions after cold start	(EU) 134/2014, Annex II	(EU) 2016/1824	n/a
2	Tailpipe emissions at (increased) idle / free acceleration test	(EU) 134/2014, Annex III	(EU) 2016/1824	n/a
3	Emissions crank-case gases	(EU) 134/2014, Annex IV	(EU) 2016/1824	n/a
4	Evaporative emissions	(EU) 134/2014, Annex V	(EU) 2016/1824	n/a
5	Durability of pollution-control devices	(EU) 134/2014, Annex VI	(EU) 2016/1824	n/a
6	Measurement of CO <sub>2</sub> emissions, fuel consumption, electric energy consumption and electric range determination	(EU) 134/2014, Annex VII	(EU) 2016/1824	All
7	Environmental on-board diagnosis (OBD) tests	(EU) 134/2014, Annex VIII	(EU) 2016/1824	n/a
8	Permissible sound level	(EU) 134/2014, Annex IX	(EU) 2016/1824	n/a
9	Procedures and technical requirements on maximum vehicle design speed, maximum torque, maximum continuous total power and maximum peak power	(EU) 134/2014, Annex X	(EU) 2016/1824	All
10	Vehicle propulsion family definition	(EU) 134/2014, Annex XI	(EU) 2016/1824	n/a

Item	Subject	Regulatory act reference	As amended by	Applicable to version
Vehic	le functional safety requirements			
1	Audible warning devices	(EU) 3/2014, Annex II	(EU) 2016/1824	All
2	Braking including anti-lock and combined brake systems	(EU) 3/2014, Annex III	(EU) 2016/1824	All
3	Electrical safety	(EU) 3/2014, Annex IV	(EU) 2016/1824	All
4	Manufacturer declaration requirements regarding endurance testing of functional safety-critical systems, parts and equipment	(EU) 3/2014, Annex V	(EU) 2016/1824	All
5	Front and rear protective structures	(EU) 3/2014, Annex VI	(EU) 2016/1824	n/a
6	Glazing, windscreen wipers and washers and defrosting and demisting systems	(EU) 3/2014, Annex VII	(EU) 2016/1824	n/a
7	Driver-operated controls including identification of controls, tell-tales and indicators	(EU) 3/2014, Annex VIII	(EU) 2016/1824	All
8	Installation of lighting and light-signalling devices, including automatic switching of lighting	(EU) 3/2014, Annex IX	(EU) 2016/1824	All
9	Rearward visibility	(EU) 3/2014, Annex X	(EU) 2016/1824	All
10	Rollover protective structure (ROPS)	(EU) 3/2014, Annex XI	(EU) 2016/1824	n/a
11	Safety-belt anchorages and safety-belts	(EU) 3/2014, Annex XII	(EU) 2016/1824	n/a
12	Seating positions (saddles and seats)	(EU) 3/2014, Annex XIII	(EU) 2016/1824	All
13	Steerability, cornering properties and turnability	(EU) 3/2014, Annex XIV	(EU) 2016/1824	All
14	Installation of tires	(EU) 3/2014, Annex XV	(EU) 2016/1824	All



Item	Subject	Regulatory act reference	As amended by	Applicable to version
Vehic	le functional safety requirements	Telefence	l	to version
15	Vehicle maximum speed limitation plate and its location of the vehicle	(EU) 3/2014, Annex XVI	(EU) 2016/1824	n/a
16	Vehicle occupant protection, including interior fittings and vehicle doors	(EU) 3/2014, Annex XVII	(EU) 2016/1824	n/a
17	Maximum continuous total power and/or maximum vehicle speed limitation by design	(EU) 3/2014, Annex XVIII	(EU) 2016/1824	All
18	Requirements on vehicle structure integrity	(EU) 3/2014, Annex XIX	(EU) 2016/1824	All

Item	Subject	Regulatory act reference	As amended by	Applicable to version
Vehic	le construction and general type-approval require	ments		
1	Powertrain tampering prevention measures (antitampering)	(EU) 44/2014, Annex II	(EU) 2016/1824	All
2	Arrangements for type-approval procedures	(EU) 44/2014, Annex III	(EU) 2016/1824	All
3	Conformity of production	(EU) 44/2014, Annex IV	(EU) 2016/1824	All
4	Coupling devices and attachments	(EU) 44/2014, Annex V	(EU) 2016/1824	n/a
5	Devices to prevent unauthorised use	(EU) 44/2014, Annex VI	(EU) 2016/1824	All
6	Electromagnetic compatibility (EMC)	(EU) 44/2014, Annex VII	(EU) 2016/1824	All
7	External projections	(EU) 44/2014, Annex VIII	(EU) 2016/1824	All
8	Fuel storage	(EU) 44/2014, Annex IX	(EU) 2016/1824	n/a
9	Load platforms	(EU) 44/2014, Annex X	(EU) 2016/1824	n/a
10	Masses and dimensions	(EU) 44/2014, Annex XI	(EU) 2016/1824	All
11	On-board diagnostics (OBD) functional requirements	(EU) 44/2014, Annex XII	(EU) 2016/1824	n/a
12	Passenger handholds and footrests	(EU) 44/2014, Annex XIII	(EU) 2016/1824	All
13	Registration plate space	(EU) 44/2014, Annex XIV	(EU) 2016/1824	All
14	Access to repair and maintenance information	(EU) 44/2014, Annex XV	(EU) 2016/1824	All
15	Stands	(EU) 44/2014, Annex XVI	(EU) 2016/1824	All

. . .



### 2. <u>Inspections and their results</u>

### 2.1. <u>Version of the tested vehicle/item</u>

Following variants have been used for testing: **Variant 1: LXRBD0GW6G0904981** 

Variant 1: LXRBD0GW6G0904981 Variant 2: LXRBD0GW4G0904980 Variant 3: LXRTD1GW2G0900002 Variant 4: LXRTD1GW0G0900001

Test engine component:

Variant 1&3: RBMBLCH168031313 Variant 2&4: RBMBLCH168031316

### 2.2. Inspection items

Inspector		Location of test	Date of receipt of	Date of test /
	_		test item	verification
Main	Leonie Lee	Nanchang Motorcycle Quality	15.10. 2016	15.10.2016
report	Nick Yang	Supervision and Inspection		~
-		Institute		15.11.2016
		Xianxiqiao, Nanchang, Jiangxi,		
		China		
		Shanghai Notor Vehicle		
		Inspection Center		
		No. 68, Yutian South Road, Anting,		
		Jiading District, Shanghai, China		
		SIEMIC (NANJING-CHINA)		
		LABORATORIES		
		No. 2-1 Longcang Avenue, Yuhua		
		Economic Development Zone,		
		Yuhua District, Nanjing 210039,		
		China		



2.3.1. Following Numbering is according to the EU whole-vehicle type-approval certificate for a complete vehicle type following (EU) 901/2014. Annex VIII  2.2.1. (A) Environmental and propulsion unit performance  2.2.1.1. Generic information on environmental performance  2.2.1.1. Description of propulsion, propulsion family and drive-train of test vehicle(s):  Not applicable, electrical vehicle.  2.2.1.1.2. Environmental step of test vehicle: Furo 3, Furo 4, Furo 5  2.2.1.1.3. Description of emission test bench(es), specifications and settings:  Not applicable, electrical vehicle.  2.2.1.1.4. Chassis/engine dynamometer(s) specifications:  Not applicable, electrical vehicle.  2.2.1.1.5. Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 2 class 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN);  Not applicable, electrical vehicle.  2.2.1.2.1. Any deviations by test vehicle(s) (prototype(s) or series production, hardware and software levels, VIN);  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  1. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.	2.3.	Executive Summary of the test reports according to item 2.2. of Annex
2.3.1. Following Numbering is according to the EU whole-vehicle type-approval certificate for a complete vehicle type following (EU) 901/2014, Annex VIII  2.2.1. (A) Environmental and propulsion unit performance  2.2.1.1. Generic information on environmental performance  2.2.1.1. Description of propulsion, propulsion family and drive-train of test vehicle(s):  Not applicable, electrical vehicle.  2.2.1.1.2. Environmental step of test vehicle: Euro 3, Euro 4, Euro 5  2.2.1.1.3. Description of emission test bench(es), specifications and settings:  Not applicable, electrical vehicle.  2.2.1.1.4. Chassis/engine dynamometer(s) specifications:  Not applicable, electrical vehicle.  2.2.1.1.5. Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.7. Applicable test type I driving schedule (FCF R40 (with/without EUDC), ECF R47, WMTC stage 1, WMTC stage 2, class 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable, electrical vehicle.  1f yes, please provide list with deviations:  Not applicable, electrical vehicle.  1f yes, please provide list with deviations:  Not applicable, electrical vehicle.  Not applicable, electrical vehicle.		
2.2.1.  (A) Environmental and propulsion unit performance  2.2.1.1.  Generic information on environmental performance  2.2.1.1.1.  Description of propulsion, propulsion family and drive-train of test vehicle(s):  Not applicable, electrical vehicle.  2.2.1.1.2.  Environmental step of test vehicle: Furo 3, Furo 4, Furo 5  2.2.1.1.3.  Description of emission test bench(es), specifications and settings:  Not applicable, electrical vehicle.  2.2.1.1.4.  Chassis/engine dynamometer(s) specifications:  Not applicable, electrical vehicle.  2.2.1.1.5.  Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.6.  Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.7.  Applicable, electrical vehicle.  2.2.1.1.8.  Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2.  Test type I: requirements: tailpipe emissions after cold start  Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2.  Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable, electrical vehicle.  Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.	2.3.1.	
2.2.1.1. Generic information on environmental performance 2.2.1.1.1. Description of propulsion, propulsion family and drive-train of test vehicle(s): Not applicable, electrical vehicle. 2.2.1.1.2. Environmental step of test vehicle: Euro 3, Euro 4, Euro 5 2.2.1.1.3. Description of emission test bench(es), specifications and settings: Not applicable, electrical vehicle. 2.2.1.1.4. Chassis/engine dynamometer(s) specifications: Not applicable, electrical vehicle. 2.2.1.1.5. Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer: Not applicable, electrical vehicle. 2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer: Not applicable, electrical vehicle. 2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, WMTC stage 2 class 1, revised WMTC): Not applicable, electrical vehicle. 2.2.1.1.8. Description gearshift prescriptions for environmental testing: Not applicable, electrical vehicle. 2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIIN): Not applicable, electrical vehicle. 2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I: Not applicable, electrical vehicle. If yes, please provide list with deviations: Not applicable, electrical vehicle. Type-approval number if not parent vehicle: Not applicable, electrical vehicle.		•
2.2.1.1.1.  Description of propulsion, propulsion family and drive-train of test vehicle(s):  Not applicable, electrical vehicle.  2.2.1.1.2.  Environmental step of test vehicle: Euro 3, Euro 4, Euro 5  2.2.1.1.3.  Description of emission test bench(es), specifications and settings:  Not applicable, electrical vehicle.  2.2.1.1.4.  Chassis/engine dynamometer(s) specifications:  Not applicable, electrical vehicle.  2.2.1.1.5.  Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.6.  Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.7.  Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, WMTC stage 2 class 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.1.8.  Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2.  Test type I: requirements: tailpipe emissions after cold start  Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable, electrical vehicle.  Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.	2.2.1.	
Not applicable, electrical vehicle.  2.2.1.1.2. Environmental step of test vehicle: Euro 3, Euro 4, Euro 5  2.2.1.1.3. Description of emission test bench(es), specifications and settings: Not applicable, electrical vehicle.  2.2.1.1.4. Chassis/engine dynamometer(s) specifications: Not applicable, electrical vehicle.  2.2.1.1.5. Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer: Not applicable, electrical vehicle.  2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer: Not applicable, electrical vehicle.  2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, WMTC stage 2 class 1, revised WMTC): Not applicable, electrical vehicle.  2.2.1.1.8. Description gearshift prescriptions for environmental testing: Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN): Not applicable, electrical vehicle.  2.2.1.2. Any deviations by test vehicle(s) from data provided in information document, Annex I: Not applicable, electrical vehicle.  If yes, please provide list with deviations: Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle: Not applicable, electrical vehicle.	2.2.1.1.	•
2.2.1.1.2. Environmental step of test vehicle: Euro 3, Euro 4, Euro 5 2.2.1.1.3. Description of emission test bench(es), specifications and settings: Not applicable, electrical vehicle. 2.2.1.1.4. Chassis/engine dynamometer(s) specifications: Not applicable, electrical vehicle. 2.2.1.1.5. Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer: Not applicable, electrical vehicle. 2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer: Not applicable, electrical vehicle. 2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, wMTC stage 2 class 1, revised WMTC): Not applicable, electrical vehicle. 2.2.1.1.8. Description gearshift prescriptions for environmental testing: Not applicable, electrical vehicle. 2.2.1.2. Test type I: requirements: tailpipe emissions after cold start 2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN): Not applicable, electrical vehicle. 2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I: Not applicable, electrical vehicle. If yes, please provide list with deviations: Not applicable 2.2.1.2.3. Type-approval number if not parent vehicle: Not applicable, electrical vehicle.	2.2.1.1.1.	Description of propulsion, propulsion family and drive-train of test vehicle(s):
2.2.1.1.3. Description of emission test bench(es), specifications and settings:  Not applicable, electrical vehicle.  2.2.1.1.4. Chassis/engine dynamometer(s) specifications:  Not applicable, electrical vehicle.  2.2.1.1.5. Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.7. Applicable test type I driving schedule (ECE-R40 (with/without EUDC), ECE-R47, WMTC stage 1, WMTC stage 2 elass 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.1.8. Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable, electrical vehicle.  Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.		Not applicable, electrical vehicle.
Not applicable, electrical vehicle.  2.2.1.1.4. Chassis/engine dynamometer(s) specifications: Not applicable, electrical vehicle.  2.2.1.1.5. Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer: Not applicable, electrical vehicle.  2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer: Not applicable, electrical vehicle.  2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, WMTC stage 2 class 1, revised WMTC): Not applicable, electrical vehicle.  2.2.1.1.8. Description gearshift prescriptions for environmental testing: Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN): Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I: Not applicable, electrical vehicle.  If yes, please provide list with deviations: Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle: Not applicable, electrical vehicle.	2.2.1.1.2.	Environmental step of test vehicle: Euro 3, Euro 4, Euro 5
2.2.1.1.4. Chassis/engine dynamometer(s) specifications:  Not applicable, electrical vehicle.  2.2.1.1.5. Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, WMTC stage 2 class 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.1.8. Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable, electrical vehicle.  7 type-approval number if not parent vehicle:  Not applicable, electrical vehicle.	2.2.1.1.3.	Description of emission test bench(es), specifications and settings:
Not applicable, electrical vehicle.  2.2.1.1.5. Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, WMTC stage 2 class 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.1.8. Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.		Not applicable, electrical vehicle.
2.2.1.1.5. Inertia (reference) mass and running resistance settings for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, WMTC stage 2 class 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.1.8. Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable, electrical vehicle.  Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.  Not applicable, electrical vehicle.	2.2.1.1.4.	Chassis/engine dynamometer(s) specifications:
dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, WMTC stage 2 class 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.1.8. Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.  Not applicable, electrical vehicle.		Not applicable, electrical vehicle.
2.2.1.1.6. Comprehensive report of road test results for the determination of test bench settings, including coast down times for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, WMTC stage 2-class 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.1.8. Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.	2.2.1.1.5.	· · · · · · · · · · · · · · · · · · ·
including coast down times for single/dual roll chassis dynamometer:  Not applicable, electrical vehicle.  2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, WMTC stage 2 class 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.1.8. Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable, electrical vehicle:		Not applicable, electrical vehicle.
2.2.1.1.7. Applicable test type I driving schedule (ECE R40 (with/without EUDC), ECE R47, WMTC stage 1, WMTC stage 2 class 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.1.8. Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.	2.2.1.1.6.	
stage 1, WMTC stage 2 class 1, revised WMTC):  Not applicable, electrical vehicle.  2.2.1.1.8. Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.		Not applicable, electrical vehicle.
2.2.1.2.8. Description gearshift prescriptions for environmental testing:  Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.	2.2.1.1.7.	
Not applicable, electrical vehicle.  2.2.1.2. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.		Not applicable, electrical vehicle.
2.2.1.2.1. Test type I: requirements: tailpipe emissions after cold start  2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.	2.2.1.1.8.	Description gearshift prescriptions for environmental testing:
2.2.1.2.1. Description of tested vehicle(s) (prototype(s) or series production, hardware and software levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.		Not applicable, electrical vehicle.
levels, VIN):  Not applicable, electrical vehicle.  2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.	2.2.1.2.	Test type I: requirements: tailpipe emissions after cold start
2.2.1.2.2. Any deviations by test vehicle(s) from data provided in information document, Annex I:  Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.	2.2.1.2.1.	
Not applicable, electrical vehicle.  If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.		Not applicable, electrical vehicle.
If yes, please provide list with deviations:  Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.	2.2.1.2.2.	Any deviations by test vehicle(s) from data provided in information document, Annex I:
Not applicable  2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.		Not applicable, electrical vehicle.
2.2.1.2.3. Type-approval number if not parent vehicle:  Not applicable, electrical vehicle.		If yes, please provide list with deviations:
Not applicable, electrical vehicle.		Not applicable
	2.2.1.2.3.	Type-approval number if not parent vehicle:
2.2.1.2.4. Mileage(s) of test vehicle(s):		Not applicable, electrical vehicle.
	2.2.1.2.4.	Mileage(s) of test vehicle(s):
Not applicable, electrical vehicle.		Not applicable, electrical vehicle.



	10 111 (11 G14162 100/2015
2.2.1.2.5.	Test fuel(s) used:
	Not applicable, electrical vehicle.
2.2.1.2.6.	Description of test type I measurement methods for hybrid L-category vehicles referred to in Appendix 11 to Annex II to Commission Delegated Regulation (EU) No 134/2014:
	Not applicable, electrical vehicle.
2.2.1.2.7.	Description of test type I measurement methods for gas-fuelled vehicles referred to in Appendix 12 to Annex II to Commission Delegated Regulation (EU) No 134/2014:
	Not applicable, electrical vehicle.
2.2.1.2.8.	Description of test type I measurement methods for vehicles equipped with a periodically regenerating system referred to in Appendix 13 to Annex II to Commission Delegated Regulation (EU) No 134/2014:
	Not applicable, electrical vehicle.
2.2.1.2.9.	Information on regeneration strategy:
	D (number of operating cycles between 2 cycles when regenerative phases occur):
	Not applicable, electrical vehicle.
	d (number of operating cycles required for regeneration): not applicable
2.2.1.2.10.	Description of weighting of type I test results as referred to in point 6.1.1.5. of Annex II to Commission Delegated Regulation (EU) No 134/2014 including equation number and weighting factors:
	Not applicable, electrical vehicle.
2.2.1.2.11.	Number of type I operating cycles between two cycles where regenerative phases occur under the conditions equivalent to type I test (Distance 'D' in Figure Ap13-1 in Appendix 13 to Annex II to Commission Delegated Regulation (EU) No 134/2014):
	Not applicable, electrical vehicle.
2.2.1.2.12.	Description of method employed to determine the number of cycles between two cycles where regenerative phases occur:
	Not applicable, electrical vehicle.
2.2.1.2.13.	Parameters to determine the level of loading required before regeneration occurs (i.e. temperature, pressure etc.):
	Not applicable, electrical vehicle.
2.2.1.2.14.	Description of method used to load system in the test procedure described in point 3.1. of Appendix 13 to Annex II to Commission Delegated Regulation (EU) No 134/2014):
	Not applicable, electrical vehicle.
2.2.1.2.15.	Test records according to point 7 of Annex II to Commission Delegated Regulation (EU) No 134/2014:
	Not applicable, electrical vehicle.
2.2.1.2.16.	Type I test results:
	Not applicable, electrical vehicle.



### 2.2.1.3. Test type II requirements: tailpipe emissions at increased idle/free acceleration 2.2.1.3.1. Details of test vehicle(s) if different from vehicle used for type I testing: (items 2.1.2.1.1. to 2.1.2.1.4. where different): not applicable 2.2.1.3.2. Description of propulsion idling activation method in case of stop-start system: Not applicable, electrical vehicle. 2.2.1.3.3. Type II test results: Not applicable, electrical vehicle. 2.2.1.4. Test type III requirements: emissions of crank-case gases Details of test vehicle(s) if different from vehicle used for type I testing: 2.2.1.4.1. (items 2.1.2.1.1. to 2.1.2.1.4. where different): **not applicable** 2.2.1.4.2. Type of crank-case gas recycling system (breather system, positive crank-case ventilation system, other) 2.2.1.4.3. System for recycling crank-case gases (description and drawings): Not applicable, electrical vehicle. 2.2.1.4.4. Test type III performance results: Not applicable, electrical vehicle. 2.2.1.4.5. Zero emissions from the crank-case gas system: Not applicable, electrical vehicle. 2.2.1.5. Type IV test requirements: evaporative emissions 2.2.1.5.1. Evaporative emissions control system: Not applicable, electrical vehicle. 2.2.1.5.2. List of 'golden components' used for evaporative emission testing complete with series, part and marking number: Not applicable, electrical vehicle. 2.2.1.5.3. Fuel permeability test result: Not applicable, electrical vehicle. 2.2.1.5.4. If the approved L-category vehicle complies with the evaporative emission requirements of Euro 4, the manufacturer shall indicate the SHED laboratory test type IV results TRTTIVST in the table below. The SHED test results shall indicate both mg/test and % of LTTIVST Not applicable, electrical vehicle. 2.2.1.5.5. Euro 4 evaporative emission test results: Not applicable, electrical vehicle. 2.2.1.5.6. If the approved L-category vehicle complies with the evaporative emission requirements of the Euro 5 step, the manufacturer shall provide:

Not applicable, electrical vehicle.

\* LCA 51 1215 002 16 \* XINRI \* GRACE \* 168/2013 \* -- \*

	<u> </u>
2.2.1.6.	Test type V requirements: durability of pollution-control devices
2.2.1.6.1.	Details of test vehicle(s), its powertrain and pollution-control devices explicitly documented and listed, emission test laboratory equipment and settings, if different from data reported under items 2.1.2.1.1. to 2.1.2.1.10:
	Not applicable, electrical vehicle.
2.2.1.6.2.	Test type V carried out on: test track, on the road, on a chassis dynamometer
2.2.1.6.3.	The test type V data outcome and the correspondent test report shall vary in relation with the chosen durability procedure set out in Article 23(3) of Regulation (EU) No 168/2013, established as follows:
	Not applicable, electrical vehicle.
2.2.1.6.3.3.	Test type V conducted according to Article 23(3c) of Regulation (EU) No 168/2013, mathematical durability procedure.
2.2.1.6.3.3.1.	The Test Type I results of a vehicle with a mileage of 100 km or more, (see 2.2.1.2.16.) and the applicable deterioration factors set out in Annex VII(B) to Regulation (EU) No 168/2013 shall be entered in the table below along with the calculated test type V results.
	Test type V results in case of compliance with Article 23(3c) of Regulation (EU) No $168/2013$
	Not applicable, electrical vehicle.
2.2.1.7.	Test type VI has not been assigned; consequently there are no results to be submitted
2.2.1.8.	Test type VII requirements: measurement of CO <sub>2</sub> emissions, fuel consumption, electric energy consumption and electric range determination
2.2.1.8.1.	Details of test vehicle(s), its powertrain and pollution-control devices explicitly documented and listed, emission test laboratory equipment and settings if different from data reported under items 2.1.2.1.1. to 2.1.2.1.10:
	Not applicable, electrical vehicle.
2.2.1.8.2.	Documentation added according to UNECE Regulation No 101: yes/no
2.2.1.8.3.	The vehicle manufacturer has ensured that the CO <sub>2</sub> emissions, fuel consumption, electric energy consumption and electric range data are provided to the buyer of the vehicle at the time of purchase of a new vehicle:
	Not applicable, electrical vehicle.
2.2.1.8.4.	A completed specimen of the test type VII result format used to inform the buyer of the new vehicle is added to the information document:
	Not applicable, electrical vehicle.
2.2.1.8.5.	Type VII test results, where applicable and for each reference fuel tested:
2.2.1.8.6.	CO <sub>2</sub> emissions and fuel consumption
	Test Type VII result table for propulsions equipped with a combustion engine only or equipped with not-externally-chargeable (NOVC) hybrid electric propulsion
	Not applicable, electrical vehicle.
2.2.1.8.7.	CO <sub>2</sub> emissions/fuel consumption (manufacturer's declared values)
	Not applicable, electrical vehicle.



Electric energy consumption and electric range:

Electric chergy consumption and electric range.				
Variant 2 was taken as the test	Measured electric	Declared electric	Measured	Declared
representative for Variant 1&2	energy consumption	engine consumption	electric range	electric range
	(Wh/km)	(Wh/km)	(km)	(km)
Pure electrical powertrain	34,0	34,0	44,5	44,5
NOVC hybrid electric powertrain				

Variant 4 was taken as the test representative for Variant 3&4	Measured electric energy consumption (Wh/km)	Declared electric engine consumption (Wh/km)	Measured electric range (km)	Declared electric range (km)
Pure electrical powertrain	24,4	24,4	63,6	63,6
NOVC hybrid electric powertrain				

2.2.1.9. Test type VIII requirements: environmental on-board diagnostic (OBD)

#### Not applicable, electrical vehicle.

2.2.1.9.1. Details of test vehicle(s), its powertrain and pollution-control devices explicitly documented and listed, emission test laboratory equipment and settings, if different from data reported under items 2.1.2.1.1 to 2.1.2.1.10:

### Not applicable

2.2.1.9.2. The manufacturer shall enter the emission laboratory test type VIII results TRTTVIIIx in the table below (both in mg/km and in % of TRTTVIIIx):

### Not applicable

2.2.1.9.3. Test type VIII Euro 4 OBD environmental results

#### Not applicable

2.2.1.9.4. Test type VIII Euro 5 OBD emission verification results

### Not applicable

- 2.2.1.10. Test type IX requirements: sound level
- 2.2.1.10.1. Details of test vehicle(s), its powertrain and noise-abatement control devices explicitly documented and listed, test equipment and settings:

#### Not applicable, electrical vehicle.

- 2.2.1.10.2. The approved L-category vehicle complies with UNECE Regulation No 9: yes/no
- 2.2.1.10.3. The approved L-category vehicle complies with UNECE Regulation No 41: yes/no
- 2.2.1.10.4. The approved L-category vehicle complies with UNECE Regulation No 63: yes/no
- 2.2.1.10.5. The replacements noise-abatement device(s) for the approved L-category vehicle comply with UNECE Regulation No 92:

#### yes/no, not applicable

2.2.1.10.6. The approved L-category vehicle complies with the test requirements of Annex IX to Commission Delegated Regulation (EU) No 134/2014 and the administrative requirements of the equivalent UNECE Regulations have been included with the information document as set out in table 5-13 of Annex VIII:

### yes/no, not applicable



LCA 31 1213 0	02 10 AINKI GRACE 108/2013 Fage 12
2.2.1.10.7.	Replacement noise-abatement device(s) make(s) and type(s):
	Not applicable
2.2.1.10.8.	Location of the type-approval number (add drawings, photographs):
	Not applicable
2.2.1.10.9.	The test results shall be reported according to the administrative requirements set out in the table below:
	Test result requirements regarding sound level
	Not applicable, electrical vehicle.
2.2.1.10.10.	In addition the manufacturer shall enter the test type IX results TRTTIX in the table below where applicable (both in $dB(A)$ and in % of $SLEUx$ ):
	Not applicable, electrical vehicle.
2.2.1.10.11.	Euro 4 or Euro 5 sound test results (3)
	Not applicable, electrical vehicle.
2.2.1.10.12.	Stationary sound level:
	Not applicable, electrical vehicle.
2.2.1.10.13.	Replacement noise-abatement device(s) make(s) and type(s):
	Not applicable
2.2.1.10.14.	Location of the type-approval number (add drawings, photographs):
	Not applicable
2.2.1.11.	Propulsion unit performance test results
2.2.1.11.1.	Propulsion unit performance data to be provided to measure/determine the maximum vehicle design speed
2.2.1.11.1.1.	Details of hardware and software of test vehicle(s), fitted components and accessories referred to in Annex X to Commission Delegated Regulation (EU) No 134/2014, Any deviations by test vehicle(s) from data provided in information document, Annex I: yes/no. If yes, please provide list with deviations relevant for measuring the maximum vehicle design speed and gear in which it was reached:
	Not applicable
2.2.1.11.1.2.	Test mass in running order: mass plus rider/driver: not applicable
2.2.1.11.1.3.	Test fuel specifications: not applicable
2.2.1.11.1.4.	Powertrain lubricant specifications: not applicable
2.2.1.11.1.5.	Atmospheric pressure: not applicable
2.2.1.11.1.6.	Relative humidity: not applicable
2.2.1.11.1.7.	Ambient temperature: not applicable
2.2.1.11.1.8.	Wind speed and direction on test track: not applicable
2.2.1.11.1.9.	Test track condition (temperature, level of moisture etc.): not applicable
2.2.1.11.1.10.	Maximum vehicle design speed measured and gear in which it is reached: not applicable
2.2.1.11.1.11.	Maximum vehicle design speed: not applicable

\* LCA 51 1215 002 16 \* XINRI \* GRACE \* 168/2013 \* -- \*



2.2.1.11.1.12.	Exemption L3e-A3 and L4e-A3 vehicles; maximum vehicle design speed declared by manufacturer:
	Not applicable
2.2.1.11.2.	Propulsion unit performance data to be provided to measure/determine the torque and power of the propulsion on the engine dynamometer
2.2.1.11.2.1.	Details of propulsion(s) hardware and software tested, test equipment and settings relevant for propulsion unit performance measurements on engine dynamometer tests:
	See 2.1. above
2.2.1.11.2.1.1.	List of components and part numbers/markings relevant for propulsion unit performance measurement on engine dynamometer, referred to in Annex X to Commission Delegated Regulation (EU) No 134/2014:
	See 2.1. above
2.2.1.11.2.1.2.	Test fuel: not applicable
2.2.1.11.2.1.3.	Powertrain lubricant specifications: not applicable
2.2.1.11.2.1.4.	Atmospheric pressure: See item 2.4.3.9.2. of this report
2.2.1.11.2.1.5.	Relative humidity: See item 2.4.3.9.2. of this report
2.2.1.11.2.1.6.	Ambient temperature: See item 2.4.3.9.2. of this report
2.2.1.11.2.1.7.	Correction factor for reference atmospheric conditions α1: not applicable
2.2.1.11.2.1.8.	Correction factor for the efficiency of the transmission $\alpha 2$ : not applicable
2.2.1.11.2.1.9.	Engine cooling temperature: not applicable
2.2.1.11.2.1.10.	Oil temperature at measuring point: not applicable
2.2.1.11.2.1.11.	Exhaust temperature: not applicable
2.2.1.11.2.1.12.	The manufacturer shall indicate the propulsion unit performance test results below:
2.2.1.11.2.1.13.	Maximum permitted combustion engine/electric motor/propulsion rotation speed:
	See item 2.4.3.9.2. of this report
2.2.1.11.2.1.14.	Maximum net power combustion engine: not applicable
2.2.1.11.2.1.15.	Maximum net torque combustion engine: not applicable
2.2.1.11.2.1.16.	Maximum continuous-rated power electric motor: See item 2.4.3.9.2. of this report
2.2.1.11.2.1.17.	Maximum continuous-rated torque electric motor: See item 2.4.3.9.2. of this report
2.2.1.11.2.1.18.	Maximum current e-motor at maximum continuous-rated power:
	See item 2.4.3.9.2. of this report
2.2.1.11.2.1.19.	Maximum continuous total power for propulsion(s): <b>not applicable</b> $kW$ at min-1 at $A/F$ ratio:
2.2.1.11.2.1.20.	Maximum continuous total torque for propulsion(s): <b>not applicable</b> $\dots$ Nm at $\dots$ min-1 at A/F ratio: $\dots$
2.2.1.11.2.1.21.	Maximum peak power for propulsion(s): not applicable kW at min-1 at A/F ratio:
2.2.1.11.2.1.22.	Power/mass in running order ratio:
	Not applicable, electrical vehicle.

* LCA 51	1215 002	16 * XINRI	* GRACE *	168/2013	* *
----------	----------	------------	-----------	----------	-----

Page 14

2.2.1.11.2.1.23. Specific fuel consumption, g/kWh at maximum net power and power:

Not applicable, electrical vehicle.

2.2.1.11.2.1.24. Propulsion unit performance sweep graphs of total power and torque vs. engine speed

(1200 rpm to propulsion speed governor rpm, step 400 rpm). Secondary variables: spark

angle, A/F ratio and mass air-flow (measured or calculated):

Not applicable, electrical vehicle.

2.2.1.11.2.1.25. Maximum speed of vehicle and gear in which it is reached ... km/h) (only for subcategories:

L1e, L2e, L6e, L7e-B1, L7e-C) (3)

Variant 1&3: 25 km/h Variant 2&4: 45 km/h

2.2.1.11.2.1.26. Maximum declared vehicle speed:

(only for subcategories without maximum vehicle speed limitation: L3e, L4e, L5e, L7e-A

and L7e-B2) not applicable



2.2.2.	(B) Functional safety test reports					
2.2.2.1.	Front and rear protective structures					
2.2.2.1.1.	Description and justification of the relevant provisions against which the vehicles has been assessed:					
	The vehicle has a single front wheel. The exterior projections have been assessed by means of the testing device set out in Annex VIII, item 1.2.1. of regulation (EU) 44/2014. The vehicle is not equipped with a device for reverse. There are no further requirements to be fulfilled.					
2.2.2.2.	Driver-operated controls including identification of controls, tell-tales and indicators					
2.2.2.2.1.	Detailed list of controls, tell-tales, tell-tales colours and indicators of the vehicle:					
	See information document Annex B, item 6.9.					
2.2.2.2.2.	Assessment of the visibility:					
	All the required symbols and tell-tales are visible from the driver's seat. The speedometer and odometer are built such, that they are visible by day and by night and lie in the driver's field of vision.					
2.2.2.3.	Installation of lighting and light-signalling devices, including automatic light switching					
2.2.2.3.1.	Specific test conditions (e.g. indicator-bulb malfunction):					
	See item 2.4.1.8. of this report					
2.2.2.4.	Safety belt anchorages and safety belts					
2.2.2.4.1.	Description and justification of the relevant provisions against which the vehicle has been assessed:					
	Not applicable					
2.2.2.5.	Installation of tyres					
2.2.2.5.1.	Maximum tyre envelope sizes applied for the clearance assessment:					
	Front tyre rolling circumference: 1244 mm Rear tyre rolling circumference: 1244 mm					
2.2.2.6.	Vehicle occupant protection, including interior fittings and vehicle doors					
2.2.2.6.1.	Values of radii measurement of interior projections in sufficient detail:					
	Not applicable					
2.2.2.7.	Maximum continuous total power and/or maximum vehicle speed limitation by design:					
	Not applicable					
2.2.2.7.1.	Maximum vehicle speed and/or maximum continuous total power for vehicles equipped with PI/CI combustion engine limited by:					
	(a) the properties, timing or presence of the spark igniting the fuel/air mixture in the cylinder(s): <a href="yes/no">yes/no</a> (b) the amount of air intake of the engine: <a href="yes/no">yes/no</a> (c) the amount of fuel intake of the engine: <a href="yes/no">yes/no</a> (d) the mechanically-controlled output rotation speed of the drive-train, such as clutch, transmission or final drive: <a href="yes/no">yes/no</a>					



2.2.2.7.2.

Maximum vehicle speed and/or maximum power shall be limited by means of two or more of the following, for vehicles which are propelled by means of one or more electric motors, including pure and hybrid electric vehicles:

### Not applicable

- (a) reduction of the maximum power output of one or more electric motors based on the vehicle or rotation speed as sensed internally to the electric motor: <a href="mailto:yes/no">yes/no</a>
- (b) reduction of the maximum power output of one or more electric motors based on the actual vehicle speed as sensed fully externally to the electric motor: yes/no

2.2.2.7.3.

Maximum vehicle speed and/or maximum power shall be limited by means of two or more of the following, for vehicles which are propelled by other means than those referred to in 2.2.7.1. and 2.2.7.2. (3):

### Not applicable



### 2.2.3. (C) Vehicle construction test reports

### 2.2.3.1. Arrangements for type-approval procedures

Delegated act reference	Annex No	Virtual and/or self- testing	Subject	Restrictions / Comments	Applied
Commission Delegated Regulation (EU) No 134/2014	X	Self-testing	Testing procedures on maximum vehicle design speed	Only for subcategories L3e-A3, L4e-A3 and L5e and does not include any other propulsion unit performance testing.	<del>yes/</del> no
Commission Delegated Regulation (EU) No 3/2014	II	Self-testing	Audible warning devices	Installation only	<del>yes/</del> no
Commission Delegated Regulation (EU) No 3/2014	VIII	Self-testing	Driver-operated controls including identification of controls, tell-tales and indicators	Speedometer only	<del>yes/</del> no
Commission Delegated Regulation (EU) No 3/2014	IX	Virtual testing	Installation of lighting and light- signalling devices	Dimensions only	<del>yes/</del> no
Commission Delegated Regulation (EU) No 3/2014	X	Virtual testing	Rearward visibility	Installation only; only according to UNECE Regulation No 81	<del>yes/</del> no
Commission Delegated Regulation (EU) No 3/2014	XIV	Virtual testing	Installation of tyres	Only where clearance exceeds 10 mm.	<del>yes/</del> no
Commission Delegated Regulation (EU) No 44/2014	XIV	Self & virtual testing	Registration plate space		<del>yes/</del> no
Commission Delegated Regulation (EU) No 44/2014	XVI	Self-testing	Stands	Only point 2.5. stand retention systems.	<del>yes/</del> no
This Commission Implementing Regulation	VIII	Self-testing	Statutory plate and EU type-approval mark		<del>yes/</del> no

2.2.3.2. Requirements applying to coupling devices and attachments

2.2.3.2.1. Dynamic strength test (endurance test) eoupling ball and/or head: passed/failed:

### Not applicable

2.2.3.2.2. Test results dynamic strength test (endurance test):

### Not applicable

- 2.2.3.3. Requirements applying to external projections
- 2.2.3.3.1. Values of radii measurement of exterior projections in sufficient detail:

### Not applicable

2.2.3.3.2. Description and justification of the relevant provisions against which the vehicle has been assessed:

The vehicle category is L1e. It has been assessed using a testing device according to item 1.2.1. of Annex VIII as well as according to all general requirements for that vehicle category.

### 2.2.3.4. On-board diagnostics (OBD) functional requirements

Component Diagnostic trouble code	Monitoring strategy	Fault detection criteria	MI activation criteria	Secondary parameters	Precondi- tioning	Demonstration test	Default mode
see table 7.6.2.2. in the information document							



#### 2.2.3.5. Stands

2.2.3.5.1. Detailed description and assessment of the system used to prevent propulsion of the vehicle when the stand is in use:

The prop stand swings in not-in-use position automatically when the vehicle starts to move forward.

If the prop stand is extended, the engine is cut-off when gear is engaged and clutch is released. It cannot be restarted until the prop stand is moved into its retracted position.

The centre stand will retract automatically as soon as the motorcycle is being moved forward.

### 2.4. <u>Detailed tests and their results according to the delegated regulations</u> supplementing regulation (EU) No. 168/2013

### 2.4.1. Delegated regulation (EU) No. 3/2014

### 2.4.1.1. Annex II: Audible Warning Devices

### 2.4.1.1.1. Acoustic tests

The sound pressure level of the warning device fitted to the vehicle was measured on an asphalt test ground in accordance with the requirements of item 14. of ECE Regulation 28.

Type of audible warning device(s) fitted and maximum sound pressure level measured between 0,5 m and 1,5 m above ground level:

manufacturer: MOCC
type: DL700-34
F4 29D 00

- type approval number: E4-28R-000032

number of devices fitted: One

### Sound pressure level:

for motorcycles and tricycles developing a	limit	measured	
- power of less than or equal to 7kW	(dB(A))	≥ 83 ≤ 112	91,0 dB(A)



### 2.4.1.2. <u>Annex III: Braking, including Anti-lock and Combined Braking Systems</u>

### 2.4.1.2.1. General requirements

### Service brake

Wheels (front/rear)	Brake control
Front wheels	hand level (RH)
Rear wheels	hand level (LH)
Combined	

### Secondary brake

Wheels (front/rear)	Brake control
Front wheels	
Rear wheels	
Front and rear wheels	

### Parking brake

Wheels (front/rear)	Brake control
Front wheels	
Rear wheels	
Front and rear wheels	

The vehicle fulfils the construction and fitting requirements. The described braking performance was obtained without locking of the wheels, without deviation of the vehicle from its course and without abnormal vibration.

### 2.4.1.2.2. Tests with wet brakes

Wet brakes have been tested on front wheel disk brake. Rear drum brake was not applicable for this test.

### 2.4.1.2.3. Results of tests

Mass of vehicle when tested (kg)

Variant 4 was taken as the test representative for all variants:

	Laden
	(kg)
Front axle	72
Rear axle	174
Total	246

Vehicle equipped with Anti-Lock system: NO Vehicle equipped with split braking system: NO Max speed of vehicle > 125 km/h: NO



### Braking performance

		Test speed	Deceleration	Stop distance	Braking Force	Limit distance	Limit deceleration		
		[km/h]	$[m/s^2]$	[m]	[N]	[m]	$[m/s^2]$		
Test §3, dry stop, single	- Rear	40/41,1	3,47	17,6	184,6	22,9	3,4		
(laden)	- Front	40/40,3	4,64	14,3	150,8	22,1	3,4		
Test §3, dry stop, single (Lightly loaded)	No CBS or S	No CBS or SSBS, not applicable							
Test §4, dry stop, all service	L1e vehicle, not applicable								
Test §5, high speed	Vmax < 125	Vmax < 125 km/h, not applicable							

### Test §6, wet brake Baseline test

Service brake-Front	Test speed	Measured performance			Measured force applied to control (Average)
	km/h	m/s <sup>2</sup>			N
Laden, dry brakes		Average	0.5-1.0 s	Max.	
No.1	40/40,1	2,795	3,083	4,892	58,8
No.2	40/41,1	2,896	2,878	3,357	88,7
No.3	40/40,0	2,874	3,186	4,518	65,4
Average			3,049	4,256	71,0

### Wet brake stop

Service brake	Test speed	Measured performance			Measured force applied to control (Average)
	km/h	m/s <sup>2</sup>			N
		Average	0.5-1.0 s	Max.	
Service brake-Front, laden	40/41,3	2,520	1,901	4,381	52,6

Test §7~ Test §11 are not applicable.



2.4.1.2.4. Anti-locking system

Not applicable

2.4.1.2.4.1 General requirements

Each controlled wheel brings its own device into operation. Any electrical failure is signalled by a tell-tale to the operator of the vehicle. The braking performance is not impaired by any failure of the anti-locking system. The operation of the anti-lock device is not impaired by electro-magnetic fields.

2.4.1.2.4.2 Coefficient of adhesion

Dry surface: - ( $\geq 0.90$ ) Wet surface: - ( $\leq 0.45$ )

2.4.1.2.4.3 Additional checks

see item 2.4.1.2.3. above

- 2.4.1.3. Annex IV: Electrical Safety
- 2.4.1.3.1. Protection against electrical shock and electrical safety applying to high voltage buses under conditions where they are not connected to external high voltage power supplies
- 2.4.1.3.1.1 Protection against direct contact
- 2.4.1.3.1.1.1 Protection of live parts inside the enclosed compartment

Not applicable, no high voltage live parts.

2.4.1.3.1.1.2 Protection of live parts in areas other than the enclosed compartment

Not applicable, no high voltage live parts.

2.4.1.3.1.1.3 Protection of live parts of vehicles where no enclosed compartment is

present

Not applicable, no high voltage live parts.

2.4.1.3.1.1.4 Connectors (including vehicle inlet)

Not applicable, no high voltage live parts.

2.4.1.3.1.1.5 Service disconnect

Not applicable, no high voltage live parts.



	10 1111111 011102 100/2013
2.4.1.3.1.1.6	Specific marking requirements  Not applicable, no high voltage live parts.
2.4.1.3.1.2	Protection against indirect contact
2.4.1.3.1.2.1	Protection against electrical shock arised from indirect contact  Not applicable, no high voltage live parts.
2.4.1.3.1.2.2	Resistance between all exposed conductive parts and the electrical chassis  Not applicable, no high voltage live parts.
2.4.1.3.1.2.3	Vehicle intended to be connected to a grounded external electric power supply  Using the connector specified by the vehicle manufacturer.
2.4.1.3.1.3	Isolation resistance
2.4.1.3.1.3.1	Electric power trains consisting of separate DC- or AC-buses  Not applicable, no high voltage live parts.
2.4.1.3.1.3.2	Electric power trains consisting of combined DC- or AC-buses  Not applicable
2.4.1.3.1.3.3	Fuel cell vehicles  Not applicable
2.4.1.3.1.3.4	Isolation resistance of coupling system for charging the REESS Not applicable, no high voltage buses.
2.4.1.3.2.	Requirements concerning the REESS
2.4.1.3.2.1	Protection in case of excessive current  Protection is provided against overheating due to excessive current by means of breaking of fuse(s) under critical conditions
2.4.1.3.2.2	Protection of accumulation of gas  Variant 1&2: Lead acid batteries (sealed type, no gas evolution)  Variant 3&4: Lithium batteries (no aqueous electrolyte, sealed type, no gas evolution)

\* LCA 51 1215 002 16 \* XINRI \* GRACE \* 168/2013 \* -- \*



* LCA 51 1215 002	16 * XINRI * GRACE * 168/2013 * * Page	23
2.4.1.3.2.3	Protection against electrolyte spills	
	Variant 1&2: Lead acid batteries (sealed type) Variant 3&4: Lithium batteries (no aqueous electrolyte, sealed type)	
2.4.1.3.2.4	Accidental or unintentional detachment	
	The REESS and its components are installed in the vehicle in a way s as to preclude the possibility of inadvertent or unintentional detachment or ejection of the REESS.  The REESS and its components are not ejected when the vehicle is tilted in any direction, leaned left or right against the ground or even when the REESS is put upside-down.	
2.4.1.3.3.	In-use safety requirements	
2.4.1.3.3.1	Propulsion system power-on and power-off procedure	
2.4.1.3.3.1.1	Start-up	
	At the start-up, including system power-on, in order to select the activing possible mode, at least two deliberate and distinctive actions shall be performed by the driver.	ve
2.4.1.3.3.1.2	Momentary indication	
	A momentary indication is given to the rider when the vehicle is switched in active driving possible mode. Refer to drawing No. GRACE-25.	
2.4.1.3.3.1.3	Signal information the rider	
	When leaving the vehicle, the rider was informed by an optical signal the vehicle still in the active driving possible mode. Refer to drawing GRACE-25.	
2.4.1.3.3.1.4	On-board REESS externally charged by driver	
	When on-board REESS was externally charged by driver, the charge cable obviously prevents the use of vehicle.	!
2.4.1.3.3.1.5	Vehicle is equipped with a device direction control unit	
	Not applicable	
2.4.1.3.3.1.6	Deactivating the active driving possible mode	

Only one action is required to deactivate the active driving possible mode or to complete the power-off procedure.

...



* LCA 51 1215 002	16 * XINRI * GRACE * 168/2013 * *	Page 24
2.4.1.3.3.2	Driving with reduced power	
2.4.1.3.3.2.1	Indication of reduced power  Not applicable.	
2.4.1.3.3.2.2	Indication of low energy content of REESS  A low energy content is indicated to the rider by an obvious devi Refer to drawing No. GRACE-25.	ice.
2.4.1.3.3.3	Driver backwards Not applicable	
2.4.1.3.3.4	Determination of hydrogen emission  Not applicable, not equipped with open type traction batteries.	
2.4.1.4.	Annex V: Declaration regarding Endurance Testing of Functional sa Critical Systems, Parts and Equipment	<u>ıfety</u>
2.4.1.5.	See manufacturer's information document  Annex VI: Front and Rear Protective Structures  See item 2.3.1. above, point 2.2.2.1.	
2.4.1.6.	Annex VII: Glazing, Windscreen Wipers and Washers and Defrosting Demisting Systems	ng and
2.4.1.6.1.	Glazing: Not applicable: The vehicle is not fitted with any glazing.	
2.4.1.6.2.	Windscreen Wipers and Washers:  Not applicable: The vehicle is not fitted with a windscreen.	
2.4.1.6.3.	Defrosting and Demisting Systems:  Not applicable: The vehicle is not fitted with a windscreen.	



### 2.4.1.7. <u>Annex VIII: Driver operated Controls including Identification of Controls,</u> Tell-Tales and Indicators

### 2.4.1.7.1. Identification

The controls, tell-tales and indicators shown in Annex B, to this report referred to in UN ECE R60 are identified by the required symbols.

The symbols stand out clearly against the background, and are placed on the control or control tell-tales or in the immediate proximity thereof.

The colours used for the tell-tales are those required in Annex VIII of Regulation (EU) 3/2014.

### 2.4.1.7.1.1 Symbols not standardised in the Directive

Symbols other than those shown in UN ECE R60 are used for other purposes. These symbols are either in accordance with Annex VIII of Regulation (EU) 3/2014 or ISO 2575:2010. There is no danger of confusion with those symbols shown UN ECE R60.

### 2.4.1.7.2. Speedometer and Odometer:

The speedometer meets all the relevant requirement of UN ECE R39.

### 2.4.1.7.2.1 Speedometer fitting:

A speedometer with a digital read-out is fitted to the vehicle. It is located in the direct field of view of the driver and is clearly legible by day and by night. The range of speed displayed includes the maximum speed of the vehicle. The read-out shows values in subdivisions of 1 km/h. The range can be switched to mph in subdivisions of 1 mph.

### 2.4.1.7.2.2 Speedometer accuracy:

Variant 2 was taken as the test representative for all variants:

#### Tires fitted:

Front axle	90/90-10 55J E4-75R-0007289
Rear axle	90/90-10 55J E4-75R-0007289

The tests were carried out on a flat and dry test track.

Actual speed	Read speed	Deviation	Limit
[km/h]	[km/h]	[km/h]	[km/h]
18,3	20	1,7	0 < deviation < 5,8
30,7	36	5,3	0 < deviation < 7,1

The speed displayed was never lower than the actual speed.

### 2.4.1.7.3. Common Space for displaying Multiple Information:

The vehicle is not fitted with a device showing multiple information in a common space.



### 2.4.1.8. <u>Annex IX: Installation of Lighting and Light Signalling Devices, including Automatic Switching of Lighting</u>

### 2.4.1.8.1. Lighting and light-signalling devices

- Component type-approval marks, manufacturer's marks see Annex B
- Position (location) and arrangement see Annex B
- Geometric visibility complies with the requirements of item 6 of UN ECE R74 for all the lighting and light-signalling devices
- The vehicle is equipped with automatic headlamp switch-on, daytime running lamp has not been equipped.
- The vehicle **is** / **is** not fitted with additional rear / side reflective devices and materials. These devices / materials do not impair the effectiveness of the mandatory lighting devices and have the same colors as the lighting devices which are present at that location
- Electrical connections are according to the requirements of item 6 of UN ECE R74 for all the lighting and light-signalling devices
- The installation and functional requirements set out in items 5 and 6 of UN ECE R74 are all met by the mandatory and optional lighting equipment installed

### Devices fitted

Device	Approval #	Number	Alignment	telltale	
Main-beam	See information document	1	frontward	Blue	
Dipped-beam	See information document	1	frontward	No	
Daytime running lamp	See information document		frontward	No	
Front direction indicator	See information document	2	frontward	Green	
Rear direction indicator	See information document	2	rearward	Green	
Stop	See information document	1	rearward	No	
Front position	See information document	1	frontward	Illumination speed	
Rear position	See information document	1	rearward	indicator	
Rear registration plate	See information document	1	rearward		
Rear retro-reflector	See information document	1	rearward	No	
Pedal retro-reflector	See information document	n.a.	n.a.	No	
Side retro-reflector	See information document	2	sideward, one per side	No	



### 2.4.1.8.1.1 Grouping and electrical connections

The main-beam and dipped-beam headlamps do not remain lit at the same time.

The direction indicators function at a frequency according to UN ECE R74 and this frequency changes considerably in the case of a malfunction of one or more direction indicators.

### 2.4.1.9. <u>Annex X: Rearward visibility</u>

### 2.4.1.9.1. Inspections and their results:

Rear view mirrors:

See type-approval no(s) listed in Annex B, drawing GRACE-27

Outside (left and right side) mirror(s):

See information document of manufacturer

### 2.4.1.9.1.1 Position

All rear-view mirror(s) is (are) attached in such a way that they remain in stable position under normal vehicle driving conditions.

The rear-view mirror(s) is (are) fitted or set in such a way that the centre of the reflecting surface is not less than 280 mm towards the outside of the median longitudinal plane of the vehicle.

The rear-view mirror(s) is (are) so placed that the driver, when sitting on the driving seat in a normal driving position, has(ve) a clear view of the road to the rear and sides of the vehicle.

#### 2.4.1.9.1.2 Number

Main outside mirror(s): 2

### 2.4.1.9.1.3 Adjustment

The driver is able to adjust the rear-view mirror(s) from his driving position.

### 2.4.1.10. Annex XI: Roll-over protective structure (ROPS)

### 2.4.1.10.1. Inspections and their results:

This Annex is not applicable to L1e category vehicles.

### 2.4.1.11. Annex XII: Safety belt anchorages and safety belts

### 2.4.1.11.1. Inspections and their results:

Not applicable



### 2.4.1.12. <u>Annex XIII: Seating positions (saddles and seats)</u>

### 2.4.1.12.1. Inspections and their results:

Number of seating positions:
All seating positions forward:
Wes
Wind of seating positions:

2

yes

Kind of seating positions:
saddle

R-point: see manufacturer's documentation

Height of R-point: > 540mm

Seating positions fitted with seat belt: **no** Child restraint systems: **no** 

### 2.4.1.13. <u>Annex XIV: Steerability, cornering properties and turnability</u>

### 2.4.1.13.1. Inspections and their results:

Variant 4 was taken as the test representative for all variants:

Vehicle test mass: 246 kg
Tire front size: 90/90-10 55J
Tire front pressure: 300 kPa
Tire rear size: 90/90-10 55J
Tire rear pressure: 300 kPa
Vehicle max. speed: 45 km/h

Spiral test

Vehicle speed: 8 km/h
Final circle radius: 12 m
Requirement left: fulfilled
Requirement right: fulfilled

Leave circle test

Vehicle speed: 23 km/h
Circle radius: 10 m
Requirement left: fulfilled
Requirement right: fulfilled

Travel along straight test

Test speed:

 $\begin{array}{ll} 0.8 \; V_{max} & \textbf{36 km/h} \\ \text{Requirement} & \textbf{fulfilled} \end{array}$ 



#### 2.4.1.14. <u>Annex XV: Installation of tyres</u>

#### 2.4.1.14.1. Inspections and their results:

EC-homologated tires of the manufacturer's specifications for size, load index and speed index must be fitted. The tires presented for the test had the following approval numbers:

Variant 2 was taken as test representative for all variants:

Front axle	90/90-10, 50J
Front axie	E11 75R-000209
Rear axle	90/90-10, 50J
Real axie	E11 75R-000209

### 2.4.1.14.1.1 Tyre fitting

There is always one type of tyres per axle only. The tyres can revolve freely within the space provided and do not any part of the vehicle structure under the conditions set out in this Annex.

### 2.4.1.14.1.2 Load capacity

Axle	Dimension	Minimum Load index technically required	Tolerated load per wheel / axle (kg)	Maximum permissible axle mass stated by the manufacturer (see (EU) 44/2014, Annex XI) (kg)
Front	90/90-10	50	190	72
Rear	90/90-10	50	190	174

#### 2.4.1.14.1.3 Speed capability

Axle	Dimension	Minimum Speed index technically required	Maximum permissible speed of tyre (km/h)	Maximum vehicle speed (km/h)
Front	120/80-14	J	100	45
Rear	130/60-13	J	100	45

### 2.4.1.14.2. Tyre pressures

The recommended tyre pressure under all conditions of use is given on a label glued left rear swing arm and also in the operators manual.

# 2.4.1.15. <u>Annex XVI: Maximum speed limitation plate and its location on the vehicle</u>

#### 2.4.1.15.1. Inspections and their results:

Plate is not mandatory for L1e category vehicles. The vehicle is not equipped with such a plate.

# 2.4.1.16. <u>Annex XVII: Vehicle occupant protection, including interior fittings and</u> vehicle doors

#### 2.4.1.16.1. Inspections and their results:

L1e category vehicle: Not applicable



# 2.4.1.17. <u>Annex XVIII: Maximum continuous rated or net power and/or maximum speed limitation by design</u>

### 2.4.1.17.1. Inspections and their results:

Maximum vehicle speed and/or power is limited by the following (minimum two required):

- properties of the spark igniting the air/fuel mixture in the cylinders
- timing of the spark igniting the air/fuel mixture in the cylinders
- presence of the spark igniting the air/fuel mixture in the cylinders
- amount of air intake of the engine
- amount of fuel intake of the engine
- electronically controlled output rotation speed of the drive train
- mechanically controlled output rotation speed of the drive train

The maximum speed of the vehicle is only limited by drag and the maximum net power is only limited by the construction of the engine. No additional limitations are used.

Above listed means used to limit the maximum vehicle speed and/or the maximum engine power operate independently. Failure of one method to work as intended does not impair the limitation function of the other method(s).

Above means have been tested by failing each method independently.

# 2.4.1.18. Annex XIX: Vehicle structure integrity

### 2.4.1.18.1. Inspections and their results:

The required signed statement is to be found in manufacturer's information document. The requirements for QA system covering the manufacturing of the chassis/frame has been assessed during the Initial Assessment of the manufacturer/producer. Specific analysis of vehicle structures, components and parts by means of engineering calculations, virtual testing methods and structural testing can be made available upon request.



- 2.4.2. <u>Delegated regulation (EU) No. 44/2014</u>
- 2.4.2.1. <u>Annex II: Powertrain tampering prevention (anti-tampering) measures</u>

#### Not applicable, electrical vehicle

- 2.4.2.2. Annex V: Coupling devices and attachments
- 2.4.2.2.1. Inspections and their results

Not applicable, vehicle is not equipped with a coupling device

- 2.4.2.3. <u>Annex VI: Devices to prevent unauthorised use</u>
- 2.4.2.3.1. General requirements

The vehicle type is fitted with a **type-2** protective device intended to prevent unauthorised use.

The protective device is designed such that:

- it is necessary to disable it in order to point, drive or move the vehicle straight ahead;
- the key can only be removed when the catch is fully engaged or withdrawn. It is impossible to obtain any intermediate position of the key, which may subsequently engage the bolt, even if the key for the protective device is introduced.

The above requirements are met by manipulating the key just once.

The protective device and the parts that it controls within the vehicle are designed in such a way that it is impossible to open it quickly and without attracting attention, render it inoperative or destroy it, other than by using special tools.

The protective device forms part of the vehicle's original equipment and the lock is attached firmly to it.

The key locking system incorporates more than 1000 different combinations.

The key and lock are not visibly coded.

It is not possible to turn the lock cylinder when it is in the locked position by applying a torque of less than 0,245 daN with anything other than the appropriate key.

The cylinder is of the disc type, and there are no more than two identical adjacent grooves operating in the same direction and no more than 50 % of identical slots.



The protective device is such that, when the vehicle is set in motion and the engine is turning there is no likelihood of accidental jamming which could, in particular, constitute a safety hazard.

Once it has been armed the protective device is, without any deterioration of the steering device that is likely to impair safety, able to withstand the application in both directions and under static conditions a torque of 200 Nm along the axis of the steering spindle.

The protective device is designed in such a way that the steering can be locked at an angle of more than 20° to the left in relation to the straight-ahead position.

### 2.4.2.3.2. Specific requirements

It is not possible to actuate the lock of this protective device other than by the motion of the key, the steering device being in the appropriate position for engagement of the catch in the corresponding slot.

It is not possible to engage the catch if the protective device is in a position enabling the engine of the vehicle to be started.

#### 2.4.2.4. <u>Annex VII: Electromagnetic compatibility (EMC)</u>

### 2.4.2.4.1. Inspections and their results:

All tests have been carried out according to the requirements of ECE R10.

Variant 2 was taken as test representative for Variant 1&2.

Variant 4 was taken as test representative for Variant 2&4.

### 2.4.2.4.1.1 Other than "REESS charging mode coupled to the power grid"

#### 2.4.2.4.1.1.1 Broadband radiation from vehicle

The vehicle has undergone inspections according to Annex 4 of the regulation. It showed lower emission values than the limits laid out in that Annex.

Variant 1&2: Refer to Annex C, page 1 to 4. Variant 3&4: Refer to Annex C, page 9 to 12.

#### 2.4.2.4.1.1.2 Narrowband radiation from vehicle

The vehicle has undergone inspections according to Annex 5 of the regulation. It showed lower emission values than the limits laid out in that Annex.

Variant 1&2: Refer to Annex C, page 5 to 8. Variant 3&4: Refer to Annex C, page 13 to 16.



#### 2.4.2.4.1.1.3 Immunity of vehicles to electromagnetic radiation

The vehicle has undergone inspections according to Annex 6 of the regulation. There is no abnormal change in the speed of the driven wheels of the vehicle, no degradation of the performance, which could cause confusion to other road users, and no degradation in the driver's direct control of the vehicle which could be observed by the driver or the other road user.

- 2.4.2.4.1.2 "REESS charging mode coupled to the power grid"
- 2.4.2.4.1.2.1 Broadband radiation from vehicle

The vehicle has undergone inspections according to Annex 4 of the regulation. It showed lower emission values than the limits laid out in that Annex.

Variant 1&2: Refer to Annex C, page 17 to 20. Variant 3&4: Refer to Annex C, page 21 to 24.

2.4.2.4.1.2.2 Emission of harmonics on AC power lines from vehicle

Not applicable, vehicle with external charger, no AD power lines in vehicle.

2.4.2.4.1.2.3 Emission of voltage changes, voltage fluctuation and flicker on AC power lines from vehicles

Not applicable, vehicle with external charger, no AD power lines in vehicle.

2.4.2.4.1.2.4 Emission of radiofrequency conducted disturbances on AC or DC power lines from vehicle

Not applicable.

As per exception set out in item 7.20.5. of ECE R10-05series, vehicle is intended to be used in "REESS charging mode coupled to the power grid" in the configuration connected to a local/private DC- charging station without addition participants.

2.4.2.4.1.2.5 Emission of radiofrequency conducted disturbances on network and telecommunication access from vehicle

Not applicable.

As per exception set out in item 7.20.1. of ECE R10-05series, there is no direct connection to a telecommunication network which includes telecommunication service additional to the charging communication service.



#### 2.4.2.4.1.2.6 Immunity of vehicle to electromagnetic radiation

The vehicle has undergone inspections according to Annex 6 of the regulation. There is no abnormal change in the speed of the driven wheels of the vehicle, no degradation of the performance, which could cause confusion to other road users, and no degradation in the driver's direct control of the vehicle which could be observed by the driver or the other road user.

# 2.4.2.4.1.2.7 Immunity of vehicles to electrical fast transient/burst disturbances conducted along AC and DC power lines

Not applicable.

As per exception set out in item 7.20.5. of ECE R10-05series, vehicle is intended to be used in "REESS charging mode coupled to the power grid" in the configuration connected to a local/private DC- charging station without addition participants.

2.4.2.4.1.2.8 Immunity of vehicles to surge conducted along AC or DC power lines

Not applicable.

As per exception set out in item 7.20.5. of ECE R10-05series, vehicle is intended to be used in "REESS charging mode coupled to the power grid" in the configuration connected to a local/private DC- charging station without addition participants.

2.4.2.4.1.3 Optional equipment

There is no optional equipment.

- 2.4.2.5. Annex VIII: External projections
- 2.4.2.5.1. Inspections and their results:
- 2.4.2.5.2. General requirements

The external surface of the vehicles does not exhibit any parts or any projection to be likely either to increase the risk or seriousness of body lesions suffered by any person struck or grazed by the vehicle in the event of an accident.

All parts of the external surface of the vehicle, which graze the testing device have a radius of curvature of at least 3 mm for corners and 0,5 mm for edges in the case of plates. Stems have a diameter of at least 10 mm and the radius of their edges are at least 2 mm.



The edges and corners of parts of the external surface of the vehicle, which collide with the testing device have a radius of curvature of at least 2 mm in the case of plates. In the case of stems they are not longer than half the diameter, if these stems have a diameter of less than 20 mm. The edges of stems have a radius of curvature of at least 2 mm, if the stems diameter is more than 20 mm.

# 2.4.2.5.3. Particular specifications

#### 2.4.2.5.3.1 Windscreen or fairing

Not applicable.

#### 2.4.2.5.3.2 Clutch and break levers

The ends and outer edges of the clutch and brake levers are spherical and have a radius of curvature of more than 7 mm. The outer edges of these levers have a radius of curvature of more than 2 mm.

### 2.4.2.5.3.3 Front mudguard

The leading edge of the front mudguard has a radius of curvature of more than 2 mm.

### 2.4.2.5.3.4 Fuel tank filler cap

Not applicable, electrical vehicle.

# 2.4.2.5.3.5 Ignition key

The ignition key is flush with the surface.

#### 2.4.2.6. Annex IX: Fuel storage

Not applicable, electrical vehicle.

#### 2.4.2.7. <u>Annex X: Load platforms</u>

Not applicable for category L1e vehicles

#### 2.4.2.8. Annex XI: Masses and dimensions

#### 2.4.2.8.1. Masses and dimensions of the vehicle type:

The masses and dimensions measured are complying with the requirements and the manufacturer's data within the measuring tolerances.

The maximum dimensions of the vehicle category are not exceeded. The maximum masses of the vehicle category are not exceeded. The distribution of the masses on the axles of the fully laden vehicle is according to the requirements of this annex.

For detailed values: see manufacturer's information document



2.4.2.9. <u>Annex XII: Functional on-board diagnostics (OBD)</u>

Not applicable, electrical vehicle.

2.4.2.10. Annex XIII: Passenger handholds and footrests

2.4.2.10.1. Inspections and their results:

Provisions are made to carry a passenger.

The vehicle is equipped with a hand-hold system in the form of two handgrip, which are behind of the passenger seating position.

The hand-grip and its attachment can withstand without snapping the required load of 2x1000N.

The vehicle is also equipped with footrests for all seating positions.

All of the footrests are capable of withstanding a static vertical compression force of 1700N without any damage. The space provided for these footrests fulfils the requirements of the present annex.

2.4.2.11. <u>Annex XIV: Registration plate space</u>

2.4.2.11.1. Dimensions of the space for mounting the rear registration plate

A plate **145mm wide and 125mm high** can be fixed to the mounting space.

2.4.2.11.2. General location:

The plate can be positioned at the rear of the vehicle within the longitudinal planes passing through the outer extremities of the vehicle.

2.4.2.11.3. Inclination

The plate can be fixed at a right angle with the median longitudinal plane of the vehicle at an inclination of less than  $30^{\circ}$  (+/-  $20^{\circ}$ ) from the vertical (the backing plate for the registration number facing upwards).

2.4.2.11.4. Maximum/Minimum height/geometric visibility

Fulfilled, refer to Annex B, drawing GRACE-33.

2.4.2.12. Annex XV: Access to repair and maintenance information

2.4.2.12.1. General requirements

The manufacturer grants undiscriminatory access to repair and maintenance information to independent operators according to all requirements of the present annex. See also the manufacturer's certificate in the information folder.



#### 2.4.2.13. <u>Annex XVI: Stands</u>

#### 2.4.2.13.1. Inspections and their results:

### 2.4.2.13.1.1 General requirements

The motorcycle is equipped with a prop stand which swings to the rear of the motorcycle / moped in order to attain the closed or travelling position.

### 2.4.2.13.1.2 Prop stands

See point 2.2.3.5.1.

#### 2.4.2.13.1.3 Centre stands

The centre stand will retract automatically as soon as the motorcycle is being moved forward.

### 2.4.2.13.1.4 Stability on a horizontal supporting surface

After the vehicle was brought to rest upon the extended centre / prop stand on the test pad, the vehicle was moved in order to increase the angle formed by the median longitudinal plane and the supporting surface by three degrees. This movement did not cause the centre / prop stand to return automatically to its retracted or travelling position.

#### 2.4.2.13.1.5 Stability on an inclined surface

After the vehicle was brought to rest upon the extended centre / prop stand on the parking platform, this platform was shifted subsequently to its minimum transverse tilt and its minimum longitudinal tilt in accordance with the table 14-1 and the figures 14-1, 14-2 and 14-3 of the Annex.

The vehicle remained stable when the parking platform was tilted by each of the required amounts.

#### 2.4.2.13.1.6 Other requirements

#### 2.4.2.13.1.6.1 Extended stand tell-tale

Not applicable.

### 2.4.2.13.1.6.2 Retention system

Both stands are provided with a retention system which holds them in the retracted or travelling position. The system consists of two independent springs for each one.



2.4.3.	Delegated regulation (EU) No. 134/2014
2.4.3.1.	Annex II: Test type I requirements: tail pipe emissions after cold start
	Not applicable, electrical vehicle.
2.4.3.2.	Annex III: Test type II requirements: tail pipe emissions at (increased) idle and free acceleration
	Not applicable, electrical vehicle.
2.4.3.3.	Annex IV: Test type III requirements: emissions of crankcase gases
	Not applicable, electrical vehicle.
2.4.3.4.	Annex V: Test type IV requirements: evaporative emissions
	Not applicable, electrical vehicle.
2.4.3.5.	Annex VI: Test type V requirements: durability of pollution-control devices
	Not applicable, electrical vehicle.
2.4.3.6.	Annex VII: Test type VII requirements: CO2 emissions, fuel consumption, electric energy consumption and electric range
	Not applicable, electrical vehicle.
2.4.3.7.	Annex VIII: Test type VIII requirements: OBD environmental tests
	Not applicable, electrical vehicle.
2.4.3.8.	Annex IX: Test type IX requirements: sound level
	Not applicable, electrical vehicle.
2.4.3.9.	Annex X: Propulsion unit performance
2.4.3.9.1.	Inspections and their results
2.4.3.9.1.1	Measured net engine power
	The maximum net engine power and net torque have been measured according to Annex 6 of ECE Regulation No. 85.



#### Test result:

#### Variant 1&3:

	1	2	3	4	5	6	7	8	9	10
rpm	0	20	61	100	140	185	221	243	279	310
V [V]	59,96	59,95	59,94	59,95	59,95	59,96	59,95	59,94	59,94	59,96
P [W]	0	97,7	229,3	310,3	391,3	492,5	466,0	448,9	93,1	13,5
M [Nm]	0	99,7	76,7	63,6	51,0	35,6	22,8	14,9	2,2	0,4
I[A]	32,69	32,29	33,05	33,36	33,24	33,32	22,24	15,74	4,43	0,97

### Maximum net power

- stated by the manufacturer : 0,5 kW at 185 min<sup>-1</sup> - measured : 0,49 kW at 185 min<sup>-1</sup>

#### Maximum net torque

- stated by the manufacturer : **98** Nm at **20** min<sup>-1</sup> : **99.7** Nm at **20** min<sup>-1</sup>

#### Variant 2&4:

	1	2	3	4	5	6	7	8	9	10	11	12
rpm	0	6	56	142	223	290	358	424	478	502	560	586
V [V]	59,97	59,98	59,97	59,97	59,97	59,97	59,97	59,97	59,98	59,97	59,96	59,97
P [W]	0	106,1	232,6	394,6	556,6	664,6	754,6	826,6	880,6	858,0	798,4	43,2
M [Nm]	104,6	106,6	93,2	78,4	63,6	54,2	46,6	40,9	36,6	29,4	13,9	0,7
I [A]	32,33	32,69	32,98	33,45	33,72	33,76	33,76	33,69	33,30	27,95	15,16	2,26

#### Maximum net power

- stated by the manufacturer : **0,88** kW at **478** min<sup>-1</sup> : **0,88** kW at **478** min<sup>-1</sup>

#### **Maximum net torque**

- stated by the manufacturer : **106** Nm at **6** min<sup>-1</sup> : **106,6** Nm at **6** min<sup>-1</sup>

### 2.4.3.9.1.2 Maximum 30 minutes power

The maximum 30 minutes power have been measured according to Annex 6 of ECE Regulation No. 85.

#### Variant 1&3:

	Start	End	Max.	Min.	Avg.
rpm	241	241		-	241
V [V]	59,96	59,95			59,95
I [A]	15,74	15,76			15,75
P [W]	449,7	449,5	451,8	447,5	450,0
M [Nm]	15,2	15,1			15,4

#### Maximum net power

- stated by the manufacturer : 0,45 kW at 240 min<sup>-1</sup> - measured : 0,45 kW at 241 min<sup>-1</sup>

#### Maximum net torque

- stated by the manufacturer : 15,2 Nm at 240 min<sup>-1</sup> : 15,4 Nm at 240 min<sup>-1</sup> : 15,4 Nm at 240 min<sup>-1</sup>

...



#### Variant 2&4:

	Start	End	Max.	Min.	Avg.
rpm	560	560		ŀ	560
V [V]	59,3	59,5			59,4
I[A]	15,6	16,4			16,8
P [W]	803,4	809,4	837,0	763,5	809,0
M [Nm]	13,7	13,8			13,8

#### Maximum net power

- stated by the manufacturer : **0,8** kW at **560** min<sup>-1</sup> - measured : **0,8** kW at **560** min<sup>-1</sup>

#### Maximum net torque

- stated by the manufacturer : 13,7 Nm at 560 min<sup>-1</sup> : 13,8 Nm at 560 min<sup>-1</sup>

#### 2.4.4. Delegated regulation (EU) No. 901/2014

### 2.4.4.1. <u>Annex V: Statutory plate and EU type-approval mark</u>

### 2.4.4.1.1. Manufacturer data plate

The manufacturer's data plate is firmly glued to the vehicle frame in the position as shown in the manufacturer's information document.

The plate contains all required information in an indelible form inside a clearly marked rectangle.

#### 2.4.4.1.2. Vehicle identification number (VIN)

The VIN is given on the manufacturer's data plate and is engraved on the right-side of steering head pipe.

It is easily accessible and cannot be obliterated or changed easily. It is structured in three parts as indicated in the Annex.

The beginning and end of this line is marked by a symbol which is neither an Arabic numeral nor a capital Latin letter, nor it is possible to confuse this with any such a character. Details see Annex B.

#### 2.4.4.1.3. Characters

All characters used on the manufacturer data plate and in the vehicle identification number are in accordance with the requirements of Annex.



### 2.5. Remarks

- Inspection items are only applicable to items which have been tested.

### 2.6. <u>Test facilities</u>

Calibration of measuring and test equipment used to carry out the inspections is in accordance with the EU-Regulation stated in 1.1. of this report and with ISO 17025 where applicable.

Inspectors stated under 2.2. of this report were in charge of performing and/or evaluating the tests.

# 3. <u>Evaluation of test results</u>

### 3.1. Variants and equipment covered

The tests carried out cover the following vehicle variations and equipment as far as these are relevant for the type approval of two wheel vehicles:

- vehicle accessory(ies) as stated in the information document

# 3.2. Remarks

# 3.2.1. <u>Main report:</u>

Not applicable



# 4. <u>Statement of compliance</u>

The inspections items and measurements carried out have shown the compliance of the vehicle type described in this report and the attached Annex with the requirements of the Regulation (EU) No. 168/2013 of the European Parliament and of the Council of 15 January 2013.

Shanghai, 17. 03. 2017

Luxcontrol s.a. Service Homologation-automobile

Leonie Lee **Ingénieur-Inspecteur** 

Nick Yang Ingénieur-Inspecteur

Nik yang

**Annex** 



Index to the information package, including a summary in chronological order, concerning extensions and/or amendments

### **EU type-approval No.: --**

# **Main Report**

Technical Report No.: LCA 51 1215 002 16 Page 1 to 42

Composition of the Annex:

A: Index Page 1

B: Information folder Page 1 to 108
C: EMC test results Page 1 to 24

Index to the information folder:

- Manufacturer's Information Document Page 1 to 108

Jiangsu Xinri E-Vehicle Co., Ltd.
No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00 Application date: September 22 2016

# **APPROVAL HISTORY**

EXTENSION No.	REASON FOR EXTENSION	JOB NUMBER	APPLICATION DATE
00 (Base approval)	Not applicable		September 22 2016

Jiangsu Xinri E-Vehicle Co., Ltd.
No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00 Application date: September 22 2016

# INFORMATION DOCUMENT CONCERNING THE APPROVAL OF A WHOLE VEHICLE TYPE

# Index **Contents:**

	Page
Approval history	1
Contents	2~3
Subject	4
Information document	5~45
Technical drawing	46~85
Information folder sheet	86~87
Manufacture's statement	88~91
COC	92~107
Authorized person to sing COC	108

Jiangsu Xinri E-Vehicle Co., Ltd.
No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00 Application date: September 22 2016

Drawing no.	Drawing subject	Page
GRACE-01	Location of Manufacturer's statutory plate and VIN	46
GRACE-02	Manufacturer's statutory plate and VIN	47
GRACE-03	Photographs of the vehicle	48
GRACE-04	The whole vehicle	49
GRACE-05	Chassis	50
GRACE-06	The overall layout of the electric drive system	51
GRACE-07-01	Under the seat cushion plastic protection	52
GRACE-07-02	Under the seat cushion plastic protection	53
GRACE-08	Overload protection switch	54
GRACE-09	External charger socket	55
GRACE-10	Remove the cushions	56
GRACE-11	Electric engine	57
GRACE-12-01	Controller	58
GRACE-12-02	Controller	59
GRACE-13-01	Lead-acid batteries	60
GRACE-13-02	lithium battery	61
GRACE-14	Transmission	62
GRACE-15	Suspension and its control system	63
GRACE-16	Suspension arrangements	64
GRACE-17	Audible warning devices	65
GRACE-18	Electrical circuit diagram	66
GRACE-19	Brake system	67
GRACE-20	Front disc and rear drum	68
GRACE-21	Front brake pad assy	69
GRACE-22	Rear brake pad assy	70
GRACE-23	Right hydraulic reservoir	71
GRACE-24	controls, tell-tales and indicators	72
GRACE-25	Speedometer	73
GRACE-26	Lighting and light-signaling devices	74
GRACE-27	Rear-view mirror	75
GRACE-28	Mirror installation	76
GRACE-29	Diagram of the steering transmission	77
GRACE-30	Protective device(s)	78
GRACE-31	General arrangement of external projections	79
GRACE-32	Handholds and footrests	80
GRACE-33	Rear registration plate	81
GRACE-34	Stands	82
GRACE-35	Harness diagram	83
GRACE-36	The seats and their anchorages	84
GRACE-37	Alarm	85

# Jiangsu Xinri E-Vehicle Co., Ltd.

No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016

# **SUBJECT:TWO-WHEEL MOPED TYPE "GRACE"**

This document concerns the following engine family:

Variant and Version	Engine family	Brief technical description
0/00	00	Electric engine type 203-35 BOSCH,and electric engine is in the rear of vehicle, Variant1,3 Maximum continuous-rated power electric motor 0.45KW @240min <sup>-1</sup> ,max speed 25km/h, Variant2,4 Maximum continuous-rated power electric motor 0.8KW @560min <sup>-1</sup> ,max speed 45km/h. Control by controller.

# INFORMATION DOCUMENT FOR THE PURPOSE OF EC TYPE-APPROVAL OF **VEHICLES**

According to Regulation (EU) number 168/2013 (Implementing Regulation (EU) 901/2014-2016/1825)

Item No.	(Sub) categories	Detailed information		
0		GENERAL INFORMATION		
Α.		General information concerning vehicles		
0.1.	L1e — L7e	Make (trade name of manufacturer):	XINRI, SUNRA, APACHI, ISILDAR APACHI, ISILDAR, Wayscral, KRAL, ZTECH, EvoMotion, SYMEX, GBF, ARORA, MASU, MOTOLUX, ALF MOTO, MOTODELL, MOTOMZ, MEEZ, MEZZ, MONASSO,	
0.2.	L1e — L7e	Type <sup>(17)</sup> :	GRACE	
0.2.1	L1e — L7e	Variant(s) <sup>(17)</sup> :	Variant 1: 25km/h/Lead acid batteries Variant 2: 45km/h/Lead acid batteries Variant 3: 25km/h/lithium battery Variant 4: 45km/h/lithium battery	
0.2.2	L1e — L7e	Version(s) <sup>(17)</sup> :	00	
0.2.3.	L1e — L7e	Commercial name(s) (if available):	GRACE, ZT-25, BE BOLD, CRYSTAL, Zeroporte, Crystal, E-START, E-MATE, E-CRUISER, E-ROAD, ANKA 3000, ANKA, KR-42, E-legant, JAGUAR, wave, urban, MARS, ElectroJet	
0.3.	L1e — L7e	Category, subcategory and subsubcategory of vehicle <sup>(2)</sup> :	L1e-B	
0.4.	L1e — L7e	Company name and address of manufacturer:	Jiangsu Xinri E-Vehicle Co.,Ltd. No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China	
0.4.1.	L1e — L7e	Name(s) and address(es) of assembly plants:	Jiangsu Xinri E-Vehicle Co.,Ltd. No.501,Xishan Avenue,Xishan District, Wuxi City,Jiangsu Province,China	
0.4.2.	L1e — L7e	Name and address of manufacturer's authorised representative, if any:	Z-TECH BIKE KFT 1044 Budapest,Ezred utca 7.II.ép.A.Iház.fszt.3.	
0.5.	L1e — L7e	Manufacturer's statutory plate(s):	•	
0.5.1.	L1e — L7e	Location of the manufacturer's statutory plate <sup>(15)(18)</sup> :	Refer to drawing No.GRACE-01	
0.5.2.	L1e — L7e	Method of attachment:	Riveted on the chassis	

	(Sub)			
Item No	categories	Detailed information		
0.5.3.	L1e — L7e	Photographs and/or drawings of the statutory plate (completed example with dimensions):	Refer to drawing No.GRACE-02	
0.6.	L1e — L7e	Location of the vehicle identification number <sup>(15)</sup> :	R ,x:270,y:1,z:560(r/o)	
0.6.1.	L1e — L7e	Photographs and/or drawings of the locations of the vehicle identification number (completed example with dimensions):	Refer to drawing No.GRACE-01, GRACE-02	
0.6.1.1.	L1e — L7e	The serial number of the type begins with:	Variant 1:	
B.		General information concerning systems, components or separate technical units		
0.7.	L1e — L7e	Make(s) (trade name(s) of manufacturer):	Not applicable	
0.8.	L1e — L7e	Type:	Not applicable	
0.8.1.	L1e — L7e	Commercial name(s) (if available):	Not applicable	
0.8.2.	L1e — L7e	Type-approval number(s) (if available):	Not applicable	
0.8.3.	L1e — L7e	Type-approval(s) issued on (date, if available):	Not applicable	
0.9.	L1e — L7e	Company name and address of manufacturer	Not applicable	
0.9.1.	L1e — L7e	Name(s) and address(es) of assembly plants	Not applicable	
0.9.2.	L1e — L7e	Name and address of manufacturer's authorised representative, if any:	Not applicable	
0.10.		Vehicle(s) for which the system/separate technical unit is intended for <sup>(21)</sup> :	Not applicable	
0.10.1.	L1e — L7e	Type <sup>(17)</sup> :	Not applicable	
0.10.2.	L1e — L7e	Variant <sup>(17)</sup> :	Not applicable	
0.10.3.	L1e — L7e	Version <sup>(17)</sup> :	Not applicable	
0.10.4.	L1e — L7e	Commercial name(s) (if available)	Not applicable	
0.10.5.	L1e — L7e	Category, subcategory and subsubcategory of vehicle <sup>(2)</sup> :	Not applicable	
0.11.	L1e — L7e	Type-approval marks for components and separate technical units <sup>(19)</sup>		
0.11.1.	L1e — L7e	Method of attachment:	Not applicable	

Item No	(Sub)	Detailed information			
	categories				
0.11.2. C.	L1e — L7e	Photographs and/or drawings of the location of the type-approval mark(completed example with dimensions):  General information regarding	Not applicable		
		conformity of production and access to repair and maintenance information			
0.12.		Conformity of production			
0.12.1.	L1e — L7e	Description of overall quality-assurance management systems.	Conforms to ISO9001:2008 quality manager system		
0.13.		Access to repair and maintenance information			
0.13.1.	L1e — L7e	Address of principal website for access to vehicle repair and maintenance information:	www.sunragroup.com Information's available six months after vehicle type approval .See regulation EU 44/2014, annex XV, item 8.7.		
0.13.2.	L1e — L7e	In the case of multi-stage type-approval, address of principal website for access to vehicle repair and maintenance information from manufacturer(s) at previous stage(s):	Not applicable		
1		GENERAL CONSTRUCTION CHARACTERISTICS			
1.1.	L1e — L7e	Photographs and/or drawings of a representative vehicle:	Refer to drawing No.GRACE-03		
1.2.	L1e — L7e	Scale drawing of the whole vehicle:	Refer to drawing No.GRACE-04		
1.3.	L1e — L7e	Number of axles and wheels:	2 axles/2 wheels		
1.3.1.	L1e — L7e	Axles with twinned wheels <sup>(23)</sup> :	Not applicable		
1.3.2.	L1e — L7e	Powered axles <sup>(23)</sup> :	Rear		
1.4. 1.5.	L1e — L7e L2e, L5e-B, L6e-B, L7e- A2, L7e-B2, L7e-C	Chassis (if any) (overall drawing): Material used for the bodywork:	Refer to drawing No.GRACE-05 Not applicable		
1.6.	L1e — L7e	Position and arrangement of the propulsion(s):	Refer to drawing No.GRACE-06		
1.7.	L4e, L5e-B, L6e-B, L7e- A2, L7e-B2, L7e-C	Hand of drive: left/right/centre <sup>(4)</sup> :	Not applicable		
1.7.1.	L1e — L7e	Vehicle is equipped to be driven in right/left-hand traffic and in countries that use metric/metric and imperial units. (4):	right/left-hand traffic and in countries that use metric units		
1.8.		Propulsion unit performance			

	Application date: September 22 2016			
Item No	(Sub) categories	Detailed information		
1.8.1.	L3e, L4e, L5e, L7e-A, L7e-B2	Declared maximum vehicle speed:	Not applicable	
1.8.2.	L1e, L2e, L6e, L7e- B1, L7e-C	Maximum design vehicle speed (22):	Variant 1,3:25km/h Variant 2,4:45km/h	
1.8.3.	L1e — L7e	Maximum net power combustion engine:	Not applicable	
1.8.4.	L1e — L7e	Maximum net torque combustion engine:	Not applicable	
1.8.5.	L1e — L7e	Maximum continuous-rated power electric motor (45/30 <sup>(4)</sup> minutes power <sup>(27)</sup> ):	Variant 1,3: 0.45KW at 240 min <sup>-1</sup> Variant 2,4: 0.8KW at 560 min <sup>-1</sup>	
1.8.6.	L1e — L7e	Maximum continuous-rated torque electric motor:	Variant 1,3: 15.2Nm at 240min <sup>-1</sup> Variant 2,4: 13.7Nm at 560min <sup>-1</sup>	
1.8.7.	L1e — L7e	Maximum continuous total power for propulsion(s):	Not applicable	
1.8.8.	L1e — L7e	Maximum continuous total torque for propulsion(s):	Not applicable	
1.8.9.	L1e — L7e	Maximum peak power for propulsion(s):	Not applicable	
2		MASSES AND DIMENSIONS		
2.1		(in kg and mm.) refer to drawings where applicable  Range of vehicle mass (overall)		
2.1.1.	L1e — L7e	Mass in running order:	Variant 1,2:61kg	
2.1.1.1.	L1e — L7e	Distribution of mass in running order between the axles:	Variant 3,4:61kg Variant 1,2: Front:24kg Rear:37kg Variant 3,4: Front:24kg Rear:37 kg	
2.1.2.	L1e — L7e	Actual mass:	Variant 1,2:171kg Variant 3,4:145 kg	
2.1.2.1.	L1e — L7e	Distribution of actual mass between the axles:	Variant 1,2: Front:68kg Rear:103kg Variant 3,4: Front:58kg Rear:87 kg	
2.1.3.	L1e — L7e	Technically permissible maximum laden mass:	246kg	
2.1.3.1.	L1e — L7e	Technically permissible maximum mass on front axle:	72kg	
2.1.3.2.	L1e — L7e	Technically permissible maximum mass on rear axle:	174kg	
2.1.3.3.	L4e	Technically permissible maximum mass on sidecar axle:	Not applicable	
2.1.4.	L1e — L7e	Maximum hill-starting ability at the maximum technically permissible mass declared by the manufacturer:	20% slope	
2.1.5.	L1e — L7e	Maximum pay mass declared by manufacturer:	Not applicable	
2.1.6.	L1e — L7e	Safe load carrying capacity of load platform declared by manufacturer:	Not applicable	

	(5.1)	Application date. deptember 22 20	· -	
Item No	(Sub) categories	Detailed information		
2.1.7.	L1e — L7e	Technically permissible maximum towable mass in case of <sup>(4)</sup> :	Not applicable	
2.1.7.1	L1e — L7e	Technically permissible maximum laden mass of the combination:	Not applicable	
2.1.7.2.	L1e — L7e	Technically permissible maximum mass at the coupling point:	Not applicable	
2.1.8.	L1e — L7e	Mass of the optional equipment:	Not applicable	
2.1.9.	L1e — L7e	Mass of the superstructure:	Not applicable	
2.1.10.	L1e — L7e	Mass of the propulsion battery:	Variant 1,2:35kg Variant 3,4:9kg	
2.1.11.	L2e, L4e, L5e, L6e, L7e	Mass of the doors:	Not applicable	
2.1.12.	L2e-U, L5e- B, L6e-BU, L7e-CU	Mass of the machines or equipment installed on the load platform area:	Not applicable	
2.1.13.	L1e — L7e	Mass of the gaseous fuel system as well as storage tanks for gaseous fuel:	Not applicable	
2.1.14.	L1e — L7e	Mass of the storage tanks to store compressed air:	Not applicable	
2.2.		Range of vehicle dimensions (overall)		
2.2.1.	L1e — L7e	Length:	1727mm.	
2.2.2.	L1e — L7e	Width:	714mm.	
2.2.3.	L1e — L7e	Height:	1071mm.	
2.2.4.	L1e — L7e	Wheelbase:	1202mm.	
2.2.4.1.	L4e	Wheelbase sidecar <sup>(28)</sup> :	Not applicable	
2.2.5.		Track width		
2.2.5.1.	L1e — L7e if equipped with twinned wheels L2e, L4e, L5e,	Track width front:	Not applicable	
2.2.5.2.	L6e, L7e L1e — L7e if equipped with twinned wheels	Track width rear:	Not applicable	
2.2.5.3.	L2e, L4e, L5e, L6e, L7e	Track width sidecar:	Not applicable.	
2.2.6.	L7e-B	Front overhang:	Not applicable	
2.2.7.	L7e-B	Rear overhang:	Not applicable	
2.2.8.		Load platform dimensions	• •	
	1	1 · · · · · ·		

(Sub)				
Item No	categories	Detailed information		
2.2.8.1.	L2e-U, L5e- B, L6e-BU, L7e-B2, L7e-CU	Length of the load platform:	Not applicable	
2.2.8.2.	L2e-U, L5e- B, L6e-BU, L7e-B2, L7e-CU	Width of load platform:	Not applicable	
2.2.8.3.	L2e-U, L5e- B, L6e-BU, L7e-B2, L7e-CU	Height of load platform:	Not applicable	
2.2.9.		Centre of gravity	N. ( P. 11	
2.2.9.1.	L2e-U, L5e- B, L6e-BU, L7e-B2, L7e-CU	Location of the centre of gravity forward of the rear axle Lcg:	Not applicable	
2.2.9.2.	L2e-U, L5e- B, L6e-BU, L7e-B2, L7e-CU	Location of the centre of gravity above the ground plane Hcg:	Not applicable	
2.2.9.3.	L2e-U, L5e- B, L6e-BU, L7e-B2, L7e-CU	Location centre of gravity of loaded platform forward of the rear axle LcgLP:	Not applicable	
2.2.10.		Miscellaneous dimensions		
2.2.10.1.	L7e-B2	Approach angle <sup>(11)</sup> :	Not applicable	
2.2.10.2.	L7e-B2	Departure angle <sup>(11)</sup> :	Not applicable	
2.2.10.3.	L7e-B2	Ramp angle <sup>(11)</sup> :	Not applicable	
2.2.10.4.	L7e-B2	Ground clearance under the front axle <sup>(11)</sup> :	Not applicable	
2.2.10.5.	L7e-B2	Ground clearance under the rear axle <sup>(11)</sup> :	Not applicable	
2.2.10.6.	L3e-AxE (x=1, 2 or 3), L3e-AxT (x=1, 2 or 3),L7e-B	Ground clearance between the axles <sup>(11)</sup> :	Not applicable	
2.2.10.7.	L7e-B	Wheelbase to ground clearance ratio:	Not applicable	
2.2.10.8.	L7e-B2	Static stability coefficient — Kst:	Not applicable	
2.2.10.9.	L3e-AxE, L3e-AxT	Seat height:	Not applicable	
2.2.10.10.	L3e-AxE, L3e-AxT	Ground clearance:	Not applicable	
3		GENERAL POWERTRAIN CHARACTERISTICS		
3.1		Manufacturer of the propulsion unit		
3.1.1.		Combustion engine		

_	(Sub)			
Item No	categories	Detailed information		
3.1.1.1.	L1e — L7e	Manufacturer:	Not applicable	
3.1.1.2.	L1e — L7e	Engine code (as marked on the engine or other means of identification):	Not applicable	
3.1.1.3. 3.1.2.	L1e — L7e	Fuel identification marking (if available): Electric motor	Not applicable	
3.1.2.1.	L1e — L7e	Manufacturer:	Bosch (Ningbo)e-Scooter Motor Co.,Ltd.	
3.1.2.2.	L1e — L7e	Electric motor code (as marked on the engine or other means of identification):	RBMBLCH???????? Refer to drawing No.GRACE-11	
3.1.3.		Hybrid application		
3.1.3.1.	L1e — L7e	Manufacturer:	Not applicable	
3.1.3.2.	L1e — L7e	Application code (as marked on the engine or other means of identification):	Not applicable	
3.1.3.3.	L1e — L7e	Fuel identification marking (if available):	Not applicable	
3.1.3.4.	L1e — L7e	Photographs and/or drawings of the location of the code(s) and/or type-approval numbers (completed example with dimensions) <sup>(20)</sup> :	Not applicable	
3.2.		Combustion engine		
3.2.1.		Specific engine information		
3.2.1.1.	L1e — L7e	Number of combustion engines:	Not applicable	
3.2.1.2.	L1e — L7e	Working principle: internal combustion engine (ICE)/positive ignition/compression ignition /external combustion engine (ECE)/turbine/compressed air <sup>(4)</sup> :	Not applicable	
3.2.1.3.	L1e — L7e	Cycle: four-stroke/two-stroke/rotary/other <sup>(4)</sup> :	Not applicable	
3.2.1.4.	L1e — L7e	Cylinders		
3.2.1.4.1.	L1e — L7e	Number:	Not applicable	
3.2.1.4.2.	L1e — L7e	Arrangement <sup>(26)</sup> :	Not applicable	
3.2.1.4.3.	L1e — L7e	Bore <sup>(12)</sup> :	Not applicable	
3.2.1.4.4.	L1e — L7e	Stroke <sup>(12)</sup> :	Not applicable	
3.2.1.4.5.	L1e — L7e	Number and configuration of stators in the case of rotary-piston engine:	Not applicable	
3.2.1.4.6.	L1e — L7e	Volume of combustion chambers in the case of rotary-piston engine:	Not applicable	
3.2.1.4.7.	L1e — L7e	Firing order:	Not applicable	
3.2.1.5.	L1e — L7e	Engine capacity <sup>(6)</sup> :	Not applicable	
3.2.1.6.	L1e — L7e	Volumetric compression ratio <sup>(7)</sup> : .	Not applicable	
3.2.1.7.	L1e — L7e	Number of inlet and exhaust valves	Not applicable	
* 3.2.1.7.1.	L1e — L7e	Number and minimum cross-sectional areas of inlet and outlet ports:	Not applicable	
* 3.2.1.7.2.	L1e — L7e	Valve timing or equivalent data:	Not applicable	

	(Ol-)	Application date. September 22 201		
Item No	(Sub) categories	Detailed information		
* 3.2.1.7.3.	L1e — L7e	Maximum lift of valves, angles of opening and closing, or timing details of alternative distribution systems, in relation to dead centres. For variable timing system, minimum and maximum timing:	Not applicable	
* 3.2.1.7.4.	L1e — L7e	Reference and/or setting ranges <sup>(4)</sup> :	Not applicable	
3.2.1.8.	L1e — L7e	Drawings of combustion chamber, cylinder head, piston, piston rings	Not applicable	
3.2.1.9.	L1e — L7e	Normal warm engine idling speed	Not applicable	
3.2.1.10.	L1e — L7e	Stop-start system: yes/no <sup>(4)</sup> :	<del>yes/</del> no <sup>(4)</sup>	
* 3.2.2. 3.2.2.1.	L1e — L7e	Powertrain/propulsion/drive-train management system PCUs/ECUs <sup>(4)</sup> software identification	Not applicable	
		number(s):		
3.2.3.		Fuel		
3.2.3.1.	L1e — L7e	Fuel type <sup>(9)</sup> :	Not applicable	
3.2.3.2.	L1e — L7e	Vehicle fuel configuration: mono-fuel/bi-fuel/flex fuel <sup>(4)</sup>	Not applicable	
3.2.3.2.1. 3.2.4.	L1e — L7e	Maximum amount of bio-fuel acceptable in fuel:  Fuel pressure delivery and control	Not applicable	
3.2.4.1.	L1e — L7e	Brief description and schematic drawing of low-and/or high-pressure fuelling wet system(s) <sup>(4)</sup> :	Not applicable	
3.2.4.2.	L1e — L7e	Low- and/or high-pressure fuel pump(s): yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>	
3.2.4.2.1.	L1e — L7e	Fuel pump control: mechanical/on/off electric/continuous operation/electronically controlled variable operation <sup>(4)</sup> :	Not applicable	
3.2.4.2.2.	L1e — L7e	For CI combustion engines and dual fuel engines only maximum fuel delivery (4)(7):	Not applicable	
3.2.4.3.	L1e — L7e	Common rail: yes/no <sup>(4)</sup>	Not applicable	
3.2.4.4.	L1e — L7e	Fuel distributor/rail/hoses <sup>(4)</sup> : yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>	
3.2.4.5.	L1e — L7e	Fuel pressure and/or fuel flow regulator(s): yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>	
3.2.5.		Fuel mass metering and control		
3.2.5.1.	L1e — L7e	By carburettor(s): yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>	
* 3.2.5.1.1.	L1e — L7e	Operating principle and construction	Not applicable	
* 3.2.5.1.2.	L1e — L7e	Maximum fuel-flow rate:	Not applicable	
3.2.5.1.3.	L1e — L7e	Carburettor(s) settings <sup>(7)</sup> :	Not applicable	
* 3.2.5.1.4.	L1e — L7e	Carburettor diffusers:	Not applicable	
* 3.2.5.1.5. * 3.2.5.1.5.1.	L1e — L7e L1e — L7e	Carburettor fuel-level in float chamber: Carburettor mass of float:	Not applicable Not applicable	

Item No	(Sub) categories	Detailed information		
3.2.5.1.6.	L1e — L7e	Carburettor cold-starting system: manual/automatic <sup>(4)</sup> : yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>	
3.2.5.1.6.1.	L1e — L7e	Carburettor cold-starting system operating principle(s):	Not applicable	
3.2.5.1.7.	L1e — L7e	Mixture scavenging port: yes/no <sup>(4)</sup>	Not applicable	
3.2.5.1.7.1.	L1e — L7e	Mixture scavenging port dimensions:	Not applicable	
3.2.5.2.	L1e — L7e	By mechanically/hydraulically controlled fuel injection <sup>(4)</sup> : yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>	
3.2.5.2.1.	L1e — L7e	Operation principle:	Not applicable	
3.2.5.2.2.	L1e — L7e	Mechanical/electronic <sup>(4)</sup> adjustment of maximum fuel mass delivery: yes/no <sup>(4)</sup>	Not applicable	
3.2.5.3.	L1e — L7e	By electronically controlled fuel injection system: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>	
3.2.5.3.1.	L1e — L7e	Operation principle: port injection/direct injection/pre-chamber/swirl chamber <sup>(4)</sup> : .	Not applicable	
3.2.5.3.2.	L1e — L7e	Fuel injector(s): single-/multi-point/direct injection/other (specify) (4):	Not applicable	
3.2.5.3.3.	L1e — L7e	Total and per cylinder amount of fuel injectors:	Not applicable	
3.2.5.4.	L1e — L7e	Air-assisted fuel injector: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>	
3.2.5.4.1.	L1e — L7e	Description and operating pressure of air-assist:	Not applicable	
3.2.5.5.	L1e — L7e	Cold start system:	<del>yes/</del> no <sup>(4)</sup>	
3.2.5.5.1.	L1e — L7e	Description of cold start system:	Not applicable	
3.2.5.6.	L1e — L7e	Auxiliary starting aid: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>	
3.2.5.7.	L1e — L7e	CI injection specific: yes/no	<del>yes/</del> no <sup>(4)</sup>	
3.2.5.7.1.	L1e — L7e	Static injection timing <sup>(7)</sup> :	Not applicable	
3.2.5.7.2.	L1e — L7e	Injection advance curve <sup>(7)</sup> :	Not applicable	
3.2.6.		Gaseous fuelling system and control		
3.2.6.1.	L1e — L7e	Brief description and schematic drawing of gaseous fuelling system(s):	Not applicable	
3.2.6.2.	L1e — L7e	Liquefied petroleum gas (LPG) fuelling system: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>	
3.2.6.2.1.	L1e — L7e	Type-approval number according to UNECE Regulation No 67 <sup>(1)</sup> :	Not applicable	
3.2.6.2.2.	L1e — L7e	Electronic engine management control unit for LPG fuelling: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>	
3.2.6.2.2.1.	L1e — L7e	Emission-related adjustment possibilities:	Not applicable	
3.2.6.2.3.	L1e — L7e	Further documentation:		
* 3.2.6.2.3.1	L1e — L7e	Description of the safeguarding of the catalyst at switch-over from petrol to LPG or back:	Not applicable	

Harra N.	(Sub)				
Item No	categories	Detailed information			
3.2.6.2.3.2	L1e — L7e	System layout (electrical connections, vacuum connections, compensation hoses, etc.):	Not applicable		
3.2.6.2.4.	L1e — L7e	Drawing of the symbol:	Not applicable		
3.2.6.3.	L1e — L7e	Natural gas (NG) fuelling system: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.6.3.1.	L1e — L7e	Type-approval number according to UNECE Regulation No 110 <sup>(2)</sup> :	Not applicable		
3.2.6.3.2.	L1e — L7e	Electronic engine management-control unit for NG fuelling: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.6.3.2.1.	L1e — L7e	Emission-related adjustment possibilities:	Not applicable		
3.2.6.3.3.	L1e — L7e	Further documentation:			
* 3.2.6.3.3.1.	L1e — L7e	Description of the safeguarding of the catalyst at switch-over from petrol to NG or back:	Not applicable		
3.2.6.3.3.2.	L1e — L7e	System layout (electrical connections, vacuum connections compensation hoses, etc.):	Not applicable		
3.2.6.3.4.	L1e — L7e	Drawing of the symbol:	Not applicable		
3.2.6.4.	L1e — L7e	Gaseous fuel: LPG/NG-H/NG-L/NG- HL <sup>(4)</sup> : yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.6.4.1.	L1e — L7e	Pressure regulator(s) or vaporiser/pressure regulator(s) <sup>(4)</sup> :	Not applicable		
* 3.2.6.4.1.1.	L1e — L7e	Number of pressure reduction stages:	Not applicable		
3.2.6.4.1.2.	L1e — L7e	Pressure in final stage,	Not applicable		
3.2.6.4.1.3.	L1e — L7e	Number of main adjustment points:	Not applicable		
3.2.6.4.1.4.	L1e — L7e	Number of idle adjustment points:	Not applicable		
3.2.6.4.1.5.	L1e — L7e	Type-approval number:	Not applicable		
3.2.6.4.2.	L1e — L7e	Fuelling system: mixing unit/gas injection/liquid injection/direct injection <sup>(4)</sup>			
*	L1e — L7e	Mixture strength regulation:	Not applicable		
3.2.6.4.2.1. 3.2.6.4.2.2.	L1e — L7e	System description and/or diagram and drawings:	Not applicable		
3.2.6.4.2.3.	L1e — L7e	Type-approval number:	Not applicable		
3.2.6.4.3.	L1e — L7e	Mixing unit: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.6.4.3.1.	L1e — L7e	Number:	Not applicable		
3.2.6.4.3.2.	L1e — L7e	Location:	Not applicable		
3.2.6.4.3.3.	L1e — L7e	Adjustment possibilities	Not applicable		
3.2.6.4.3.4.	L1e — L7e	Type-approval number	Not applicable		
3.2.6.4.4.	L1e — L7e	Inlet manifold injection: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.6.4.4.1.	L1e — L7e	Injection: single-point/multi-point <sup>(4)</sup>	Not applicable		

Item No	(Sub) categories	Detailed information			
3.2.6.4.4.2.	L1e — L7e	Injection: continuous	•	Not applicable	
		timed/sequentially tin		. (1)	
3.2.6.4.5.	L1e — L7e	Injection equipment:	•	<del>yes/</del> no <sup>(4)</sup>	
3.2.6.4.5.1.	L1e — L7e	Adjustment possibilit		Not applicable	
3.2.6.4.5.2.	L1e — L7e	Type-approval numb		Not applicable	
3.2.6.4.6.	L1e — L7e	1		<del>yes/</del> no <sup>(4)</sup>	
3.2.6.4.6.1.	L1e — L7e	Type-approval numb	er	Not applicable	
3.2.6.4.7.	L1e — L7e	Injector(s)			
3.2.6.4.7.1.	L1e — L7e	Type-approval numb		Not applicable	
3.2.6.4.8.	L1e — L7e	Direct/port injection:	•	<del>yes/</del> no <sup>(4)</sup>	
3.2.6.4.9.	L1e — L7e	Injection pump/press yes/no <sup>(4)</sup>	-		
3.2.6.4.9.1.	L1e — L7e	Type-approval numb		Not applicable	
3.2.6.4.10.	L1e — L7e	Separate electronic control unit (ECU) for yes/no <sup>(4)</sup> gaseous fuelling system: yes/no <sup>(4)</sup>			
3.2.6.4.10.1.	L1e — L7e	Adjustment possibilit	ies	Not applicable	
3.2.6.4.10.2.	L1e — L7e	Software identification number(s)		Not applicable	
3.2.6.4.10.3.	L1e — L7e	Calibration verification number(s)		Not applicable	
3.2.6.5.	L1e — L7e	NG fuel-specific equi	•		
3.2.6.5.1.	L1e — L7e	Variant 1 (only in the of engines for severa compositions)		Not applicable	
3.2.6.5.2.	L1e — L7e	Fuel composition		Not applicable	
			Overview		
		methane (CH 4 ):	basis: %mole	min %mole	max %mole
		ethane (C <sub>2</sub> H <sub>6</sub> ):	basis: %mole	min %mole	max %mole
		propane (C <sub>3</sub> H <sub>8</sub> ):	basis: %mole	min %mole	max %mole
		butane (C <sub>4</sub> H <sub>10</sub> ):	basis: %mole	min %mole	max %mole
		C 5 /C 5 +:	basis: %mole	min %mole	max %mole
		oxygen (O 2 ):	basis: %mole	min %mole	max %mole
		inert (N 2, He, etc.):	basis: %mole	min %mole	max %mole
3.2.6.5.3.	L1e — L7e	Gaseous fuel injector	r(s):	Not applicable	
3.2.6.5.4.	L1e — L7e	Variant 2 (only in the for several specific fu	case of approvals	Not applicable	
3.2.6.6.	L1e — L7e	Hydrogen fuel-specif yes/no <sup>(4)</sup>	. ,	<del>yes/</del> no <sup>(4)</sup>	
3.2.6.6.1.	L1e — L7e	EC type-approval nu Regulation (EC) No 7 European Parliament	79/2009 of the	Not applicable	
* 3.2.6.6.2.	L1e — L7e	Further documentation	on	Not applicable	

Item No     (Sub) categories     Detailed information       3.2.6.6.3.     L1e — L7e     System layout (electrical connections, vacuum connections, compensation hoses, etc.):       * 3.2.6.6.4.     L1e — L7e     Description of the safeguarding of the Not application.	
vacuum connections, compensation hoses, etc.):	
hoses, etc.):	
" 3.2.6.6.4.   L1e — L/e   Description of the sateguarding of the Not applic	
catalyst at switch-over from petrol to	cable
hydrogen/H <sub>2</sub> NG <sup>(4)</sup> or back	
3.2.6.6.5. L1e — L7e Drawing of the symbol Not applic	cable
3.2.6.7. L1e — L7e H₂NG fuelling system: yes/no <sup>(4)</sup>	
3.2.6.7.1. L1e — L7e Percentage of hydrogen in the fuel (the Not applic	cable
maximum specified by the manufacturer)	
3.2.7. L1e — L7e   Air-induction system 3.2.7.1. L1e — L7e   Brief description and schematic drawing   Not applic	aabla
3.2.7.1. L1e — L7e Brief description and schematic drawing Not applic of gaseous intake air-flow and induction	Sable .
system	
3.2.7.2. L1e — L7e Intake manifold description and working Not applic	cable
principle (e.g. fixed length/variable	
length/swirl valves) <sup>(4)</sup> (include detailed drawings and/or photos):	
* 3.2.7.2.1. L1e — L7e Description and drawings of inlet pipes Not applic	cable
and their accessories (plenum chamber,	
heating device with control strategy,	
additional air intakes,etc.)  3.2.7.3. L1e — L7e Intake air pressure charger: yes/no <sup>(4)</sup>	
3.2.7.3.1. L1e — L7e Brief description and schematic drawing Not applic	aabla
of the intake air-pressure charger system	Jable
3.2.7.3.2. L1e — L7e Working and control principles Not applic	cable
3.2.7.3.3. L1e — L7e Type(s) (turbo or supercharger, other) <sup>(4)</sup> Not applic	cable
3.2.7.3.4. L1e — L7e Maximum intake air-charge pressure and Not applic	cable
flow-rate at maximum torque and power 3.2.7.4. L1e — L7e Waste gate: yes/no <sup>(4)</sup> yes/no <sup>(4)</sup>	
3.2.7.5. L1e — L7e Intercooler: yes/no <sup>(4)</sup> yes/no <sup>(4)</sup>	
3.2.7.5.1. L1e — L7e Type: air-air/air-water/other <sup>(4)</sup> Not applie	
* 3.2.7.5.2. L1e — L7e Intake depression at rated engine speed Not applic and at 100 % load (compression ignition	cable
engines only)	
3.2.7.6. L1e — L7e Air filter, (drawings, photographs) Not applic	cable
3.2.7.7. L1e — L7e Intake air-silencer description (drawings, Not applic	cable
photographs)	
* 3.2.7.7.1. L1e — L7e Working principle Not applic	capie
3.2.8. L1e — L7e	rahla
of air-mass metering and control system	วสมเซ
3.2.8.2. L1e — L7e Mechanical throttle body: yes/no <sup>(4)</sup>	
3.2.8.3. L1e — L7e Electronic throttle control (ETC): yes/no <sup>(4)</sup> yes/no <sup>(4)</sup>	
3.2.8.3.1. L1e — L7e Schematic drawing of electronic throttle Not applic	cable
control	

Item No	(Sub) Detailed information				
item NO	categories	Detailed information			
* 3.2.8.3.1.2.	L1e — L7e	Description of ETC hardware redundancies regarding sensors/actuators/electric power/ground/control electronics	Not applicable		
3.2.9.	L1e — L7e	Spark delivery system and control	N. C. B. LL		
3.2.9.1.	L1e — L7e	Brief description and schematic drawing of spark delivery and control system	Not applicable		
3.2.9.1.1.	L1e — L7e	Working principle	Not applicable		
3.2.9.1.2.	L1e — L7e	Ignition advance curve or map <sup>(7)</sup> at wide open throttle	Not applicable		
3.2.9.1.3.	L1e — L7e	Static ignition timing (7)	Not applicable		
3.2.9.2.	L1e — L7e	Ion sense capability: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.9.3.	L1e — L7e	Spark plugs:			
3.2.9.3.1.	L1e — L7e	Gap setting	Not applicable		
3.2.9.4.	L1e — L7e	Ignition coil(s)	Not applicable		
* 3.2.9.4.1.	L1e — L7e	Working principle	Not applicable		
* 3.2.9.4.2.	L1e — L7e	Dwell angle and timing at wide open throttle	Not applicable		
3.2.10.	L1e — L7e	Powertrain cooling system and control			
3.2.10.1.	L1e — L7e	Brief description and schematic drawing of powertrain cooling and control system	Not applicable		
3.2.10.2.	L1e — L7e	Cooling system: liquid: yes/no <sup>(4)</sup>	Not applicable		
3.2.10.2.1.	L1e — L7e	Maximum temperature at outlet	Not applicable		
3.2.10.2.2.	L1e — L7e	Nominal setting of the engine temperature control mechanism	Not applicable		
3.2.10.2.3.	L1e — L7e	Nature of liquid	Not applicable		
3.2.10.2.4.	L1e — L7e	Circulating pump(s): yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.10.2.4.1.	L1e — L7e	Characteristics	Not applicable		
3.2.10.2.5.	L1e — L7e	Drive ratio(s)	Not applicable		
3.2.10.2.6.	L1e — L7e	Description of the fan and its drive mechanism	Not applicable		
3.2.10.3.	L1e — L7e	Air cooling: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.10.3.1.	L1e — L7e	Reference point	Not applicable		
3.2.10.3.2.	L1e — L7e	Maximum temperature at reference point	Not applicable		
3.2.10.3.3.	L1e — L7e	Fan: yes/no <sup>(4)</sup>			
3.2.10.3.3.1.	L1e — L7e	Characteristics	Not applicable		
3.2.10.3.3.2.	L1e — L7e	Drive ratio(s)	Not applicable		
3.2.11.	L1e — L7e	Powertrain lubrication system and control			
3.2.11.1.	L1e — L7e	Brief description and schematic drawing of powertrain lubrication and control system	Not applicable		

Mari Ni	(Sub)	Detailed information			
Item No	categories	Detailed information			
3.2.11.2.	L1e — L7e	Lubrication system configuration(s) (wet sump, dry sump, other, pump/injection into induction system/mixed with the fuel, etc.) <sup>(4)</sup>	Not applicable		
3.2.11.3.	L1e — L7e	Location of oil reservoir (if any)	Not applicable		
3.2.11.4.	L1e — L7e	Feed system (pump/injection into induction system/mixed with the fuel,etc.) <sup>(4)</sup>	Not applicable		
3.2.11.5.	L1e — L7e	Lubricating pump: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.11.6.	L1e — L7e	Oil cooler: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.11.6.1.	L1e — L7e	Drawing	Not applicable		
3.2.11.7.	L1e — L7e	Lubricant(s) characteristics	Not applicable		
3.2.11.8.	L1e — L7e	Lubricant mixed with the fuel: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.11.8.1.	L1e — L7e	Percentage range of lubricant mixed with the fuel	Not applicable		
3.2.12.	L1e — L7e	Exhaust system and control			
3.2.12.1.	L1e — L7e	Brief description and schematic drawing of exhaust devices for noise and tailpipe emission control	Not applicable		
3.2.12.2.	L1e — L7e	Description and drawing of the exhaust manifold	Not applicable		
3.2.12.3.	L1e — L7e	Description and detailed drawing of the exhaust device	Not applicable		
3.2.12.4.	L1e — L7e	Maximum permissible exhaust back- pressure at rated engine speed and at 100 % load	Not applicable <sup>)</sup>		
3.2.12.5.	L1e — L7e	Type, marking of exhaust noise- abatement device(s)	Not applicable		
* 3.2.12.6.	L1e — L7e	Noise-reducing measures in the engine compartment and on the engine where relevant for external noise	Not applicable		
3.2.12.7.	L1e — L7e	Location of the exhaust outlet	Not applicable		
3.2.12.8.	L1e — L7e	Exhaust noise-abatement device containing fibrous materials: yes/no <sup>(4)</sup>	Not applicable		
3.2.13.	L1e — L7e	Other electrical systems and control than those intended for the electrical propulsion			
3.2.13.1.	L1e — L7e	Rated voltage	Not applicable		
3.2.13.2.	L1e — L7e	Generator: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.13.2.1.	L1e — L7e	Nominal output	Not applicable		
3.2.13.3.	L1e — L7e	Battery(ies): yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
3.2.13.3.1.	L1e — L7e	Capacity and other characteristics (mass,)	Not applicable		
3.2.13.4.	L1e — L7e	Electric heating systems for the passenger compartment: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		

(Sub)						
Item No	categories	Detailed information				
3.3.		Pure electric and hybrid electric				
		propulsion and control				
3.3.1.	L1e — L7e	Electric vehicle configuration: pure	pure electric			
		electric/hybrid electric/manpower— electric <sup>(4)</sup>				
3.3.2.	L1e — L7e	Brief description and schematic drawing	Refer to drawing No. GRACE-11/			
		of pure and hybrid electric propulsions	GRACE-12-01/ GRACE-12-02			
		and its control system(s):				
3.3.3.		Electric propulsion motor	4			
3.3.3.1.	L1e — L7e	Number of electric motors for propulsion	1			
3.3.3.2.	L1e — L7e	Type (winding, excitation)	winding			
3.3.3.3.	L1e — L7e	Operating voltage	≤60V			
3.3.3.4.	L1e — L7e	15/30 <sup>(4)</sup> minutes power <sup>(27)</sup> :	Variant 1,3: 0.45KW at 240 min <sup>-1</sup> Variant 2,4: 0.8KW at 560 min <sup>-1</sup>			
3.3.4.		Propulsion batteries	,			
3.3.4.1.	L1e — L7e	Primary propulsion battery				
3.3.4.1.1.	L1e — L7e	Number of cells	Variant 1,2: 5 lead acid battery			
0.0.4.4.0			Variant 3,4: 1 lithium battery			
3.3.4.1.2.	L1e — L7e	Mass	Variant 1,2: 35kg			
3.3.4.1.3.	L1e — L7e	Capacity	Variant 3,4:9kg 20Ah			
3.3.4.1.4.	L1e — L7e	Voltage	≤60V			
3.3.4.1.5.	L1e — L7e	Position in the vehicle	Refer to drawing No.GRACE-06			
3.3.4.2.	L1e — L7e	Secondary propulsion battery	9			
3.3.4.2.1.	L1e — L7e	Number of cells	Not applicable			
3.3.4.2.2.	L1e — L7e	Mass	Not applicable			
3.3.4.2.3.	L1e — L7e	Capacity	Not applicable			
3.3.4.2.4.	L1e — L7e	Voltage	Not applicable			
3.3.4.2.5.	L1e — L7e	Position in the vehicle	Not applicable			
3.3.5.		Hybrid electric vehicle				
3.3.5.1.	L1e — L7e	Engine or motor combination (number of	Not applicable			
		electric motor(s) and/or combustion engine(s)/other) <sup>(4)</sup>				
3.3.5.2.	L1e — L7e	Category of hybrid electric vehicle: off-	Not applicable			
0.0.0.2.	2.0	vehicle charging/not off-vehicle charging:	, tot applicable			
3.3.5.3.	L1e — L7e	Operating mode switch: with/without <sup>(4)</sup>	Not applicable			
3.3.5.4.	L1e — L7e	Selectable modes: yes/no <sup>(4)</sup>	Not applicable			
3.3.5.5.	L1e — L7e	Pure fuel consuming: yes/no <sup>(4)</sup>	Not applicable			
3.3.5.6.	L1e — L7e	Vehicle propelled with fuel cell: yes/no <sup>(4)</sup>	Not applicable			
3.3.5.7.	L1e — L7e	Hybrid operation modes: yes/no <sup>(4)</sup> (if yes, short description):	Not applicable			
3.3.6.		Energy storage device				
3.3.6.1.	L1e — L7e	Description: (battery, capacitor,	battery			
0.0.0.0		flywheel/generator) <sup>(4)</sup>	V : 140 4500450			
3.3.6.2.	L1e — L7e	Identification number	Variant 1,2:1506176- 3AH1069999DZ26			
			Variant 3,4:BRAF051200001			
	I	ı	7 S. ISH C , 1.D. C II OO 120000 1			

	Application date: September 22 2016				
Item No	(Sub) categories	Detailed information			
* 3.3.6.3.	L1e — L7e	Kind of electrochemical couple	Variant 1,2: lead acid battery Variant 3,4: lithium battery		
3.3.6.4.	L1e — L7e	Energy (for battery: voltage and capacity Ah in 2h, for capacitor: J,, for flywheel/generator: J,,)	60V 20Ah		
3.3.6.5.	L1e — L7e	Charger: on-board/external/without <sup>(4)</sup>	external		
3.3.7.		Electric motor (describe each type of electric motor separately)			
3.3.7.1.	L1e — L7e	Primary use: propulsion motor/generator <sup>(4)</sup>	propulsion motor		
3.3.7.2.	L1e — L7e	When used as propulsion motor: single-/multi-motors (number) <sup>(4)</sup>	1		
3.3.7.3.	L1e — L7e	Working principle	The basic rotation of the motor depends on the position information detected by the rotor position sensor and then drives the electric power switch device connected with the armature winding to turn off or turn on by the electronic commutation circuit so as to control the energization state of the winding, and generates a continuous rotating magnetic field on the stator to rotate the rotor. With the rotation of the rotor, the sensor signal is constantly fed back to the chip, the main chip to change the armature winding power state, so that the magnetic pole in each winding under the same direction of current. So it can generate a constant torque, and make the motor continuous rotation up and running		
3.3.7.4.	L1e — L7e	Direct current/alternating current/number of phases	Direct current		
3.3.7.5.	L1e — L7e	Separate excitation/series/compound <sup>(4)</sup>	Separate excitation		
3.3.7.6.	L1e — L7e	Synchronous/asynchronous <sup>(4)</sup> :	synchronous		
3.3.8.	14- 17-	Electric motor control unit	Variant 1 2:20000000000		
3.3.8.1.	L1e — L7e	Identification number	Variant 1,3:3869680005871 Variant 2,4:3869680005872		
3.3.9.	14. 17	Power controller	Not any Paul I		
3.3.9.1. 3.4.	L1e — L7e	Identification number Other engines, electric motors or combinations (specific information concerning the parts of these motors)	Not applicable		

Item No	(Sub) categories	Detailed information						
3.4.1.	outogonio o	Cooling system (temperatures permitted						
		by the manufac						
3.4.1.1.	L1e — L7e	Liquid cooling		Not ap	oplicable			
3.4.1.1.1.	L1e — L7e	Maximum temperature at outlet			Not applicable			
3.4.1.2.	L1e — L7e	Air cooling			Not applicable			
3.4.1.2.1.	L1e — L7e	Reference point Not applicable						
3.4.1.2.2.	L1e — L7e	·			Not applicable			
3.4.2.		Lubrication sys	stem	-	-			
3.4.2.1.	L1e — L7e	•			Not ap	Not applicable		
3.4.2.2.	L1e — L7e	Location of oil	reservoir (if any)		Not ap	oplicable		
3.4.2.3.	L1e — L7e	Feed system (pump/injection into Not applicable induction system/mixed with the fuel, etc.) <sup>(4)</sup>						
3.4.2.4.	L1e — L7e	Lubricant mixe	d with the fuel		Not ap	oplicable		
3.4.2.4.1.	L1e — L7e	Percentage			Not ap	oplicable		
3.4.2.5.	L1e — L7e	Oil cooler: yes/	′no <sup>(4)</sup>		Not ap	oplicable		
* 3.4.2.5.1.	L1e — L7e	Drawing(s)			Not ap	oplicable		
3.5. 3.5.1.	L1e — L7e	Drive-train and control <sup>(13)</sup> Brief description and schematic drawing Refer to drawing No.GRACE-14				0040544		
		of the vehicle of system (gear so or any other ele	drive-train and its on the control, clutch ement of drive-trains	control control		ŭ		
3.5.2.	140 170	Clutch		مان دران ما	NI=4 = "	ماطممناهم		
3.5.2.1.	L1e — L7e	Brief description and schematic drawing of the clutch and its control system			Not applicable			
3.5.3. 3.5.3.1.	L1e — L7e		Transmission			Not applicable		
3.3.3.1.	Lie — Lie	Brief description and schematic drawing Not applicable of gear shift system(s) and its control						
3.5.3.2.	L1e — L7e	•	Drawing of the transmission Refer to drawing No		to drawing No.	GRACE-14		
3.5.3.3.	L1e — L7e	Type (mechanical, hydraulic, electric, Not applicable manual/manual automated/automatic/CVT/ other (indicate).) <sup>(4)</sup>						
3.5.3.4.	L1e — L7e	A brief description of the electrical/electronic components (if any)			Not applicable			
3.5.3.5.	L1e — L7e	Location relative to the engine			Not applicable			
3.5.3.6.	L1e — L7e		Method of control		Not ap	oplicable		
3.5.4.		Gear ratios						
		Overview gear ratios						
			Internal transmission ratios (ratios of engine to transmission output shaft	Final drive ratio(s) (ra transmiss output sha driven wh	atio of ion aft to	Total gear	Ratio (engine speed/vehicle speed) for manual transmission	
		Gear	revolutions)	revolution	s)	ratiose	only	
		W	-	-		-		
		Reverse	21			1		

Item No	(Sub)	Detailed information					
	categories						
3.5.4.1.	L3e-AxE, L3e-AxT	Final drive ratio	Not applicable				
3.5.4.2.	L3e-AxE, L3e-AxT	Overall gear ratio in highest gear	Not applicable				
3.6.	L1e — L7e	Safe-cornering device					
3.6.1.	L1e — L7e equipped with twinned wheels, L2e, L5e, L6e, L7e	Safe-cornering device (Annex VIII to Regulation (EU) No 168/2013: yes/no <sup>(4)</sup> ; differential/other <sup>(4)</sup>	Not applicable				
3.6.2.	L1e — L7e equipped with twinned wheels, L2e, L5e, L6e, L7e	Differential lock: yes/no/optional <sup>(4)</sup>	Not applicable				
3.6.3.	L1e — L7e	Brief description and schematic drawing of the safe-cornering device, the differential lock and their control systems	Not applicable				
3.7.		Suspension and control					
3.7.1.	L1e — L7e	Brief description and schematic drawing of suspension and its control system	Refer to drawing No.GRACE-15				
3.7.2.	L1e — L7e	Drawing of the suspension arrangements	Refer to drawing No.GRACE-16				
3.7.3.	L1e — L7e	Level adjustment:	<del>yes/</del> no <del>/optional<sup>(4)</sup></del>				
3.7.4.	L1e — L7e	Brief description of the electrical/electronic components:	Not applicable				
3.7.5.	L1e — L7e	Stabilisers:	<del>yes/</del> no <del>/optional<sup>(4)</sup></del>				
3.7.6.	L1e — L7e	Shock absorbers:	yes <del>/no/optional<sup>(4)</sup></del>				
3.8.		Passenger-compartment heating system and air-conditioning					
3.8.1.		Passenger-compartment heating system					
3.8.1.1.	L2e, L5e-B, L6e- B, L7e	An overall drawing of the heating system giving its location on the vehicle (and the arrangement of the sound damping devices (including the position of the heat exchange points)):	Not applicable				
3.8.1.2.	L2e, L5e-B, L6e- B, L7e	An overall drawing of the heat-exchanger used in systems utilising the heat from the exhaust gases, or of the parts where that exchange takes place (in the case of heating systems using the heat provided by the engine cooling air):	Not applicable				

	(OIr)	Application date. Coptomber 22 201					
Item No	(Sub) categories	Detailed information					
3.8.1.3.	L2e, L5e-B,	A sectional drawing of the heat-	Not applicable				
	L6e- B, L7e	exchanger or parts where heat exchange takes place, together with a statement of the wall thickness, of the materials used and the characteristics of their surface:					
3.8.1.4. 3.8.2.	L2e, L5e-B, L6e- B, L7e	Specifications regarding the method of manufacture and technical data relating to other major components of the heating system, such as the fan:  Air-conditioning	Not applicable				
3.8.2.1.	L2e, L5e-B, L6e- B, L7e	Brief description and schematic drawing of air-conditioning and its control system:	Not applicable				
3.8.2.2.	L2e, L5e-B, L6e- B, L7e	Gas used as refrigerant in the air- conditioning system	Not applicable				
3.8.2.3.	L2e, L5e-B, L6e- B, L7e	The air-conditioning system is designed to contain fluorinated greenhouse gases with global warming potential higher than 150: yes/no <sup>(4)</sup> . If Yes, fill in the following sections	Not applicable				
3.8.2.3.1.	L2e, L5e-B, L6e- B, L7e	Drawing and brief description of the air- conditioning system, including the reference or part number and material of the leak components	Not applicable				
3.8.2.3.2.	L2e, L5e-B, L6e- B, L7e	Leakage of the air-conditioning system	Not applicable				
3.8.2.3.3.	L2e, L5e-B, L6e- B, L7e	Reference or part number and material of the components of the system and test information (e.g. test report number, Type-approval number, etc.)	Not applicable				
3.8.2.3.4.	L2e, L5e-B, L6e- B, L7e	Overall leakage/year of the entire system	Not applicable				
3.9.		Cycles designed to pedal					
3.9.1.	L1e	Ratio manpower/electric power:	Not applicable				
3.9.2.	L1e	Maximum assistance factor:	Not applicable				
3.9.3.	L1e	Maximum vehicle speed for which the electric motor gives assistance:	Not applicable				
3.9.4. 4	L1e	Switch-off distance  GENERAL INFORMATION ON  ENVIRONMENTAL AND  PROPULSION PERFORMANCE  General information on environmental	Not applicable				
		and propulsion performance					
4.0.1.	L1e — L7e	Environmental step:	Not applicable				
4.0.2.	L1e — L7e	Fuel consumption (provide details for each reference fuel tested)	Not applicable				

Item No	(Sub)	Detailed information						
item No	categories	Detailed info	rmation					
4.0.3.	L1e — L7e	CO <sub>2</sub> emissions <sup>(25)</sup> :	Not applicable					
4.0.4.	L1e — L7e	Energy consumption <sup>(25)</sup> :	Variant 1,2:34Wh/km Variant 3,4:24.4Wh/km					
4.0.5.	L1e — L7e	Electric range <sup>(25)</sup> :	Variant 1,2:44.5km Variant 3,4:63.6km					
4.1.		Tailpipe emission-control system						
4.1.1.	L1e — L7e	Brief description and schematic drawing of the tailpipe emission-control system and its control:	Not applicable					
4.1.2.		Catalytic converter						
4.1.2.1.	L1e — L7e	Configuration, number of catalytic converters and elements (information to be provided for each separate unit):	Not applicable					
4.1.2.2.	L1e — L7e	Drawing with dimensions, shape and volume of the catalytic converter(s):	Not applicable					
4.1.2.3.	L1e — L7e	Catalytic reaction:	Not applicable					
* 4.1.2.4.	L1e — L7e	Total charge of precious metals:	Not applicable					
* 4.1.2.5.	L1e — L7e	Relative concentration:	Not applicable					
* 4.1.2.6.	L1e — L7e	Substrate (structure and material):	Not applicable					
* 4.1.2.7.	L1e — L7e	Cell density:	Not applicable					
* 4.1.2.8.	L1e — L7e	Casing for the catalytic converter(s):	Not applicable					
4.1.2.9.	L1e — L7e	Location of the catalytic converter(s) (place and reference distance in the exhaust line):	Not applicable					
4.1.2.10.	L1e — L7e	Catalyst heat-shield:	<del>yes/</del> no <sup>(4)</sup>					
4.1.2.11.	L1e — L7e	Brief description and schematic drawing of the regeneration system/method of exhaust after-treatment systems and its control system:	Not applicable					
* 4.1.2.11.1.	L1e — L7e	Normal operating temperature range	Not applicable					
4.1.2.11.2.	L1e — L7e	Consumable reagents: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>					
4.1.2.11.3.	L1e — L7e	Brief description and schematic drawing of the reagent flow (wet) system and its control system:	Not applicable					
4.1.2.11.4.	L1e — L7e	Type and concentration of reagent needed for catalytic action:	Not applicable					
* 4.1.2.11.5.	L1e — L7e	Normal operational temperature range of reagent	Not applicable					
4.1.2.11.6.	L1e — L7e	Frequency of reagent refill: continuous/maintenance <sup>(4)</sup>	Not applicable					
4.1.2.12. 4.1.3.	L1e — L7e	Identifying part number:  Oxygen sensor(s)	Not applicable					
4.1.3.1.	L1e — L7e	Oxygen sensor component(s) drawing(s):	Not applicable					

Item No (Sub) Detailed information					
iteili NO	categories	Detailed Info	iiiiauOii		
4.1.3.2.	L1e — L7e	Drawing of exhaust device with oxygen sensor location(s) (dimensions relative to exhaust valves):	Not applicable		
4.1.3.3.	L1e — L7e	Control range(s)	Not applicable		
4.1.3.4.	L1e — L7e	Identifying part number(s)	Not applicable		
4.1.3.5.	L1e — L7e	Description of oxygen sensor heating system and heating strategy:	Not applicable		
4.1.3.6.	L1e — L7e	Oxygen sensor heat shield(s): yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
4.1.4.		Secondary air-injection (air-inject in exhaust)			
4.1.4.1.	L1e — L7e	Brief description and schematic drawing of the secondary air-injection system and its control system:	Not applicable		
4.1.4.2.	L1e — L7e	Configuration (mechanical, pulse air, air pump etc.) <sup>(4)</sup> :	Not applicable		
4.1.4.3.	L1e — L7e	Working principle:	Not applicable		
4.1.5.		External exhaust gas recirculation (EGR)			
4.1.5.1.	L1e — L7e	Brief description and schematic drawing of the EGR system (exhaust flow) and its control system:	Not applicable		
4.1.5.2.	L1e — L7e	Characteristics:	Not applicable		
4.1.5.3.	L1e — L7e	Water-cooled EGR system: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
4.1.5.4.	L1e — L7e	Air-cooled EGR system: yes/no <sup>(4)</sup>	<del>yes/</del> no <sup>(4)</sup>		
4.1.6.		Particulate filter			
4.1.6.1.	L1e — L7e	PT component drawing with dimensions, shape and capacity of the particulate filter:	Not applicable		
4.1.6.2.	L1e — L7e	Design of the particulate filter:	Not applicable		
4.1.6.3.	L1e — L7e	Brief description and schematic drawing of the particulate filter and its control system:	Not applicable		
4.1.6.4.	L1e — L7e	Location (reference distance in the exhaust line):	Not applicable		
4.1.6.5.	L1e — L7e	Method or system of regeneration, description and drawing:	Not applicable		
4.1.6.6.	L1e — L7e	Identifying part number:	Not applicable		
4.1.7.		Lean NOx trap	Not applicable		
4.1.7.1.	L1e — L7e	Operation principle of lean NOx trap:	Not applicable		
4.1.8.		Additional tailpipe emission-control devices (if any not covered under another heading)			
4.1.8.1.	L1e — L7e	Working principle:	Not applicable		
4.2.		Crankcase emission control system			

Item No (Sub) Detailed information					
item No	categories	Detailed Info	rmation		
4.2.1.	L1e — L7e	Configuration of crank-case gas recycling system (breather system, positive crank-case ventilation system, other) <sup>(4)</sup> (description and drawings). <b>Evaporative emission control system</b>	Not applicable		
4.3.1.	L1e — L7e	Evaporative emissions control system:	<del>yes/</del> no <sup>(4)</sup>		
4.3.2.	L1e — L7e	Drawing of the evaporative control system	Not applicable		
4.3.3.	L1e — L7e	Drawing of the canister (including dimensions and indicating vent and purge mechanism)	Not applicable		
4.3.4.	L1e — L7e	Working capacity	Not applicable		
4.3.5.	L1e — L7e	Adsorption material:	Not applicable		
4.3.6.	L1e — L7e	Housing material:	Not applicable		
4.3.7.	L1e — L7e	Schematic drawing of the fuel tank, indicating capacity and material:	Not applicable		
4.3.8.	L1e — L7e	Drawing of the heat-shield between tank and exhaust device:	Not applicable		
4.4.		Additional information on environmental and propulsion unit performance			
4.4.1.	L1e — L7e	Description and/or schematic drawings of additional pollution-control devices:	Not applicable		
4.4.2.	L1e — L7e	Location of the coefficient of absorption symbol (compression-ignition engines only):	Not applicable		
4.4.3.	L1e — L7e	Applicable information document set out in respectively UN Regulation No 9, 41 or 63 shall supplement this information document with regard to the sound level.	Not applicable		
4.4.4.	L1e — L7e	Applicable information document set out in respectively UN Regulation No 92 shall supplement this information document with regards to the noise-abatement devices installed on the vehicle.	Not applicable		
5		VEHICLE PROPULSION FAMILY			
5.1.	L1e — L7e	To define the vehicle propulsion family, the manufacturer shall submit the information required for classification criteria set out in point 3 of Annex XI to Commission Delegated Regulation (EU) No 134/2014, if not already provided in the information document.	Not applicable		
6		INFORMATION ON FUNCTIONAL SAFETY			

Have No	(Sub)							
Item No	categories	Detailed information						
6.1.		Audible warning devices						
6.1.1.	L1e — L7e	Summary description of device(s) used and their purpose:	Electro magnetic actuated diaphragm Horn					
6.1.2.	L1e — L7e	Drawing(s) showing the location of the audible warning device(s) in relation to the structure of the vehicle:	Refer to drawing No.GRACE-17					
6.1.3.	L1e — L7e	Details of the method of attachment, including the part of the vehicle structure to which the audible warning device(s) is (are) attached:	Refer to drawing No.GRACE-17					
6.1.4. 6.1.4.1.	L1e — L7e L1e — L7e	Electrical/pneumatic circuit diagram: Voltage: AC/DC <sup>(4)</sup>	Refer to drawing No.GRACE-18 AC/DC <sup>(4)</sup>					
6.1.4.2.	L1e — L7e	Rated voltage or pressure:	12V					
6.1.5.	L1e — L7e	Drawing of the mounting device:	Refer to drawing No.GRACE-17					
6.2.		Braking, including anti-lock and combined braking systems	· ·					
6.2.1.	L1e — L7e	Characteristics of the brakes, including details and drawings of the drums, discs, hoses, make and type of shoe/pad assemblies and/or linings, effective braking areas, radius of drums, shoes or discs, mass of drums, adjustment devices, relevant parts of the axle(s) and suspension, levers, pedals (4):	Refer to drawing No.GRACE-19, GRACE-20,GRACE-21,GRACE-22, GRACE-23					
6.2.2.	L1e — L7e	Operating diagram, description and/or drawing of the braking system, including details and drawings of the transmission and controls as well as a brief description of the electrical and/or electronic components used in the braking system <sup>(4)</sup> :	Refer to drawing No.GRACE-19					
6.2.2.1.	L1e — L7e	Front, rear and sidecar brakes, disc and/or drum <sup>(4)</sup> :	Refer to drawing No.GRACE-20					
6.2.2.2.	L1e — L7e	Parking braking system:	Not applicable					
6.2.2.3.	L1e — L7e	Any additional braking system	Not applicable					
6.2.3.	L1e — L7e	Vehicle is equipped to tow a trailer with no brake/overrun brake/electric/pneumatic/hydraulic service brakes: yes/no <sup>(4)</sup> :	<del>yes</del> /no <sup>(4)</sup> :					
6.2.4.	L1e — L7e	Anti-lock/Combined braking system						
6.2.4.1.	L1e — L7e	Anti-lock braking system:	<del>yes/</del> no <del>/optional</del> <sup>(4)</sup>					
6.2.4.2.	L1e — L7e	Combined braking system:	<del>yes/</del> no <del>/optional</del> <sup>(4)</sup>					
6.2.4.3.	L1e — L7e	Anti-lock and combined braking system:	yes/no/optional <sup>(4)</sup>					
6.2.4.4.	L1e — L7e	Schematic drawing(s):	Not applicable					
6.2.5.	L1e — L7e	Hydraulic reservoir(s) (volume and location):	Refer to drawing No.GRACE-23					

Item No	(Sub)	Detailed information					
item No	categories	Detailed into	rmation				
6.2.6.	L1e — L7e	Particular characteristics of the braking system(s)					
6.2.6.1.	L1e — L7e	Brake shoes and/or pads <sup>(4)</sup> :	Refer to drawing No.GRACE-21				
6.2.6.2.	L1e — L7e	Linings and/or pads (indicate make, type, grade of material or identification mark):	Refer to drawing No.GRACE-22				
6.2.6.3.	L1e — L7e	Brake levers and/or pedals <sup>(4)</sup> :	Refer to drawing No.GRACE-19				
6.2.6.4.	L1e — L7e	Other devices (where applicable):	Not applicable				
6.3.		Electrical safety					
6.3.1.	L1e — L7e	Brief description of the power circuit components installation and drawings/photographs showing the location of the power circuit components installation:	Refer to drawing No.GRACE-06, GRACE-18,GRACE-35				
6.3.2.	L1e — L7e	Schematic diagram of all electrical functions included in power circuit	Refer to drawing No.GRACE-18				
6.3.3.	L1e — L7e	Working voltage(s) (V):	≤60V				
6.3.4.	L1e — L7e	Description of protection against electric- shocks:	Emergency power,short circuit protection switch				
6.3.5.	L1e — L7e	Fuse and/or circuit breaker	yes <del>/no/optional<sup>(4)</sup></del>				
6.3.5.1.	L1e — L7e	Diagram showing the functional range	Refer to drawing No.GRACE-18				
6.3.6.	L1e — L7e	Configuration of power wiring harness	According with nation standard				
6.4.		Front and rear protective structures					
6.4.1.	110 170	Front protective structure	Not applicable				
6.4.1.1.	L1e — L7e	Detailed technical description (including photographs or drawings)	Not applicable				
6.4.1.2.	L1e — L7e	Materials used:	Not applicable				
6.4.2.	14. 17.	Rear protective structure	Net and Park I				
6.4.2.1.	L1e — L7e	Detailed technical description (including photographs or drawings):	Not applicable				
6.4.2.2.	L1e — L7e	Materials used:	Not applicable				
6.5.		Glazing, windscreen wipers and washers, and defrosting and demisting systems					
6.5.1.		Windscreen					
6.5.1.1.	L2e, L5e, L6e, L7e	Materials used:	Not applicable				
6.5.1.2.	L2e, L5e, L6e, L7e	Method of mounting:	Not applicable				
6.5.1.3.	L2e, L5e, L6e, L7e	Angle of inclination:	Not applicable				
6.5.1.4.	L2e, L5e, L6e, L7e	Windscreen accessories and the position in which they are fitted, together with a brief description of any electrical/electronic components:	Not applicable				

		Application date: September 22 20	. •
Item No	(Sub) categories	Detailed info	ormation
6.5.1.5.	L2e, L5e, L6e, L7e	Drawing of the windscreen with dimensions:	Not applicable
6.5.2.		Other windows	
6.5.2.1.	L2e, L5e, L6e, L7e	Materials used:	Not applicable
6.5.2.2	L2e, L5e, L6e, L7e	A brief description of the electrical/electronic components (if any) of the window lifting mechanism:	Not applicable
6.5.3.		Opening roof glazing	
6.5.3.1.	L2e, L5e, L6e, L7e	Materials used:	Not applicable
6.5.4.		Other glass panes	
6.5.4.1.	L2e, L5e, L6e, L7e	Materials used:	Not applicable
6.6.		Windscreen wiper(s)	
6.6.1.	L2e, L5e, L6e, L7e	Detailed technical description (including photographs or drawings):	Not applicable
6.7.		Windscreen washer	
6.7.1.	L2e, L5e, L6e, L7e	Detailed technical description (including photographs or drawings)	Not applicable
6.7.2.	L2e, L5e, L6e, L7e	Capacity of the reservoir	Not applicable
6.8.		Defrosting and demisting	
6.8.1.	L2e, L5e, L6e, L7e	Detailed technical description (including photographs or drawings):	Not applicable
6.9.		Driver-operated controls including identification of controls, tell-tales and indicators	
6.9.1.	L1e — L7e	Arrangement and identification of controls, tell-tales and indicators:	Refer to drawing No.GRACE-24, GRACE-25
6.9.2.	L1e — L7e	Photographs and/or drawings of the arrangement of symbols and	Refer to drawing No.GRACE-24, GRACE-25
6.9.3.	L1e — L7e	controls, tell-tales and indicators: Controls, tell-tales and indicators for which, when fitted, identification is mandatory, including the identification symbols to be used for that purpose:	Refer to drawing No.GRACE-24, GRACE-25
6.9.4.	L1e — L7e	Summary table: the vehicle is equipped with the following driver-operated controls, including indicators and tell-tales <sup>(4)</sup>	

Item No	(Sub) categories	Detailed information								
		Controls, tell-tales and indicators for which, when fitted, identification is mandatory, and symbols to be used for that purpose								
		Symbo I No	Device	Control / indicator availabl e (+)	Identifi ed by symbol (+)	Where (++)	Tell- tale availabl e ( + )	Identified by symbol (+)	Whe re (++	
		1	Master light	-	-	-	-	-	-	
		2	Dipped- beam head lamps	x	x	С	x	x	d	
		3	Main-beam head lamps	х	х	С	х	х	d	
		4	Position (side) lamps	-	-	-	-	-	-	
		5	Front fog lamps	-	-	-	-	-	-	
		6	Rear fog lamp	-	-	-	-	-	-	
		7	Headlamp levelling device	-	1	-	-	-	-	
		8	Parking lamps	-	-	1	-	-	-	
		9	Direction indicators	x	Х	С	х	Х	d	
		10	Hazard warning	-	-	-	-	-	-	
		11	Windscreen wiper	-	-	-	-	-	-	
		12	Windscreen washer	-	-	-	-	-	_	
		13	Windscreen wiper and washer	-	-	-	-	-	-	
		14	Headlamp cleaning device	-	-	-	-	-	-	
		15	Windscreen demisting and defrosting	-	-	-	-	-	-	
		16	Rear window demisting and defrosting	_	-	-	_	_	_	

Item No	(Sub) categories			De	etailed inf	ormation	1		
		17	Ventilating fan	-	-		-	-	_
		18	Diesel pre- heat	_	-	-	-	-	-
		19	Choke	-	-	-	-	-	-
		20	Brake failur	e -	-	_	-	-	-
		21	Fuel level	-	-	-	-	-	-
		22	Battery charging condition	_	-	_	-	_	-
		23	Engine coolant temperature	e -	_	_	_	_	_
		24	Malfunction indicator light (MI)		-	-	-	-	-
6.9.5.	L1e — L7e	Control which, options used if	o = optional. d = directly on c = in close viols, tell-tales ar when fitted, ic al, and symbol they are to be optional, and s	cinity.  Ind indicato Ientification Is which Is identified Is and indi	rs for  is shall be cators for	which, wl			
		Sym bol No	Device	Control / indicator availabl e ( + )	Identifie d by symbol (+)	Where (++)	Tell-tale availabl e ( + )	Identifie d by symbol (+)	Where (++)
		1	Parking brake	-	-	-	-	-	-
		2	Rear window wiper	-	-	-	-	-	-
		3	Rear window washer	-	-	-	-	-	-
		4	Rear window wiper and washer	-	-	-	-	-	-

Application date: September 22 2016									
Item No	(Sub)	Detailed information							
	categories						•		
		5	Intermittent windscreen wiper	_	_	_	_	_	*
		6	Audible warning device (horn)	x	x	d	_	_	
		7	Front hood (bonnet)	-	-	-	_	_	_
		8	Rear hood (boot)	-	-	-	-	-	-
		9	Rear hood (boot)	-	-	-	_	-	-
		10	Engine oil pressure	-	-		-	-	
		11	Unleaded petrol	-	-	-	-	-	-
		12							
		13 (+)	x = yes						
		( ' )	- = no or not s	separately a	vailable				
		( , , , )	o = optional.	control in	diaatar ar t	all tala			
		(++)	d = directly on c = in close vi		icator or te	eli-tale			
6.10.		Speed	ometer and c						
6.10.1.		Speed	ometer						
6.10.1.1.	L1e — L7e	comple	graphs and/or ete system:			Refer	to drawing	y No.GRAC	E-25
6.10.1.2.	L1e — L7e		e speed range			0-99k			
6.10.1.3.	L1e — L7e	of the	nce of the measpeedometer:			+4km			
6.10.1.4.	L1e — L7e		cal constant o	•			z@45km/		
6.10.1.5.	L1e — L7e		d of operation ve mechanism		iption of	in acc	ordance	value linea with the m or located	
6.10.1.6.	L1e — L7e	mecha		ratio of th	e drive	1puls	e/rev		
6.10.2.		Odome							
6.10.2.1.	L1e — L7e	of the	nce of the mean odometer:			≤10kr			
6.10.2.2.	L1e — L7e		d of operation ve mechanism		iption of	signa instru the si series stepp	I transmis ment, ins gnal shap s of opera	d sensor a ssion to the trument th bing filter, t itions,sent drive, drive	e irough to through a

Application date: September 22 2016									
Item No		(Sub) Detailed information							
6.11.  Installation of lighting, lightsignalling devices, including automatic switching of lighting  List of all devices (mentioning the number, make(s),type, component typeapproval mark(s), the maximum intensity of the main-beam headlamps, colour, the corresponding tell-tale):									
Lamp fur	nction	QTY.	Colour	Tell-tale	Max. intensity	Make	Туре	Approval mark	
High be Low b		1	white	Blue /	22500cd	XINRI	XR-FYJZ-QD	E11 113R-007571	
Front posi lamp	ition	1	White	Via panel plate		XINRI	XR-FYJZ-WZD	E11 50R-007650	
Fron direction		2	amber	green		XINRI	XR-FYJZ-FZXD	E11 50R-007651	
Rear directio	n	2	amber	green		XINRI	XR-FYJZ-WD	E11 50R-007652	
Rear pos lamp		1	red	Via panel plate		XINRI	XR-FYJZ-WD	E11 50R-007652	
Stop	lamp	1	red	no		XINRI	XR-FYJZ-WD	E11 50R-007652	
Rear registrati	on	1	white	no		8	DN-MN-PZD-1	E11 50R-007563	
Rear ref	ector	1	red	no		K-LITE	KM-202	IA-E9-02.1269	
Side ref	lector	2	amber	no		K-LITE	KM-101	IA-E9-02.1270	
6.11.2.	L1e -	— L7e		n showing t and light-s			Refer to drawing	g No.GRACE-26	
6.11.3.	L1e -	— L7е		_	•		Not applicable		
6.11.4. 6.11.5.	L1e -	— L7е — L7е	Brief de electror lighting system: For eve	Hazard warning lamps: Brief description of the electrical and/or electronic components used in the lighting system and in the light-signalling system: For every lamp and reflector, supply the				g No.GRACE-18	
6.11.5.1.	L1e — L7e		diagram Drawing	following information (in writing and/or by diagram): Drawing showing the extent of the illuminating surface:			See components certificate		
6.11.5.2.	5.2. L1e — L7e		Method surface UNECE 6.12.20	Method used to define the apparent surface in accordance with point 2.10 of UNECE Regulation No 48 (OJ L 323, 6.12.2011, p. 46):			See componer		
6.11.5.3.	L1e -	— L7e	Axis of reference	reference an ce:	id centre of		See componer	nts certificate	
6.11.5.4.	L1e -	— L7e	Method lamps:	of operation	of conceal	able	e Not applicable		

Item No	(Sub)	Detailed info	rmation
	categories		
6.11.6.	L1e — L7e	Description/drawing and type of headlamp levelling device (e.g. automatic, stepwise manually adjustable, continuously manually adjustable) <sup>(4)</sup> :	Not applicable
6.11.6.1.	L1e — L7e	Control device:	Not applicable
6.11.6.2.	L1e — L7e	Reference marks:	Not applicable
6.11.6.3. 6.12.	L1e — L7e	Marks assigned for loading conditions:  Rearward visibility	Not applicable
6.12.1.		Rear-view mirrors (stating for each mirror)	
6.12.1.1.	L1e — L7e	Drawing(s) for the identification of the mirror showing the position of the mirror relative to the vehicle structure:	Refer to drawing No.GRACE-27
6.12.1.2.	L1e — L7e	Details of the method of attachment including that part of the vehicle structure to which it is attached:	Refer to drawing No.GRACE-28
6.12.1.3.	L1e — L7e	A brief description of the electronic components of the adjustment system:	Not applicable
6.12.2.	L1e — L7e	Devices for indirect vision other than mirrors	
6.12.2.1.	L1e — L7e	Description of the device:	Not applicable
6.12.2.2.	L1e — L7e	In the case of a camera-monitor device, the detection distance (mm),contrast, luminance range, glare correction, display performance (black and white/colour <sup>(4)</sup> ), image repetition frequency, luminance reach of the monitor <sup>(4)</sup> :	Not applicable
<ul><li>6.12.2.3.</li><li>6.13.</li></ul>	L1e — L7e	Sufficiently detailed drawings to identify the complete device, including installation instructions; the position for the EU type-approval mark has to be indicated on the drawings:  Rollover protective structure (ROPS)	Not applicable
6.13.1.	L7e-B2	Detailed technical description, position,	Not applicable
	L10-02	fixing, etc. (including photographs or drawings):	Hot applicable
6.13.2.		ROPS by Frame <sup>(4)</sup>	
6.13.2.1.	L7e-B2	Internal and external dimensions:	Not applicable
6.13.2.2. 6.13.3.	L7e-B2	Material(s) and method of construction:  ROPS by Cab (4)	Not applicable
6.13.3.1.	L7e-B2	Other weather protection arrangements (description):	Not applicable
6.13.3.2. 6.13.4.	L7e-B2	Internal and external dimensions:  ROPS by Roll bar(s) mounted at	Not applicable
	Í	front/rear <sup>(4)</sup> , fold-down/not fold down <sup>(4)</sup>	

Itom No	Item No (Sub) Detailed information			
item No	categories	Detailed Information		
6.13.4.2.	L7e-B2	Material(s) and method of construction:	Not applicable	
6.14.		Safety belts and/or other restraints		
6.14.1.	L2e, L4e, L5e-B, L6e- B, L7e	Number and position of safety belts and restraint systems and seats on which they can be used, please fill out table below:	Not applicable	
6.14.2.	L2e, L4e, L5e-B, L6e- B, L7e	Description of a specific type of belt, with one anchorage attached to the seat back-rest or incorporating an energy-dissipation device:	Not applicable	
6.14.3.	L2e, L4e, L5e-B, L6e- B, L7e	Number and location of the anchorages:	Not applicable	
6.14.4.	L2e, L4e, L5e-B, L6e- B, L7e	Brief description of electrical/electronic components:	Not applicable	
6.15.	,	Safety belt anchorages		
6.15.1.	L2e, L4e, L5e-B, L6e- B, L7e	Photographs and/or drawings of the bodywork showing the true, effective location and dimensions of the anchorages, together with an indication of the R-point:	Not applicable	
6.15.2.	L2e, L4e, L5e-B, L6e- B, L7e	Drawings of the anchorages and the parts of the vehicle structure to which they are attached (together with a statement on the nature of the materials used):	Not applicable	
6.15.3.	L2e, L4e, L5e-B, L6e- B, L7e	Designation of the types of belts <sup>(14)</sup> authorised for attachment to the anchorages on the vehicle:	Not applicable	
6.15.4.	L2e, L4e, L5e-B, L6e- B, L7e	Type-approval mark for each position:	Not applicable	
6.15.5.	L2e, L4e, L5e-B, L6e- B, L7e	Special devices (example: seat-height adjustment, preloading device, etc.):	Not applicable	
6.15.6.	L2e, L4e, L5e-B, L6e- B, L7e	Photographs and/or drawings of the bodywork showing the true, effective location and dimensions of the anchorages, together with an indication of the R-point:	Not applicable	
6.15.7.	L2e, L4e, L5e-B, L6e- B, L7e	Observation:	Not applicable	
6.16.		Seating positions (saddles and seats)		
6.16.1.	L1e — L7e	Number of seating positions:	2	

Item No	(Sub)	Detailed information		
6.16.1.1.	categories	Location and arrangement(8)	Not applicable	
0.10.1.1.	L2e, L5e, L6e, L7e	Location and arrangement <sup>(8)</sup> :	Not applicable	
6.16.2.	L1e — L7e	Seating position configuration:	seat/saddle <sup>(4)</sup>	
6.16.3.	L1e — L7e	Description and drawings of:		
6.16.3.1.	L1e — L7e	The seats and their anchorages:	Refer to drawing No.GRACE-36	
6.16.3.2.	L1e — L7e	The adjustment system:	Not applicable	
6.16.3.3.	L1e — L7e	The displacement and locking systems:	Not applicable	
6.16.3.4.	L1e — L7e	The seat-belt anchorages incorporated in the seat structure:	Not applicable	
6.16.3.5.	L1e — L7e	The parts of the vehicle used as anchorages:	Not applicable	
6.16.4.	L2e, L4e, L5e-B, L6e- B, L7e	Coordinates or drawing of the R-point(s) of all seating positions:	Not applicable	
6.16.4.1.	L2e, L4e, L5e-B, L6e- B, L7e	Driver's seat:	Not applicable	
6.16.4.2.	L2e, L4e, L5e-B, L6e- B, L7e	All other seating positions:	Not applicable	
6.16.5.	L1e — L7e	Design torso angle:		
6.16.5.1.	L1e — L7e	Driver's seat:	Not applicable	
6.16.5.2.	L1e — L7e	All other seating positions:	Not applicable	
6.16.6.	L1e — L7e	Range of seat adjustment:		
6.16.6.1.	L1e — L7e	Driver's seat:	Not applicable	
6.16.6.2.	L1e — L7e	All other seating positions:	Not applicable	
6.17.		Steer-ability, cornering properties and turn-ability		
6.17.1.	L1e — L7e	Schematic diagram of steered axle(s) showing steering geometry:	Refer to drawing No.GRACE-29	
6.17.2.		Transmission and control of steering		
6.17.2.1.	L1e — L7e	Configuration of steering transmission (specify for front and rear):	Refer to drawing No.GRACE-29	
6.17.2.2.	L1e — L7e	Linkage to wheels (including other than mechanical means; specify for front and rear):	Refer to drawing No.GRACE-29	
6.17.2.2.1.	L1e — L7e	A brief description of the electrical/electronic components:	Not applicable	
6.17.2.3.	L1e — L7e	Diagram of the steering transmission:	Refer to drawing No.GRACE-29	
6.17.2.4.	L2e, L5e, L6e, L7e	Schematic diagram(s) of the steering control(s):	Not applicable	
6.17.2.5.	L2e, L5e, L6e, L7e	Range and method of adjustment of the steering control(s):	Not applicable	

				Арр	lication date: Septen	nber 22 2016	6		
Item No (Sub) categories			De	etailed infor	matio	on			
6.17.2.6.		L2e, L5e, L6e, L7e		Method of assistance:		Not a	applicable		
6.17.3.			_		steering angle of the	wheels	00.1		
6.17.3.1.		L1e — L		To the righ				egrees	
6.17.3.2. 6.18.		L1e — L	7e	To the left:	eels combination		30 d	egrees	
6.18.1.				Tyres:	eis combination				
6.18.1.1.				Size desig					
		Make		Tire	Approval No.	Rolling circumfere		Tire Pressure	
	YU	IANXING	90	/90-10,55J	E4-75R-0007289	1244mr	n	300kPa	
Front	k	KENDA	90,	/90-10,50J	E11 75R-000209	1244mr	n	250kPa	
	C	CHENG SHIN	90,	/90-10,50J	E4 75R-000090	1244mr	n	250kPa	
	YU	IANXING	90	/90-10,55J	E4-75R-0007289	1244mr	n	300kPa	
Rear	ŀ	KENDA	90	/90-10,50J	E11 75R-000209	1244mr	n	250kPa	
	C	CHENG SHIN	90,	/90-10,50J	E4 75R-000090	1244mr	n	250kPa	
6.18.1.1.	1.	L1e — L	7e	Axle 1:				0-10,55J	
6.18.1.1.2	2.	L1e — L	7e	Axle 2:			90/9	0-10,50J 0-10,55J	
6.18.1.1.	3.	L4e		Sidecar wl	neel:			0-10,50J applicable	
6.18.1.2.		L1e — L	7e		oad-capacity index:		Fron Rear	t:17	
6.18.1.3.		L1e — L	7e		speed category syr		В	.77	
				•	e with the theoret				
6.18.1.4.		L1e — L	7e	Tyre press	maximum design vehicle speed:  Tyre pressure(s) as recommended by the vehicle manufacturer:		300k	:Pa	
6.18.2.				Wheels:					
6.18.2.1.		L1e — L	7e	Rim size(s	):		Fron	t,Rear:10	
6.18.2.2.		L1e — L	7e	Categories vehicle:	s of use compatible v	vith the	Not a	applicable	
6.18.2.3. 6.19.		L1e — L	7e	Nominal ro	olling circumference:		Fron	t,Rear:1244mm	
6 10 1		170 D1 -	n d	<del>-</del>	its location on the		NI <sub>0</sub> +	annlicable	
6.19.1.		L7e-B1 a L7e- B2	ırıa	(indicate the	speed limitation platence reflecting materiatings and photos may riate):	I	NOL 8	applicable	

Item No	(Sub)	Detailed information		
6.19.2.	L7e-B1 and L7e-B2	Location of maximum speed limitation plate (indicate variants where necessary; drawings and photos may be	Not applicable	
6.19.3.	L7e-B1 and L7e- B2	used as appropriate): Height above road surface, upper edge	Not applicable	
6.19.4.	L7e-B1 and L7e- B2	Height above road surface, lower edge	Not applicable	
6.19.5.	L7e-B1 and L7e- B2	Distance of the centre line from the longitudinal median plane of the vehicle	Not applicable	
6.19.6.	L7e-B1 and L7e- B2	Distance from the left vehicle edge:	Not applicable	
6.20.		Vehicle occupant protection, including interior fittings and vehicle doors		
6.20.1.		Bodywork		
6.20.1.1.	L2e, L5e-B, L6e- B, L7e	Materials used and methods of construction:	Not applicable	
6.20.2.		Occupant doors, latches and hinges		
6.20.2.1.	L2e, L5e, L6e, L7e	Number of doors, and its configuration, dimensions and maximum angle of opening <sup>(5)</sup> :	Not applicable	
6.20.2.2.	L2e, L5e, L6e, L7e	Drawing of latches and hinges and of their position in the doors:	Not applicable	
6.20.2.3.	L2e, L5e, L6e, L7e	Technical description of latches and hinges:	Not applicable	
6.20.2.4.	L2e, L5e, L6e, L7e	Details, including dimensions, of entrances, steps and necessary handles where applicable:	Not applicable	
6.20.3.		Interior protection for occupants		
6.20.3.1. 6.20.4.	L2e, L5e, L6e, L7e	Photographs, drawings and/or an exploded view of the interior fittings, showing the parts in the passenger compartment and the materials used (with the exception of interior rear view mirrors, arrangement of controls, seats and the rear part of seats), roof and opening roof, backrest:  Head restraints	Not applicable	
6.20.4.	L2e, L5e,	Head restraints:	Not applicable	
0.20.4.1.	L6e, L7e	integrated/detachable/separate(4)	ττοι αργιιοαρίο	
6.20.4.2.	L2e, L5e, L6e, L7e	Detailed description of the head restraint, specifying in particular the nature of the padding material or materials and, where applicable, the position and specifications of the braces and anchorage pieces for the type of seat for which approval is sought:	Not applicable	

14	(Sub)			
Item No	categories	Detailed info	rmation	
6.20.4.3.	L2e, L5e, L6e, L7e	In the case of a 'separate' head restraint		
6.20.4.3.1.	L2e, L5e, L6e, L7e	Detailed description of the structural zone to which the head restraint is intended to be fixed:	Not applicable	
6.20.4.3.2.	L2e, L5e, L6e, L7e	Scale drawings of the significant parts of the structure and the head restraint:	Not applicable	
6.21.		Maximum continuous total power and/or maximum vehicle speed limitation by design		
6.21.1.		Propulsion and/or drive-train output governors		
6.21.1.1.	L1e — L7e	Number (minimum two, exemption L3e-A3 and L4e-A3):	Not applicable	
6.21.1.2.	L1e — L7e	How is the redundancy of governors ensured?	Not applicable	
6.21.1.3. 6.21.1.3.1.	L1e — L7e L1e — L7e	Nominal cut-off point no 1: Engine/motor/drive-train rotation speed	Not applicable	
		at which cut-off starts under load	Not applicable	
6.21.1.3.2.	L1e — L7e	Maximum rotation speed at the minimum engine load:	Not applicable	
6.21.1.4.	L1e — L7e	Nominal cut-off point no 2:		
6.21.1.4.1	L1e — L7e	Engine/motor/drive-train rotation speed at which cut-off starts under load <sup>(4)</sup> :	Not applicable	
6.21.1.4.2.	L1e — L7e	Maximum rotation speed at the minimum engine load:	Not applicable	
6.21.1.5.	L1e — L7e	The stated purpose of governor(s): maximum design vehicle speed limitation/maximum power limitation/engine over-speed protection <sup>(4)</sup> :	Not applicable	
7		INFORMATION ON VEHICLE CONSTRUCTION		
7.1.		Coupling devices and attachments		
7.1.1.	L1e — L7e	L-category vehicle equipped with coupling device:	<del>yes/</del> no <del>/optional<sup>(4)</sup></del>	
7.1.2.	L1e — L7e	Guidelines and information for consumers in all EU languages regarding the impact on the driveability of using a trailer with an L-category vehicle included in the owner's manual:)	<del>yes</del> /no <sup>(4)</sup>	
7.1.3.	L1e — L7e	For coupling-device approved as separate technical unit: installation and operating instructions added to documentation: yes/no <sup>(4)</sup>	<del>yes</del> /no <sup>(4)</sup>	

	Application date. Deptember 22 2010			
Item No	(Sub)	Detailed info	rmation	
	categories			
7.1.4.	L1e — L7e	Photographs and/or drawings showing the position and the construction of the coupling-devices:	Not applicable	
7.1.5.	L1e — L7e	Instructions for attaching the coupling- type to the vehicle and photo graphs or drawings of the fixing points on the vehicle as stated by the manufacturer; additional information, if the use of the coupling-type is restricted to certain variants or versions of the vehicle type:	Not applicable	
7.1.6. 7.2.	L1e — L7e	Attachment points for a secondary coupling and/or breakaway cable(drawings and pictures may be used as appropriate): yes/no <sup>(4)</sup> Devices to prevent unauthorised use	Not applicable	
7.2.1.		Protective device		
7.2.1.1.	L1e — L7e	Summary description of protective device(s) used:	Refer to drawing No.GRACE-30	
7.2.2.		Vehicle immobiliser		
7.2.2.1.	L1e — L7e	Technical description of the vehicle immobiliser and of the measures taken against inadvertent activation:	Not applicable	
7.2.3.		Alarm system		
7.2.3.1.	L1e — L7e	Description of the alarm system and of the vehicle parts involved in its installation:	Refer to drawing No.GRACE-37	
7.2.3.2.	L1e — L7e	List of the main components comprising the alarm system:	Refer to drawing No.GRACE-37	
7.3.		Electromagnetic compatibility (EMC)		
7.3.1.	L1e — L7e	Requirements under UNECE Regulation No 10 (OJ L 254, 20.9.2012, p. 1) are met with relevant documentation included in the information document:	yes/ <del>no<sup>(4)</sup></del>	
7.3.2.	L1e — L7e	Table or drawing of radio-interference control equipment:	Not applicable	
7.3.3.	L1e — L7e	Particulars of the nominal value of the direct-current resistance, and, in the case of resistive ignition cables, of their nominal resistance per metre:	Not applicable	
7.4.		External projections		

Item No	(Sub)	Detailed information		
	categories			
7.4.1.	L1e — L7evehicles with bodywork	General arrangement (drawing or photographs accompanied if necessary by dimensional details and/or text) indicating the position of the attached sections and views, of any parts of the	Refer to drawing No.GRACE-31	
		exterior surface which can be regarded as critical for external projections, for example, and where relevant: bumpers, floor line, door and window pillars, airintake grilles, radiator grille, windscreen wipers, rain gutter channels, handles, slide rails, flaps, door hinges and locks, hooks, eyes, winches, decorative trim,		
7.5.		badges, emblems and recesses and any other parts of the exterior surface which can be regarded as critical (e.g. lighting equipment):  Fuel storage		
7.5. 7.5.1.		Fuel tank(s)		
7.5.1. 7.5.1.1.		Main fuel tank(s)		
7.5.1.1. 7.5.1.1.1.	L1e — L7e	Maximum capacity:	Not applicable	
7.5.1.1.2.	L1e — L7e	Materials used:	Not applicable  Not applicable	
7.5.1.1.3.	L1e — L7e	Fuel tank inlet: restricted orifice/label <sup>(4)</sup>	Not applicable	
7.5.1.2.	L1e — L7e	Reserve fuel tank(s):	Not applicable	
7.5.1.2. 7.5.1.2.1.	L1e — L7e	Maximum capacity:	Not applicable	
7.5.1.2.1.	L1e — L7e	Materials used:	Not applicable	
7.5.1.2.3.	L1e — L7e	Fuel tank inlet: restricted orifice/label <sup>(4)</sup>	Not applicable	
7.5.1.3.	L1e — L7e	Drawing and technical description of the tank(s) with connections and lines of the breathing and venting system, locks, valves, fastening devices:	Not applicable	
7.5.1.4.	L1e — L7e	Drawing clearly showing the position of the tank(s) in the vehicle:	Not applicable	
7.5.1.5.	L1e — L7e	Drawing of the heat shield between tank and exhaust device:	Not applicable	
7.5.2.		Compressed natural gas (CNG) container(s)		
7.5.2.1.	L1e — L7e	Applicable information document set out in UNECE regulation No 110 <sup>(1)</sup> as prescribed for vehicle category M1 shall supplement this information document with regards to the CNG tanks installed on the vehicle.	Not applicable	
7.5.3.	L1e — L7e	Liquefied petroleum gas (LPG)container(s)		

Item No	(Sub)	Detailed info	rmation
item NO	categories	Detailed into	imation
7.5.3.1. 7.6.	L1e — L7e	Applicable information document set out in UNECE regulation No 67 (2) as prescribed for vehicle category M1 shall supplement this information document with regards to the LPG tanks installed on the vehicle.  On-board diagnostics (OBD) functional requirements	Not applicable
7.6.1		On-board diagnostics system	
7.6.1.1.	L1e — L7e	Stage I: yes/no(4) and/or	Not applicable
7.6.1.2.	L1e — L7e	Stage II: yes/no(4)	Not applicable
7.6.2.		OBD system general information	
7.6.2.1.	L3e— L7e <sup>(10)</sup>	Written description and/or drawing of the malfunction indicator (MI):	Not applicable
7.6.2.2.	L3e— L7e <sup>(10)</sup>	List and purpose of all components monitored by the OBD system:	Not applicable
7.6.2.3.	L3e— L7e <sup>(10)</sup>	Written description (general working principles) for all OBD stage I circuit (open circuit, shorted low and high, rationality) and electronics (PCU/ECU internal and communication) diagnostics:	Not applicable
7.6.2.4.	L3e— L7e <sup>(10)</sup>	Written description (general working principles) for all OBD stage I diag nostic functionality triggering any operating mode which significantly reduces engine torque in case of fault detection:	Not applicable
7.6.2.5.	L3e— L7e <sup>(10)</sup>	Written description of the communication protocol(s) supported:	Not applicable
7.6.2.6.	L3e— L7e <sup>(10)</sup>	Physical location of diagnostic- connector (add drawings and photo- graphs):	Not applicable
7.6.2.7.	L3e— L7e <sup>(10)</sup>	Written description in case of voluntary compliance with OBD stage II (general working principles):	
7.6.2.7.1.	L3e— L7e <sup>(10)</sup>	Positive-ignition engines	Not applicable
7.6.2.7.1.1.	L3e— L7e <sup>(10)</sup>	Catalyst monitoring:	Not applicable
7.6.2.7.1.2.	L3e — L7e <sup>(10)</sup>	Misfire detection:	Not applicable
7.6.2.7.1.3.	L3e — L7e <sup>(10)</sup>	Oxygen sensor monitoring:	Not applicable
7.6.2.7.1.4.	L3e — L7e <sup>(10)</sup>	Other components monitored by the OBD system	Not applicable
7.6.2.7.2.	L3e — L7e <sup>(10)</sup>	Compression-ignition engines	
7.6.2.7.2.1.	L3e — L7e <sup>(10)</sup>	Catalyst monitoring:	Not applicable

Application date: September 22 2016  (Sub)			
Item No	categories	Detailed info	rmation
7.6.2.7.2.2.	L3e —	Particulate filter monitoring:	Not applicable
7.6.2.7.2.3.	L7e <sup>(10)</sup> L3e —	Electronic fuelling system monitoring:	Not applicable
7.6.2.7.2.4.	L7e <sup>(10)</sup> L3e — L7e <sup>(10)</sup>	deNOx system monitoring:	Not applicable
7.6.2.7.2.5.	L3e — L7e <sup>(10)</sup>	Other components monitored by the OBD system:	Not applicable
7.6.2.7.3	L3e — L7e <sup>(10)</sup>	Criteria for MI activation (fixed number of driving cycles or statistical method):	Not applicable
7.6.2.7.4.	L3e — L7e <sup>(10)</sup>	List of all OBD output codes and formats used (with explanation of each):	Not applicable
7.6.3.		OBD compatibility	
		The following additional information shall be provided by the vehicle manufacturer to enable the manufacture of OBD-compatible replacement or service parts, diag nostic tools and test equipment:	Not applicable
7.6.3.1.	L3e — L7e <sup>(10)</sup>	A comprehensive document describing all sensed components concerned with the strategy for fault detection and MI activation (fixed number of driving cycles or statistical method). This shall, include a list of relevant secondary sensed parameters for each component monitored by the OBD system. The document shall also list all OBD output codes and formats (with an explanation of each) used in association with individual emission- related powertrain components and individual non-emission-related components, where monitoring the component is used to determine MI activation. This shall contain, in particular, a comprehensive explanation for the data given in service \$05 Test ID \$ 21 to FF and the data given in service \$06:	Not applicable
7.6.3.2.	L3e — L7e <sup>(10)</sup>	For vehicle types using a communication link in accordance with ISO 15765-4 'Road vehicles, diagnostics on controller area network (CAN)— Part 4: requirements for emissions-related systems', the manufacturer shall provide a comprehensive explanation for the data given in service \$06 Test ID \$00 to FF, for each OBD monitor ID supported:	Not applicable

Application date: September 22 2016			
Item No	(Sub) categories	Detailed info	rmation
7.6.3.3.	L3e — L7e <sup>(10)</sup>	The information required above may be provided in table form as described below.	Not applicable
7.6.3.4.	L3e — L7e <sup>(10)</sup>	Description of ETC diagnostic fault codes:	Not applicable
7.6.4.		Communication protocol information The following information shall be referenced to a specific vehicle make, model and variant, or identified using other workable definitions such as VIN or vehicle and systems identification:	Not applicable
7.6.4.1.	L3e — L7e <sup>(10)</sup>	Any protocol information system needed to enable complete diagnostics in addition to the standards prescribed in point 3.8. of Appendix 1 to Annex XII to Commission Delegated Regulation (EU) No 44/2014, such as additional hardware or software protocol information, parameter identification, transfer functions, 'keep alive' requirements, or error conditions;	Not applicable
7.6.4.2.	L3e — L7e <sup>(10)</sup>	Details of how to obtain and interpret all fault codes not in accordance with the standards prescribed in point 3.11. of Appendix 1 to Annex XII to Commission Delegated Regulation (EU) No 44/2014	Not applicable
7.6.4.3.	L3e — L7e <sup>(10)</sup>	A list of all available live data parameters including scaling and access information;	Not applicable
7.6.4.4.	L3e — L7e <sup>(10)</sup>	A list of all available functional tests including device activation or control and the means to implement them;	Not applicable
7.6.4.5.	L3e — L7e <sup>(10)</sup>	Details of how to obtain all component and status information, time stamps, pending DTC and freeze frames;	Not applicable
7.6.4.6.	L3e — L7e <sup>(10)</sup>	PCU/ECU identification and variant coding;	Not applicable
7.6.4.7.	L3e — L7e <sup>(10)</sup>	Details of how to reset service lights;	Not applicable
7.6.4.8.	L3e — L7e <sup>(10)</sup>	Location of diagnostic connector and connector details;	Not applicable
7.6.4.9.	L3e — L7e <sup>(10)</sup>	Engine code identification.	Not applicable
7.6.5.		Test and diagnosis of OBD monitored components	
7.6.5.1.	L3e — L7e <sup>(10)</sup>	A description of tests to confirm its functionality, at the component or in the harness:	Not applicable

Item No	(Sub) categories	Detailed info	Detailed information		
7.7.		Passenger handholds and footrests			
7.7.1.		Handholds			
7.7.1.1.	L1e — L7e	Configuration: strap and/or handle <sup>(4)</sup>	handle		
7.7.1.3.	L1e — L7e	Photographs and/or drawings showing the location and the construction:	Refer to drawing No.GRACE-32		
7.7.2.		Footrests			
7.7.2.1.	L1e — L7e	Photographs and/or drawings showing the location and the construction:holds	Refer to drawing No.GRACE-32		
7.8.		Registration plate space			
7.8.1.	L1e — L7e	Location of rear registration plate (indicate variants where necessary;drawings may be used as appropriate):	Refer to drawing No.GRACE-33		
7.8.1.1.	L1e — L7e	Height above road surface, upper edge:	340mm		
7.8.1.2.	L1e — L7e	Height above road surface, lower edge:	232mm		
7.8.1.3.	L1e — L7e	Distance of the centre line from the longitudinal median plane of the vehicle:	0mm		
7.8.1.4.	L1e — L7e	Dimensions (length x width)	145mm x125mm		
7.8.1.5.	L1e — L7e	Inclination of the plane to the vertical:	30degr.		
7.8.1.6.		Angle of visibility in the horizontal plane:	60degr.		
7.9.		Stands			
7.9.1.	L1e, L3e	Configuration: central and/or side <sup>(4)</sup> : .	central and side		
7.9.2.	L1e, L3e	Construction material used:	Steel		
7.9.3.	L1e, L3e	Photographs and drawings showing the location of the stand(s) in relation to the structure of the vehicle:	Refer to drawing No.GRACE-34		
7.9.4.	L1e, L3e	Description of the method to prevent contact of the stand with the ground when the vehicle is being propelled:	Refer to drawing No.GRACE-34		

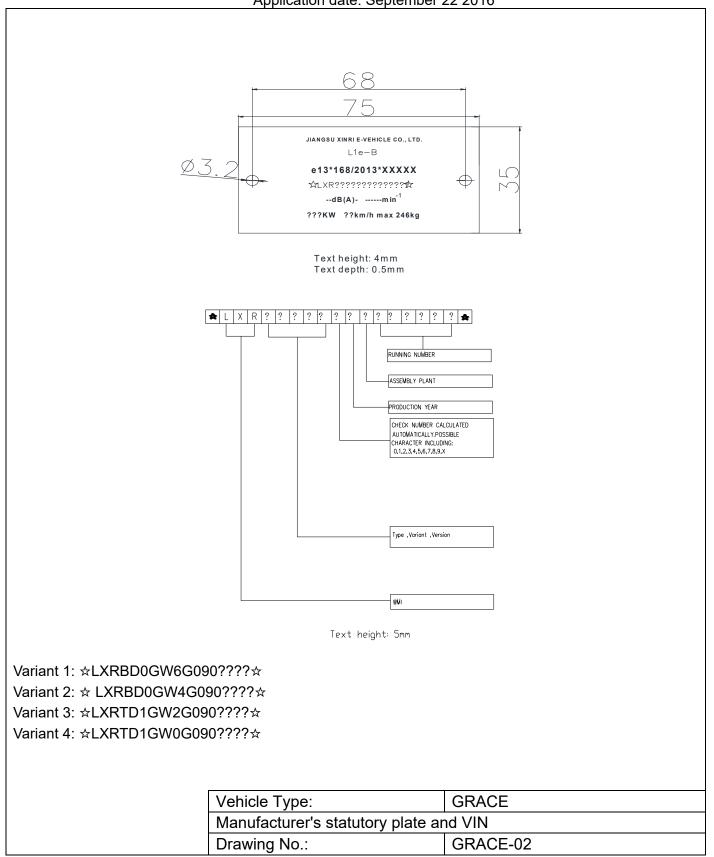


manufacturer's statutory plate x:1050,y:100,z:370

x:270,y:1,z:560

Vehicle Type:	GRACE	
Location of Manufacturer's statutory plate and VIN		
Drawing No.:	GRACE-01	

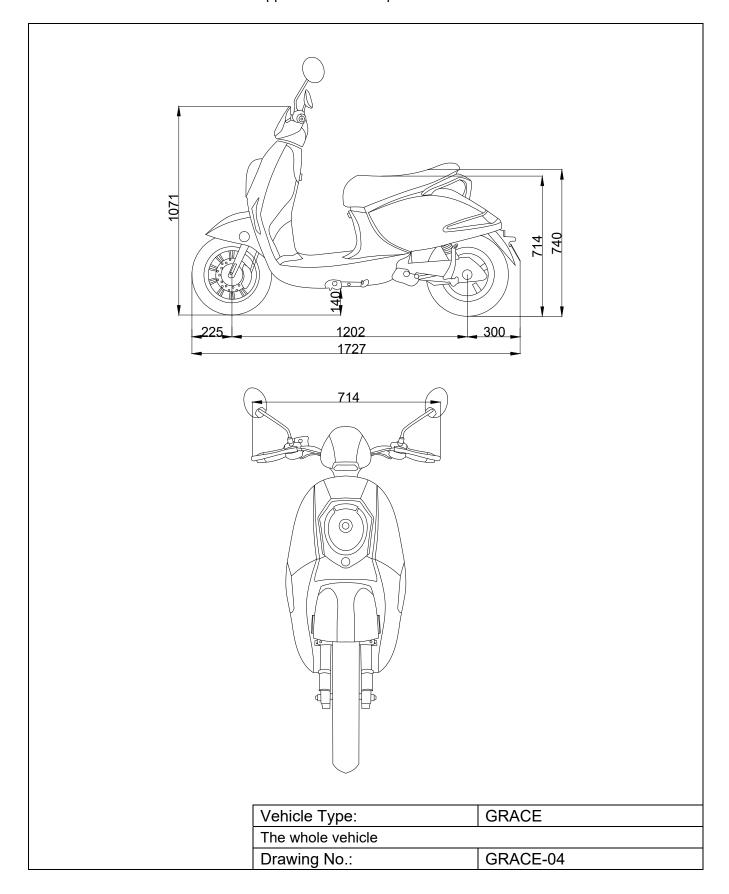
### Jiangsu Xinri E-Vehicle Co., Ltd.

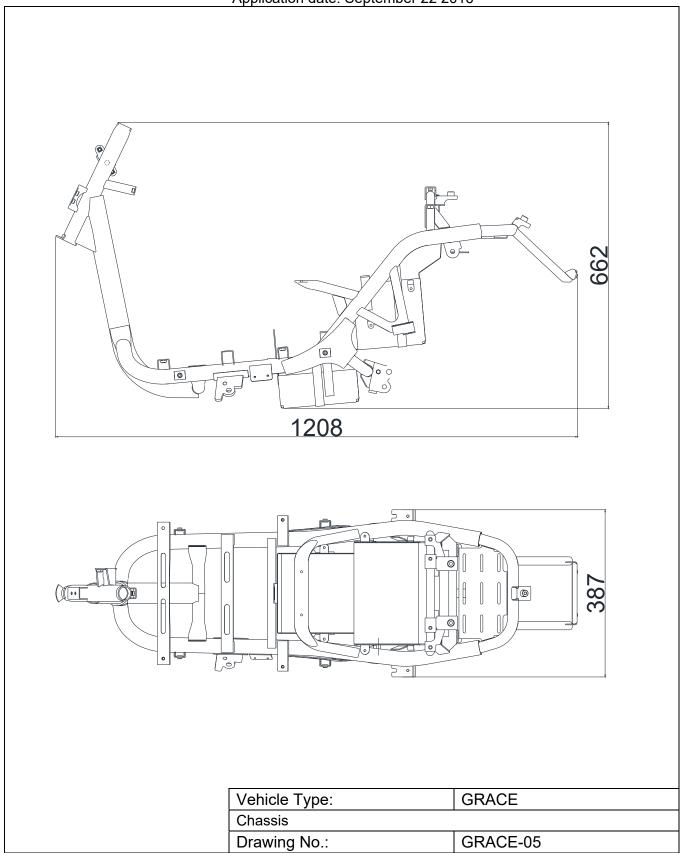




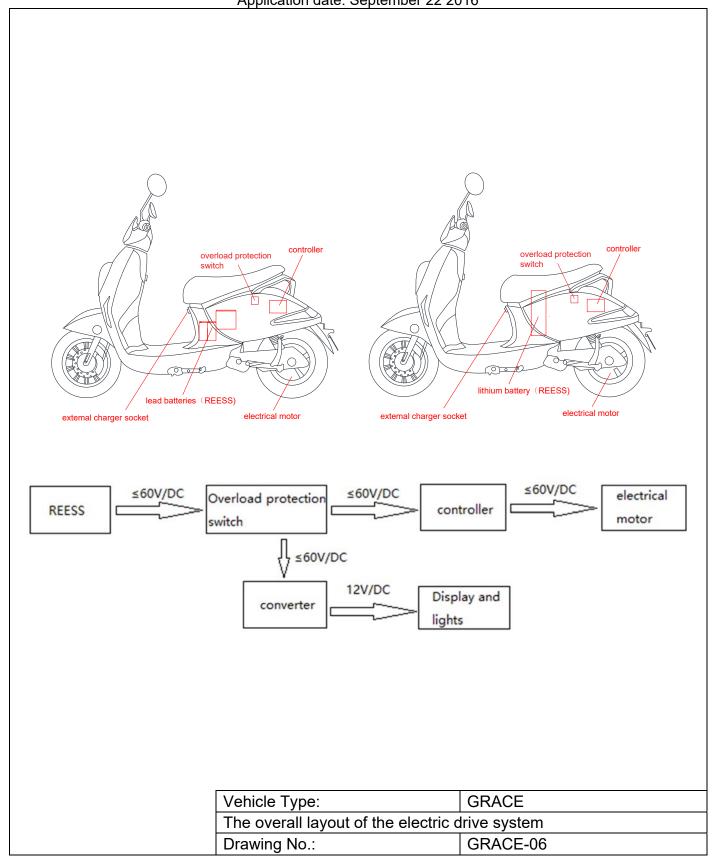


Vehicle Type:	GRACE
Photographs of the vehicle	
Drawing No.:	GRACE-03

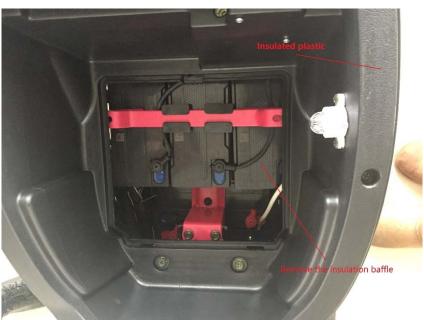




## Jiangsu Xinri E-Vehicle Co., Ltd.







Lead-acid battery status

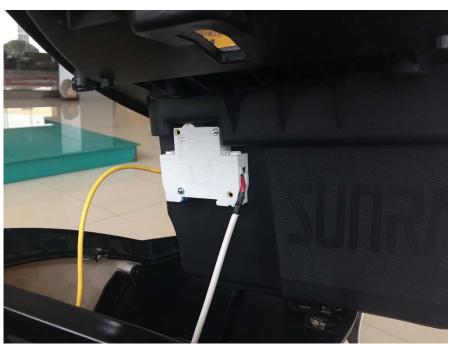
Vehicle Type:	GRACE	
Under the seat cushion plastic protection		
Drawing No.:	GRACE-07-01	



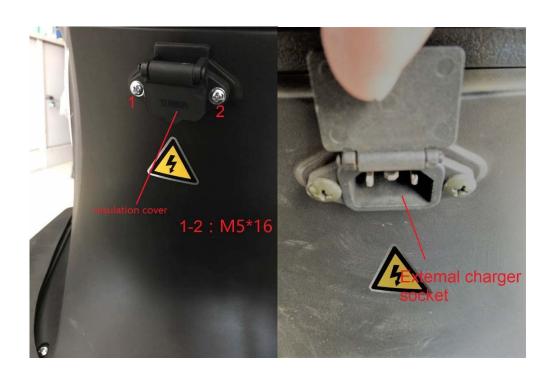
Lithium battery status

Vehicle Type:	GRACE	
Under the seat cushion plastic protection		
Drawing No.:	GRACE-07-02	

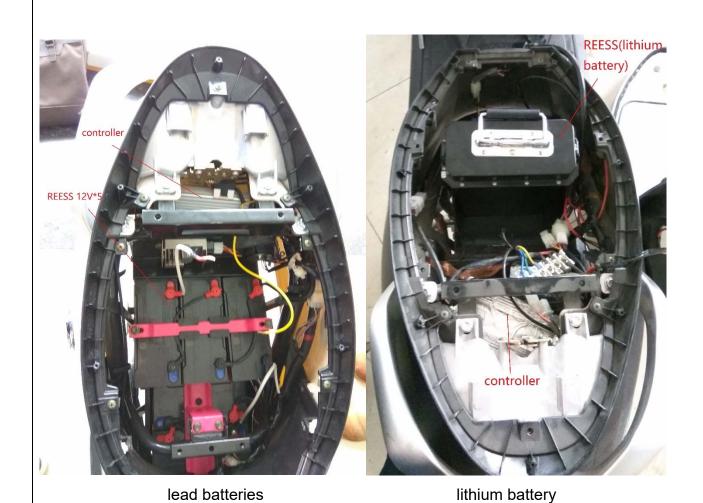




Vehicle Type:	GRACE
Overload protection switch	
Drawing No.:	GRACE-08



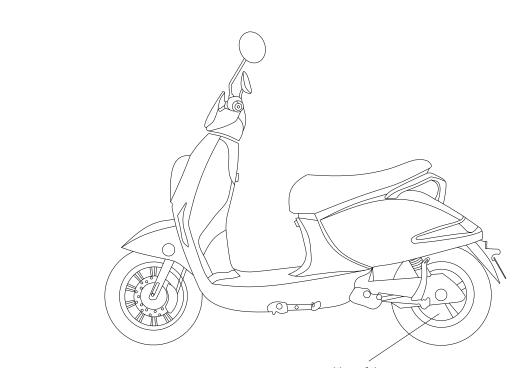
Vehicle Type:	GRACE
Extemal charger socket	
Drawing No.:	GRACE-09



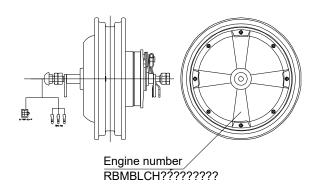
Vehicle Type: GRACE Remove the cushions Drawing No.: **GRACE-10** 

# Jiangsu Xinri E-Vehicle Co., Ltd.

No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016



position of the motor



Text height:5mm

Make: BOSCH

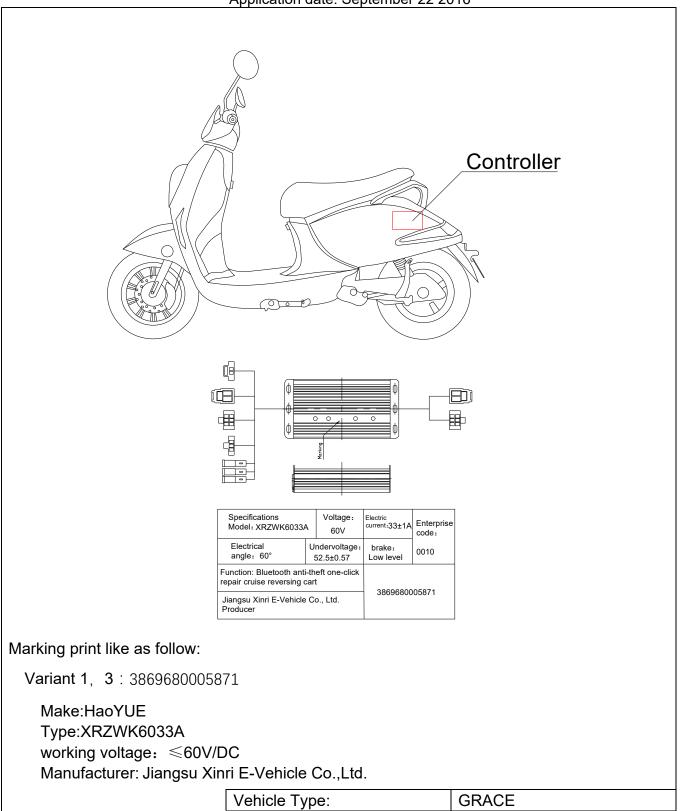
Type: 203-35 BOSCH

working voltage: ≤60V/DC

Manufacturer: Bosch (Ningbo)e-Scooter Motor Co.,Ltd.

Vehicle Type:	GRACE
Electric engine	
Drawing No.:	GRACE-11

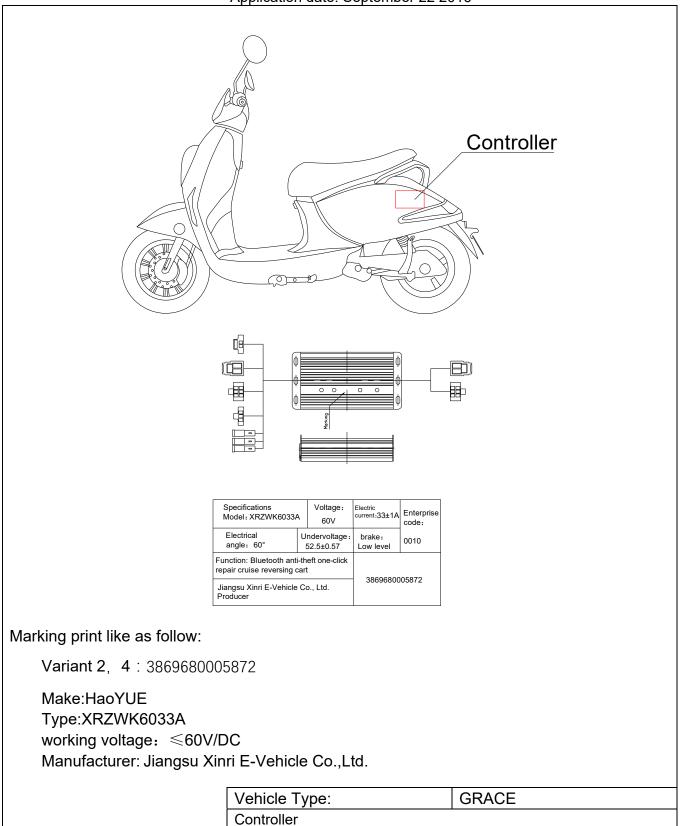
No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016



GRACE-12-01

Controller
Drawing No.:

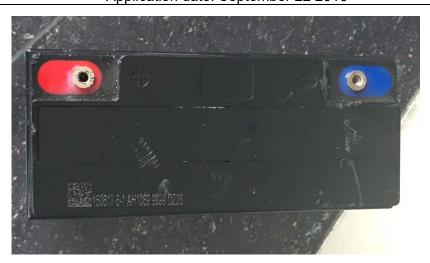
No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016



GRACE-12-02

Drawing No.:

No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016





Variants1,2,:Lead-acid batteries

Make: T

Tianneng

Type: 6-DZM-20

working voltage: ≤60V/DC

Manufacturer: Tianneng Battery Group Co., Ltd.

Vehicle Type:	GRACE
Lead-acid batteries	
Drawing No.:	GRACE-13-01





Variants3,4,: lithium battery

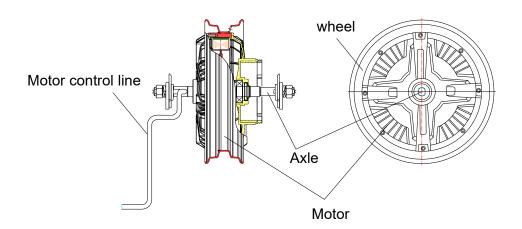
Make: CHILWEE Type: BR6020PM

working voltage: ≤60V/DC

Manufacturer: Super Granville Power Co., Ltd.

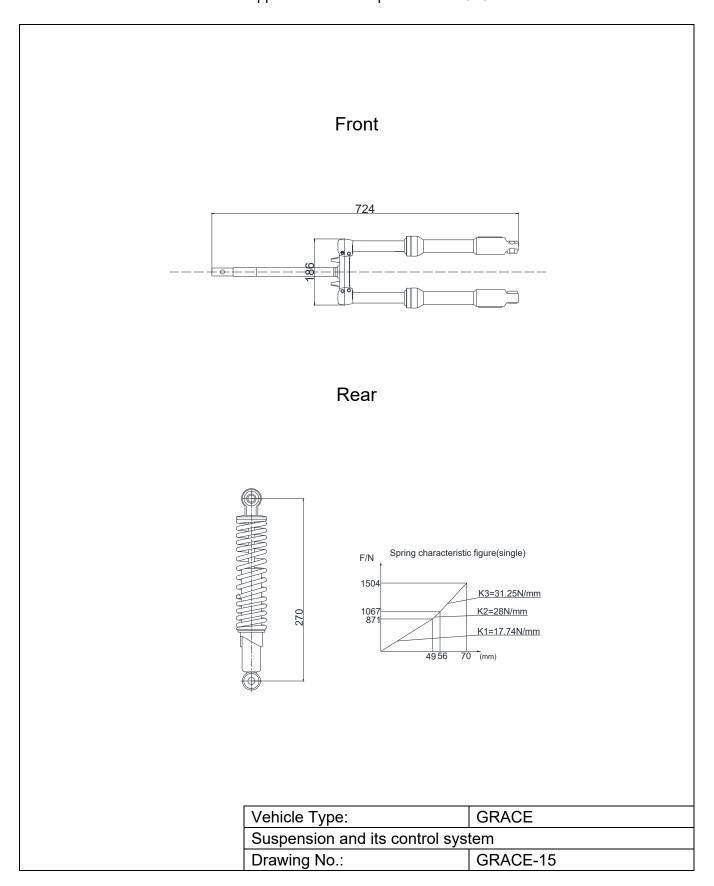
Vehicle Type:	GRACE
lithium battery	
Drawing No.:	GRACE-13-02

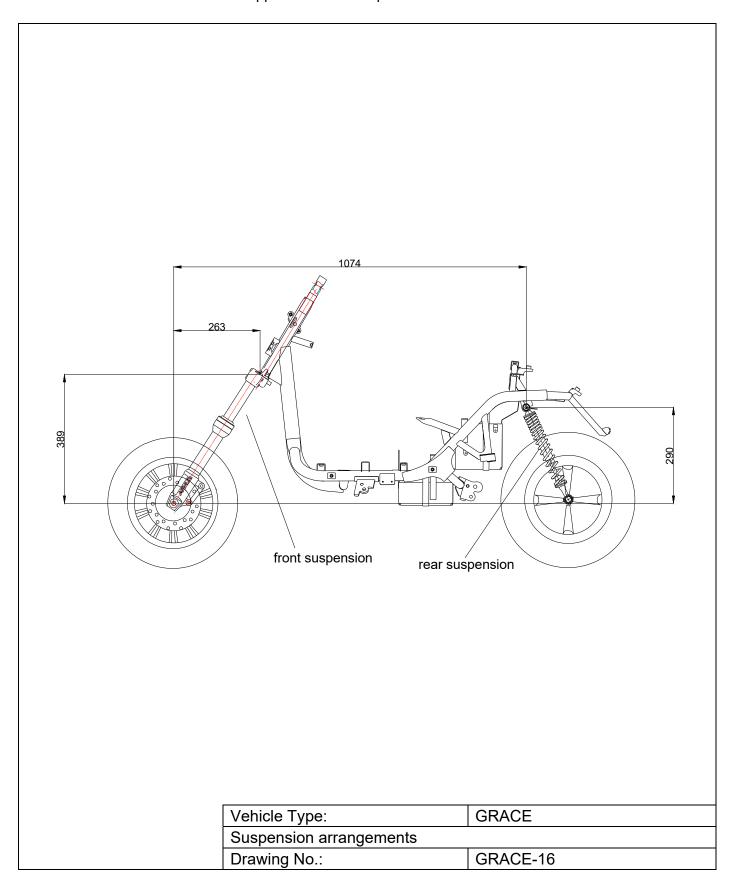
No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016

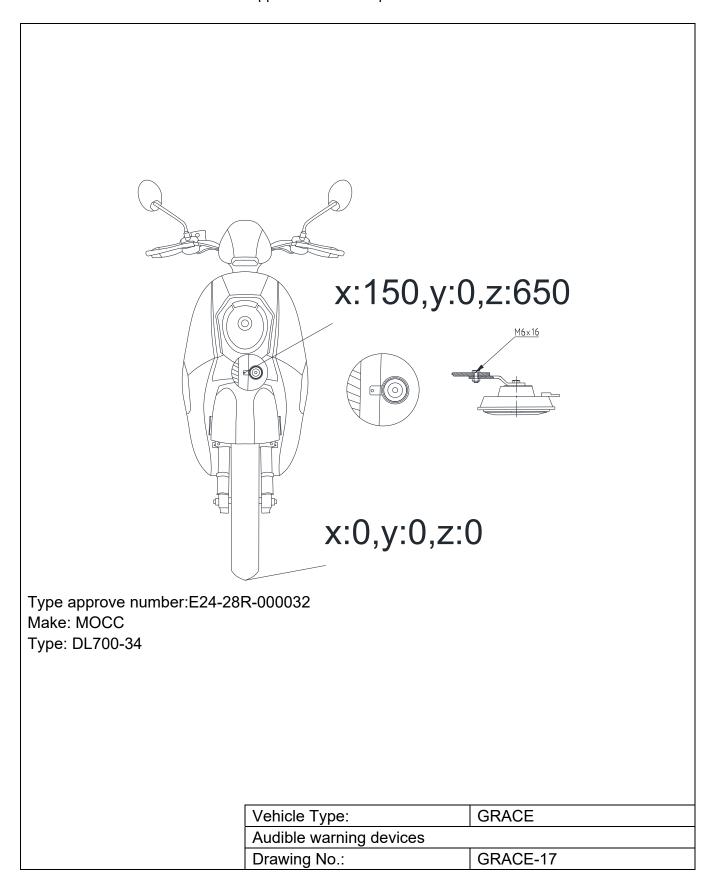


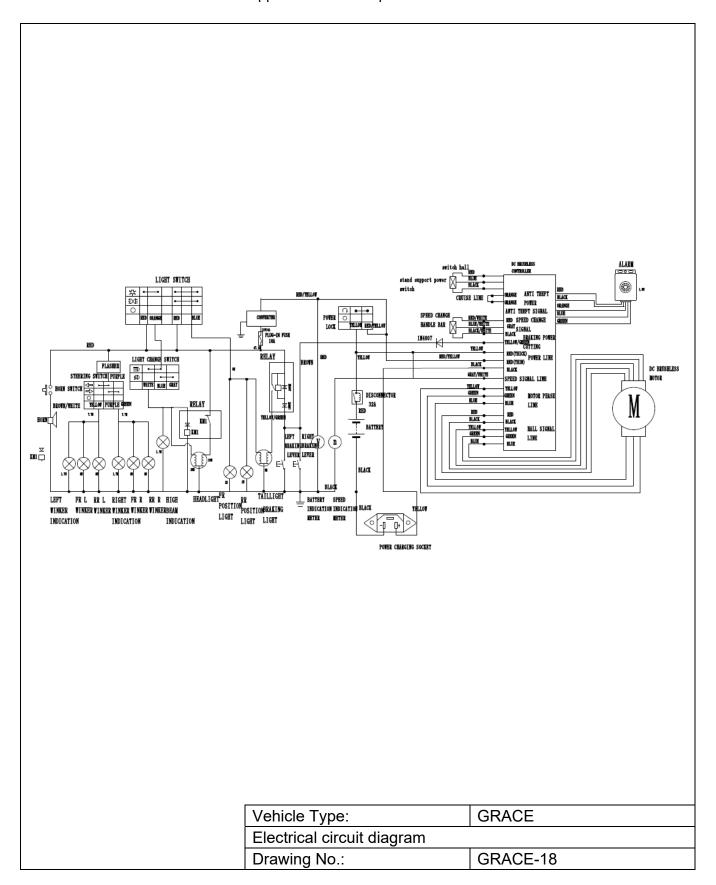
How it works: the battery to the controller and motor power supply, the controller by adjusting the motor power to the motor produces two states of the maximum speed

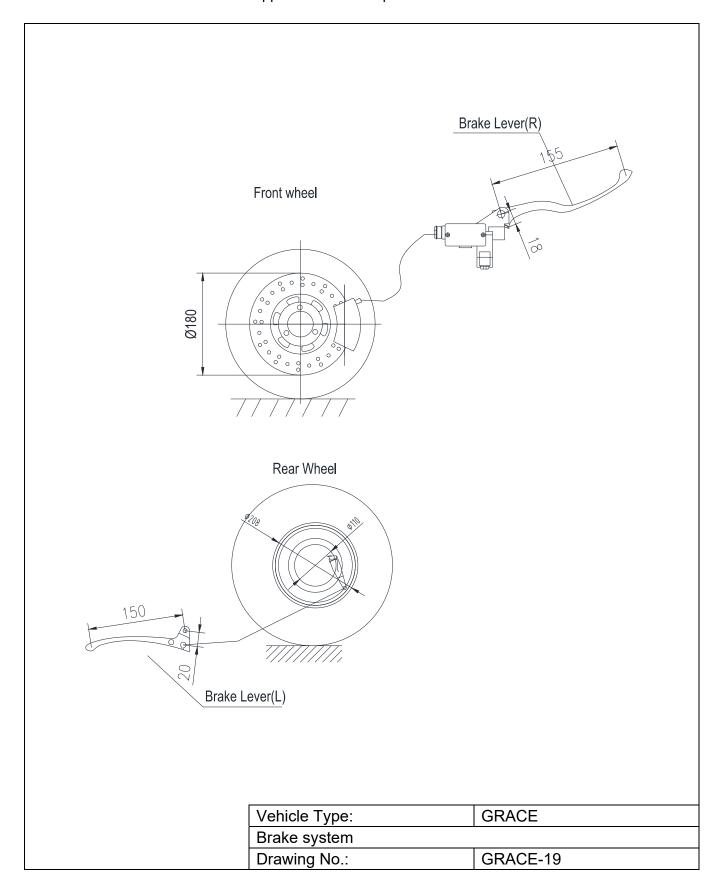
Vehicle Type:	GRACE
Transmission	
Drawing No.:	GRACE-14



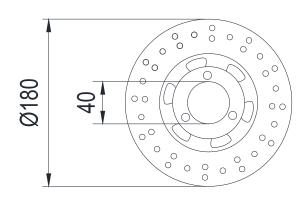




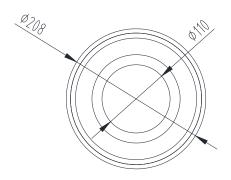




No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016



## Front disc

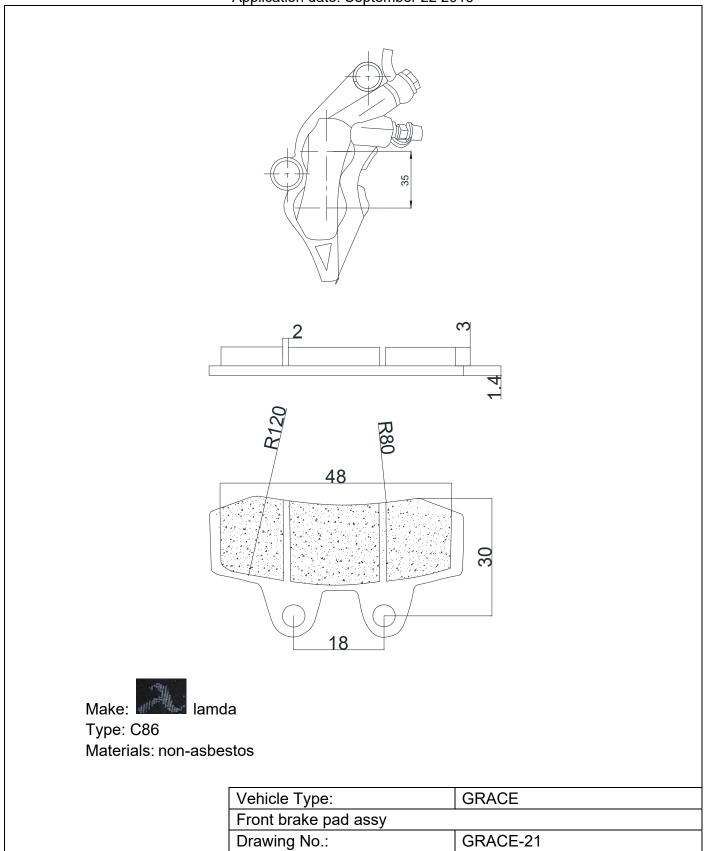


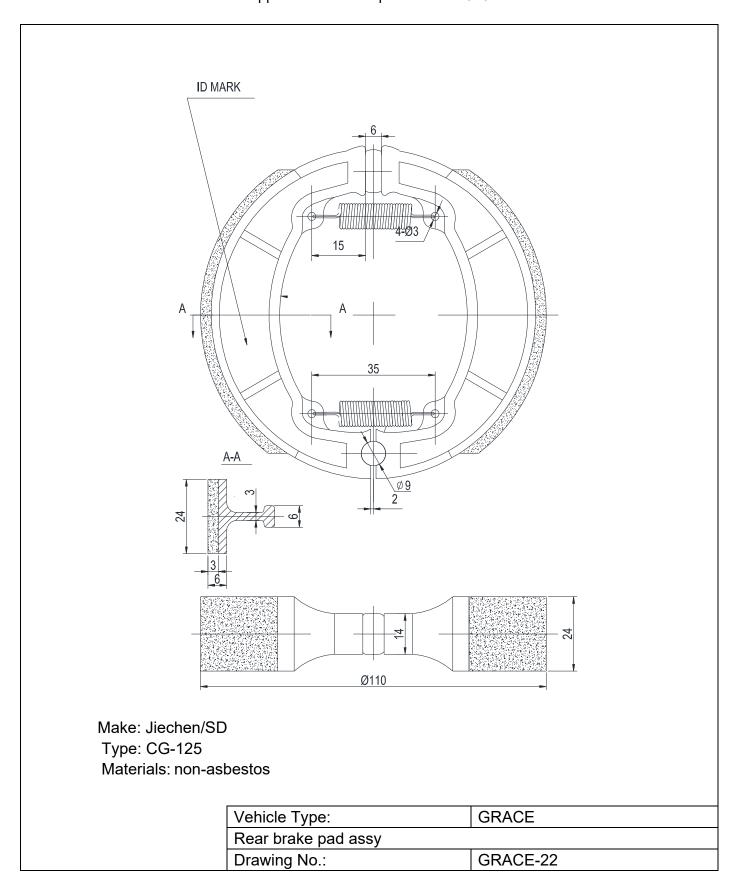
## Rear drum

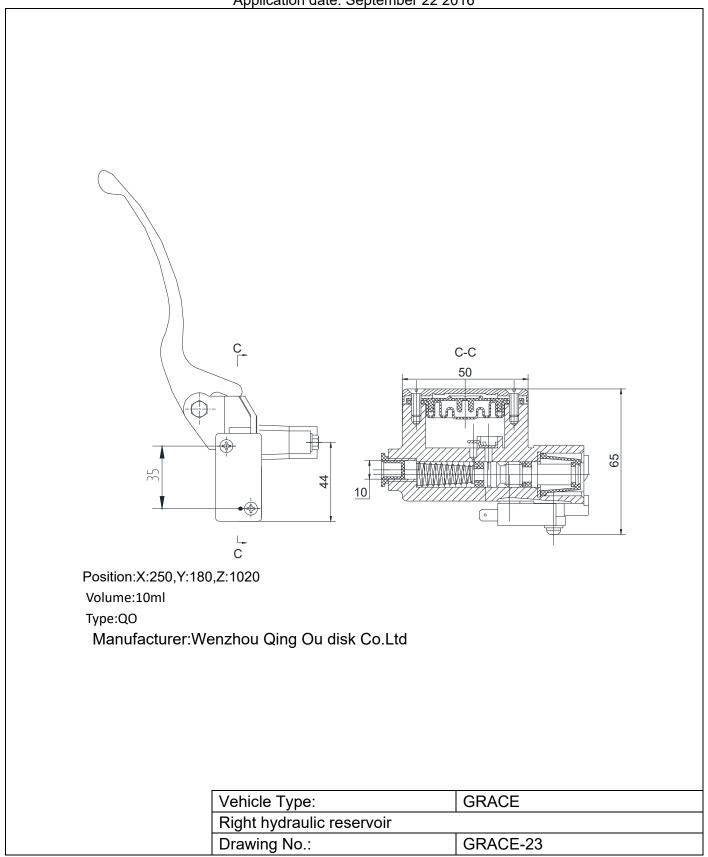
Front :Make: QO Rear: Make: Jiechen/SD

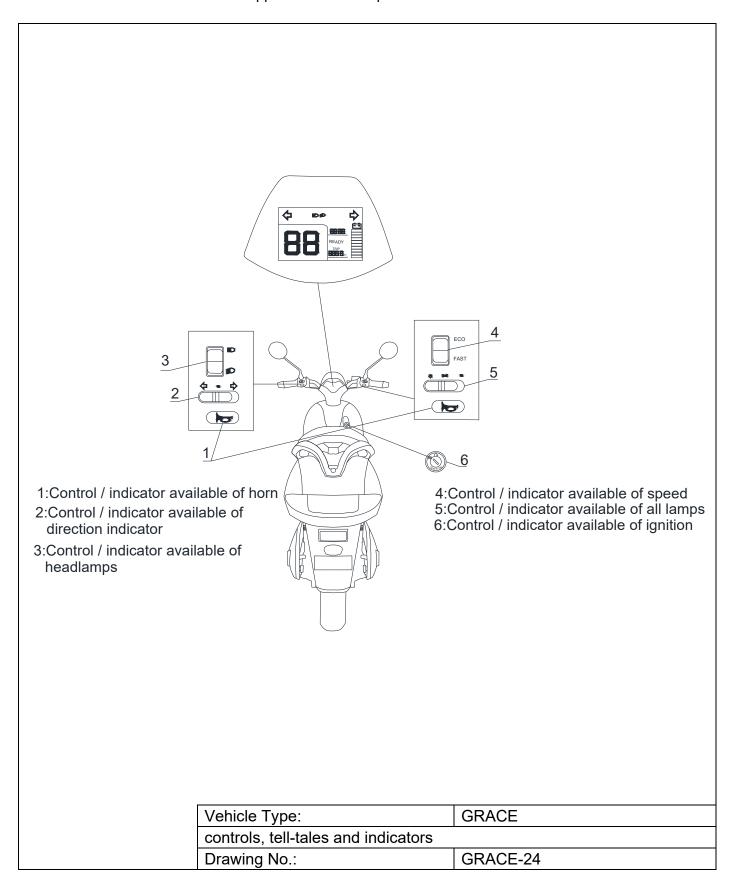
Type: QO01 Type: SDφ16X21

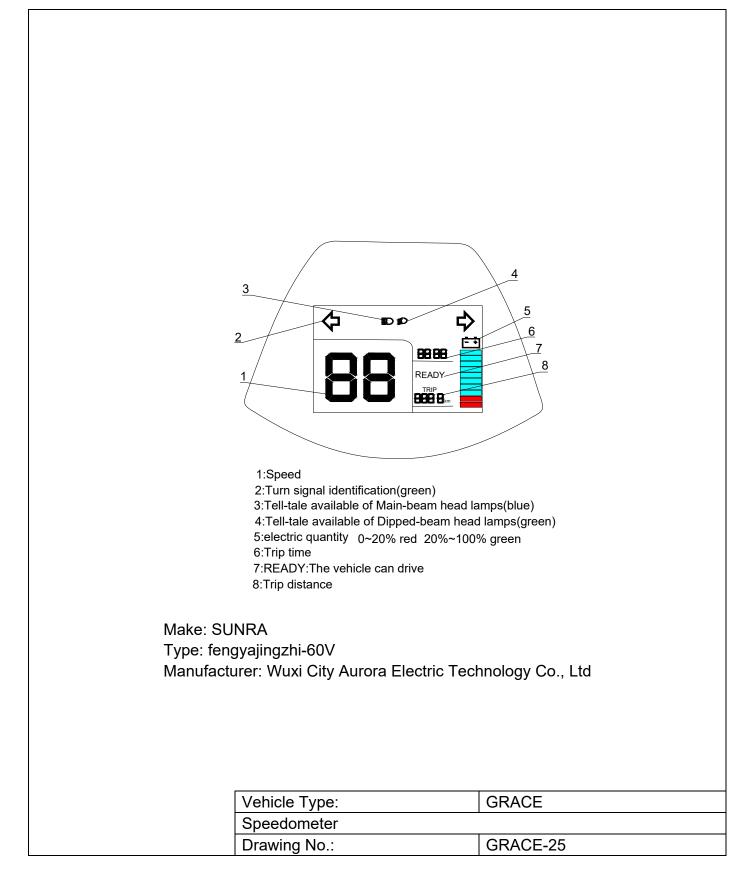
Vehicle Type:	GRACE
Front disc and rear drum	
Drawing No.:	GRACE-20

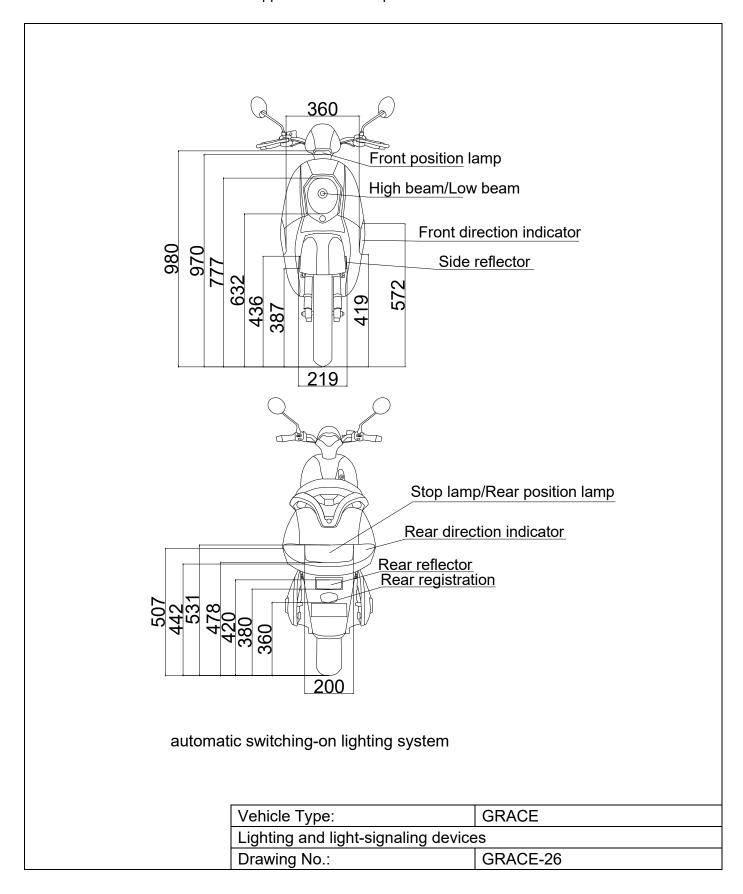


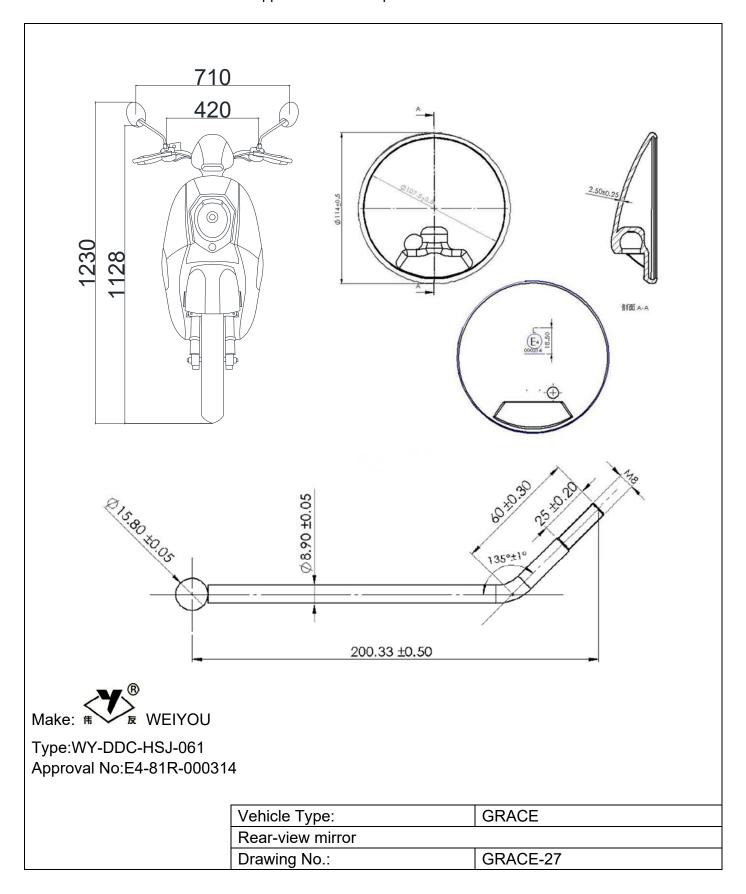


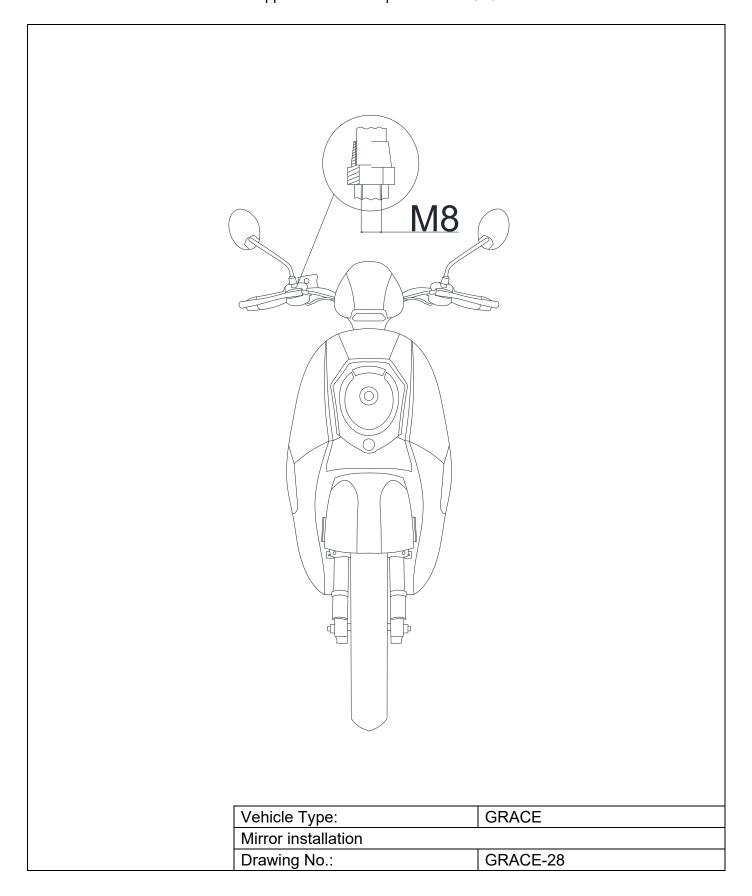


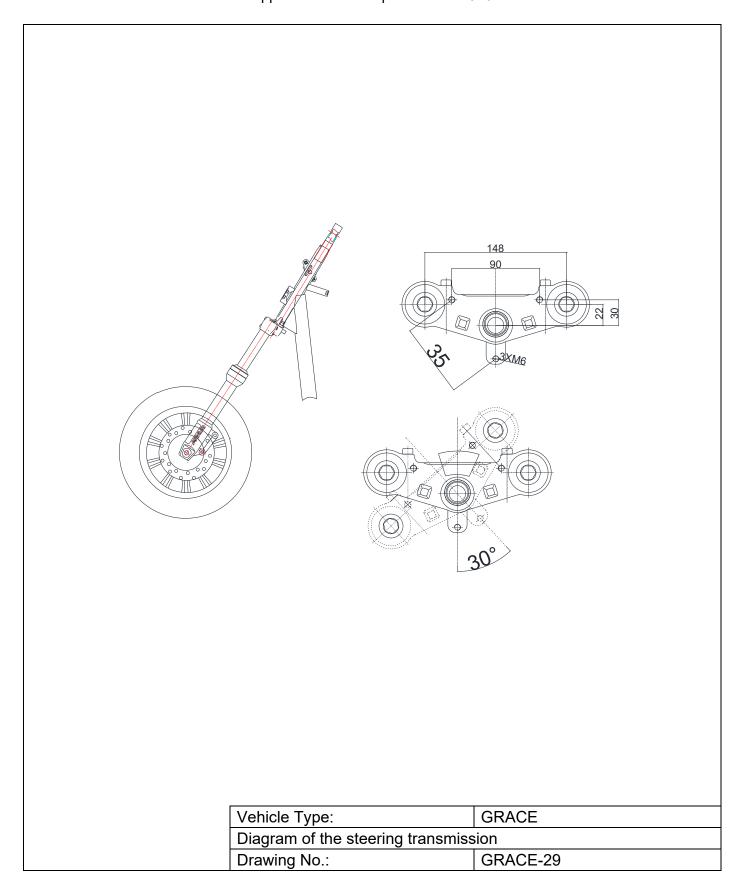


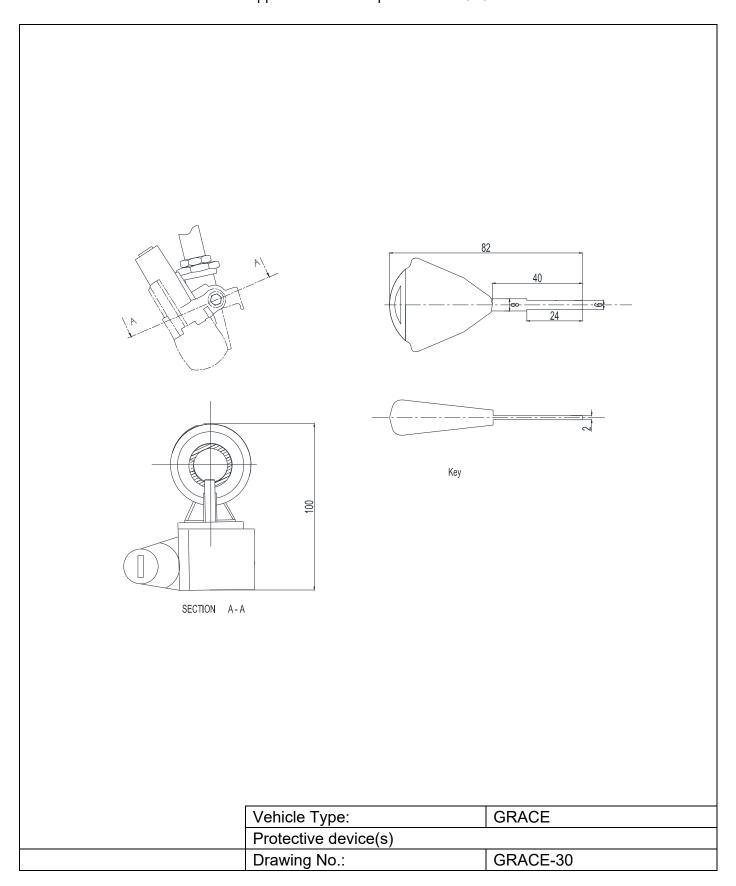


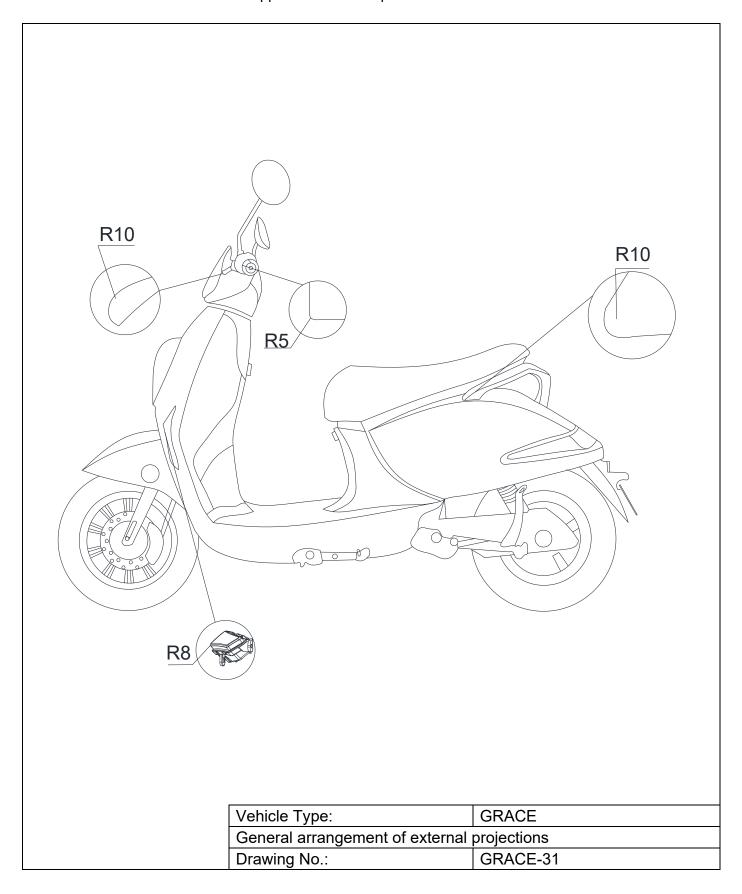


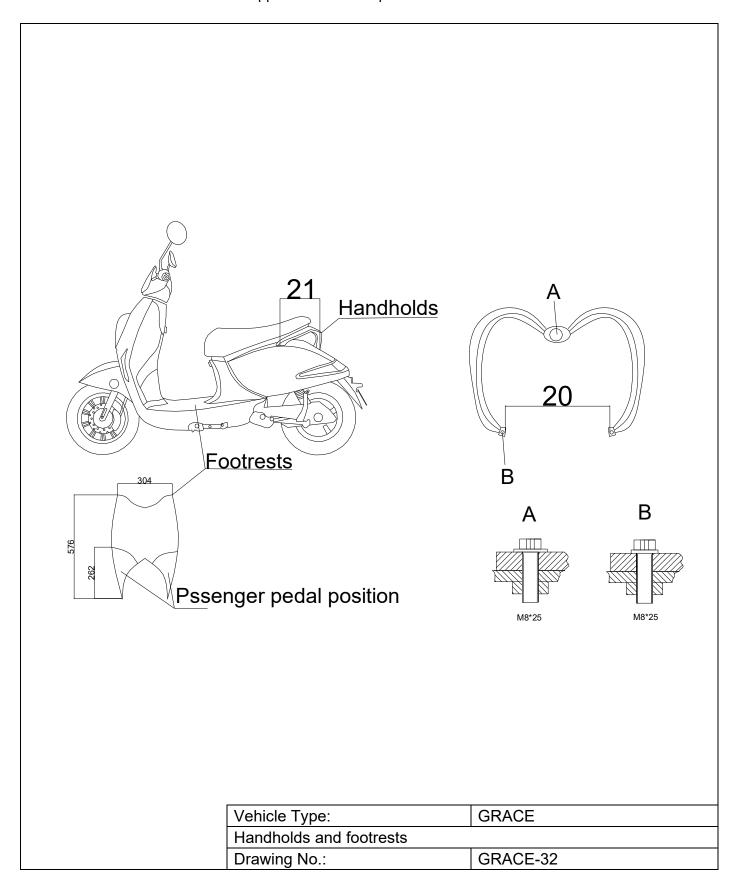


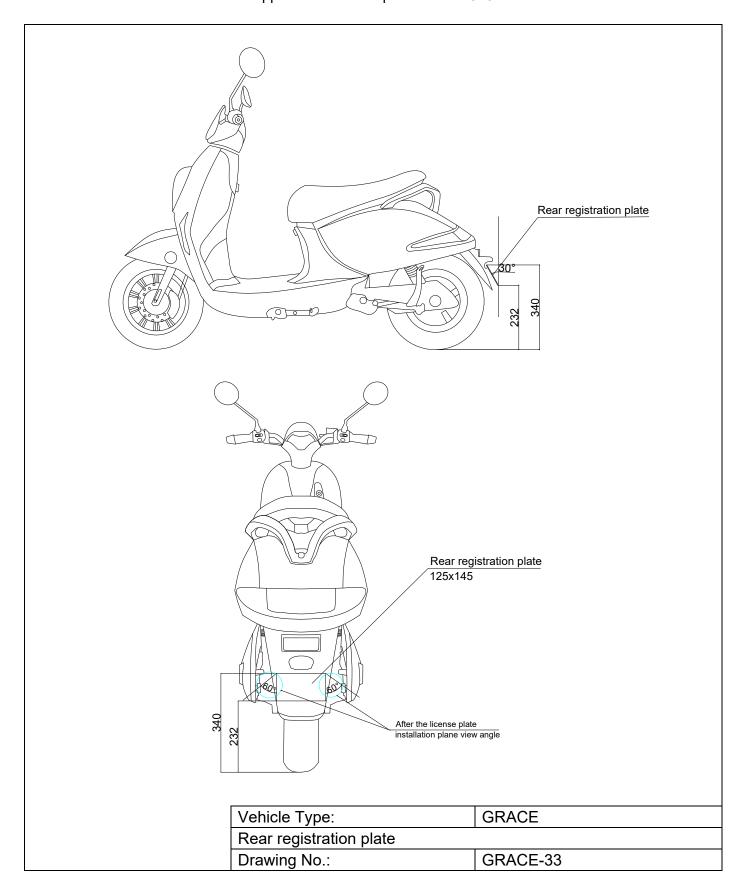


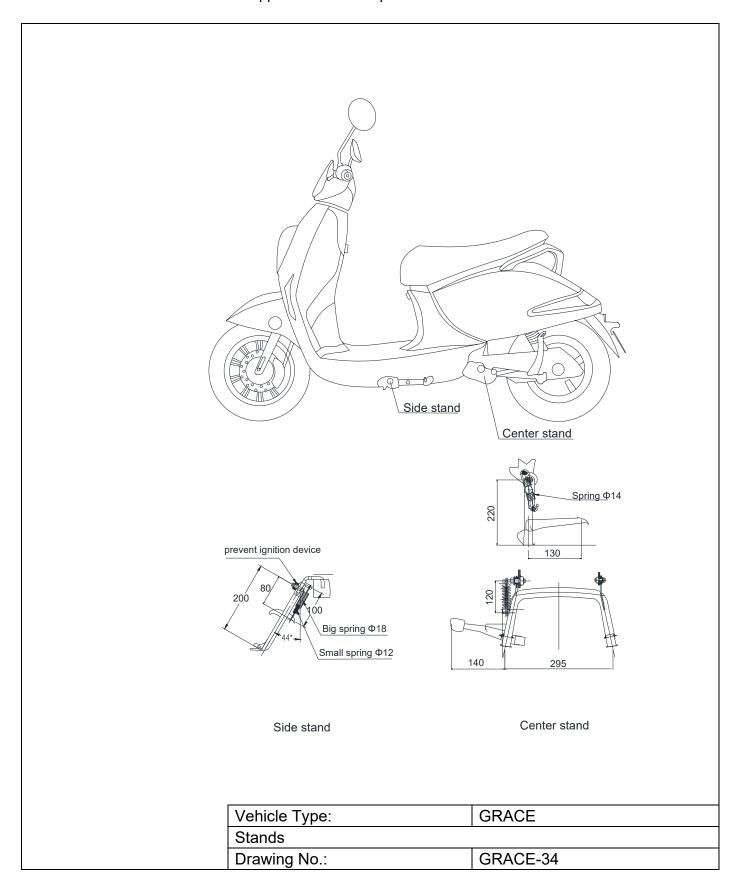


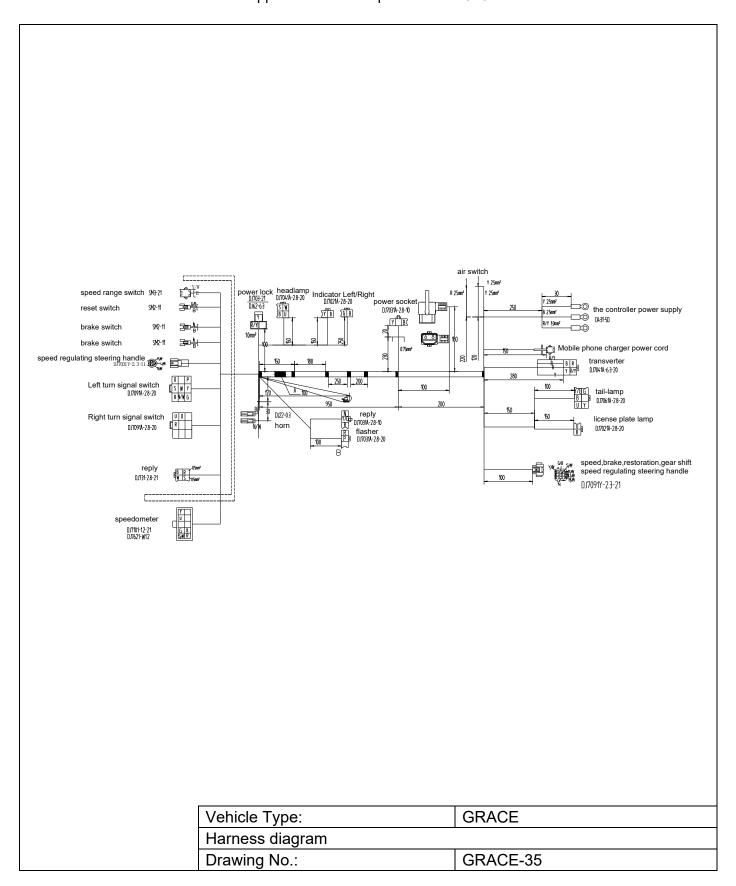


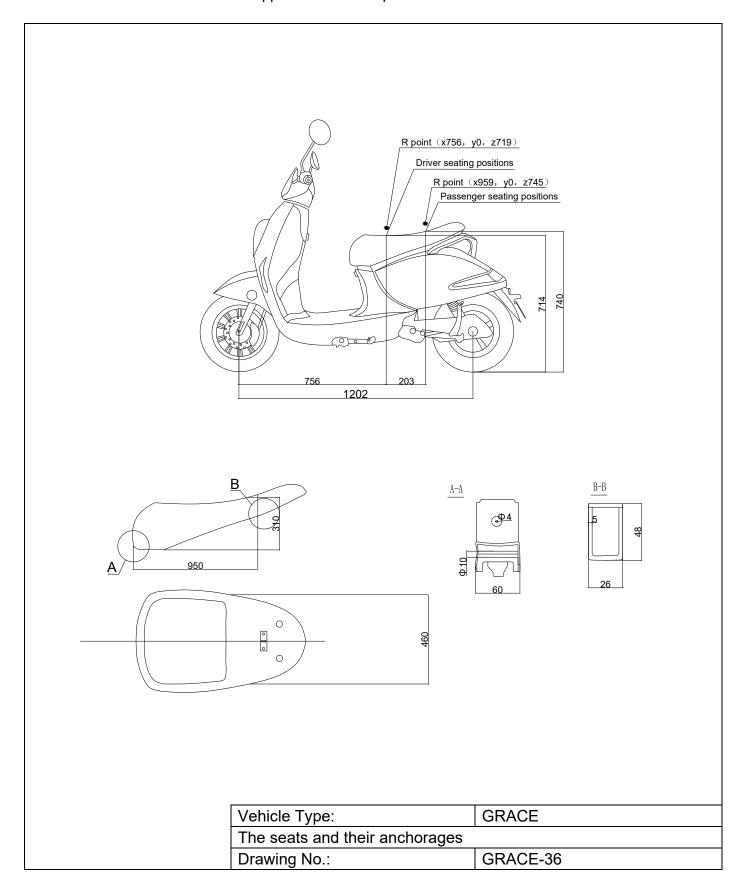


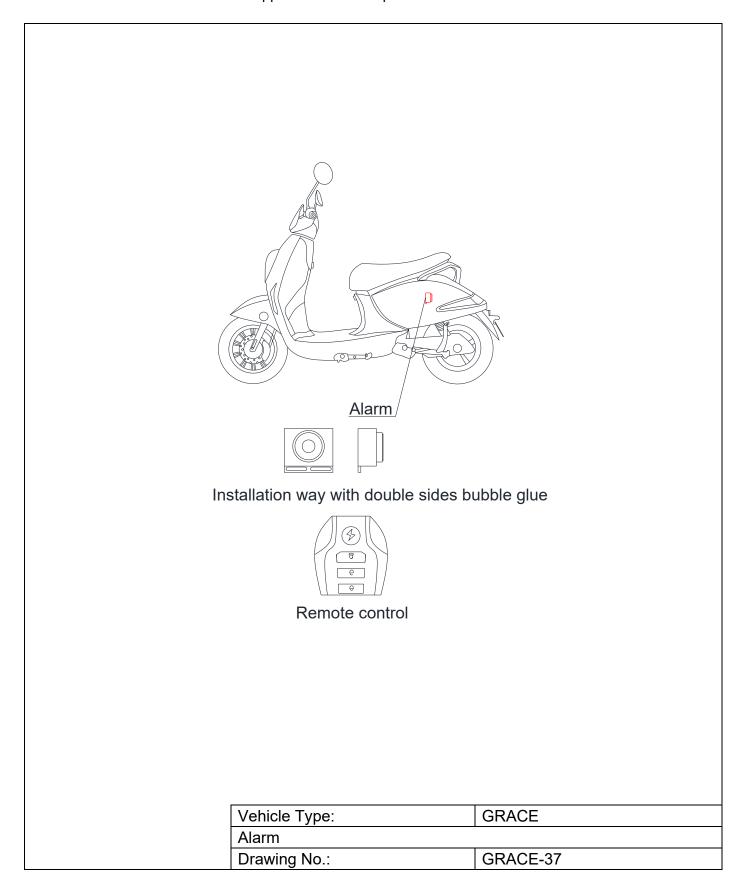












# Annex B - LCA 51 1215 002 16 - Page 86 Jiangsu Xinri E-Vehicle Co., Ltd.

No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016

### Information folder sheet

The undersigned: [.Mr.Ren Yi/Manager (full name and position)]

Company name and address of the manufacturer:

Jiangsu Xinri E-Vehicle Co., Ltd.

No.501,Xishan Avenue, Xishan District, Wuxi City, Jiangsu Province, China

Name and address of the manufacturer's representative (if any):

**Z-TECH BIKE KFT** 

1044 Budapest, Ezred utca 7.II.ép.A.Iház.fszt.3.

Hereby applies for type-approval procedure<sup>(4)</sup>:

- (a) step-by-step type-approval
- (b) single-step type-approval
- (c) mixed type-approval

Where procedures (a) or (c) are chosen, compliance with requirements as under (b) is declared for all systems, components and separate technical units.

Multi-stage type-approval chosen in accordance with Article 25(5) of Regulation (EU) No168/2013: yes/no<sup>(4)</sup>

## Information on the vehicle(s) to be filled in, if application is for EU whole-vehicle type- approval<sup>(3)</sup>:

- 0.1. Make (trade name of the manufacturer): XINRI, SUNRA, APACHI, ISILDAR APACHI, ISILDAR, Wayscral, KRAL, ZTECH, EvoMotion, SYMEX, GBF, ARORA, MASU, MOTOLUX, ALF MOTO, MOTODELL, MOTOMZ, MEEZ, MEZZ, MEZZ, MONASSO,
- 0.2. Type(17): GRACE
- 0.2.1. Variant(s)(17): Variant 1: 25km/h/Lead acid batteries

Variant 2: 45km/h/Lead acid batteries Variant 3: 25km/h/lithium battery

Variant 4: 45km/h/lithium battery

- 0.2.2. Version(s)(17): 00
- 0.2.3. Commercial name(s) (if available): GRACE, ZT-25, BE BOLD, CRYSTAL, Zeroporte, Crystal, E-START, E-MATE, E-CRUISER, E-ROAD, ANKA 3000, ANKA, KR-42, E-legant, JAGUAR, wave, urban, MARS, ElectroJet
- 0.3. Category, subcategory and sub-subcategory of vehicle<sup>(2)</sup>: L1e-B

## Information to be filled in, if application is for type-approval of a system/component/separate technical unit<sup>(3)(4)</sup>:

- 0.7. Make(s) (trade name(s) of manufacturer): Not applicable
- 0.8. Type: Not applicable
- 0.8.1. Commercial name(s) (if available): Not applicable.
- 1.6. Virtual and/or self-testing<sup>(3)</sup>
- 1.6.1. Overview list with virtual and/or self-tested systems, components or separate technical units pursuant to point 6 of Annex III to Commission Delegated Regulation (EU) No44/2014 below:

# Annex B - LCA 51 1215 002 16 - Page 87 Jiangsu Xinri E-Vehicle Co., Ltd.

No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00

Application date: September 22 2016

Overview table virtual and/or self-testing

Delegated act	Annex	Subject	Virtual and/or self- tested: <del>yes/</del> no <sup>(4)</sup>
Commission Delegated Regulation (EU) No 134/2014 (*)	Х	Testing procedures on maximum design vehicle speed	Self-testing: <del>yes/</del> no <sup>(4)</sup>
Commission Delegated Regulation (EU) No 3/2014	II	Audible warning devices	Self-testing: <del>yes/</del> no <sup>(4)</sup>
Commission Delegated Regulation (EU) No 3/2014	VIII	Driver-operated controls including identification of controls, tell-tales and indicators	
Commission Delegated Regulation (EU) No 3/2014	IX	Installation of lighting and light- signalling devices	Virtual testing: <del>yes/</del> no <sup>(4)</sup>
Commission Delegated Regulation (EU) No 3/2014	X	Rearward visibility	Virtual testing: <del>yes/</del> no <sup>(4)</sup>
Commission Delegated Regulation (EU) No 3/2014	XIV	Installation of tyres	Virtual testing: <del>yes/</del> no <sup>(4)</sup>
Commission Delegated Regulation (EU) No 44/2014	XIV	Registration plate space	Self & Virtual testing: <del>yes/</del> no <sup>(4))</sup>
Commission Delegated Regulation (EU) No 44/2014	XVI	Stands	Self-testing: <del>yes/</del> no <sup>(4)</sup>
This Commission Imple- menting Regulation	VIII	Statutory plate and EU type-approval mark	Self-testing: <del>yes/</del> no <sup>(4)</sup>

(\*) Commission Delegated Regulation (EU) No 134/2014 of 16 December 2013 supplementing Regulation (EU) No 168/2013 of the European Parliament and of the Council with regard to environmental and propulsion unit performance requirements and amending Annex V thereof (OJ L 53, 21.2.2014, p. 1).

1.6.2. Detailed report on validation of virtual and/or self-testing added: yes/no<sup>(4)</sup>

Place: No.501,Xishan Avenue, Xishan District, Wuxi City, Jiangsu Province, China Date: September 22 2016

230

Signature:

Name and position in the company: Mr.Ren Yi/Manager

No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016

### Manufacturer's declaration on powertrain tampering prevention measures (anti-tampering)

- Vehicle manufacturer's declaration on powertrain tampering prevention measures (anti-tampering):
- not to market interchangeable components which could enable propulsion unit performance to exceed levels applicable to the relevant (sub) category;
- manufacturer-facilitated modifications shall not increase the propulsion unit performance of the vehicle:
- modifications and interchangeability of parts and components

Manufacturer's declaration not to market interchangeable components which could enable propulsion unit performance to exceed levels applicable to the relevant (sub) category A duly-completed version of this statement shall be included in the information folder.

0.4. Company name and address of manufacturer:

Jiangsu Xinri E-Vehicle Co.,Ltd.

No.501, Xishan Avenue, Xishan District, Wuxi City, Jiangsu Province, China

0.4.2. Name and address of the manufacturer's representative (if any):

**Z-TECH BIKE KFT** 

1044 Budapest, Ezred utca 7.II.ép.A.Iház.fszt.3.

Hereby declares that:

For the L1e/L2e, (L3e/L4e)-A1/(L3e/L4e)-A2/L6e/L7e (1) category vehicle: L1e

0.1 Make (trade name of the manufacturer): XINRI, SUNRA, APACHI, ISILDAR APACHI,ISILDAR, Wayscral,KRAL,ZTECH,EvoMotion,SYMEX,GBF,ARORA,MASU,MOTOLUX,ALF MOTO, MOTODELL,MOTOMZ,MEEZ,MEZZ,MONASSO,

0.2.Type: GRACE

0.2.1. Variant(s): Variant 1: 25km/h/Lead acid battery

Variant 2: 45km/h/Lead acid battery Variant 3: 25km/h/lithium battery Variant 4: 45km/h/lithium battery

0.2.2. Version(s):00

0.2.3 Commercial name(s) (if available): GRACE, ZT-25, BE BOLD, CRYSTAL, Zeroporte, Crystal, E-START, E-MATE, E-CRUISER, E-ROAD, ANKA 3000, ANKA, KR-42, E-legant, JAGUAR, wave, urban, MARS, ElectroJet

0.3. Category, subcategory and sub-subcategory of vehicle: L1e-B

No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016

Will not market interchangeable components which could enable propulsion unit performance to exceed levels applicable to the relevant (sub) category; and that

The manufacturer-facilitated modifications of the following characteristics:

- (a) spark delivery of the ignition system if applicable;
- (b) fuel feed and delivery system;
- (c) air-intake system including air filter(s) (modification or removal);
- (d) propulsion battery configuration or electric power to the electric motor(s) if applicable;
- (e) drive-train;
- (f) and the control unit(s) that control(s) the propulsion unit performance of the powertrain.

shall comply with the requirements set out in point 2.6. of Annex II to Commission Delegated Regulation (EU) No 44/2014 (0) (2) (3)

For L3e-A2/L4e-A2/L7e <sup>(1)</sup> category vehicles the manufacturer declares that:

The modifications and interchangeability of:

(a) spark delivery of the ignition system, if applicable;

\*

- (b) fuel feed and delivery system;
- (c) air-intake system including air filter(s) (modification or removal);
- (d) the drive-train;
- (e) the control unit(s) for the propulsion unit performance of the powertrain;
- (f) removal of any component (mechanical, electrical, structural, etc.) which limits full engine load, leading to any change in the propulsion unit performance as approved in accordance with Ann Regulation (EU) No168/2013

shall comply with the requirements set out in point 2.6 of Annex II to Commission Delegated Regulation(EU)No 44/2014 (0) (4)

Place: Wuxi City, Jiangsu Province, P.R. China Date: Date: September.22.2016

Name and position in the company: Mr.Ren Signature: Yi/Manager

griature. <u>Fi/Mariag</u>i

Propulsion unit performance

No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016

# Manufacturer's statement on endurance testing (Annex V to Commission Delegated Regulation (EU) No 3/2014)

A duly completed version of this statement shall be included in the information folder

The undersigned: Mr.Ren Yi/Manager

Company name and address of the manufacturer:

Jiangsu Xinri E-Vehicle Co.,Ltd.

No.501, Xishan Avenue, Xishan District, Wuxi City, Jiangsu Province, China

Name and address of the manufacturer's representative (if any):

Z-TECH BIKE KFT

1044 Budapest, Ezred utca 7.II.ép.A.Iház.fszt.3.

Hereby states that the vehicles:

0.1. Make (trade name of the manufacturer): XINRI, SUNRA, APACHI, ISILDAR APACHI, ISILDAR, Wayscral, KRAL, ZTECH, EvoMotion, SYMEX, GBF, ARORA, MASU, MOTOLUX, ALF MOTO, MOTODELL, MOTOMZ, MEEZ, MEZZ, MONASSO, **ORFID** 

0.2. Type: GRACE

0.2.1. Variant(s): Variant 1: 25km/h/Lead acid battery

Variant 2: 45km/h/Lead acid battery Variant 3: 25km/h/lithium battery Variant 4: 45km/h/lithium battery

0.2.2. Version(s):00

0.2.3. Commercial name(s) (if available): GRACE, ZT-25, BE BOLD, CRYSTAL, Zeroporte, Crystal, E-START, E-MATE, E-CRUISER, E-ROAD, ANKA 3000, ANKA, KR-42, E-legant, JAGUAR, wave, urban, MARS, ElectroJet

0.3. Category, subcategory and sub-subcategory of vehicle: L1e-B

for which type-approval is sought shall withstand normal use as intended for at least 30000km travelled within five years of first registration, taking into account regular and scheduled maintenance and specific equipment adjustments, as described clearly and unambiguously in the instructions manual delivered with the vehicles.

The undersigned furthermore confirms that the endurance of the systems, parts and equipment critical for functional safety is ensured through appropriate testing and the use of good engineering practice.

This declaration has no bearing on any vehicle warranty.

1333

Place: Wuxi City, Jiangsu Province, P.R. China Date: Date: September.22.2016

Name and position in the company: Mr.Ren

<u>Yi/Manager</u>

Signature:

No.501,Xishan Avenue,Xishan District,Wuxi City,Jiangsu Province,China Information document number: 168/2013/EU-GRACE-00
Application date: September 22 2016

# Manufacturer's statement on structure integrity (Annex XIX to Commission Delegated Regulation (EU) No 3/2014)

A duly completed version of this statement shall be included in the information folder

The undersigned: Mr.Ren Yi/Manager

Company name and address of the manufacturer:

Jiangsu Xinri E-Vehicle Co., Ltd.

No.501, Xishan Avenue, Xishan District, Wuxi City, Jiangsu Province, China

Name and address of the manufacturer's representative (if any):

Z-TECH BIKE KFT

1044 Budapest, Ezred utca 7.II.ép.A.Iház.fszt.3.

Hereby states that the vehicles:

0.1. Make (trade name of the manufacturer): XINRI, SUNRA, APACHI, ISILDAR APACHI,ISILDAR, Wayscral,KRAL,ZTECH,EvoMotion,SYMEX,GBF,ARORA,MASU, MOTOLUX,ALF MOTO, MOTODELL,MOTOMZ,MEEZ,MEZZ, MONASSO,

0.2. Type: GRACE

0.2.1. Variant(s): Variant 1: 25km/h/Lead acid battery

一至多

Variant 2: 45km/h/Lead acid battery Variant 3: 25km/h/lithium battery Variant 4: 45km/h/lithium battery

0.2.2. Version(s):00

Signature:

0.2.3. Commercial name(s) (if available): GRACE, ZT-25, BE BOLD, CRYSTAL, Zeroporte, Crystal, E-START, E-MATE, E-CRUISER, E-ROAD, ANKA 3000, ANKA, KR-42, E-legant, JAGUAR, wave, urban, MARS, ElectroJet

0.3. Category, subcategory and sub-subcategory of vehicle: L1e-B

shall be constructed in a proper manner and are designed to be sufficiently robust to withstand the intended use over the vehicle's lifetime, taking into account regular and scheduled maintenance and specific equipment adjustments, as described clearly and unambiguously in the instructions manual delivered with the vehicles.

The undersigned furthermore agrees to and guarantees that specific analyses of vehicle structures, components and/or parts using engineering calculations, virtual testing methods and/or structural testing shall be made available in a timely manner to the approval authority and the European Commission upon request in case of a recall due to a serious safety risk.

This declaration applies to all vehicles covered by the type annexed and has no bearing on any vehicle warranty.

Place: Wuxi City, Jiangsu Province, P.R. China Date: Date: September.22.2016

Name and position in the company: Mr.Ren

<u>Yi/Manager</u>

### **EU CERTIFICATE OF CONFORMITY**

The undersigned: Mr.Ren Yi/Manager (full name and position)] Hereby certifies that the following complete vehicle:

0.1	Make (trade name of the manufacturer):	XINRI,SUNRA,APACHI, ISILDAR APACHI,ISILDAR,Wayscral, KRAL,ZTECH,EvoMotion,SYMEX,GBF,ARORA,MASU, MOTOLUX,ALF MOTO,MOTODELL,MOTOMZ,MEEZ,MEZZ,
		MONASSO, DRAID
0.2.	Type <sup>(5)</sup> :	GRACE
0.2.1.	Variant <sup>(5)</sup> :	Variant 1: 25km/h/Lead acid batteries
0.2.2.	Version (5):	00
0.2.3.	Commercial name (if available):	GRACE, ZT-25, BE BOLD, CRYSTAL, Zeroporte, Crystal, E-START, E-MATE, E-CRUISER, E-ROAD, ANKA 3000, ANKA, KR-42, E-legant, JAGUAR, wave, urban, MARS, ElectroJet
0.3.	Category, subcategory and sub-subcategory of vehicle <sup>(6)</sup> :	L1e-B
0.4.	Company name and address of manufacturer:	Jiangsu Xinri E-Vehicle Co.,Ltd. No.501,Xishan Avenue, Xishan District, Wuxi City, Jiangsu Province, China
0.4.2.	Name and address of manufacturer's authorized representative (if any) <sup>(3)</sup> :	Z-TECH BIKE KFT 1044 Budapest, Ezred utca 7.II.ép.A.Iház.fszt.3.
0.5.1.	Location of the manufacturer's statutory plate(s) <sup>(7)(8)</sup> :	R,x:1050,y:100,z:370
0.5.2.	Method of attachment of the manufacturer's statutory plate(s):	Riveted on the chassis
0.6.	Location of the vehicle identification number <sup>(7)</sup> :	R,x:270,y:1,z:560(r/o)
1	Vehicle identification number:	☆LXRBD0GW6G090????☆
conforms in a	Il respects to the type descr	ribed in EU type-approval (e13*168/2013*?????*00) issued on

conforms in all respects to the type described in EU type-approval (e13\*168/2013\*?????\*00) issued on (...... date of issue) and

can be permanently registered in Member States having right/left -hand traffic and using metric/imperial (1) units for the speedometer.

(Place): Wuxi City, Jiangsu Province, P.R. China (Date): September 22 2016

Signature:

### General construction characteristics 1.3. Number of axles: and wheels: 2 1.3.1. Axles with twinned wheels(2)(3): Not applicable 1.3.2. Powered axles<sup>(2)</sup>: R Advanced braking system: ABS / CBS / 6.2.4. None Both ABS and CBS / None (1)(3): Main dimensions 2.2.1. Length: 1727mm 2.2.2. Width: 714mm 2.2.3. Height: 1071mm 2.2.4. Wheelbase: 1202mm 2.2.4.1. Wheelbase sidecar (3a)(3k): Not applicable 2.2.5. Track width(3) 2.2.5.1. Track width front (3c): Not applicable 2.2.5.2. Track width rear (3c): Not applicable 2.2.5.3. Track width sidecar (3k): Not applicable 2.2.10.6. Ground clearance between the axles (3d): Not applicable Wheelbase to ground clearance ratio (3f): 2.2.15. Not applicable 2.2.17. Seat height (3d): Not applicable Masses 2.1.1. Mass in running order: 61kg 2.1.2. Actual mass: 171kg Technically permissible maximum laden 2.1.3. 246kg mass: Technically permissible maximum mass on 2.1.3.1. 72kg front axle: Technically permissible maximum mass on 2.1.3.2. 174kg rear axle: Technically permissible maximum mass on 2.1.3.3. Not applicable sidecar axle(3k): Technically permissible maximum towable 2.1.7. mass (3): Braked: Not applicable Unbraked: Not applicable Technically permissible maximum laden 2.1.7.1. Not applicable mass of the combination (3): Technically permissible maximum mass at 2.1.7.2. Not applicable the coupling point<sup>(3)</sup>: **Powertrain** 3.1.1.1. Manufacturer(3n): Not applicable Engine code (as marked on the engine or 3.1.1.2. Not applicable other means of identification)(3n): Working principle of the combustion engine: internal combustion engine (ICE)/positive 3.2.1.2. ignition/compression ignition/external Not applicable combustion engine (ECE)/turbine/compressed air(1)(3n): 3.2.1.4.1 Number of cylinders<sup>(3n)</sup>: Not applicable 3.2.1.4.2 Arrangement of cylinders (3n)(f): Not applicable

3.2.1.5	Engine capacity:	Not applicable
1.9.	Maximum net power <sup>(3n)</sup> :	Not applicable
1.10.	Ratio maximum net power/mass of the vehicle in running order <sup>(3n)</sup> :	Not applicable
3.2.3.1.	Fuel type <sup>(3n)(g)</sup> :	Not applicable
3.2.3.2.	Vehicle fuel combination:mono-fuel/bi- fuel/flex-fuel (1)(3n)	Not applicable
3.2.3.2.1	Maximum amount of bio-fuel acceptable in fuel <sup>(3n)</sup> :	Not applicable
3.1.2.1.	Manufacturer <sup>(3o)</sup> :	Bosch (Ningbo)e-Scooter Motor Co.,Ltd.
3.1.2.2.	Electric motor code (as marked on the engine or other means of identification) <sup>(3o)</sup> :	RBMBLCH????????
3.3.3.4.	<del>15/</del> 30 <sup>(1)</sup> minutes power <sup>(30)(r)</sup> :	0.45KW at 240 min <sup>-1</sup>
3.1.3.1.	Manufacturer (3p):	Not applicable
3.1.3.2.	Application code (as marked on the engine or other means of identification) <sup>(3p)</sup> :	Not applicable
3.3.1.	Electric vehicle configuration: pure electric/hybrid electric/manpower — electric (1)((30)(3p) :	Not applicable
3.3.5.2.	Category of hybrid electric vehicle: off- vehicle charging/not off-vehicle charging (1)(3p)	Not applicable
3.9.2.	Maximum assistance factor <sup>(3q)</sup> :	Not applicable
Maximum		Not applicable
1.8.	Maximum speed of vehicle (9):	25km/h
3.9.3.	Maximum vehicle speed for which the electric motor gives assistance (3q):	Not applicable
Drive-trai	n and control	
3.5.3.9.	Transmission (type) (h):	Not applicable
3.5.4.	Gear ratios (t):	Not applicable
3.5.4.1.	Final drive ratio:	Not applicable
	Overall gear ratio in highest gear (3d):	Not applicable
	on of tyres	
6.18.1.1	Tyre size designation <sup>(s)</sup> :	Axle 1:90/90-10,55J Axle 2:90/90-10,55J 90/90-10,50J 90/90-10,50J
		(optional) (optional)
	sidecar wheel	Not applicable
Bodywor		
6.20.2.1.	Door configuration and number of doors (3g) (i) (j):	Not applicable
6.16.1.	Number of seating positions:	2 Not applicable
6.16.1.1	Location and arrangement (3g)(k):	Not applicable
Coupling	Type-approval number of coupling-device	
7.2.8.	(3):	Not applicable
Environm	nental performance	
4.0.1.	Environmental step (p):Euro (3/4/5) (1)	Not applicable
4.0.6.	Sound level measured according to <sup>(m)(n)</sup> :	Not applicable
4.0.6.1.	Stationary:	Not applicable
4.0.6.2.	Drive-by:	Not applicable
	-··· <del>·</del>	

#### Annex B - LCA 51 1215 002 16 - Page 95

4.0.6.3. Limit value for L<sub>urban</sub><sup>(3r)</sup>: Not applicable Exhaust emissions measured according to 3.2.15. Not applicable Type V test: tailpipe emissions after cold start, including the deterioration factor, if applicable CO: Not applicable THC: Not applicable 3.2.15.1. NMHC: Not applicable Not applicable NOx: THC+NOx: Not applicable PM: Not applicable Type II test: tailpipe emissions at 3.2.15.2. (increased) idle and free acceleration: Not applicable 3.2.15.3. Smoke corrected absorption coefficient: Not applicable Energy efficiency<sup>(m)(o)</sup> Fuel consumption<sup>(3)(q)</sup>: 4.0.2. Not applicable 4.0.3. CO2 emissions<sup>(3)(q)(n)</sup>: Not applicable Energy consumption<sup>(3)(q)</sup>: 4.0.4. 34Wh/km 4.0.5. Electric range<sup>(3)</sup>: 44.5km Conversion of the performance of the vehicle (3i) Vehicle appropriate for converting its performance level between subcategories 8.1. Not applicable (L3e/L4e)-A2 and (L3e/L4e)-A3 and vice versa: Additional information (3): 9.1. Remarks (3): Not applicable Exemptions (3): 9.2. Not applicable

#### **EU CERTIFICATE OF CONFORMITY**

The undersigned: Mr.Ren Yi/Manager (full name and position)] Hereby certifies that the following complete vehicle:

0.1	Make (trade name of the manufacturer):	XINRI,SUNRA,APACHI, ISILDAR APACHI,ISILDAR,Wayscral, KRAL,ZTECH,EvoMotion,SYMEX,GBF,ARORA,MASU, MOTOLUX,ALF MOTO,MOTODELL,MOTOMZ,MEEZ,MEZZ, MONASSO,				
0.2.	Type <sup>(5)</sup> :	GRACE				
0.2.1.	Variant <sup>(5)</sup> :	Variant 2: 45km/h/Lead acid batteries				
0.2.2.	Version (5):	00				
0.2.3.	Commercial name (if available):	GRACE , ZT-25, BE BOLD,CRYSTAL, Zeroporte, Crystal, E-START,E-MATE,E-CRUISER,E-ROAD, ANKA 3000, ANKA, KR-42, E-legant, JAGUAR, wave, urban, MARS, ElectroJet				
0.3.	Category, subcategory and sub-subcategory of vehicle <sup>(6)</sup> :	L1e-B				
0.4.	Company name and address of manufacturer:	Jiangsu Xinri E-Vehicle Co.,Ltd. No.501,Xishan Avenue, Xishan District, Wuxi City, Jiangsu Province, China				
0.4.2.	Name and address of manufacturer's authorized representative (if any) <sup>(3)</sup> :	Z-TECH BIKE KFT 1044 Budapest,Ezred utca 7.II.ép.A.Iház.fszt.3.				
0.5.1.	Location of the manufacturer's statutory plate(s) <sup>(7)(8)</sup> :	R,x:1050,y:100,z:370				
0.5.2.	Method of attachment of the manufacturer's statutory plate(s):	Riveted on the chassis				
0.6.	Location of the vehicle identification number <sup>(7)</sup> :	R,x:270,y:1,z:560(r/o)				
1	Vehicle identification number:	☆LXRBD0GW4G090????☆				
conforms in all respects to the type described in EU type-approval (e13*168/2013*?????*00) issued on ( date of issue) and can be permanently registered in Member States having right/left (1) -hand traffic and using metric/imperial (1) units for the speedometer (e) .						

(Place): Wuxi City, Jiangsu (Date): September 22 2016

Signature:

2

#### **General construction characteristics** 1.3. Number of axles: and wheels: 1.3.1. Axles with twinned wheels(2)(3): Not applicable 1.3.2. Powered axles<sup>(2)</sup>: R Advanced braking system: ABS / CBS / Both 6.2.4. None ABS and CBS / None (1)(3): Main dimensions 2.2.1. Length: 1727mm 2.2.2. Width: 714mm 2.2.3. Height: 1071mm 2.2.4. Wheelbase: 1202mm 2.2.4.1. Wheelbase sidecar (3a)(3k): Not applicable Track width(3) 2.2.5. 2.2.5.1. Track width front (3c): Not applicable 2.2.5.2. Track width rear (3c): Not applicable 2.2.5.3. Track width sidecar (3k): Not applicable 2.2.10.6. Ground clearance between the axles (3d): Not applicable 2.2.15. Wheelbase to ground clearance ratio (3f): Not applicable Not applicable 2.2.17. Seat height (3d): Masses 2.1.1. Mass in running order: 61kg 2.1.2. Actual mass: 171kg Technically permissible maximum laden mass: 2.1.3. 246kg Technically permissible maximum mass on 2.1.3.1. 72kg front axle: Technically permissible maximum mass on 2.1.3.2. 174kg rear axle: Technically permissible maximum mass on 2.1.3.3. Not applicable sidecar axle(3k): Technically permissible maximum towable 2.1.7. mass (3): Braked: Not applicable Not applicable Unbraked: Technically permissible maximum laden mass 2.1.7.1. Not applicable of the combination (3): Technically permissible maximum mass at the 2.1.7.2. Not applicable coupling point<sup>(3)</sup>: **Powertrain** 3.1.1.1. Manufacturer<sup>(3n)</sup>: Not applicable Engine code (as marked on the engine or 3.1.1.2. Not applicable other means of identification)(3n): Working principle of the combustion engine: internal combustion engine (ICE)/positive 3.2.1.2. ignition/compression ignition/external Not applicable combustion engine (ECE)/turbine/compressed air<sup>(1)(3n)</sup>: 3.2.1.4.1 Number of cylinders<sup>(3n)</sup>: Not applicable 3.2.1.4.2 Arrangement of cylinders (3n)(f): Not applicable 3.2.1.5 Engine capacity: Not applicable

1.9.	Maximum net power <sup>(3n)</sup> :	Not applicable	
1.10.	Ratio maximum net power/mass of the vehicle in running order <sup>(3n)</sup> :	Not applicable	
3.2.3.1.	Fuel type <sup>(3n)(g)</sup> :	Not applicable	
3.2.3.2.	Vehicle fuel combination:mono-fuel/bi-fuel/flexfuel (1)(3n)	Not applicable	
3.2.3.2.1	Maximum amount of bio-fuel acceptable in fuel (3n):	Not applicable	
3.1.2.1.	Manufacturer <sup>(3o)</sup> :	Bosch (Ningbo)e-Scooter	Motor Co.,Ltd.
3.1.2.2.	Electric motor code (as marked on the engine or other means of identification) <sup>(30)</sup> :	RBMBLCH?????????	
3.3.3.4.	45/30 (1) minutes power(30)(r):	0.8KW at 560 min <sup>-1</sup>	
3.1.3.1.	Manufacturer (3p):	Not applicable	
3.1.3.2.	Application code (as marked on the engine or other means of identification) <sup>(3p)</sup> :	Not applicable	
3.3.1.	Electric vehicle configuration: pure electric/hybrid electric/manpower — electric (1)((30)(3p);	Not applicable	
3.3.5.2.	Category of hybrid electric vehicle: off-vehicle charging/not off-vehicle charging (1)(3p)	Not applicable	
3.9.2.	Maximum assistance factor <sup>(3q)</sup> :	Not applicable	
Maximum	n speed		
1.8.	Maximum speed of vehicle (9):	45km/h	
3.9.3.	Maximum vehicle speed for which the electric motor gives assistance <sup>(3q)</sup> :	Not applicable	
Drive-trai	n and control		
3.5.3.9.	Transmission (type) <sup>(h)</sup> :	Not applicable	
3.5.4.	Gear ratios (t):	Not applicable	
3.5.4.1.	Final drive ratio:	Not applicable	
3.5.4.2.	Overall gear ratio in highest gear (3d):	Not applicable	
Installatio	on of tyres	Axle 1:90/90-10,55J	Axle 2:90/90-10,55J
6.18.1.1	Tyre size designation (s):	90/90-10,50J (optional)	90/90-10,50J (optional)
	sidecar wheel	Not applicable	(optional)
Bodywor		11	
6.20.2.1.	Door configuration and number of doors (3g) (i) (i):	Not applicable	
6.16.1.	Number of seating positions:	2	
6.16.1.1	Location and arrangement (3g)(k):	Not applicable	
Coupling	devices		
7.2.8.	Type-approval number of coupling-device (3):	Not applicable	
Environm	nental performance		
4.0.1.	Environmental step (p):Euro (3/4/5) (1)	Not applicable	
4.0.6.	Sound level measured according to (m)(n):	Not applicable	
4.0.6.1.	Stationary:	Not applicable	
4.0.6.2.	Drive-by:	Not applicable	
4.0.6.3.	Limit value for L <sub>urban</sub> <sup>(3r)</sup> :	Not applicable	

3.2.15. Exhaust emissions measured according to (m)(o) Not applicable

Type V test: tailpipe emissions after cold start, including the deterioration factor, if applicable

CO: Not applicable

THC: Not applicable

3.2.15.1. NMHC: Not applicable

NOx: Not applicable

THC+NOx: Not applicable

PM: Not applicable

3.2.15.2. Type II test: tailpipe emissions at (increased)

idle and free acceleration:

Not applicable

3.2.15.3. Smoke corrected absorption coefficient: Not applicable

**Energy efficiency** 

4.0.2. Fuel consumption<sup>(3)(q)</sup>: Not applicable

4.0.3. CO2 emissions<sup>(3)(q)(n)</sup>: Not applicable

4.0.4. Energy consumption<sup>(3)(q)</sup>: 34Wh/km

4.0.5. Electric range<sup>(3)</sup>: 44.5km

Conversion of the performance of the vehicle (3i)

Vehicle appropriate for converting its

8.1. performance level between subcategories (L3e/L4e)-A2 and (L3e/L4e)-A3 and vice

versa:

Additional information (3):

9.1. Remarks <sup>(3)</sup>: Not applicable 9.2. Exemptions <sup>(3)</sup>: Not applicable

#### **EU CERTIFICATE OF CONFORMITY**

The undersigned: Mr.Ren Yi/Manager (full name and position)] Hereby certifies that the following complete vehicle:

0.1	Make (trade name of the manufacturer):	XINRI,SUNRA,APACHI, ISILDAR APACHI,ISILDAR,Wayscral, KRAL,ZTECH,EvoMotion,SYMEX,GBF,ARORA,MASU, MOTOLUX,ALF MOTO,MOTODELL,MOTOMZ,MEEZ,MEZZ, MONASSO.
0.2.	Type <sup>(5)</sup> :	GRACE
0.2.1.	Variant <sup>(5)</sup> :	Variant 3: 25km/h/ lithium battery
0.2.2.	Version (5):	00
0.2.3.	Commercial name (if available):	GRACE, ZT-25, BE BOLD, CRYSTAL, Zeroporte, Crystal, E-START, E-MATE, E-CRUISER, E-ROAD, ANKA 3000, ANKA, KR-42, E-legant, JAGUAR, wave, urban, MARS, ElectroJet
0.3.	Category, subcategory and sub-subcategory of vehicle <sup>(6)</sup> :	L1e-B
0.4.	Company name and address of manufacturer:	Jiangsu Xinri E-Vehicle Co.,Ltd. No.501,Xishan Avenue, Xishan District, Wuxi City, Jiangsu Province, China
0.4.2.	Name and address of manufacturer's authorized representative (if any) <sup>(3)</sup> :	Z-TECH BIKE KFT 1044 Budapest,Ezred utca 7.II.ép.A.Iház.fszt.3.
0.5.1.	Location of the manufacturer's statutory plate(s) <sup>(7)(8)</sup> :	R,x:1050,y:100,z:370
0.5.2.	Method of attachment of the manufacturer's statutory plate(s):	Riveted on the chassis
0.6.	Location of the vehicle identification number <sup>(7)</sup> :	R,x:270,y:1,z:560(r/o)
1	Vehicle identification number:	☆LXRTD1GW2G090????☆
	all respects to the type descrate of issue) and	ribed in EU type-approval (e13*168/2013*????**00) issued on

(Place): Wuxi City, Jiangsu (Date): September 22 2016

Signature:

(1) units for the speedometer (e).

can be permanently registered in Member States having right/left (1) -hand traffic and using metric/imperial

General c	onstruction characteristics		
1.3.	Number of axles: 2	and wheels:	2
1.3.1.	Axles with twinned wheels(2)(3):	Not applicable	
1.3.2.	Powered axles <sup>(2)</sup> :	R	
6.2.4.	Advanced braking system: ABS / CBS / Both ABS and CBS / None (1)(3):	None	
Main dime	ensions		
2.2.1.	Length:	1727mm	
2.2.2.	Width:	714mm	
2.2.3.	Height:	1071mm	
2.2.4.	Wheelbase:	1202mm	
2.2.4.1.	Wheelbase sidecar (3a)(3k):	Not applicable	
2.2.5.	Track width <sup>(3)</sup>		
2.2.5.1.	Track width front (3c):	Not applicable	
2.2.5.2.	Track width rear <sup>(3c)</sup> :	Not applicable	
2.2.5.3.	Track width sidecar (3k):	Not applicable	
2.2.10.6.	Ground clearance between the axles (3d):	Not applicable	
2.2.15.	Wheelbase to ground clearance ratio (3f):	Not applicable	
2.2.17.	Seat height (3d):	Not applicable	
Masses			
2.1.1.	Mass in running order:	61kg	
2.1.2.	Actual mass:	145kg	
2.1.3.	Technically permissible maximum laden mass:	246kg	
2.1.3.1.	Technically permissible maximum mass on front axle:	72kg	
2.1.3.2.	Technically permissible maximum mass on rear axle:	174kg	
2.1.3.3.	Technically permissible maximum mass on sidecar axle <sup>(3k)</sup> :	Not applicable	
2.1.7.	Technically permissible maximum towable mass <sup>(3)</sup> :		
	Braked:	Not applicable	
	Unbraked:	Not applicable	
2.1.7.1.	Technically permissible maximum laden mass of the combination <sup>(3)</sup> :	Not applicable	
2.1.7.2.	Technically permissible maximum mass at the coupling point <sup>(3)</sup> :	Not applicable	
Powertrai	n		
3.1.1.1.	Manufacturer <sup>(3n)</sup> :	Not applicable	
3.1.1.2.	Engine code (as marked on the engine or other means of identification) <sup>(3n)</sup> :	Not applicable	
3.2.1.2.	Working principle of the combustion engine: internal combustion engine (ICE)/positive ignition/compression ignition/external combustion engine (ECE)/turbine/compressed air <sup>(1)(3n)</sup> :	Not applicable	
3.2.1.4.1	Number of cylinders <sup>(3n)</sup> :	Not applicable	
3.2.1.4.2	Arrangement of cylinders <sup>(3n)(f):</sup>	Not applicable	

3.2.1.5	Engine capacity:	Not applicable
1.9.	Maximum net power <sup>(3n)</sup> :	Not applicable
1.10.	Ratio maximum net power/mass of the vehicle in running order <sup>(3n)</sup> :	Not applicable
3.2.3.1.	Fuel type <sup>(3n)(g)</sup> :	Not applicable
3.2.3.2.	Vehicle fuel combination:mono-fuel/bi-fuel/flex-fuel (1)(3n)	Not applicable
3.2.3.2.1	Maximum amount of bio-fuel acceptable in fuel (3n):	Not applicable
3.1.2.1.	Manufacturer <sup>(3o)</sup> :	Bosch (Ningbo)e-Scooter Motor Co.,Ltd.
3.1.2.2.	Electric motor code (as marked on the engine or other means of identification) <sup>(3o)</sup> :	RBMBLCH????????
3.3.3.4.	<del>15/</del> 30 <sup>(1)</sup> minutes power <sup>(3o)(r)</sup> :	0.45KW at 240 min <sup>-1</sup>
3.1.3.1.	Manufacturer (3p):	Not applicable
3.1.3.2.	Application code (as marked on the engine or other means of identification) <sup>(3p)</sup> :	Not applicable
3.3.1.	Electric vehicle configuration: pure electric/hybrid electric/manpower — electric (1)((3o)(3p):	Not applicable
3.3.5.2.	Category of hybrid electric vehicle: off-vehicle charging/not off-vehicle charging (1)(3p)	Not applicable
3.9.2.	Maximum assistance factor <sup>(3q)</sup> :	Not applicable
Maximum	speed	
1.8.	Maximum speed of vehicle (9):	25km/h
3.9.3.	Maximum vehicle speed for which the electric motor gives assistance (3q):	Not applicable
Drive-train	n and control	
3.5.3.9.	Transmission (type) <sup>(h)</sup> :	Not applicable
3.5.4.	Gear ratios (t):	Not applicable
3.5.4.1.	Final drive ratio:	Not applicable
3.5.4.2.	Overall gear ratio in highest gear (3d):	Not applicable
Installatio	on of tyres	A.J. 4.00/00 40 FF L A.J. 0.00/00 40 FF L
6.18.1.1	Tyre size designation <sup>(s)</sup> :	Axle 1:90/90-10,55J 90/90-10,50J (entional) Axle 2:90/90-10,55J 90/90-10,50J
	sidecar wheel	(optional) Not applicable
Bodyworl		τοι αρμιοαδίο
6.20.2.1.	Door configuration and number of doors (3g) (i)	Not applicable
6.16.1.	Number of seating positions:	2
6.16.1.1	Location and arrangement (3g)(k):	Not applicable
Coupling	devices	
7.2.8.	Type-approval number of coupling-device (3):	Not applicable
Environm	ental performance	
4.0.1.	Environmental step (p):Euro (3/4/5) (1)	Not applicable
4.0.6.	Sound level measured according to <sup>(m)(n)</sup> :	Not applicable
4.0.6.1.	Stationary:	Not applicable
4.0.6.2.	Drive-by:	Not applicable
4.0.6.3.	Limit value for L <sub>urban</sub> <sup>(3r)</sup> :	Not applicable

3.2.15. Exhaust emissions measured according to (m)(o) Not applicable

Type V test: tailpipe emissions after cold start, including the deterioration factor, if applicable

CO: Not applicable

THC: Not applicable

3.2.15.1. NMHC: Not applicable

NOx: Not applicable

THC+NOx: Not applicable

PM: Not applicable

3.2.15.2. Type II test: tailpipe emissions at (increased)

idle and free acceleration:

Not applicable

3.2.15.3. Smoke corrected absorption coefficient: Not applicable

**Energy efficiency** 

4.0.2. Fuel consumption<sup>(3)(q)</sup>: Not applicable

4.0.3. CO2 emissions<sup>(3)(q)(n)</sup>: Not applicable

4.0.4. Energy consumption<sup>(3)(q)</sup>: 24.4Wh/km

4.0.5. Electric range<sup>(3)</sup>: 63.6km

Conversion of the performance of the vehicle (3i)

Vehicle appropriate for converting its performance level between subcategories

8.1. (L3e/L4e)-A2 and (L3e/L4e)-A3 and vice

versa:

Additional information (3):

9.1. Remarks <sup>(3)</sup>: Not applicable 9.2. Exemptions <sup>(3)</sup>: Not applicable

#### **EU CERTIFICATE OF CONFORMITY**

The undersigned: Mr.Ren Yi/Manager (full name and position)] Hereby certifies that the following complete vehicle:

0.1	Make (trade name of the manufacturer):	XINRI,SUNRA,APACHI, ISILDAR APACHI,ISILDAR,Wayscral, KRAL,ZTECH,EvoMotion,SYMEX,GBF,ARORA,MASU, MOTOLUX,ALF MOTO,MOTODELL,MOTOMZ,MEEZ,MEZZ, MONASSO,
0.2.	Type <sup>(5)</sup> :	GRACE
0.2.1.	Variant <sup>(5)</sup> :	Variant 4: 45km/h/ lithium battery
0.2.2.	Version (5):	00
0.2.3.	Commercial name (if available):	GRACE, ZT-25, BE BOLD, CRYSTAL, Zeroporte, Crystal, E-START, E-MATE, E-CRUISER, E-ROAD, ANKA 3000, ANKA, KR-42, E-legant, JAGUAR, wave, urban, MARS, ElectroJet
0.3.	Category, subcategory and sub-subcategory of vehicle <sup>(6)</sup> :	L1e-B
0.4.	Company name and address of manufacturer:	Jiangsu Xinri E-Vehicle Co.,Ltd. No.501,Xishan Avenue, Xishan District, Wuxi City, Jiangsu Province, China
0.4.2.	Name and address of manufacturer's authorized representative (if any) <sup>(3)</sup> :	Z-TECH BIKE KFT 1044 Budapest,Ezred utca 7.II.ép.A.Iház.fszt.3.
0.5.1.	Location of the manufacturer's statutory plate(s) <sup>(7)(8)</sup> :	R,x:1050,y:100,z:370
0.5.2.	Method of attachment of the manufacturer's statutory plate(s):	Riveted on the chassis
0.6.	Location of the vehicle identification number <sup>(7)</sup> :	R,x:270,y:1,z:560(r/o)
1	Vehicle identification number:	☆LXRTD1GW0G090????☆
conforms in	all respects to the type desc	ribed in EU type-approval (e13*168/2013*?????*00) issued on

can be permanently registered in Member States having right/left (1) -hand traffic and using metric/imperial (1) units for the speedometer (e).

(Place): Wuxi City, Jiangsu (Date): September 22 2016

Signature:

General c	construction characteristics		
1.3.	Number of axles: 2	and wheels:	2
1.3.1.	Axles with twinned wheels <sup>(2)(3)</sup> :	Not applicable	
1.3.2.	Powered axles <sup>(2)</sup> :	R	
6.2.4.	Advanced braking system: ABS / CBS / Both ABS and CBS / None (1)(3):	None	
Main dim	ensions		
2.2.1.	Length:	1727mm	
2.2.2.	Width:	714mm	
2.2.3.	Height:	1071mm	
2.2.4.	Wheelbase:	1202mm	
2.2.4.1.	Wheelbase sidecar (3a)(3k):	Not applicable	
2.2.5.	Track width <sup>(3)</sup>		
2.2.5.1.	Track width front (3c):	Not applicable	
2.2.5.2.	Track width rear (3c):	Not applicable	
2.2.5.3.	Track width sidecar (3k):	Not applicable	
2.2.10.6.	Ground clearance between the axles (3d):	Not applicable	
2.2.15.	Wheelbase to ground clearance ratio (3f):	Not applicable	
2.2.17.	Seat height (3d):	Not applicable	
Masses			
2.1.1.	Mass in running order:	61kg	
2.1.2.	Actual mass:	145kg	
2.1.3.	Technically permissible maximum laden mass:	246kg	
2.1.3.1.	Technically permissible maximum mass on front axle:	72kg	
2.1.3.2.	Technically permissible maximum mass on rear axle:	174kg	
2.1.3.3.	Technically permissible maximum mass on sidecar axle <sup>(3k)</sup> :	Not applicable	
2.1.7.	Technically permissible maximum towable mass <sup>(3)</sup> :		
	Braked:	Not applicable	
	Unbraked:	Not applicable	
2.1.7.1.	Technically permissible maximum laden mass of the combination <sup>(3)</sup> :	Not applicable	
2.1.7.2.	Technically permissible maximum mass at the coupling point <sup>(3)</sup> :	Not applicable	
Powertra	in		
3.1.1.1.	Manufacturer <sup>(3n)</sup> :	Not applicable	
3.1.1.2.	Engine code (as marked on the engine or other means of identification) <sup>(3n)</sup> :	Not applicable	
3.2.1.2.	Working principle of the combustion engine: internal combustion engine (ICE)/positive ignition/compression ignition/external combustion engine (ECE)/turbine/compressed air <sup>(1)(3n)</sup> :	Not applicable	
3.2.1.4.1	Number of cylinders <sup>(3n)</sup> :	Not applicable	
3.2.1.4.2	Arrangement of cylinders <sup>(3n)(f)</sup> :	Not applicable	

3.2.1.5	Engine capacity:	Not applicable
1.9.	Maximum net power <sup>(3n)</sup> :	Not applicable
1.10.	Ratio maximum net power/mass of the vehicle in running order <sup>(3n)</sup> :	Not applicable
3.2.3.1.	Fuel type <sup>(3n)(g)</sup> :	Not applicable
3.2.3.2.	Vehicle fuel combination:mono-fuel/bi-fuel/flex-fuel (1)(3n)	Not applicable
3.2.3.2.1	Maximum amount of bio-fuel acceptable in fuel (3n):	Not applicable
3.1.2.1.	Manufacturer <sup>(3o)</sup> :	Bosch (Ningbo)e-Scooter Motor Co.,Ltd.
3.1.2.2.	Electric motor code (as marked on the engine or other means of identification) <sup>(3o)</sup> :	RBMBLCH????????
3.3.3.4.	15/30 (1) minutes power(30)(r):	0.8KW at 560 min <sup>-1</sup>
3.1.3.1.	Manufacturer <sup>(3p)</sup> :	Not applicable
3.1.3.2.	Application code (as marked on the engine or other means of identification) <sup>(3p)</sup> :	Not applicable
3.3.1.	Electric vehicle configuration: pure electric/hybrid electric/manpower — electric (1)((30)(3p):	Not applicable
3.3.5.2.	Category of hybrid electric vehicle: off-vehicle charging/not off-vehicle charging (1)(3p)	Not applicable
3.9.2.	Maximum assistance factor <sup>(3q)</sup> :	Not applicable
Maximum	speed	
1.8.	Maximum speed of vehicle (9):	45km/h
3.9.3.	Maximum vehicle speed for which the electric motor gives assistance (3q):	Not applicable
Drive-trai	n and control	
3.5.3.9.	Transmission (type) <sup>(h)</sup> :	Not applicable
3.5.4.	Gear ratios (t):	Not applicable
3.5.4.1.	Final drive ratio:	Not applicable
3.5.4.2.	Overall gear ratio in highest gear (3d):	Not applicable
installatio	on of tyres	Axle 1:90/90-10,55J
6.18.1.1	Tyre size designation (s):	90/90-10,50J (optional)
	sidecar wheel	Not applicable
Bodyworl		That applicable
6.20.2.1.	Door configuration and number of doors (3g) (i) (i):	Not applicable
6.16.1.	Number of seating positions:	2
6.16.1.1	Location and arrangement (3g)(k):	Not applicable
Coupling	devices	
7.2.8.	Type-approval number of coupling-device (3):	Not applicable
	ental performance	
4.0.1.	Environmental step (p):Euro (3/4/5) (1)	Not applicable
4.0.6.	Sound level measured according to (m)(n):	Not applicable
4.0.6.1.	Stationary:	Not applicable
4.0.6.2.	Drive-by:	Not applicable
4.0.6.3.	Limit value for L <sub>urban</sub> <sup>(3r)</sup> :	Not applicable

3.2.15. Exhaust emissions measured according to (m)(o) Not applicable

Type V test: tailpipe emissions after cold start, including the deterioration factor, if applicable

CO: Not applicable

THC: Not applicable

3.2.15.1. NMHC: Not applicable

NOx: Not applicable

THC+NOx: Not applicable

PM: Not applicable

3.2.15.2. Type II test: tailpipe emissions at (increased)

idle and free acceleration:

Not applicable

3.2.15.3. Smoke corrected absorption coefficient: Not applicable

Energy efficiency

4.0.2. Fuel consumption<sup>(3)(q)</sup>: Not applicable

4.0.3. CO2 emissions<sup>(3)(q)(n)</sup>: Not applicable

4.0.4. Energy consumption<sup>(3)(q)</sup>: 24.4Wh/km

4.0.5. Electric range<sup>(3)</sup>: 63.6km

Conversion of the performance of the vehicle (3i)

Vehicle appropriate for converting its

8.1. performance level between subcategories (L3e/L4e)-A2 and (L3e/L4e)-A3 and vice

versa:

Additional information (3):

9.1. Remarks <sup>(3)</sup>: Not applicable 9.2. Exemptions <sup>(3)</sup>: Not applicable

#### **Statement Concerning Authority Of Signature On COC Paper**

We, Jiangsu Xinri E-Vehicle Co., Ltd. declare that the undersigned, Mr.Ren Yi the manager of our company, will be the authorized person to sign the COC paper of the motorcycle.

Type: GRACE

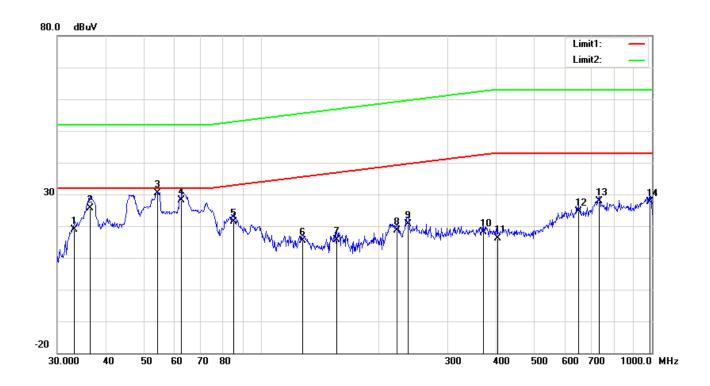
Specification of signature of COC:

Mr.Ren Yi

Jiangsu Xinri E-Vehicle Co., Ltd.

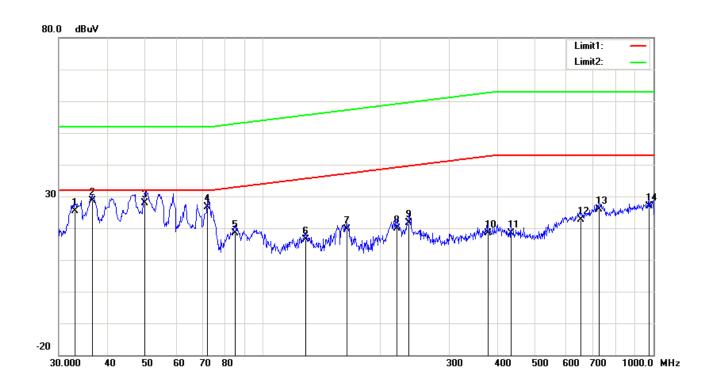
Date: September 22, 2016

### Lead acid battery-Broadband-REESS not in charging Left-Horizontal



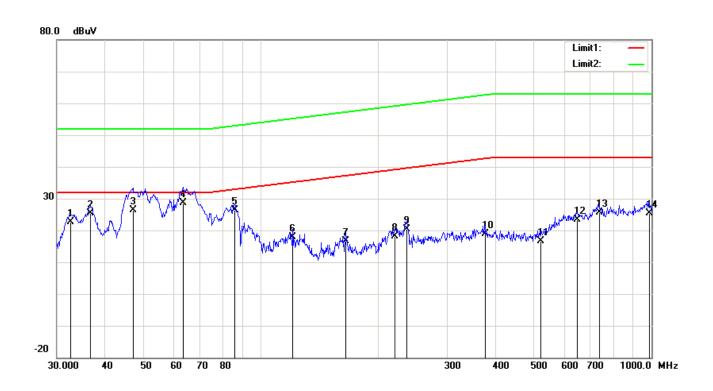
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	33.2800	51.41	QP	12.15	45.65	0.93	18.84	32.00	-13.16	300	180
2	36.4800	58.78	QP	11.58	45.65	0.99	25.70	32.00	-6.30	300	180
3	54.2000	66.07	QP	9.72	46.66	1.27	30.40	32.00	-1.60	300	180
4	62.6000	64.53	QP	9.80	47.47	1.34	28.20	32.00	-3.80	300	180
5	85.1600	57.69	QP	9.62	47.50	1.47	21.28	32.83	-11.55	300	180
6	127.6000	45.19	QP	15.56	47.12	1.84	15.47	35.49	-20.02	300	180
7	156.1600	48.43	QP	12.69	47.55	2.08	15.65	36.82	-21.17	300	180
8	222.8800	49.92	QP	14.19	47.75	2.38	18.74	39.16	-20.42	300	180
9	238.0800	50.84	QP	14.73	47.38	2.45	20.64	39.59	-18.95	300	180
10	371.1600	47.63	QP	16.26	48.76	3.10	18.23	42.51	-24.28	300	180
11	402.2400	45.94	QP	16.00	48.94	3.24	16.24	43.00	-26.76	300	180
12	649.2800	46.72	QP	21.82	47.89	4.09	24.74	43.00	-18.26	300	180
13	733.4400	46.33	QP	22.60	45.33	4.35	27.95	43.00	-15.05	300	180
14	991.3600	43.98	QP	24.89	46.37	5.04	27.54	43.00	-15.46	300	180

### Lead acid battery-Broadband-REESS not in charging Left-Vertical



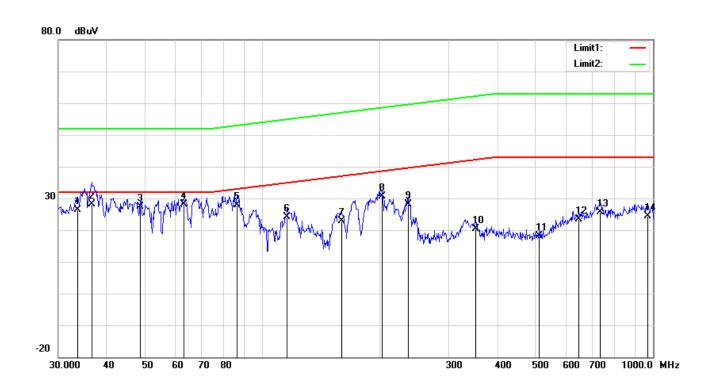
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	33.0000	50.38	QP	19.85	45.65	0.92	25.50	32.00	-6.50	300	180
2	36.5600	55.48	QP	17.78	45.65	0.99	28.60	32.00	-3.40	300	180
3	50.0000	63.95	QP	9.05	46.45	1.25	27.80	32.00	-4.20	300	180
4	72.2000	63.40	QP	9.77	47.91	1.44	26.70	32.00	-5.30	300	180
5	84.8800	56.27	QP	8.15	47.53	1.47	18.36	32.81	-14.45	300	180
6	128.7200	45.38	QP	16.30	47.21	1.85	16.32	35.55	-19.23	300	180
7	164.0400	50.68	QP	13.76	46.96	2.08	19.56	37.14	-17.58	300	180
8	221.1200	50.44	QP	14.87	47.79	2.37	19.89	39.10	-19.21	300	180
9	236.7200	51.71	QP	14.89	47.41	2.45	21.64	39.55	-17.91	300	180
10	377.5600	47.39	QP	16.54	48.77	3.13	18.29	42.62	-24.33	300	180
11	432.4400	47.80	QP	16.46	49.12	3.34	18.48	43.00	-24.52	300	180
12	652.0000	45.26	QP	21.47	48.16	4.10	22.67	43.00	-20.33	300	180
13	725.5200	44.91	QP	22.32	45.59	4.32	25.96	43.00	-17.04	300	180
14	975.3600	44.88	QP	23.63	46.55	5.01	26.97	43.00	-16.03	300	180

## Lead acid battery-Broadband-REESS not in charging Right-Horizontal



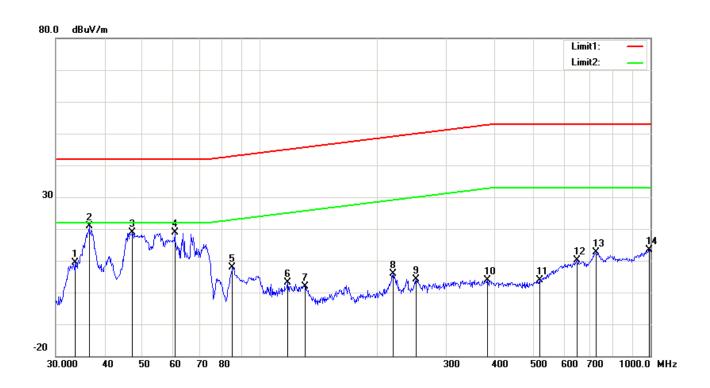
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.6000	55.16	QP	12.27	45.66	0.92	22.69	32.00	-9.31	300	0
2	36.7200	58.42	QP	11.54	45.65	0.99	25.30	32.00	-6.70	300	0
3	47.0800	61.30	QP	10.20	46.19	1.19	26.50	32.00	-5.50	300	0
4	63.4800	64.87	QP	9.91	47.53	1.35	28.60	32.00	-3.40	300	0
5	85.7200	62.84	QP	9.63	47.45	1.48	26.50	32.88	-6.38	300	0
6	120.8000	46.67	QP	16.00	46.62	1.79	17.84	35.13	-17.29	300	0
7	165.4000	48.97	QP	12.34	46.85	2.08	16.54	37.20	-20.66	300	0
8	220.8000	49.50	QP	14.12	47.80	2.36	18.18	39.10	-20.92	300	0
9	236.9600	50.73	QP	14.69	47.40	2.45	20.47	39.56	-19.09	300	0
10	375.7600	48.31	QP	16.22	48.77	3.12	18.88	42.59	-23.71	300	0
11	522.0400	45.26	QP	17.16	49.32	3.64	16.74	43.00	-26.26	300	0
12	646.0400	45.17	QP	21.78	47.56	4.08	23.47	43.00	-19.53	300	0
13	735.4800	44.05	QP	22.61	45.26	4.35	25.75	43.00	-17.25	300	0
14	989.2400	42.03	QP	24.84	46.42	5.04	25.49	43.00	-17.51	300	0

## Lead acid battery-Broadband-REESS not in charging Right-Vertical



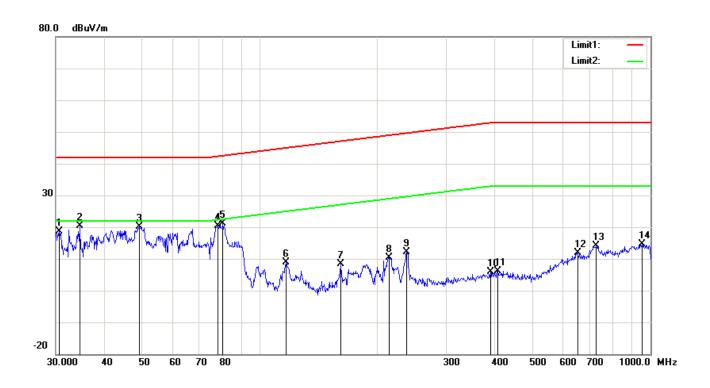
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	33.6400	51.73	QP	19.48	45.65	0.94	26.50	32.00	-5.50	300	0
2	36.5600	54.98	QP	17.78	45.65	0.99	28.10	32.00	-3.90	300	0
3	48.8000	62.65	QP	9.86	46.34	1.23	27.40	32.00	-4.60	300	0
4	62.8800	65.76	QP	8.59	47.49	1.34	28.20	32.00	-3.80	300	0
5	86.0800	65.38	QP	8.35	47.41	1.48	27.80	32.91	-5.11	300	0
6	115.9200	53.90	QP	15.04	46.43	1.74	24.25	34.86	-10.61	300	0
7	159.4800	54.73	QP	13.36	47.32	2.07	22.84	36.96	-14.12	300	0
8	202.2000	60.83	QP	14.85	47.39	2.27	30.56	38.52	-7.96	300	0
9	237.1600	58.17	QP	14.89	47.40	2.45	28.11	39.57	-11.46	300	0
10	352.6800	50.25	QP	16.03	48.81	3.01	20.48	42.17	-21.69	300	0
11	512.7600	47.91	QP	15.95	49.34	3.60	18.12	43.00	-24.88	300	0
12	645.6000	45.44	QP	21.32	47.52	4.08	23.32	43.00	-19.68	300	0
13	732.7200	44.38	QP	22.25	45.35	4.35	25.63	43.00	-17.37	300	0
14	971.3600	42.19	QP	23.63	46.47	5.00	24.35	43.00	-18.65	300	0

### Lead acid battery-Narrowband-REESS not in charging Left-Horizontal



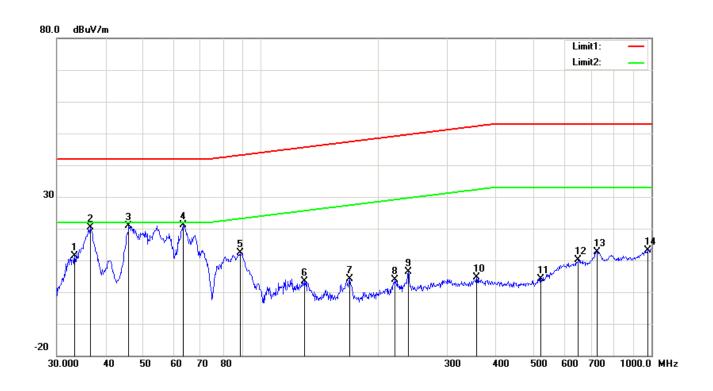
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	33.6803	41.99	AVG	12.08	45.65	0.94	9.36	22.00	-12.64	300	180
2	36.5092	53.90	AVG	11.57	45.65	0.99	20.81	22.00	-1.19	300	180
3	47.1599	53.76	AVG	10.19	46.20	1.19	18.94	22.00	-3.06	300	180
4	60.4919	55.29	AVG	9.54	47.32	1.31	18.82	22.00	-3.18	300	180
5	84.9995	44.37	AVG	9.61	47.52	1.47	7.93	22.82	-14.89	300	180
6	117.7725	32.05	AVG	15.82	46.49	1.76	3.14	24.97	-21.83	300	180
7	130.3789	32.06	AVG	15.25	47.33	1.87	1.85	25.63	-23.78	300	180
8	219.0753	37.29	AVG	14.06	47.80	2.35	5.90	29.04	-23.14	300	180
9	251.1804	34.26	AVG	15.19	47.78	2.52	4.19	29.94	-25.75	300	180
10	382.5879	33.45	AVG	16.16	48.79	3.15	3.97	32.71	-28.74	300	180
11	520.8882	32.53	AVG	17.10	49.36	3.63	3.90	33.00	-29.10	300	180
12	647.3856	32.07	AVG	21.80	47.70	4.08	10.25	33.00	-22.75	300	180
13	724.2611	31.45	AVG	22.55	45.63	4.32	12.69	33.00	-20.31	300	180
14	993.0114	29.69	AVG	24.93	46.33	5.05	13.34	33.00	-19.66	300	180

#### Lead acid battery-Narrowband-REESS not in charging Left-Vertical



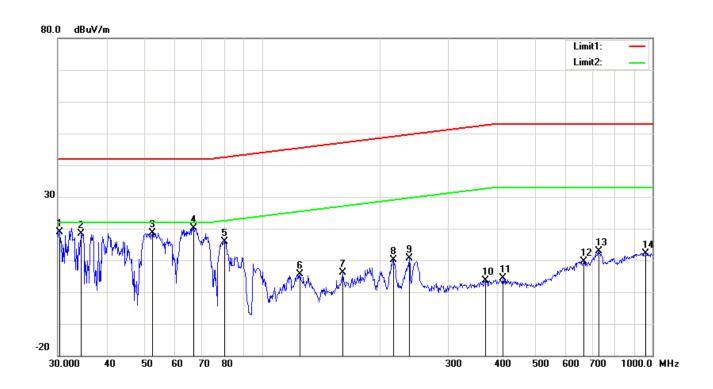
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	30.6400	42.31	AVG	21.23	45.68	0.88	18.74	22.00	-3.26	300	180
2	34.5200	46.18	AVG	18.97	45.64	0.95	20.46	22.00	-1.54	300	180
3	49.0800	55.65	AVG	9.67	46.37	1.23	20.18	22.00	-1.82	300	180
4	78.3200	58.90	AVG	7.87	47.83	1.44	20.38	22.28	-1.90	300	180
5	80.5200	59.88	AVG	7.44	47.74	1.44	21.02	22.47	-1.45	300	180
6	116.8400	38.45	AVG	15.22	46.46	1.75	8.96	24.91	-15.95	300	180
7	160.9200	39.98	AVG	13.43	47.21	2.07	8.27	27.02	-18.75	300	180
8	214.8400	40.98	AVG	14.86	47.70	2.33	10.47	28.92	-18.45	300	180
9	238.2400	42.28	AVG	14.89	47.37	2.45	12.25	29.59	-17.34	300	180
10	389.9200	34.86	AVG	16.79	48.85	3.19	5.99	32.83	-26.84	300	180
11	406.4400	35.02	AVG	16.89	48.97	3.25	6.19	33.00	-26.81	300	180
12	652.0800	34.41	AVG	21.47	48.17	4.10	11.81	33.00	-21.19	300	180
13	728.0000	32.91	AVG	22.30	45.51	4.33	14.03	33.00	-18.97	300	180
14	954.4000	32.10	AVG	23.64	46.14	4.97	14.57	33.00	-18.43	300	180

## Lead acid battery-Narrowband-REESS not in charging Right-Horizontal



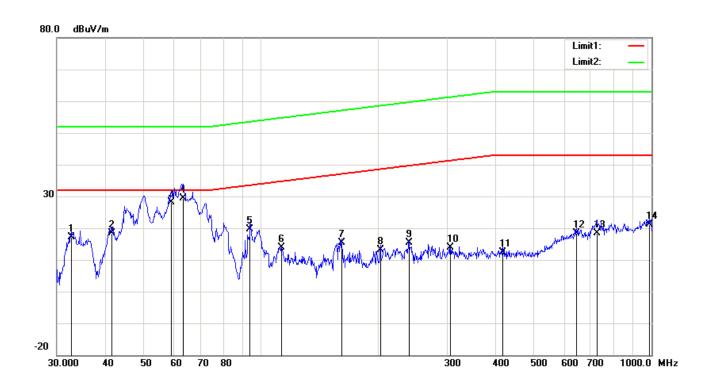
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	33.3279	44.05	AVG	12.14	45.65	0.93	11.47	22.00	-10.53	300	0
2	36.6375	53.56	AVG	11.55	45.65	0.99	20.45	22.00	-1.55	300	0
3	45.8553	55.45	AVG	10.33	46.09	1.17	20.86	22.00	-1.14	300	0
4	63.0916	57.40	AVG	9.86	47.50	1.34	21.10	22.00	-0.90	300	0
5	88.3421	48.30	AVG	9.67	47.19	1.50	12.28	23.08	-10.80	300	0
6	129.0146	33.20	AVG	15.46	47.23	1.85	3.28	25.56	-22.28	300	0
7	168.4138	36.40	AVG	12.25	46.62	2.09	4.12	27.32	-23.20	300	0
8	220.6171	35.26	AVG	14.11	47.80	2.36	3.93	29.09	-25.16	300	0
9	238.3102	36.55	AVG	14.73	47.37	2.45	6.36	29.60	-23.24	300	0
10	356.6758	33.89	AVG	16.39	48.78	3.03	4.53	32.25	-27.72	300	0
11	520.8882	32.64	AVG	17.10	49.36	3.63	4.01	33.00	-28.99	300	0
12	649.6597	32.07	AVG	21.83	47.93	4.09	10.06	33.00	-22.94	300	0
13	726.8052	31.36	AVG	22.56	45.55	4.33	12.70	33.00	-20.30	300	0
14	979.1804	30.23	AVG	24.60	46.62	5.02	13.23	33.00	-19.77	300	0

# Lead acid battery-Narrowband-REESS not in charging Right-Vertical



No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	30.3173	42.21	AVG	21.42	45.69	0.88	18.82	22.00	-3.18	300	0
2	34.3964	44.05	AVG	19.04	45.64	0.95	18.40	22.00	-3.60	300	0
3	52.3913	55.27	AVG	8.76	46.57	1.26	18.72	22.00	-3.28	300	0
4	66.9669	56.89	AVG	9.66	47.73	1.40	20.22	22.00	-1.78	300	0
5	80.3619	54.70	AVG	7.41	47.75	1.44	15.80	22.45	-6.65	300	0
6	125.0066	34.60	AVG	16.11	46.93	1.82	5.60	25.36	-19.76	300	0
7	160.9089	37.82	AVG	13.43	47.21	2.07	6.11	27.02	-20.91	300	0
8	217.5443	40.75	AVG	14.87	47.76	2.35	10.21	29.00	-18.79	300	0
9	238.3102	40.77	AVG	14.89	47.37	2.45	10.74	29.60	-18.86	300	0
10	373.3112	32.83	AVG	16.45	48.76	3.11	3.63	32.55	-28.92	300	0
11	413.2706	33.29	AVG	16.78	49.02	3.27	4.32	33.00	-28.68	300	0
12	665.8035	32.10	AVG	21.79	48.35	4.14	9.68	33.00	-23.32	300	0
13	729.3583	31.68	AVG	22.28	45.46	4.34	12.84	33.00	-20.16	300	0
14	962.1623	29.86	AVG	23.64	46.29	4.98	12.19	33.00	-20.81	300	0

### Lithium battery-Broadband-REESS not in charging Left-Horizontal



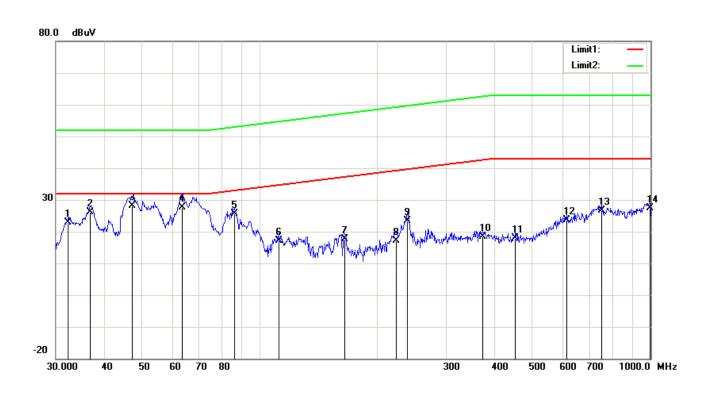
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.8400	49.63	QP	12.23	45.66	0.92	17.12	32.00	-14.88	300	180
2	41.4400	52.25	QP	10.80	45.79	1.08	18.34	32.00	-13.66	300	180
3	59.0400	64.56	QP	9.52	47.17	1.29	28.20	32.00	-3.80	300	180
4	63.2400	65.68	QP	9.88	47.51	1.35	29.40	32.00	-2.60	300	180
5	94.0800	54.08	QP	10.68	46.77	1.55	19.54	33.49	-13.95	300	180
6	112.9200	43.22	QP	15.31	46.33	1.71	13.91	34.69	-20.78	300	180
7	160.9600	48.03	QP	12.47	47.20	2.07	15.37	37.02	-21.65	300	180
8	202.2800	44.83	QP	13.47	47.39	2.27	13.18	38.52	-25.34	300	180
9	239.3600	45.58	QP	14.77	47.35	2.46	15.46	39.63	-24.17	300	180
10	305.7600	42.56	QP	16.85	48.39	2.79	13.81	41.23	-27.42	300	180
11	416.2000	42.24	QP	16.00	49.04	3.28	12.48	43.00	-30.52	300	180
12	644.8800	40.01	QP	21.77	47.45	4.08	18.41	43.00	-24.59	300	180
13	726.1200	37.10	QP	22.56	45.57	4.32	18.41	43.00	-24.59	300	180
14	991.8000	37.56	QP	24.90	46.36	5.04	21.14	43.00	-21.86	300	180

### Lithium battery-Broadband-REESS not in charging Left-Vertical



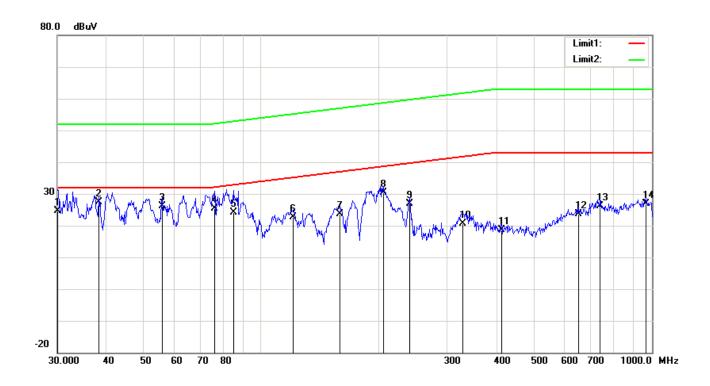
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.2000	49.83	QP	20.32	45.66	0.91	25.40	32.00	-6.60	300	180
2	41.5600	55.09	QP	14.73	45.80	1.08	25.10	32.00	-6.90	300	180
3	50.4400	61.82	QP	9.00	46.47	1.25	25.60	32.00	-6.40	300	180
4	72.3600	64.25	QP	9.72	47.91	1.44	27.50	32.00	-4.50	300	180
5	95.7200	54.42	QP	10.20	46.68	1.57	19.51	33.60	-14.09	300	180
6	112.7200	51.07	QP	14.41	46.33	1.71	20.86	34.68	-13.82	300	180
7	121.6000	47.61	QP	15.92	46.68	1.79	18.64	35.18	-16.54	300	180
8	198.8400	56.85	QP	14.57	47.27	2.26	26.41	38.41	-12.00	300	180
9	240.1200	51.90	QP	14.89	47.33	2.46	21.92	39.65	-17.73	300	180
10	350.6800	45.04	QP	15.99	48.82	3.00	15.21	42.14	-26.93	300	180
11	452.6800	43.14	QP	16.11	49.17	3.40	13.48	43.00	-29.52	300	180
12	594.0400	43.34	QP	19.97	48.68	3.92	18.55	43.00	-24.45	300	180
13	725.6800	39.36	QP	22.32	45.58	4.32	20.42	43.00	-22.58	300	180
14	928.5600	38.66	QP	23.66	46.29	4.92	20.95	43.00	-22.05	300	180

## Lithium battery-Broadband-REESS not in charging Right-Horizontal



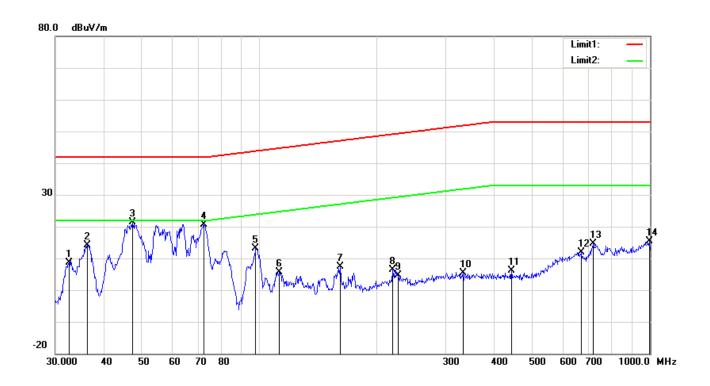
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.3200	55.37	QP	12.32	45.66	0.91	22.94	32.00	-9.06	300	0
2	36.8400	59.39	QP	11.52	45.66	0.99	26.24	32.00	-5.76	300	0
3	47.0400	62.90	QP	10.20	46.19	1.19	28.10	32.00	-3.90	300	0
4	63.2800	63.88	QP	9.89	47.52	1.35	27.60	32.00	-4.40	300	0
5	86.1600	61.91	QP	9.63	47.40	1.48	25.62	32.91	-7.29	300	0
6	111.9600	46.54	QP	15.21	46.30	1.71	17.16	34.63	-17.47	300	0
7	165.0800	50.03	QP	12.35	46.88	2.08	17.58	37.18	-19.60	300	0
8	224.0800	48.25	QP	14.24	47.72	2.38	17.15	39.19	-22.04	300	0
9	238.4800	53.61	QP	14.74	47.37	2.45	23.43	39.60	-16.17	300	0
10	373.2800	47.83	QP	16.24	48.76	3.11	18.42	42.55	-24.13	300	0
11	451.7600	47.76	QP	16.00	49.17	3.40	17.99	43.00	-25.01	300	0
12	610.1600	46.21	QP	21.38	47.82	3.97	23.74	43.00	-19.26	300	0
13	752.0400	44.52	QP	22.71	45.01	4.40	26.62	43.00	-16.38	300	0
14	998.8400	43.54	QP	25.07	46.20	5.06	27.47	43.00	-15.53	300	0

## Lithium battery-Broadband-REESS ont in charging Right-Vertical



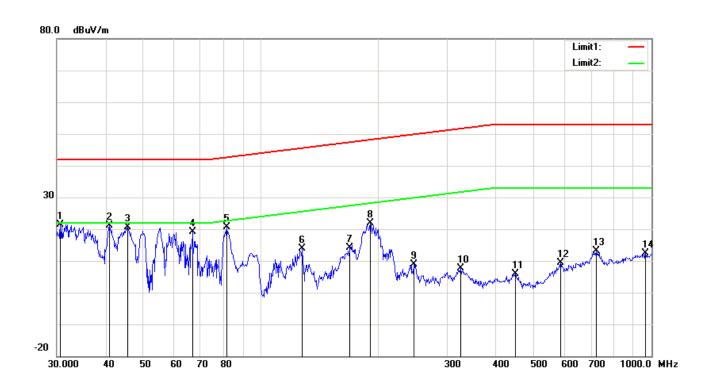
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	30.0000	47.82	QP	21.60	45.69	0.87	24.60	32.00	-7.40	300	0
2	38.4800	55.50	QP	16.66	45.68	1.02	27.50	32.00	-4.50	300	0
3	55.7200	63.25	QP	8.36	46.78	1.27	26.10	32.00	-5.90	300	0
4	76.0000	63.28	QP	8.59	47.91	1.44	25.40	32.09	-6.69	300	0
5	84.8400	62.12	QP	8.14	47.53	1.47	24.20	32.81	-8.61	300	0
6	120.9200	51.59	QP	15.89	46.63	1.79	22.64	35.14	-12.50	300	0
7	159.0800	55.53	QP	13.39	47.35	2.07	23.64	36.94	-13.30	300	0
8	205.4400	60.77	QP	14.86	47.47	2.28	30.44	38.62	-8.18	300	0
9	240.0000	56.92	QP	14.89	47.33	2.46	26.94	39.64	-12.70	300	0
10	328.2400	50.85	QP	15.53	48.77	2.90	20.51	41.70	-21.19	300	0
11	413.2400	47.63	QP	16.78	49.02	3.27	18.66	43.00	-24.34	300	0
12	648.1600	45.85	QP	21.38	47.78	4.09	23.54	43.00	-19.46	300	0
13	738.0000	44.82	QP	22.19	45.18	4.36	26.19	43.00	-16.81	300	0
14	967.7200	44.53	QP	23.64	46.40	5.00	26.77	43.00	-16.23	300	0

## Lithium battery-Narrowband-REESS not in charging Left-Horizontal



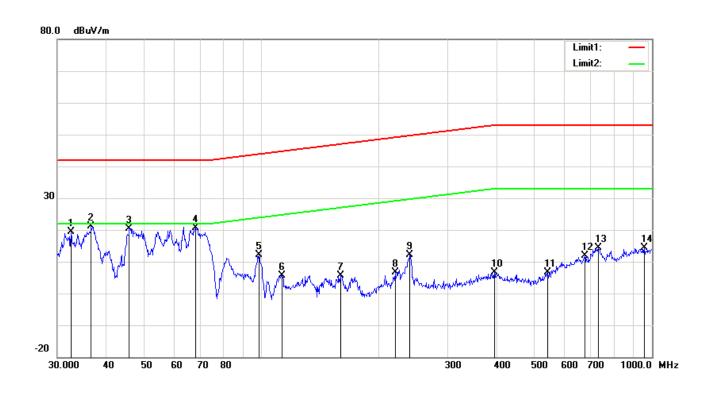
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.5600	41.12	AVG	12.28	45.66	0.92	8.66	22.00	-13.34	300	180
2	36.2800	47.28	AVG	11.62	45.65	0.98	14.23	22.00	-7.77	300	180
3	47.4400	56.22	AVG	10.16	46.22	1.20	21.36	22.00	-0.64	300	180
4	72.1600	56.76	AVG	10.46	47.91	1.44	20.75	22.00	-1.25	300	180
5	98.1200	46.44	AVG	11.65	46.58	1.60	13.11	23.77	-10.66	300	180
6	112.8000	35.06	AVG	15.29	46.33	1.71	5.73	24.68	-18.95	300	180
7	160.9600	39.97	AVG	12.47	47.20	2.07	7.31	27.02	-19.71	300	180
8	219.8000	37.81	AVG	14.08	47.82	2.36	6.43	29.07	-22.64	300	180
9	226.1600	35.69	AVG	14.31	47.67	2.39	4.72	29.25	-24.53	300	180
10	332.6800	34.58	AVG	16.61	48.83	2.92	5.28	31.79	-26.51	300	180
11	442.8800	35.92	AVG	16.00	49.16	3.37	6.13	33.00	-26.87	300	180
12	665.9200	34.02	AVG	22.01	48.34	4.14	11.83	33.00	-21.17	300	180
13	717.0800	33.45	AVG	22.50	45.71	4.30	14.54	33.00	-18.46	300	180
14	998.2000	31.47	AVG	25.06	46.21	5.06	15.38	33.00	-17.62	300	180

### Lithium battery-Narrowband-REESS not in charging Left-Vertical



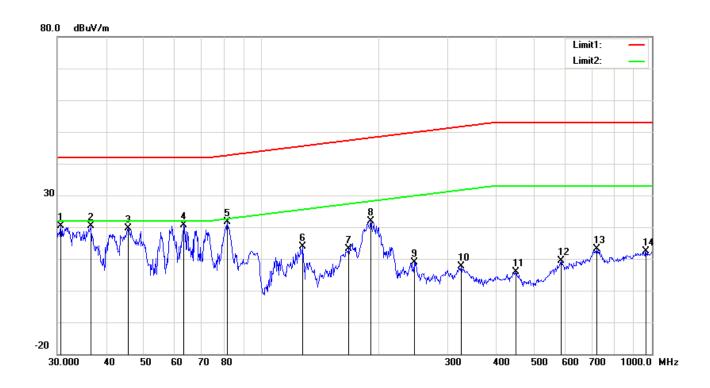
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	30.6379	44.91	AVG	21.23	45.68	0.88	21.34	22.00	-0.66	300	180
2	40.8446	50.70	AVG	15.21	45.75	1.07	21.23	22.00	-0.77	300	180
3	45.5348	53.42	AVG	12.06	46.06	1.16	20.58	22.00	-1.42	300	180
4	66.7325	55.95	AVG	9.60	47.72	1.39	19.22	22.00	-2.78	300	180
5	81.7833	59.16	AVG	7.64	47.68	1.45	20.57	22.57	-2.00	300	180
6	127.6645	42.91	AVG	16.25	47.13	1.84	13.87	25.50	-11.63	300	180
7	169.0054	44.39	AVG	14.29	46.57	2.09	14.20	27.34	-13.14	300	180
8	190.4050	53.95	AVG	12.56	46.73	2.22	22.00	28.12	-6.12	300	180
9	245.9509	39.17	AVG	14.90	47.57	2.49	8.99	29.80	-20.81	300	180
10	324.4561	38.01	AVG	15.45	48.73	2.89	7.62	31.62	-24.00	300	180
11	447.9822	35.37	AVG	16.19	49.16	3.39	5.79	33.00	-27.21	300	180
12	584.7895	34.53	AVG	19.51	48.65	3.88	9.27	33.00	-23.73	300	180
13	721.7259	32.18	AVG	22.36	45.71	4.31	13.14	33.00	-19.86	300	180
14	965.5421	30.17	AVG	23.64	46.36	4.99	12.44	33.00	-20.56	300	180

## Lithium battery-Narrowband-REESS not in charging Right-Horizontal



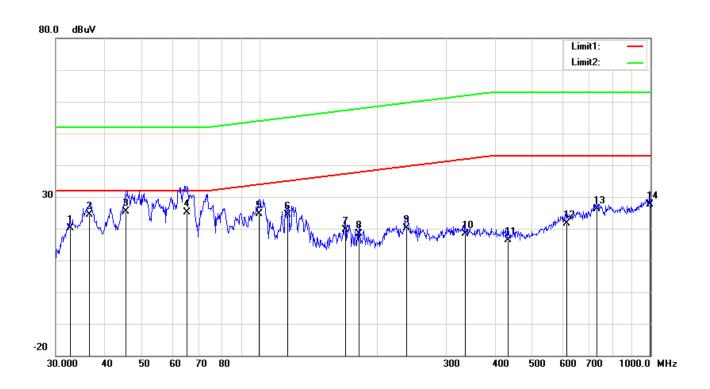
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.5200	43.89	AVG	20.13	45.66	0.92	19.28	22.00	-2.72	300	0
2	36.7200	48.07	AVG	17.69	45.65	0.99	21.10	22.00	-0.90	300	0
3	45.9200	53.60	AVG	11.80	46.09	1.17	20.48	22.00	-1.52	300	0
4	67.8400	57.08	AVG	9.89	47.78	1.41	20.60	22.00	-1.40	300	0
5	98.6400	46.22	AVG	10.82	46.56	1.60	12.08	23.80	-11.72	300	0
6	113.2000	35.83	AVG	14.51	46.34	1.72	5.72	24.71	-18.99	300	0
7	160.2400	37.39	AVG	13.36	47.26	2.07	5.56	26.99	-21.43	300	0
8	220.0800	37.17	AVG	14.87	47.82	2.36	6.58	29.07	-22.49	300	0
9	240.0800	42.21	AVG	14.89	47.33	2.46	12.23	29.65	-17.42	300	0
10	395.4400	35.47	AVG	16.91	48.89	3.21	6.70	32.92	-26.22	300	0
11	541.9200	34.13	AVG	17.39	48.69	3.72	6.55	33.00	-26.45	300	0
12	673.5600	33.17	AVG	21.97	47.54	4.17	11.77	33.00	-21.23	300	0
13	729.4400	33.17	AVG	22.28	45.46	4.34	14.33	33.00	-18.67	300	0
14	956.8800	31.94	AVG	23.64	46.19	4.97	14.36	33.00	-18.64	300	0

## Lithium battery-Narrowband-REESS ont in charging Right-Vertical



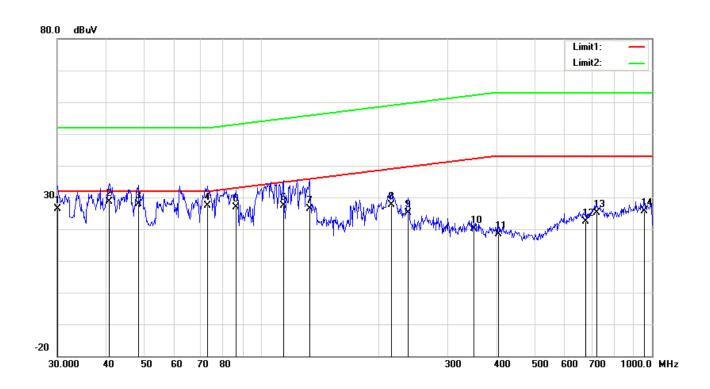
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	30.6379	43.91	AVG	21.23	45.68	0.88	20.34	22.00	-1.66	300	0
2	36.6375	47.19	AVG	17.74	45.65	0.99	20.27	22.00	-1.73	300	0
3	45.5348	52.42	AVG	12.06	46.06	1.16	19.58	22.00	-2.42	300	0
4	63.3132	57.99	AVG	8.70	47.52	1.35	20.52	22.00	-1.48	300	0
5	81.7833	60.16	AVG	7.64	47.68	1.45	21.57	22.57	-1.00	300	0
6	127.6645	42.91	AVG	16.25	47.13	1.84	13.87	25.50	-11.63	300	0
7	167.2368	43.56	AVG	14.10	46.71	2.08	13.03	27.27	-14.24	300	0
8	190.4050	53.95	AVG	12.56	46.73	2.22	22.00	28.12	-6.12	300	0
9	245.9509	39.17	AVG	14.90	47.57	2.49	8.99	29.80	-20.81	300	0
10	324.4561	38.01	AVG	15.45	48.73	2.89	7.62	31.62	-24.00	300	0
11	447.9822	35.37	AVG	16.19	49.16	3.39	5.79	33.00	-27.21	300	0
12	584.7895	34.53	AVG	19.51	48.65	3.88	9.27	33.00	-23.73	300	0
13	721.7259	32.18	AVG	22.36	45.71	4.31	13.14	33.00	-19.86	300	0
14	965.5421	30.17	AVG	23.64	46.36	4.99	12.44	33.00	-20.56	300	0

### Lead acid battery-Broadband-REESS in charging mode Left-Horizontal



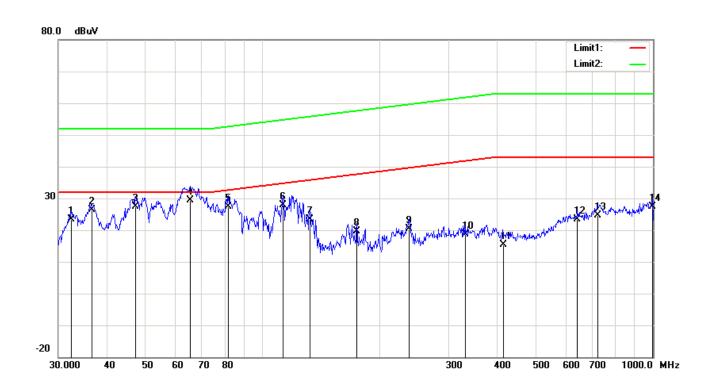
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.6400	52.62	QP	12.27	45.66	0.92	20.15	32.00	-11.85	300	180
2	36.7600	57.63	QP	11.53	45.65	0.99	24.50	32.00	-7.50	300	180
3	45.4400	59.92	QP	10.37	46.05	1.16	25.40	32.00	-6.60	300	180
4	64.9600	61.37	QP	10.10	47.64	1.37	25.20	32.00	-6.80	300	180
5	99.8400	57.43	QP	12.06	46.51	1.62	24.60	33.88	-9.28	300	180
6	118.1600	53.32	QP	15.86	46.50	1.76	24.44	34.99	-10.55	300	180
7	165.9200	52.06	QP	12.32	46.81	2.08	19.65	37.22	-17.57	300	180
8	179.6000	50.24	QP	12.39	46.32	2.16	18.47	37.74	-19.27	300	180
9	237.8800	50.42	QP	14.72	47.38	2.45	20.21	39.58	-19.37	300	180
10	336.7200	47.85	QP	16.57	48.87	2.94	18.49	41.87	-23.38	300	180
11	431.8800	46.14	QP	16.00	49.12	3.34	16.36	43.00	-26.64	300	180
12	611.5600	43.99	QP	21.39	47.70	3.97	21.65	43.00	-21.35	300	180
13	729.6400	44.64	QP	22.58	45.45	4.34	26.11	43.00	-16.89	300	180
14	998.8400	43.59	QP	25.07	46.20	5.06	27.52	43.00	-15.48	300	180

#### Lead acid battery-Broadband-REESS in charging mode Left-Vertical



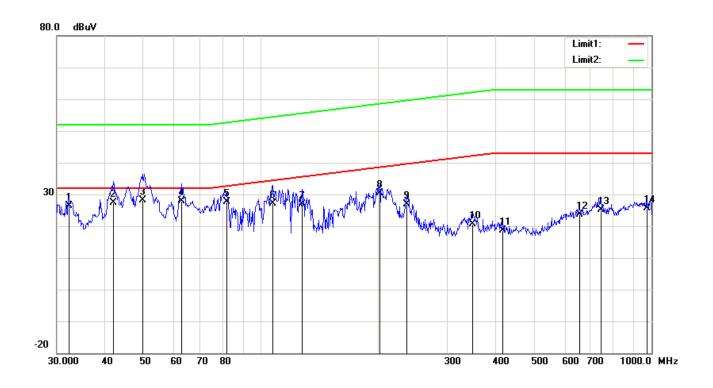
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	30.0000	49.72	QP	21.60	45.69	0.87	26.50	32.00	-5.50	300	180
2	40.7200	57.98	QP	15.30	45.74	1.06	28.60	32.00	-3.40	300	180
3	48.4400	62.89	QP	10.10	46.31	1.22	27.90	32.00	-4.10	300	180
4	72.7200	64.37	QP	9.61	47.92	1.44	27.50	32.00	-4.50	300	180
5	86.0400	64.40	QP	8.34	47.42	1.48	26.80	32.90	-6.10	300	180
6	114.0000	57.49	QP	14.66	46.37	1.72	27.50	34.75	-7.25	300	180
7	132.7200	56.68	QP	15.30	47.48	1.90	26.40	35.75	-9.35	300	180
8	216.0000	58.03	QP	14.87	47.72	2.34	27.52	38.95	-11.43	300	180
9	238.0400	55.25	QP	14.89	47.38	2.45	25.21	39.59	-14.38	300	180
10	350.7200	50.05	QP	15.99	48.82	3.00	20.22	42.14	-21.92	300	180
11	405.3600	47.09	QP	16.91	48.96	3.25	18.29	43.00	-24.71	300	180
12	679.0400	43.03	QP	22.10	46.96	4.19	22.36	43.00	-20.64	300	180
13	722.8800	44.16	QP	22.35	45.67	4.32	25.16	43.00	-17.84	300	180
14	955.9600	43.21	QP	23.64	46.17	4.97	25.65	43.00	-17.35	300	180

## Lead acid battery-Broadband-REESS in charging mode Right-Horizontal



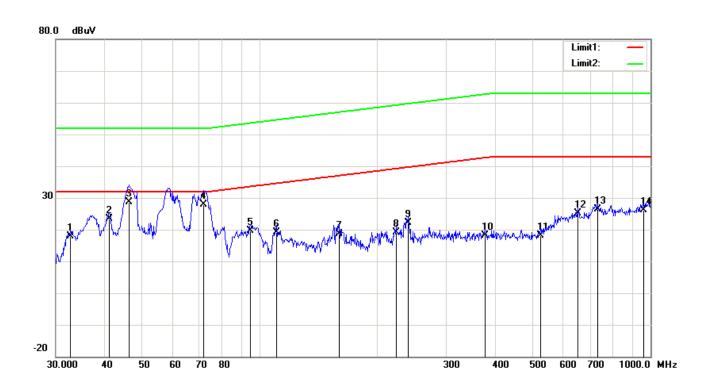
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.4400	55.79	QP	12.30	45.66	0.91	23.34	32.00	-8.66	300	0
2	36.5200	59.39	QP	11.57	45.65	0.99	26.30	32.00	-5.70	300	0
3	47.4400	62.36	QP	10.16	46.22	1.20	27.50	32.00	-4.50	300	0
4	65.5600	65.52	QP	10.17	47.67	1.38	29.40	32.00	-2.60	300	0
5	81.8400	64.07	QP	9.56	47.68	1.45	27.40	32.57	-5.17	300	0
6	113.2800	57.08	QP	15.34	46.34	1.72	27.80	34.71	-6.91	300	0
7	132.5200	54.62	QP	14.42	47.47	1.90	23.47	35.74	-12.27	300	0
8	174.4800	51.67	QP	12.29	46.41	2.13	19.68	37.55	-17.87	300	0
9	237.7200	50.71	QP	14.71	47.39	2.45	20.48	39.58	-19.10	300	0
10	331.0400	47.82	QP	16.62	48.81	2.91	18.54	41.76	-23.22	300	0
11	415.1600	45.17	QP	16.00	49.03	3.28	15.42	43.00	-27.58	300	0
12	641.5600	44.67	QP	21.73	47.12	4.07	23.35	43.00	-19.65	300	0
13	724.2400	43.41	QP	22.55	45.63	4.32	24.65	43.00	-18.35	300	0
14	996.6400	43.63	QP	25.02	46.25	5.05	27.45	43.00	-15.55	300	0

## Lead acid battery-Broadband-REESS in charging mode Right-Vertical



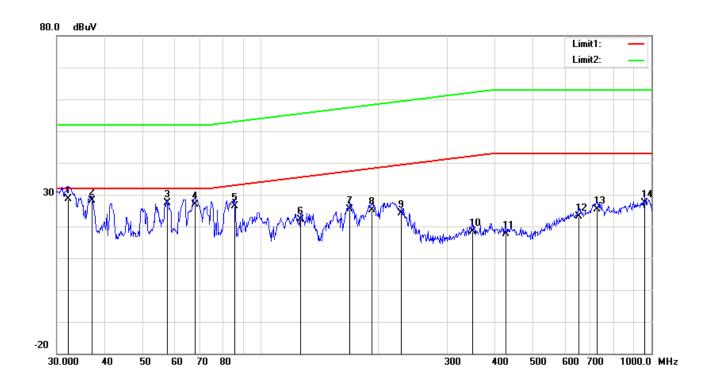
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.2800	50.98	QP	20.27	45.66	0.91	26.50	32.00	-5.50	300	0
2	41.9200	57.74	QP	14.49	45.82	1.09	27.50	32.00	-4.50	300	0
3	49.8400	64.23	QP	9.16	46.44	1.25	28.20	32.00	-3.80	300	0
4	62.8000	65.47	QP	8.57	47.48	1.34	27.90	32.00	-4.10	300	0
5	81.8000	66.18	QP	7.65	47.68	1.45	27.60	32.57	-4.97	300	0
6	107.1600	58.65	QP	13.09	46.31	1.67	27.10	34.34	-7.24	300	0
7	127.8400	55.94	QP	16.26	47.14	1.84	26.90	35.50	-8.60	300	0
8	201.8400	60.74	QP	14.85	47.38	2.27	30.48	38.51	-8.03	300	0
9	236.9600	56.91	QP	14.89	47.40	2.45	26.85	39.56	-12.71	300	0
10	348.7600	50.43	QP	15.95	48.84	3.00	20.54	42.10	-21.56	300	0
11	417.4400	47.56	QP	16.71	49.04	3.29	18.52	43.00	-24.48	300	0
12	654.8000	46.45	QP	21.54	48.44	4.11	23.66	43.00	-19.34	300	0
13	743.6800	43.75	QP	22.14	45.08	4.38	25.19	43.00	-17.81	300	0
14	972.8400	43.38	QP	23.63	46.50	5.01	25.52	43.00	-17.48	300	0

### Lithium battery-Broadband-REESS in charging mode Left-Horizontal



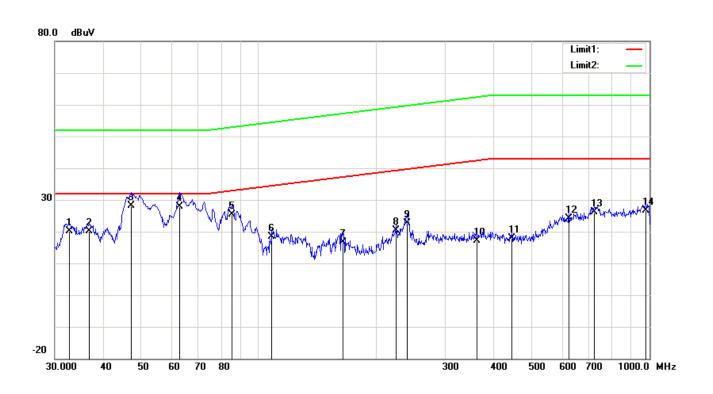
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.8400	50.48	QP	12.23	45.66	0.92	17.97	32.00	-14.03	300	180
2	41.2400	57.30	QP	10.82	45.78	1.07	23.41	32.00	-8.59	300	180
3	46.3200	63.27	QP	10.28	46.13	1.18	28.60	32.00	-3.40	300	180
4	72.0000	63.79	QP	10.48	47.91	1.44	27.80	32.00	-4.20	300	180
5	94.6800	53.86	QP	10.82	46.73	1.56	19.51	33.53	-14.02	300	180
6	110.5200	48.64	QP	15.05	46.26	1.69	19.12	34.55	-15.43	300	180
7	159.5200	51.36	QP	12.52	47.31	2.07	18.64	36.96	-18.32	300	180
8	223.5200	50.18	QP	14.22	47.73	2.38	19.05	39.18	-20.13	300	180
9	240.3200	52.25	QP	14.81	47.34	2.46	22.18	39.65	-17.47	300	180
10	377.8000	47.45	QP	16.20	48.77	3.13	18.01	42.62	-24.61	300	180
11	523.0800	46.53	QP	17.21	49.29	3.64	18.09	43.00	-24.91	300	180
12	652.9200	47.39	QP	21.86	48.25	4.10	25.10	43.00	-17.90	300	180
13	733.5600	44.78	QP	22.60	45.32	4.35	26.41	43.00	-16.59	300	180
14	959.2800	43.21	QP	24.12	46.24	4.98	26.07	43.00	-16.93	300	180

### Lithium battery-Broadband-REESS in charging mode Left-Vertical



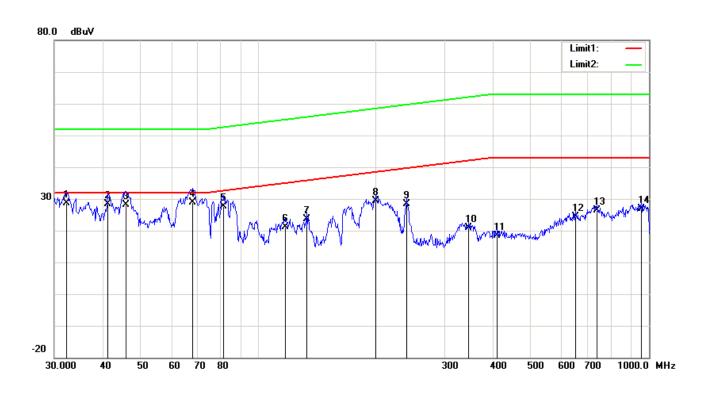
No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.1600	53.01	QP	20.34	45.66	0.91	28.60	32.00	-3.40	300	180
2	36.9200	55.30	QP	17.57	45.66	0.99	28.20	32.00	-3.80	300	180
3	57.6000	64.98	QP	8.13	47.00	1.29	27.40	32.00	-4.60	300	180
4	67.6800	63.42	QP	9.84	47.77	1.41	26.90	32.00	-5.10	300	180
5	85.8800	63.94	QP	8.31	47.43	1.48	26.30	32.89	-6.59	300	180
6	126.4000	51.16	QP	16.18	47.03	1.83	22.14	35.43	-13.29	300	180
7	169.4000	55.53	QP	14.34	46.54	2.09	25.42	37.35	-11.93	300	180
8	192.8800	56.59	QP	13.15	46.88	2.23	25.09	38.21	-13.12	300	180
9	228.7600	54.47	QP	14.88	47.61	2.41	24.15	39.33	-15.18	300	180
10	348.1600	48.36	QP	15.94	48.84	2.99	18.45	42.09	-23.64	300	180
11	424.3600	46.73	QP	16.59	49.08	3.31	17.55	43.00	-25.45	300	180
12	653.6000	45.83	QP	21.51	48.32	4.10	23.12	43.00	-19.88	300	180
13	725.2400	44.36	QP	22.33	45.60	4.32	25.41	43.00	-17.59	300	180
14	960.6800	45.09	QP	23.64	46.26	4.98	27.45	43.00	-15.55	300	180

## Lithium battery-Broadband-REESS in charging mode Right-Horizontal



No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.6800	52.63	QP	12.26	45.66	0.92	20.15	32.00	-11.85	300	0
2	36.8000	53.39	QP	11.52	45.66	0.99	20.24	32.00	-11.76	300	0
3	47.0000	62.99	QP	10.21	46.19	1.19	28.20	32.00	-3.80	300	0
4	62.8000	64.11	QP	9.83	47.48	1.34	27.80	32.00	-4.20	300	0
5	85.3600	61.79	QP	9.62	47.48	1.47	25.40	32.85	-7.45	300	0
6	107.9200	48.56	QP	14.40	46.29	1.67	18.34	34.39	-16.05	300	0
7	164.0000	49.19	QP	12.38	46.96	2.08	16.69	37.14	-20.45	300	0
8	224.6400	51.51	QP	14.25	47.71	2.39	20.44	39.21	-18.77	300	0
9	240.0000	52.72	QP	14.79	47.33	2.46	22.64	39.64	-17.00	300	0
10	361.9200	46.53	QP	16.34	48.75	3.06	17.18	42.34	-25.16	300	0
11	445.9200	47.66	QP	16.00	49.16	3.38	17.88	43.00	-25.12	300	0
12	622.4400	45.59	QP	21.52	46.97	4.00	24.14	43.00	-18.86	300	0
13	722.8000	45.06	QP	22.54	45.68	4.32	26.24	43.00	-16.76	300	0
14	981.9600	43.45	QP	24.67	46.59	5.02	26.55	43.00	-16.45	300	0

## Lithium battery-Broadband-REESS in charging mode Right-Vertical



No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	32.2800	53.18	QP	20.27	45.66	0.91	28.70	32.00	-3.30	300	0
2	41.2000	58.23	QP	14.97	45.77	1.07	28.50	32.00	-3.50	300	0
3	45.9200	61.22	QP	11.80	46.09	1.17	28.10	32.00	-3.90	300	0
4	67.6800	65.32	QP	9.84	47.77	1.41	28.80	32.00	-3.20	300	0
5	81.2400	66.31	QP	7.55	47.71	1.45	27.60	32.53	-4.93	300	0
6	117.2400	50.55	QP	15.30	46.47	1.75	21.13	34.94	-13.81	300	0
7	132.8800	53.89	QP	15.24	47.49	1.90	23.54	35.76	-12.22	300	0
8	199.8800	59.74	QP	14.82	47.33	2.26	29.49	38.44	-8.95	300	0
9	239.8800	58.42	QP	14.89	47.33	2.46	28.44	39.64	-11.20	300	0
10	346.0000	50.84	QP	15.89	48.86	2.98	20.85	42.05	-21.20	300	0
11	410.3600	47.38	QP	16.83	49.00	3.26	18.47	43.00	-24.53	300	0
12	649.2000	46.72	QP	21.41	47.88	4.09	24.34	43.00	-18.66	300	0
13	735.6000	44.97	QP	22.22	45.26	4.35	26.28	43.00	-16.72	300	0
14	956.8400	44.53	QP	23.64	46.19	4.97	26.95	43.00	-16.05	300	0