

Département de la mobilité et des transports

## SOCIÉTÉ NATIONALE DE CERTIFICATION ET D'HOMOLOGATION

S.A.

Registre de Commerce: B 27180



L-8070 Bertrange

**Référence:** e13\*168/2013\*00874\*01

**Annexes:** - Rapport technique

- Fiche de renseignements du constructeur

Bertrange, le 09 décembre 2020

## 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) N° <u>2020/1694</u> complété par les règlements (UE) N° 3/2014, N° 44/2014 et N° 134/2014 modifiés en dernier lieu par le règlement (UE) N° 2018/295

par le règlement (UE)  $N^{\circ}$  2018/295 with regard to Regulation (EU)  $N^{\circ}$  168/2013,-as last amended by (Commission Delegated) Regulation (EU)  $N^{\circ}$  2020/1694 supplemented by regulations (EU)  $N^{\circ}$  3/2014,  $N^{\circ}$  44/2014 and  $N^{\circ}$  134/2014 as last amended by regulation (EU)  $N^{\circ}$  2018/295

Numéro de réception UE par type:

EU type-approval number: e13\*168/2013\*00874\*01

Raison de l'extension:

Reason for extension: Refer to Index of technical report

#### SECTION I SECTION I

0.1. Marque (dénomination commerciale du

constructeur):

Make (trade name of manufacturer): refer to item 0.1. of technical report

**0.2.** Type:

Type: LX05

**0.2.1. Variante(s):** 

Variant(s): E1, E2, <u>E3, E4</u>

**0.2.2.** Version(s):

Version(s): 01, 02, 03

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

échéant):

Commercial name(s) (if available): S5-W, S5, E-go S5, LX05, Elex, BuzzE, Alegra

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 LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district,

Changzhou, P.R. China

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

d'assemblage:

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

Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district,

Changzhou, P.R. China

0.4.2. Nom et adresse du mandataire du constructeur (le cas échéant):

Name and address of manufacturer's authorised

representative, if any:

IVA Mobility B.V.

Sportlaan 391, 3364DK Sliedrecht, The Netherlands

## **SECTION II** SECTION II

01.12.2020

Luxcontrol SA B.P. 349 1. Service technique responsable de la réalisation des essais:

L-4004 Esch-sur-Alzette Technical service responsible for carrying out the tests:

Date du rapport d'essais: Date of test report: 2.

Numéro du rapport d'essais: Number of test report: 3. LC 1282 019 20

## 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

2. La réception est <del>accordée</del>/étendue/<del>refusée</del>/ retirée:

The approval is granted/extended/refused/withdrawn

2.1. La réception est accordée conformément à l'article 40 du règlement (UE) no 168/2013 et sa validité expire, par conséquent, le jj/mm/aaaa.

The approval is granted in accordance with Article 40 of Regulation (EU) No 168/2013 and the validity of the approval is thus limited to dd/mm/yyyy.

not applicable

the approval is extended

Lieu: Bertrange Place: Date: 09 décembre 2020 Date: Signature: Signature: Pour le Ministre de la Mobilité Pour la SNCH et des Travaux publics **Laurent LINDEN** Alain DISIVISCOUR Conseiller Directeur opérationnel 5/001 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 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 Annex A - Page 2 to 4 of technical report N° LC 1282 019 20





Département de la mobilité et des transports

## SOCIÉTÉ NATIONALE DE CERTIFICATION ET D'HOMOLOGATION

Registre de Commerce: B 27180



L-8070 Bertrange

**Référence:** e13\*168/2013\*00874\*01

**Annexes:** - Rapport technique

- Fiche de renseignements du constructeur

Bertrange, le 09 décembre 2020

## Index du dossier de réception

Index to type-approval report

Numéro de réception UE par type:

e13\*168/2013\*00874\*01 EU type-approval number:

**Révision:** 

00 Revision:

Marque de fabrique ou de commerce:

refer to item 0.1. of the technical report Trade name or mark:

Type:

LX05 Type:

Procès-verbal d'essai: 1.

N° LC 1282 019 20 Test report:

- Technical report:

Page 1 to 3; - Index: Page 1 & 2;

- Technical information: Annex A - Page 1 to 4;

- Test results: Annex B - Page 1 to 31.

Dossier du constructeur: 2.

Annex C (N° 168/2013-LX05-01) Report of the manufacturer:

- List of content:

Page 1 & 2; - Manufacturer's information document: Page 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17,

18, 19, 20, 21 & 22;

- Documentation: Refer to list of content; Annex D - Page 1 to 18. - Test report EMC:

3. Autres documents annexés:

not applicable Other documents annexed:

Date de délivrance de la réception initiale: 4.

30.04.2020 Date of issue of initial type approval:

5. Date de la dernière délivrance de pages

révisées:

Not applicable Date of last issue of revised pages:

Date de la dernière délivrance d'une réception 6.

révisée:

09.12.2020 Date of last extension:



Département de la mobilité et des transports

SOCIÉTÉ NATIONALE DE CERTIFICATION ET D'HOMOLOGATION

S.A.

Registre de Commerce: B 27180



L-8070 Bertrange

**Référence:** e13\*168/2013\*00874\*01

**Annexes:** - Rapport Technique

- Fiche de Renseignements du constructeur

Bertrange, le 09 décembre 2020

## Annexe VIII Annex VIII

## Fiche des résultats d'essais

Test results sheet

refer to Annex B - Page 1 to 10 of test report N° LC 1282 019 20



\* LC 1282 019 20 \* Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. \* LX05 \* 168/2013 \* R-- \*

Page 1 of 3

## TECHNICAL REPORT

No.: LC 1282 019 20

## **Inspection concerning**

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

performed according to

**Regulation: (EU) 168/2013** amendment: 2020/1649

Extension 01 to EU Type Approval no: e13\*168/2013\*00874\*00

## **Contents:**

- 1. General
- 2. Test details
- 3. Statement of compliance Index

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RC Lux.: B15664

IBAN: LU56 0030 1612 0727 0000 **BIC: BGLLLULL** Dexia-BIL IBAN: LU48 0026 1824 1543 2600

BIC: BILLLULL

BGL BNP Paribas Luxembourg



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

Manufacturer: Jiangsu LVNENG Electrical Bicycle

Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district,

Changzhou, P.R. China

Vehicle Type: LX05

Variant(s): E1, E2, <u>E3, E4</u>

Version(s): 01, 02, 03

Commercial name(s) S5-W, S5, E-go S5, LX05, Elex, BuzzE,

**Alegra** 

## 2. <u>Test details</u>

	Inspector	Location of test:	Date of receipt of	Date of test:
			test item:	
Main report	S. Zhang I. Chen	SMVIC No. 68, Yutian South Road, Anting, Jiading District, Shanghai, China	26.03.2020	30.03.2020
Ext 01	S. Zhang M. Cao	SMVIC No. 68, Yutian South Road, Anting,Jiading District, Shanghai, China	17.11.2020	17.11.2020- 30.11.2020

## 2.1. Remarks

2.1.1. <u>Main report:</u>

Not applicable

2.1.2. <u>Extension 01:</u>

For details for the extension, refer to Index.

All changes have been assessed. All modification fulfil the requirements of the regulation.



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

The inspections items and measurements carried out have shown the compliance of the type described in this technical report and the attached Annexes with the requirements of the standard as stated on page 1.

Shanghai, December 1, 2020

Luxcontrol s.a. Service Homologation-automobile

Wayne Zeng

Wayne Zeng Ingénieur-Inspecteur Mason Cao Ingénieur-Inspecteur

Mason Cao

Annexes



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

Type-approval previously granted: e13\*168/2013\*00874\*00

Main Report					
Technical Report No.:	LC 1282 007 20 Index	3 1	pages page		
List of Annexes: A: Communication as numbered in the standard B: Test results C: Information folder D: EMC test report			pages pages pages pages		
Extension 01					
Technical Report No.:	LC 1282 019 20 Index	3 2	pages pages		
List of Annexes: A: Communication as numbered in the standard B: Test results C: Information folder     to be deleted:     to be added: D: EMC test report     to be deleted:     to be added:		91	pages pages pages pages pages pages		



#### to be added:

- The 10 trademarks "Generic, KSR MOTO AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA SOURIS, WAYEL, Lexmoto, CULOC, Densom".
- The 3 Commercial names "Elex, BuzzE, Alegra".
- Variant E3, E4, refer to Annex C, item 0.2.1.
- Electric motor, refer to Annex C, item 3.1.2.2.
- Battery, refer to Annex C, item 3.3.6.2.
- Electric motor control unit, refer to Annex C, item 3.3.8.1.
- Speedometer, refer to Annex C, item 6.10.1.1.
- Optional rear fork guard plate, refer to Annex C, Drawing No. LX05-03-04~No. LX05-03-06 to be deleted:
- The 6 trademarks "simple, , skand, VEMO, Hype-Bike". to be corrected:
- Appearance of lock cover, refer to Annex C, Drawing No. LX05-15-01
- The height of central stand, refer to Annex C, Drawing No. LX05-24-01 to be updated:
- Editorial arrangements, refer to Annex C content with underline
- Audible warning devices's Component Approval No., refer to Annex C Table 6.11.1.
- Regulation (EU) 168/2013 updated to latest amendment 2020/1694/EU

#### Content of the information folder:

- manufacturer's information document (page 1 to 22)
- drawings, photographs, details of the vehicle (page 23 to 91)



## COMMUNICATION AS NUMBERED () IN THE STANDARD

WVTA certificate: (EU) 901/2014, amendment (EU) 2020/239 Annex VI, Appendix 1, Section I

(0.1.) Make (trade name of manufacturer):

(0.2.) Type:

**LX05** 

(0.2.1.) Variant(s):

E1, E2, E3, E4

(0.2.2.) Version(s):

01, 02, 03

(0.2.3.) Commercial name(s):

S5-W, S5, E-go S5, LX05, Elex, BuzzE, Alegra

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

L1e-B

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

Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China

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

Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China

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

IVA Mobility B.V.

Sportlaan 391, 3364DK Sliedrecht, The Netherlands



WVTA certificate: (EU) 901/2014, amendment (EU) 2020/239 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** 

(1.2.) Wavers applied : **not applicable** 

(1.2.1.) Reasons for the waivers : **not applicable** 

(1.2.2.) Alternative requirements : not applicable

## 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) 2018/295	n/a
2	Tailpipe emissions at (increased) idle / free acceleration test	(EU) 134/2014, Annex III	(EU) 2018/295	n/a
3	Emissions crank-case gases	(EU) 134/2014, Annex IV	(EU) 2018/295	n/a
4	Evaporative emissions	(EU) 134/2014, Annex V	(EU) 2018/295	n/a
5	Durability of pollution-control devices	(EU) 134/2014, Annex VI	(EU) 2018/295	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) 2018/295	All
7	Environmental on-board diagnosis (OBD) tests	(EU) 134/2014, Annex VIII	(EU) 2018/295	n/a
8	Permissible sound level	(EU) 134/2014, Annex IX	(EU) 2018/295	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) 2018/295	All
10	Vehicle propulsion family definition	(EU) 134/2014, Annex XI	(EU) 2018/295	n/a



## \* LC 1282 019 20 \* Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. \* LX05 \* 168/2013 \* R-- \* Annex A, Page 3 of 4

Item	Subject	Regulatory act reference	As amended by	Applicable to version
Vehic	le functional safety requirements RVFSR			
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 tyres	(EU) 3/2014, Annex XV	(EU) 2016/1824	All
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



## \* LC 1282 019 20 \* Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. \* LX05 \* 168/2013 \* R-- \* Annex A, Page 4 of 4

Item	Subject	Regulatory act reference	As amended by	Applicable to version
Vehic	le construction and general type-approval require	ments RVCR		
1	Powertrain tampering prevention measures (anti-tampering)	(EU) 44/2014, Annex II	(EU) 2018/295	All
2	Arrangements for type-approval procedures	(EU) 44/2014, Annex III	(EU) 2018/295	All
3	Conformity of production	(EU) 44/2014, Annex IV	(EU) 2018/295	All
4	Coupling devices and attachments	(EU) 44/2014, Annex V	(EU) 2018/295	n/a
5	Devices to prevent unauthorised use	(EU) 44/2014, Annex VI	(EU) 2018/295	All
6	Electromagnetic compatibility (EMC)	(EU) 44/2014, Annex VII	(EU) 2018/295	All
7	External projections	(EU) 44/2014, Annex VIII	(EU) 2018/295	All
8	Fuel storage	(EU) 44/2014, Annex IX	(EU) 2018/295	n.a.
9	Load platforms	(EU) 44/2014, Annex X	(EU) 2018/295	n.a.
10	Masses and dimensions	(EU) 44/2014, Annex XI	(EU) 2018/295	All
11	On-board diagnostics (OBD) functional requirements	(EU) 44/2014, Annex XII	(EU) 2018/295	n.a.
12	Passenger handholds and footrests	(EU) 44/2014, Annex XIII	(EU) 2018/295	All
13	Registration plate space	(EU) 44/2014, Annex XIV	(EU) 2018/295	All
14	Access to repair and maintenance information	(EU) 44/2014, Annex XV	(EU) 2018/295	All
15	Stands	(EU) 44/2014, Annex XVI	(EU) 2018/295	All



## 1. <u>Test results:</u>

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

If applicable, a sufficient large number of versions have been tested. Initial approval:

Main report:

Туре	LX05
Variant	E1, E2
Category	L1e-B
VIN	LV2NYK303K1000077*
Electrical motor type	CH600r120°eM
Electrical motor code	RBNBFCK195180044
Controller	8
	ZWK060140A-1 / ZWK060140A
Batteries	DM1501709 60V26Ah
Front tire	90/90-12 59J, E4-75R-0012445
Rear tire	90/90-12 59J, E4-75R-0012445

<sup>\*</sup> Same test vehicle has been used for test with different controller for different vehicle variants for energy consumption and electric range.

VIN	LV2NYE309K1000005*	LV2NYK308K1000009*	
Variant/version	E1/01	E2/01	
Category	L1e-B	L1e-B	
Electrical motor type	CH600r120° eM	CH600r120° eM	
Electrical motor code	RBMBLCJ191090020	RBNBFCK191090006	
Controller	6	6	
	ZWK060140A-1	ZWK060140A	
Front tire	90/90-12 59J	90/90-12 59J	
rioni the	E4-75R-0012445	E4-75R-0012445	
Rear tire	90/90-12 59J	90/90-12 59J	
Kear tire	E4-75R-0012445	E4-75R-0012445	

<sup>\*</sup>test vehicle which are technically identical in relation to EU168/2013

VIN	LV2NYK312K1000001*	
Version	02/03	
Electrical motor type	CH600r120° eM	
Electrical motor code	RBNBFCJ18C040002	
Controller	<b>6</b> /ZWK060140A	
Front and rear tire	90/90-12 59J, E4-75R-0012445	

<sup>\*</sup>same test vehicle has been used for test with/without luggage for different version



Test electrical motor component:

Variant: E1 Type: CH600r120° eM

Code: RBMBLCJ191090021

Variant: E2 Type: CH600r120° eM

Code: RBNBFCK191090007

## **Extension 01**

Туре	LX05	
Variant	E3, E4	
Category	L1e-B	
VIN	LV2NYK303K1000077*	
Electrical motor type	EJ600r120°eM	
Electrical motor code	RBNBFCJ19A210042	
Controller	8	
	ZWK060040A-1 / ZWK060040A	
Batteries	DM2851709	
Front tire	90/90-12 59J, E4-75R-0012445	
Rear tire	90/90-12 59J, E4-75R-0012445	

<sup>\*</sup> Same test vehicle has been used for test with different controller for different vehicle variants for energy consumption and electric range.

VIN	LV2NYF203J1000006*		
Electrical motor type	EJ600r120°eM		
Electrical motor code	181200051*		
Controller	8		
	ZWK060040A / ZWK060040A-1		

<sup>\*</sup>test vehicle which are technically identical in relation to EU168/2013

## 1.2. Executive Summary of the test reports according to item 2.2. of Annex VIII of (EU) 901/2014 as amended by (EU) 2020/239

- 1.2.1. Following Numbering is according to the EU whole-vehicle type-approval certificate for a complete vehicle type following (EU) 901/2014 as amended by (EU) 2020/239, Annex VIII
- (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: Euro 3, Euro 4, Euro 5, 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:
	Mingdianshe 30kw/CHDY
(2.2.1.1.5.)	Inertia (reference) mass and running resistance settings for single <del>/dual</del> 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 2-1, 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
	Not applicable, electrical vehicle.
(2.2.1.3.)	Test type II requirements: tailpipe emissions at increased idle/free acceleration
	Not applicable, electrical vehicle.
(2.2.1.4.)	Test type III requirements: emissions of crank-case gases
	Not applicable, electrical vehicle.
(2.2.1.5.)	Type IV test requirements: evaporative emissions
	Not applicable, electrical vehicle.
(2.2.1.6.)	Test type V requirements: durability of pollution-control devices
	Not applicable, electrical vehicle.
(2.2.1.7.)	Test type VI has not been assigned; consequently there are no results to be submitted
	Not applicable, electrical vehicle.
(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:

#### Yes/no

(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:

#### Not applicable, electrical vehicle.

(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

(2.2.1.8.7.) CO<sub>2</sub> emissions/fuel consumption (manufacturer's declared values)

Electric energy consumption and electric range:

Test Type VII result table for pure electric propulsion or not-externally-chargeable (NOVC) propulsions equipped with an electric motor for propulsion

#### Variant E1

	Measured electric	Declared electric	Measured	Declared
	energy consumption	engine consumption	electric range	electric range
	(Wh/km)	(Wh/km)	(km)	(km)
Pure electrical powertrain	34	34	130	130
NOVC hybrid electric powertrain				

#### Variant E2

	Measured electric	Declared electric	Measured	Declared
	energy consumption	engine consumption	electric range	electric range
	(Wh/km)	(Wh/km)	(km)	(km)
Pure electrical powertrain	40	40	120	120
NOVC hybrid electric powertrain	-			

#### Variant E3

	Measured electric energy consumption (Wh/km)	Declared electric engine consumption (Wh/km)	Measured electric range (km)	Declared electric range (km)
Pure electrical powertrain	32	32	137	137
NOVC hybrid electric powertrain				

#### Variant E4

	Measured electric	Declared electric	Measured	Declared
	energy consumption	engine consumption	electric range	electric range
	(Wh/km)	(Wh/km)	(km)	(km)
Pure electrical powertrain	<u>38</u>	<u>38</u>	<u>113</u>	113
NOVC hybrid electric powertrain				

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

#### Not applicable, electrical vehicle.



(2.2.1.10.)	Test type IX requirements: sound level
	Not applicable, electrical vehicle.
(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: 72 kg
	mass plus rider/driver: 165 kg(with battery)
(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: 103.1 kPa
(2.2.1.11.1.6.)	Relative humidity: 51 %
(2.2.1.11.1.7.)	Ambient temperature: 280 K
(2.2.1.11.1.8.)	Wind speed and direction on test track: 1.5 m/s
(2.2.1.11.1.9.)	Test track condition (temperature, level of moisture etc.): sunny, dry
(2.2.1.11.1.10.)	Maximum vehicle design speed measured and gear in which it is reached:
	Variant E1: 24.8 km/h (electrical vehicle, no gear) Variant E2: 43.6 km/h (electrical vehicle, no gear) Variant E3: 24.5 km/h (electrical vehicle, no gear) Variant E4: 45.6 km/h (electrical vehicle, no gear)
(2.2.1.11.1.11.)	Maximum vehicle design speed:
	Variant E1: 25 km/h Variant E2: 45 km/h Variant E3: 25 km/h Variant E4: 45 km/h
(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:
	Soo 1.1 above

See 1.1. 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 1.1. 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: not applicable
(2.2.1.11.2.1.5.)	Relative humidity: not applicable
(2.2.1.11.2.1.6.)	Ambient temperature: not applicable
(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 1.3.3.9. 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 1.3.3.9. of this report
(2.2.1.11.2.1.17.)	Maximum continuous-rated torque electric motor: See item 1.3.3.9. of this report
(2.2.1.11.2.1.18.)	Maximum current e-motor at maximum continuous-rated power:
	See item 1.3.3.9. 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> Nm at min-1 at A/F ratio:
(2.2.1.11.2.1.21.)	Maximum peak power for propulsion(s): <b>not applicable</b> 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.
(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 (only for subcategories: L1e, L2e, L6e, L7e-B1, L7e-C) (3)
	Variant E1: 24.8 km/h (electrical vehicle, no gear) Variant E2: 43.6 km/h (electrical vehicle, no gear) Variant E3: 24.5 km/h (electrical vehicle, no gear) Variant E4: 45.6 km/h (electrical vehicle, no gear)
(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:
	Not applicable
(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 manufacturer's information document Annex C, item6.9.
(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 1.3.1.8. 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: 1450 mm
	Rear tyre rolling circumference: 1450 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:

(2.2.2.7.1.)Maximum vehicle speed and/or maximum continuous total power for vehicles equipped with PI/CI combustion engine limited by:

## Not applicable

- (a) the properties, timing or presence of the spark igniting the fuel/air mixture in the cylinder(s): yes/no
- (b) the amount of air intake of the engine: yes/no
- (c) the amount of fuel intake of the engine: yes/no
- (d) the mechanically-controlled output rotation speed of the drive-train, such as clutch, transmission or final drive: yes/no
- (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:
  - (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: yes/no (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 (c) physical vehicle speed limitation by means of internal or external components such as a maximum achievable revolution speed of an 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	XV	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
Commission Implementing Regulation (EU) No 901/2014	V	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) coupling 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	Monitoring	Fault detection	MI activation	Secondary	Precondi-	Demonstration	Default
code	strategy	criteria	criteria	parameters	tioning	test	mode
see table 7.6. 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:

If the prop stand is extended, the electric motor is cut-off. It cannot be restarted until the prop stand is moved into its retracted position.

The centre stand is able to swing back automatically into the not-in-use position when the vehicle is moved forward purposely so as to raise the centre stand from the ground surface.

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

1.3.1. Delegated regulation (EU) No. 3/2014

## 1.3.1.1. Annex II: Audible Warning Devices

#### 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 2.1 of Annex II part 2 of this regulation.

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: LVEE type: DL 70-II

type approval number: E32\*28R00/05\*0002\*01

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))	≥ 75 ≤ 112	91 dB(A)

## 1.3.1.2. Annex III: Braking, including Anti-lock and Combined Braking Systems

## 1.3.1.2.1. General requirements

#### Service brake

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

## Secondary (Emergency) 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.

## 1.3.1.2.2. Tests with wet brakes

Wet brakes have been tested on front and rear wheel disk brake.

#### 1.3.1.2.3. Results of tests

The tests have been carried out in the order set out in Annex 3, of ECE R78.

Mass of vehicle when tested (kg)

	Laden
	(kg)
Front axle	80
Rear axle	160
Total	240

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	corrected Stop distance	Braking Force	Limit distance	Limit deceleration	
		[km/h]	$[m/s^2]$	[m]	[N]	[m]	$[m/s^2]$	
Test §3, dry stop, single	-Front	40.0/40.0	3.88	19.62	114	21.76	3.4	
(laden)	-Rear	40.0/40.3	3.42	17.86	444	26.88	2.7	
Test §3, dry stop, single (Lightly loaded)	No CBS	No CBS or SSBS, not applicable						
Test §4, dry stop, all service	L1e vehicle, not applicable							
Test §5, high speed	Vmax <	Vmax < 125 km/h, not applicable						

## Test §6, wet brake

Baseline test

	Dascille to	, St			
Service brake- Front	Test speed	Measured performance		rmance	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	40.0/40.2	2.52	2.06	3.79	57
No.2	40.0/40.2	2.67	2.09	3.89	60
No.3	40.0/39.8	2.59	2.27	3.92	59
Average			2.14	3.87	59



Service brake- Rear	Test speed	Measured performance		rmance	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	40.0/39.3	2.50	2.16	3.82	98
No.2	40.0/39.6	2.58	2.17	3.89	104
No.3	40.0/40.2	2.53	2.12	3.80	101
Average			2.15	3.84	101

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.	
Front, laden	40.0/39.7	2.50	1.95	3.72	58
Rear, laden	40.0/39.6	2.41	1.90	3.52	100

Test §7~ Test §12 are not applicable.

1.3.1.2.4. Anti-locking system

Not applicable

- 1.3.1.3. Annex IV: Electrical Safety
- 1.3.1.3.1. 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
- 1.3.1.3.1.1 Protection against direct contact

The protections provided shall not be able of being opened, disassembled or removed without the use of tools.

Requirement fulfilled. Refer to Annex C, drawing No. LX05-27-01.

1.3.1.3.1.1.1 Protection of live parts inside the enclosed compartment

Not applicable, vehicle has no enclosed compartment.

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

Not applicable, vehicle has no enclosed compartment.

1.3.1.3.1.1.3 Protection of live parts of vehicles where no enclosed compartment is present

Requirement fulfilled. Protection of live parts with the protection degree IPPXXD.

1.3.1.3.1.1.4 Connectors (including vehicle inlet)

Requirement fulfilled. Vehicle connectors comply with the protection degree IPPXXB.

1.3.1.3.1.1.5 Service disconnect

Not applicable, service disconnect can not be opened, disassembled or removed without the use of tools.



1.3.1.3.1.1.6	Specific marking requirements Requirement fulfilled no cables for high voltage buses which are not located fully within enclosures. More details refer to Annex C, drawing No. LX05-28-01.
1.3.1.3.1.2	Protection against indirect contact
1.3.1.3.1.2.1	Protection against electrical shock arised from indirect contact Requirements fulfilled through galvanically connections using bolts.
1.3.1.3.1.2.2	Resistance between all exposed conductive parts and the electrical chassis The resistance between all exposed conductive parts and the electrical chassis is lower than 0.1 $\Omega$ when there is current flow of 0.2 A.
1.3.1.3.1.2.3	Vehicle intended to be connected to a grounded external electric power supply Requirement fulfilled, vehicle can only use a dedicated charger that is protected when any single isolation fault arises.
1.3.1.3.1.3	Isolation resistance
1.3.1.3.1.3.1	Electric power trains consisting of separate DC- or AC-buses Requirement fulfilled, DC buses, working voltage is more than $100\Omega/V$ .
1.3.1.3.1.3.2	Electric power trains consisting of combined DC- or AC-buses  Not applicable
1.3.1.3.1.3.3	Fuel cell vehicles Not applicable
1.3.1.3.1.3.4	Isolation resistance of coupling system for charging the REESS Not applicable, connected to external DC power supply.
1.3.1.3.2.	Requirements concerning the REESS
1.3.1.3.2.1	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
1.3.1.3.2.2	Protection of accumulation of gas Lithium battery (no aqueous electrolyte, sealed type, no gas evolution)
1.3.1.3.2.3	Protection against electrolyte spills  Lithium battery (no aqueous electrolyte, sealed type)
1.3.1.3.2.4	Accidental or unintentional detachment The REESS and its components are installed in the vehicle in a way so 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.



1.3.1.3.3.	In-use safety requirements
1.3.1.3.3.1	Propulsion system power-on and power-off procedure
1.3.1.3.3.1.1	Start-up At the start-up, including system power-on, in order to select the active driving possible mode, at least two deliberate and distinctive actions shall be performed by the driver.
1.3.1.3.3.1.2	Momentary indication  A momentary indication is given to the rider when the vehicle is switched in active driving possible mode.
1.3.1.3.3.1.3	Signal information the rider When leaving the vehicle, the rider was informed by an optical signal if the vehicle still in the active driving possible mode.
1.3.1.3.3.1.4	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.
1.3.1.3.3.1.5	Vehicle is equipped with a device direction control unit  Not applicable
1.3.1.3.3.1.6	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.
1.3.1.3.3.2	Driving with reduced power
1.3.1.3.3.2.1	Indication of reduced power Not applicable.
1.3.1.3.3.2.2	Indication of low energy content of REESS A low energy content is indicated to the rider by an obvious device. Refer to drawing No. LX05-15-01.
1.3.1.3.3.3	Driver backwards Not applicable
1.3.1.3.3.4	Determination of hydrogen emission  Not applicable, not equipped with open type traction batteries.
1.3.1.4.	Annex V: Declaration regarding Endurance Testing of Functional safety Critical Systems, Parts and Equipment  See manufacturer's information document
1.3.1.5.	Annex VI: Front and Rear Protective Structures  Not applicable



1.3.1.6. Annex VII: Glazing, Windscreen Wipers and Washers and Defrosting and

**Demisting Systems** 

1.3.1.6.1. Glazing:

Not applicable: The vehicle is not fitted with any glazing.

1.3.1.6.2. Windscreen Wipers and Washers:

Not applicable: The vehicle is not fitted with a windscreen.

1.3.1.6.3. Defrosting and Demisting Systems:

Not applicable: The vehicle is not fitted with a windscreen.

1.3.1.7. Annex VIII: Driver operated Controls including Identification of Controls, Tell-

Tales and Indicators

1.3.1.7.1. Identification

> The controls, tell tales and indicators shown in Annex C, 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 colors used for the tell-tales are those required in Annex VIII of Regulation (EU) 3/2014.

1.3.1.7.1.1. 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.

1.3.1.7.2. Speedometer and Odometer:

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

1.3.1.7.2.1. Speedometer fitting:

> There is a digital speedometer 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.

#### 1.3.1.7.2.2. Speedometer accuracy:

## Tires fitted:

THES TILLEG.	
Front axle	90/90-12 59J
	E4-75R-0012445
Rear axle	90/90-12 59J
	E4-75R-0012445

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



#### Speedometer system

#### Test results:

Actual speed V2	Read speed V1	Deviation V1-V2	Limit: 0.1 x V2 + 4
[km/h]	[km/h]	[km/h]	[km/h]
35.5	36	0.5	7.6
18.1	20	1.9	5.8

## Speedometer system(Optional)

#### Test results:

Actual speed V2	Read speed V1	Deviation V1-V2	Limit : $0.1 \times V2 + 4$
[km/h]	[km/h]	[km/h]	[km/h]
33.5	36	2.5	<u>7.4</u>
<u>17.8</u>	20	2.2	<u>5.8</u>

The speed displayed was never lower than the actual speed.

## 1.3.1.7.2.3. Common Space for displaying Multiple Information:

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

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

## 1.3.1.8.1. Lighting and light-signalling devices

- Component type-approval marks, manufacturer's marks: see manufacturer's information document Annex C.
- Position (location) and arrangement: see manufacturer's information document Annex C.
- 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	
Dipped-beam	See information document	1	frontward	
Front position	See information document	1	frontward	
Front direction indicator	See information document	2	frontward	
Rear direction indicator	See information document	2	rearward	
Stop	See information document	1	rearward	See 6.11.1. of
Rear position	See information document	1	rearward	information folder
Rear registration plate	See information document	1	rearward	
Rear retro-reflector	See information document	1	rearward	
Pedal retro-reflector	See information document		Front/rear ward	
Side retro-reflector	See information document	2	sidewards	

## 1.3.1.8.2. 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 the standard and this frequency changes considerably in the case of a malfunction of one or more direction indicators.

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

## 1.3.1.9.1. Inspections and their results:

Rear view mirrors:

Make:

**Type: WY-032** 

Approval number: E13\*81R00/02\*6472\*00

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

See information document, Annex C, drawing No. LX05-18-01.

## 1.3.1.9.2. 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) 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.



1.3.1.9.3. Number

Main outside mirror(s): 2

1.3.1.9.4. Adjustment

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

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

Inspections and their results:

Not applicable

1.3.1.11. <u>Annex XII: Safety belt anchorages and safety belts</u>

Inspections and their results:

Not applicable

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

Inspections and their results:

Version(s)-01: 2

Number of seating positions: Version(s)-02 & 03: 1

All seating positions forward: yes
Kind of seating positions: saddles

R-point: see manufacturer's documentation

Height of R-point: > 540mm

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

1.3.1.13. Annex XIV: Steerability, cornering properties and turnability

Inspections and their results:

Vehicle test mass: 240kg
Tire front size: 90/90-12 59J
Tire front pressure: 200 kPa
Tire rear size: 90/90-12 59J
Tire rear pressure: 220 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:

0.8 x vmax 36 km/h Requirement fulfilled

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

#### 1.3.1.14.1. 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:

## See information document of manufacturer, Annex C, page 20.

## 1.3.1.14.1.1. 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.

## 1.3.1.14.1.2. Load capacity

Combined	Axle	Dimension	Minimum Load	Tolerated load	Maximum permissible axle
tyre No			index technically	per wheel / axle	mass stated by the
			required	(kg)	manufacturer (see (EU)
					44/2014, Annex XI) (kg)
1	Front	90/90-12 59J	20	243	80
	Rear	90/90-12 59J	44	243	160
2	Front	90/90-12 54J	20	212	80
	Rear	90/90-12 54J	44	212	160
3	Front	90/90-12 44J	20	160	80
	Rear	90/90-12 44J	44	160	160

#### 1.3.1.14.1.3. Speed capability

Combined tyre No	Axle	Dimension	Minimum Speed index technically required	Maximum permissible speed of tyre (km/h)	Maximum vehicle speed (km/h)
1	Front	90/90-12 59J	В	100	45
	Rear	90/90-12 59J	В	100	45
2	Front	90/90-12 54J	В	100	45
	Rear	90/90-12 54J	В	100	45
3	Front	90/90-12 44J	В	100	45
	Rear	90/90-12 44J	В	100	45

## 1.3.1.14.1.4. Tyre pressures

The recommended tyre pressure under all conditions of use is given on a label stuck or be riveted under the seat and also in the operator's manual.



1.3.1.15. Annex XVI: Maximum speed limitation plate and its location on the vehicle

Inspections and their results:

## Not applicable

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

Inspections and their results: Not applicable

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

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

For vehicles which are propelled by means of one or more electric motors, including pure and hybrid electric vehicles:

- 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
- 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
- physical vehicle speed limitation by means of internal or external components such as a maximum achievable revolution speed of an electric motor.

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.



## 1.3.1.18. Annex XIX: Vehicle structure integrity

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.

## 1.3.2. <u>Delegated regulation (EU) No. 44/2014</u>

## 1.3.2.1. <u>Annex II: Powertrain tampering prevention (anti-tampering) measures</u>

## 1.3.2.1.1. General requirements

The manufacturer declares its commitment not to market interchangeable components which could enable an increase in propulsion unit performance applicable to the relevant (sub)category.

The maximum design vehicle speed and/or the maximum continuous rated and/or net engine power of the relevant (sub)category, set out in Annex I to Regulation (EU) No 168/2013 remains within the conformity of production boundaries set out in point 4.1.4 of Annex IV.

The number of teeth is displayed on the pinions. The ignition timing is not adjustable.

All electronic equipment and/or programmable computer are tamper protected.

Stored on board diagnostic trouble codes (DTCs) in the powertrain or engine control unit(s) are not erased by disconnection of the on board computer from the vehicle power supply or by disconnection or failure of the vehicle battery or ground.

## 1.3.2.1.2. Additional specific requirements for categories L1e, L2e and L6e

	Requirement
Intake system	Not applicable
Fixing with Shear bolts / special bolts	
Interference with pipes lead to malfunctioning	
Marking with vehicle category	
Engine	Not applicable
Reed valves fixed in order to prevent reuse	
Thickness of cylinder head gasket	
Two stroke engines	
Exhaust system	Not applicable
Artificial restriction	
Resonator tube	
Part inside silencer	
CVT transmission	Not applicable
Covers fixed by min 2 shear bolts	
Mechanism, distance between discs	



1.3.2.1.3. Additional specific requirements for categories L3e-A1 and L4e-A1

Not applicable.

1.3.2.1.4. Additional specific requirements for other categories (L3e-A2/A3 and L4e-A2/A3)

Not applicable

1.3.2.2. Annex V: Coupling devices and attachments

Inspections and their results

Not applicable, vehicle is not equipped with a coupling device

1.3.2.3. <u>Annex VI: Devices to prevent unauthorised use</u>

1.3.2.3.1. 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.

## 1.3.2.3.2. 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.

## 1.3.2.4. Annex VII: Electromagnetic compatibility (EMC)

## 1.3.2.4.1. Inspections and their results:

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

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

## 1.3.2.4.1.1.1. 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.

Refer to Annex D, page 1 to 4.

#### 1.3.2.4.1.1.2. 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.

Refer to Annex D, page 5 to 8.

### 1.3.2.4.1.1.3. 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.

### 1.3.2.4.1.2. "REESS charging mode coupled to the power grid"

#### 1.3.2.4.1.2.1. 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.

Refer to Annex D, page 9 to 12.



1.3.2.4.1.2.2. Emission of harmonics on AC power lines from vehicle

The vehicle has undergone inspections according to Annex 11 of the regulation. Requirement of item 7.3.2. of the regulation are fulfilled.

Refer to Annex D, page 16 to 18.

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

The vehicle has undergone inspections according to Annex 12 of the regulation. Requirement of item 7.4.2. of the regulation are fulfilled.

Refer to Annex D, page 15.

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

The vehicle has undergone inspections according to Annex 13 of the regulation. Requirement of item 7.5.2. of the regulation are fulfilled.

Refer to Annex D, page 13 to14.

1.3.2.4.1.2.5. 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 R10-05 series, there is no direct connection to a telecommunication network which includes telecommunication service additional to the charging communication service.

1.3.2.4.1.2.6. 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.

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

The vehicle has undergone inspections according to Annex 15 of the regulation. No degradation of performance of "immunity-related" functions was observed during the testes.

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

The vehicle has undergone inspections according to Annex 16 of the regulation. No degradation of performance of "immunity-related" functions was observed during the testes.

1.3.2.4.1.2.9. Optional equipment

Not applicable



### 1.3.2.5. <u>Annex VIII: External projections</u>

### 1.3.2.5.1. Inspections and their results:

The assessment of the external projections has been performed according to the general requirements set in paragraph 2.1. of the Annex VIII.

The external surface of the vehicles do not exhibit any parts or any projection to be likely either to increase the risk of seriousness of bodily injury to a person hit by the external surface or brushing against it in event of a collision, or to catch on pedestrians, cyclists or motor cyclists.

All parts of the external surface of the vehicle, which are above the floor line or so located that they can neither in static condition nor in operation be contacted by a sphere with 100 mm in diameter, have a radius of curvature of not less than 2,5 mm respectively 5 mm in case of front and rear bumper.

1.3.2.5.2. Ornaments

Not applicable

1.3.2.5.3. Grilles and gaps

Not applicable

1.3.2.5.4. Bumpers:

Not applicable

1.3.2.5.6. Wheels, wheel nuts, hubcaps and wheel discs

Wheels, wheel nuts, hubcaps and wheel discs do not exhibit any pointed or sharp projections that extend beyond the external plane of the wheel rim.

At straight ahead position of the wheels, no part of the wheels, other than the tyres, located above the horizontal plane, passing through their axis of rotation is projecting beyond the vertical projection, in a horizontal plane, of the external surface of the vehicle.

1.3.2.5.7. Sheet metal edges

Not applicable

1.3.2.5.8. Particular specifications

1.3.2.5.8.1. Windscreen or fairing

Not applicable

1.3.2.5.8.2. Clutch and break levers

Not applicable

1.3.2.6. <u>Annex IX: Fuel storage</u>

Not applicable, electrical vehicle.



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

1.3.2.7.1. Inspections and their results:

Not applicable for category L1e vehicles.

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

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

# Annex XII: Functional on-board diagnostics (OBD)

Not applicable for category L1e vehicles.

### 1.3.2.10. Annex XIII: Passenger handholds and footrests

### 1.3.2.10.1. Inspections and their results:

1.3.2.9.

Provisions are made to carry a passenger (only for version 01).

The vehicle is equipped with a hand-hold system in the form of one hand-grips, which are beside the passenger seating position.

Its attachment can withstand without snapping the required load of 2000N.

The vehicle is equipped with footrests for all seating positions.

All of the footrests are capable of withstanding a static vertical compression force of 1700N. The space provided for these footrests fulfils the requirements of the present annex.

### 1.3.2.11. Annex XIV: Registration plate space

## 1.3.2.11.1. Dimensions of the space for mounting the rear registration plate

A plate 145mm\*125mm can be fixed to the mounting space.

### 1.3.2.11.2. 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.

### 1.3.2.11.3. 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° from the vertical (the backing plate for the registration number facing upwards).



1.3.2.11.3. Maximum/Minimum height/geometric visibility

Fulfilled, refer to Annex C, drawing No. LX05-23-01

1.3.2.12. <u>Annex XV: Access to repair and maintenance information</u>

General requirements

The manufacturer grants non-discriminatory 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.

1.3.2.13. Annex XVI: Stands

1.3.2.13.1 Inspections and their results:

1.3.2.13.1.1 General requirements

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

1.3.2.13.1.2 Prop stands

See point 2.2.3.5.1.

1.3.2.13.1.3 Centre stands

See point 2.2.3.5.1.

1.3.2.13.1.4 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.

1.3.2.13.1.5 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.

1.3.2.13.1.6 Other requirements

1.3.2.13.1.6.1 Extended stand tell-tale

Not applicable.



1.3.2.13.1.6.2	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.
1.3.3.	Delegated regulation (EU) No. 134/2014
1.3.3.1.	Annex II: Test type I requirements: tail pipe emissions after cold start
	Not applicable, electrical vehicle.
1.3.3.2.	Annex III: Test type II requirements: tail pipe emissions at (increased) idle and free acceleration
	Not applicable, electrical vehicle.
1.3.3.3.	Annex IV: Test type III requirements: emissions of crankcase gases
	Not applicable, electrical vehicle.
1.3.3.4.	Annex V: Test type IV requirements: evaporative emissions
	Not applicable, electrical vehicle.
1.3.3.5.	Annex VI: Test type V requirements: durability of pollution-control devices
	Not applicable, electrical vehicle.
1.3.3.6.	Annex VII: Test type VII requirements: CO2 emissions, fuel consumption, electric energy consumption and electric range
	Inspections and their results:
	Refer to item 2.2.1.8.7. of this report.
1.3.3.7.	Annex VIII: Test type VIII requirements: OBD environmental tests
	Inspections and their results:
	Not applicable
1.3.3.8.	Annex IX: Test type IX requirements: sound level
	Not applicable



## 1.3.3.9. <u>Annex X: Propulsion unit performance</u>

## 1.3.3.9.1. Inspections and their results:

1.3.3.9.1.1. 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 E1:

	1	2	3	4	5	6	7	8	9	10
rpm	325	306	293	278	250	222	197	158	115	79
V [V]	60	60	60	60	60	60	60	60	60	60
P [W]	201.3	953.4	1090.5	1155.7	1110.7	1046.3	1059.0	916.5	710.7	496.3
M [Nm]	6.2	29.8	35.5	39.7	42.4	45.0	51.3	55.4	59.0	60.0
I[A]	5.3	21.4	24.1	26.5	26.8	26.2	28.2	28.0	27.2	26.1

## Variant E2:

	1	2	3	4	5	6	7	8	9	10
rpm	480	461	445	433	425	410	386	353	290	159
V [V]	60	60	60	60	60	60	60	60	60	60
P [W]	588.1	2963.6	2935.6	3051.4	3106.3	3065.3	2982.9	2920.1	2648.0	1798.1
M [Nm]	11.7	55.8	63.0	67.3	69.8	71.4	73.8	79.0	87.2	108.0
I [A]	11.7	53.9	60.0	64.1	67.1	67.0	67.6	67.4	67.0	67.2

## Variant E3:

	1	2	3	4	5	6	7	8	9	10
rpm	327	315	302	291	283	265	231	201	120	42
V [V]	60	60	60	60	60	60	60	60	60	60
P [W]	210.8	609.0	1004.3	1275.3	1296.3	1275.0	1208.5	1115.2	745.1	276.5
M [Nm]	6.2	18.5	31.8	41.9	43.7	45.9	50.0	53.0	59.3	62.9
I [A]	4.3	11.2	19.2	25.9	26.5	26.8	26.7	26.4	25.8	24.9

## Variant E4:

	1	2	3	4	5	6	7	8	9	10
rpm	494	492	495	412	381	324	368	333	283	60
V[V]	59.8	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.8
P [W]	460.4	1107.6	1762.3	2118.2	1998.8	1916.9	1953.7	1921.3	1843.2	18.8
M [Nm]	8.9	21.5	34.0	49.1	50.1	56.5	50.7	55.1	62.2	3.0
I [A]	9.9	22.2	34.1	41.7	41.2	41.0	41.3	41.1	41.5	0.3

## 1.3.3.9.1.2. Maximum 30 minutes power

The maximum continuous-rated power and maximum continuous-rated torque have been measured according to Annex 6 of ECE Regulation No. 85.



#### Variant E1:

	Start	End	Max.	Min.	Avg.
rpm	280	275			280
V [V]	60	60			60
I [A]	25.3	25.2			25.4
P [W]	1132.3	1123.1	1147.3	1114.5	1133
M [Nm]	38.6	39.0			38.7

## Maximum continuous-rated power

stated by the manufacturer : 1.15 kW at 280 min<sup>-1</sup> measured : 1.13 kW at 280 min<sup>-1</sup>

## Maximum continuous-rated torque

stated by the manufacturer : **39.0** Nm at **280** min<sup>-1</sup> measured : **38.7** Nm at **280** min<sup>-1</sup>

#### Variant E2:

	Start	End	Max.	Min.	Avg.
rpm	422	418	1	1	421
V [V]	60	60			60
I[A]	64.4	62.9			63.2
P [W]	3026.4	2986.2	3026.4	2986.2	3003
M [Nm]	68.5	68.2			68.2

## Maximum continuous-rated power

stated by the manufacturer : 3.00 kW at 420 min<sup>-1</sup> measured : 3.00 kW at 421 min<sup>-1</sup>

## Maximum continuous-rated torque

stated by the manufacturer : **68.5** Nm at **420** min<sup>-1</sup> measured : **68.2** Nm at **421** min<sup>-1</sup>

### Variant E3:

	Start	End	Max.	Min.	Avg.
rpm	271	272		1	272
V [V]	60	60		1	60
I [A]	26.2	26.2		1	26.3
P [W]	1283.5	1273.6	1287.9	1272.4	1281.4
M [Nm]	45.2	44.7			45.1

## Maximum continuous-rated power

stated by the manufacturer  $: 1.28 \text{ kW at } 270 \text{ min}^{-1}$  measured  $: 1.28 \text{ kW at } 272 \text{ min}^{-1}$ 

## Maximum continuous-rated torque

stated by the manufacturer : **45.1** Nm at **270** min<sup>-1</sup> measured : **45.1** Nm at **272** min<sup>-1</sup>



#### Variant E4:

	Start	End	Max.	Min.	Avg.
rpm	398	392			392
V [V]	60	60			60
I [A]	40.9	41.1			41.2
P [W]	1980.4	1978.6	1992.3	1976.5	1984.2
M [Nm]	47.5	48.2			48.4

### Maximum continuous-rated power

stated by the manufacturer : 2.02 kW at 390 min<sup>-1</sup> measured : 1.98 kW at 392 min<sup>-1</sup>

### Maximum continuous-rated torque

stated by the manufacturer : **48.4** Nm at **390** min<sup>-1</sup> measured : **48.4** Nm at **392** min<sup>-1</sup>

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

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

## 1.3.4.1.1. Manufacturer data plate

The manufacturer's data plate is firmly riveted on the chassis 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.

## 1.3.4.1.2. Vehicle identification number (VIN)

The VIN is given on the manufacturer's data plate and is stamped on the right side of main 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 manufacturer's information document.

#### 1.3.4.1.3. Characters

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

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

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

### 1.5. Remarks

The inspection results are only applicable to items which have been tested.

## Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

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Document information about two-wheel mopeds

Reference number of information document: 168/2013-LX05-01

Application date: November 20, 2020

LIST OF CONTENT

I. 168/2013 Information Document-GENERAL INFORMATION

II. Variants and Versions Matrix

Туре	Engine t	type	Variant(s)	Version(s)	Battery	Mass speed	Controller Marking	
			E1		Lithium battery:	25km/h	ZWK060140A-1	
	CH600r12	20°eM	E2		60V 26Ah, 2	45km/h	ZWK060140A	
LX05			E3	01, 02, 03		25km/h	ZWK060040A-1	
	EJ600r12	20°eM			Lithium battery: 60V 23.4Ah, 2			
			<u>E4</u>		60 V 23.4An, 2	<u>45km/h</u>	<u>ZWK060040A</u>	
	Content of drav		3.1					
Drawing 1		Drawing		2 , 2 1 , 1	1. 1.1 : 1			
LX05-01-				late and chassis	late and chassis numb	per		
LX05-02-		_						
LX05-03-				ension(Version(				
LX05-03-				ension(Version(				
	*			ension(Version(				
LX05-03- LX05-03-				ension(Version( ension(Version(				
LX05-03-				ension(Version(				
LX05-04-	_	Chassis	te venicie dini	ension version	8)-03 optionar <u>)</u>			
LX05-04-			view of moto	r				
LX05-06-		_	system of pur					
LX05-08-		Control		c propulsion				
LX05-09-		_	ispension arrai	ngements				
LX05-10-			spension arran					
LX05-11-	*		n of audible w					
LX05-12-			al schematic	drining device				
LX05-13-		Brake s						
LX05-13-		-	ake system					
LX05-13-			ake system					
LX05-14-			nal range of ci	rcuit breaker				
LX05-15-			s, tell-tales and					
LX05-16-			neter system					
LX05-16-			neter system(	Optional)				
LX05-17-			g installation	· ·				
LX05-18-			n of rear view	mirror				
LX05-19-	01		geometry					
LX05-20-	01		eft device					
LX05-21-	01	Hand-ho	old(Only for V	rersion(s)-01)				
LX05-22-	01	Footrest						
LX05-23-	01	Space for	or rear registra	tion plate				
LX05-24-	01	Central	stand	=-				
LX05-24-	02	Side stand						
LX05-25-	01	Location of the Power Circuit Components						
LX05-26-01 Lithium battery(Variant(s)-E1, E2)								
<u>LX05-26-02</u> <u>Lithium battery(Variant(s)-E3, E4)</u>								
LX05-27-01 Installation of the battery(Variant(s)-E1, E2)								
<u>LX05-27-02</u> <u>Installation of the battery(Variant(s)-E3, E4)</u>								
	<u>LX05-28-01</u> <u>External charger socket</u>							
IV. Ac	dditional infor	mation re	equested by the	e type approval				

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information folder sheet
Endurance statement
Structure statement
Anti-Tampering Statement
Sample of COC
Statement concerning authority of Signature on COC



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

According to Regulation (EU) number 168/2013\*2020/1694 and Commission implementing Regulation (EU) number 901/2014 amended by 2020/239

Item No	(Sub) categories	Deta	ile	ed information
0.		GENERAL INFORMATION		
A.		General information concerning vehicles		
0.1.	L1e-L7e	Make (trade name of manufacturer)	:	LVNENG, LVNENG's logo*2( POPE GIO ), ufban's logo( ), smartway, IVA, Senzo, Monasso, Generic, KSR MOTO AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA SOURIS, WAYEL, Lexmoto, rutec's logo ( CULEC ),
0.2.	L1e-L7e	Type (17)		CETUR's logo(CETUR), bensom LX05
0.2.1.	L1e-L7e	Variant(s) <sup>(17)</sup>		E1, E2, <u>E3, E4</u>
0.2.2.	L1e-L7e	Version(s) (17)		01, 02, 03
0.2.3.	L1e-L7e	Commercial name(s) (if available)		S5-W, S5, E-go S5, LX05, Elex, BuzzE, Alegra
0.3.	L1e-L7e	Category, subcategory and sub-subcategory of vehicle (2)		
0.4.	L1e-L7e	Company name and address of manufacturer	:	Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China
0.4.1.	L1e-L7e	Name(s) and address(es) of assembly plants	:	Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China
0.4.2.	L1e-L7e	Name and address of manufacturer's authorized representative, if any	:	IVA Mobility B.V. Sportlaan 391,3364DK Sliedrecht, The Netherlands
0.5.	L1e-L7e	Manufacturer's statutory plate(s)		
0.5.1.	L1e-L7e	Location of the manufacturer's statutory plate (15) (18)	:	R, x830, y110, z230 Refer to drawing No. LX05-01-01
0.5.2.	L1e-L7e	Method of attachment	:	The manufacturer data plate is riveted on the chassis
0.5.3.	L1e-L7e	Photographs and/or drawings of the statutory plate (completed example with dimensions)	:	Refer to drawing No. LX05-02-01
0.6.	L1e-L7e	Location of the vehicle identification number <sup>(2)</sup>	:	R, x400, y5, z460(r/o) Refer to drawing No. LX05-01-01
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. LX05-01-01 Refer to drawing No. LX05-01-02

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Item No	(Sub) categories	Deta	ailed information
0.6.1.1.	L1e-L7e	The serial number of the type begins with	: Variant(s)/Version(s):  E1/01: ☆LV2NYE30??1??????☆  E1/02: ☆LV2NYE31??1??????☆  E1/03: ☆LV2NYE32??1??????☆  E2/01: ☆LV2NYK30??1??????☆  E2/02: ☆LV2NYK31??1??????☆  E2/03: ☆LV2NYK32??1??????☆  E3/01: ☆LV2NYF30??1??????☆  E3/02: ☆LV2NYF31??1??????☆  E3/03: ☆LV2NYF31??1??????☆  E4/01: ☆LV2NYJ30??1??????☆  E4/02: ☆LV2NYJ31??1??????☆  E4/03: ☆LV2NYJ32??1??????☆  Refer to drawing No. LX05-02-01
В.		General information concerning systems, com	
	L1e-L7e	From 0.7. to 0.11.2.	: Not applicable
C.		General information regarding conformity of information	production and access to repair and maintenance
0.12.		Conformity of production	
0.12.1.	L1e-L7e	Description of overall quality-assurance management systems	: Conforms to ISO9001: 2015 quality management system
0.13.		Access to repair and maintenance informatio	n
0.13.1.	L1e-L7e	Address of principal website for access to vehicle repair and maintenance information	: http://www.lvnengebike.com/ Information is 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 CHARACTE	ERISTICS
1.1.	L1e-L7e	Photographs and/or drawings of a representative vehicle	: Refer to drawing No. LX05-03-01 Refer to drawing No. LX05-03-02 Refer to drawing No. LX05-03-03 Refer to drawing No. LX05-03-04 Refer to drawing No. LX05-03-05 Refer to drawing No. LX05-03-06
1.2.	L1e-L7e	Scale drawing of the whole vehicle	: Refer to drawing No. LX05-03-01 Refer to drawing No. LX05-03-02 Refer to drawing No. LX05-03-03 Refer to drawing No. LX05-03-04 Refer to drawing No. LX05-03-05 Refer to drawing No. LX05-03-06
1.3.	L1e-L7e	Number of axles and wheels	: 2 axles and 2 wheels
1.3.1.	L1e-L7e	Axles with twinned wheels (23)	: Not applicable
1.3.2.	L1e-L7e	Powered axles (23)	: R (Rear powered axle)
1.4.	L1e-L7e	Chassis (if any) (overall drawing)	: Refer to drawing No. LX05-04-01

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Item No	(Sub) categories	Deta	aile	ed informa	ation	
1.5.		Material used for the bodywork	:	Not app (only fo		-B,L7e-A2,L7e-B2,L7e-C)
1.6.	L1e-L7e	Position and arrangement of the propulsion(s)	:	In the co	entre of rear whee	el
1.7.		Hand of drive	:	_	<del>t/centre <sup>(4)</sup></del> or L4e,L5e-B,L6e	-B,L7e-A2,L7e-B2,L7e-C)
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 ar	nd left-hand, metr	ic and imperial
1.8.		Propulsion unit performance				
1.8.1.		Declared maximum vehicle speed	:	Not app (Only fo	licable or L3e, L4e, L5e,	L7e-A, L7e-B2)
1.8.2.		Maximum design vehicle speed (22)	:	Variant(	s)-E1, <u>E3</u> : 25km/ s)-E2, <u>E4</u> : 45km/ r in which it is rea or L1e, L2e, L6e,	h ached: Not applicable
1.8.3.	L1e-L7e	Maximum net power combustion engine	:	Not app	licable	
1.8.4.	L1e-L7e	Maximum net torque combustion engine	:	Not app	licable	
1.8.5.	L1e-L7e	Maximum continuous-rated power electric motor (15/30 <sup>(4)</sup> minutes power <sup>(27)</sup> )	:	Variant( Variant(	(s)-E1: 1.15 kW a (s)-E2: 3.00 kW a (s)-E3: 1.28 kW a (s)-E4: 2.02 kW a	t 420 min <sup>-1</sup> t 270 min <sup>-1</sup>
1.8.6.	L1e-L7e	Maximum continuous-rated torque electric motor	:	Variant( Variant(	(s)-E1: 39.0 N.m (s)-E2: 68.5 N.m (s)-E3: 45.1 N.m (s)-E4: 48.4 N.m	at 420 min <sup>-1</sup> at 270 min <sup>-1</sup>
1.8.7.	L1e-L7e	Maximum continuous total power for propulsion(s)	:	Not app	licable	
1.8.8.	L1e-L7e	Maximum continuous total torque for propulsion(s)	:	Not app	licable	
1.8.9.	L1e-L7e	Maximum peak power for propulsion(s)	:	Not app	licable	
2.		MASSES AND DIMENSIONS (In kg and mm.) refer to drawings where app	olic	able		
2.1.		Range of vehicle mass (overall)				
					Version(s)-01 & 02	Version(s)-03
2.1.1.	L1e-L7e	Mass in running order	:		72kg	83kg
2.1.1.1.	L1e-L7e	Distribution of mass in running order between the axles	:	Front: Rear:	30kg 42kg	29kg 54kg
2.1.2.	L1e-L7e	Actual mass	:		168g	179g
2.1.2.1.	L1e-L7e	Distribution of actual mass between the axles	:	Front: Rear:	65kg 103g	70kg 109g
2.1.3.	L1e-L7e	Technically permissible maximum laden mass	:		240kg	240g
2.1.3.1.	L1e-L7e	Technically permissible maximum mass on front axle	:		80kg	80kg
				•		·

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Item No	(Sub)	Doto	iled information
nem No	categories	Deta	nied information
2.1.3.2.	L1e-L7e	Technically permissible maximum mass on rear axle	: 160g 160g
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	: 15° slope
2.1.5.	L1e-L7e	Maximum pay mass declared by manufacturer	: Version(s)-01 & 02: 72kg Version(s)-03: 61kg
2.1.6.	L1e-L7e	Safe load carrying capacity of load platform declared by manufacturer	: Not applicable
2.1.7.	L1e-L7e	Technically permissible maximum towable mass in case of (4)	: 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(s)-E1, E2: 2*10.4kg=20.8kg <u>Variant(s)-E3, E4: 2*10.1kg=20.2kg</u>
2.1.11.		Mass of the doors	: Not applicable (Only for L2e, L4e, L5e, L6e, L7e)
2.1.12.		Mass of the machines or equipment installed on the load platform area	: Not applicable (Only for L2e-U, L5e-B, L6e-BU, L7e-CU)
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	: Version(s)-01: 1890 mm Version(s)-02 & 03: 1940 mm
2.2.2.	L1e-L7e	Width	: 720 mm
2.2.3.	L1e-L7e	Height	: Version(s)-01 & 02: 1110 mm Version(s)-03: 1330 mm
2.2.4.	L1e-L7e	Wheelbase	: 1365 mm
2.2.4.1.	L4e	Wheelbase sidecar (28)	: Not applicable
2.2.5.		Track width	: 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	: Not applicable (Only for L2e-U, L5e-B,L6e-BU,L7e-B2,L7e-CU)
2.2.9.		Centre of gravity	: Not applicable (Only for L2e-U, L5e-B,L6e-BU,L7e-B2,L7e-CU)

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Item No	(Sub) categories	Det	ailed information
2.2.10.		Miscellaneous dimensions	
2.2.10.1.	L7e-B2	Approach angle (11)	: Not applicable
2.2.10.2.	L7e-B2	Departure angle (11)	: Not applicable
2.2.10.3.	L7e-B2	Ramp angle (11)	: Not applicable
2.2.10.4.	L7e-B2	Ground clearance under the front axle (11)	: Not applicable
2.2.10.5.	L7e-B2	Ground clearance under the rear axle (11)	: Not applicable
2.2.10.6.		Ground clearance between the axles (11)	: Not applicable [Only for L3e-AxE (x=1, 2 or 3) L3e-AxT (x=1, 2 or 3), L7e-B]
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 CHARACTER	USTICS
3.1.		Manufacturer of the propulsion unit	
3.1.1.		Combustion engine	
	L1e-L7e	From 3.1.1.1. to 3.1.1.3.	: Not applicable
3.1.2.		Electric motor	
3.1.2.1.	L1e-L7e	Manufacturer	: BOSCH (Ningbo) light electric vehicle motor Co., Ltd
3.1.2.2.	L1e-L7e	Electric motor code (as marked on the engine or other means of identification)	: Variant(s)-E1, E2: CH600r120°eM *???????????*
			Variant(s)-E3, E4: EJ600r120°eM*????????????* Refer to drawing No. LX05-05-01
3.1.3.		Hybrid application	
	L1e-L7e	From 3.1.3.1. to 3.1.3.4.	: Not applicable
3.2.		Combustion engine	
	L1e-L7e	From 3.2.1. to 3.2.13.4.	: Not applicable
3.3.		Pure electric and hybrid electric propulsion	and control
3.3.1.	L1e-L7e	Electric vehicle configuration	: Pure electric/ <del>hybrid electric/manpower electric</del> (4)
3.3.2.	L1e-L7e	Brief description and schematic drawing of pure and hybrid electric propulsions and its control system(s)	: Refer to drawing No. LX05-06-01
3.3.3.		Electric propulsion motor	
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(s)-E1: 1.15 kW at 280 min <sup>-1</sup> Variant(s)-E2: 3.00 kW at 420 min <sup>-1</sup> Variant(s)-E3: 1.28 kW at 270 min <sup>-1</sup> Variant(s)-E4: 2.02 kW at 390 min <sup>-1</sup>

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Item No	(Sub) categories	Det	aile	ed information
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(s)-E1, E2: 17*9=153 <u>Variant(s)-E3, E4: 2*17*9=2*153</u>
3.3.4.1.2.	L1e-L7e	Mass	:	Variant(s)-E1, E2: 1*10.4kg=10.4kg <u>Variant(s)-E3, E4: 2*10.1kg=20.2kg</u>
3.3.4.1.3.	L1e-L7e	Capacity	:	Variant(s)-E1, E2: 26Ah <u>Variant(s)-E3, E4: 23.4Ah</u>
3.3.4.1.4.	L1e-L7e	Voltage	:	60V
3.3.4.1.5.	L1e-L7e	Position in the vehicle	:	Under rear saddle Refer to drawing No. LX05-27-01 Refer to drawing No. LX05-27-02
3.3.4.2.	L1e-L7e	Secondary propulsion battery		Only for Variant(s) E1, E2
3.3.4.2.1.	L1e-L7e	Number of cells	:	17*9=153
3.3.4.2.2.	L1e-L7e	Mass	:	1*10.4kg=10.4kg
3.3.4.2.3.	L1e-L7e	Capacity	:	26Ah
3.3.4.2.4.	L1e-L7e	Voltage	:	60V
3.3.4.2.5.	L1e-L7e	Position in the vehicle	:	Under rear saddle Refer to drawing No. LX05-27-01
3.3.5.		Hybrid electric vehicle		
	L1e-L7e	From 3.3.5.1. to 3.3.5.7.	:	Not applicable
3.3.6.		Energy storage device		
3.3.6.1.	L1e-L7e	Description	:	(battery, <del>capacitor, flywheel/generator</del> ) (4)
3.3.6.2.	L1e-L7e	Identification number	:	Variant(s)-E1, E2: Type: DM1501709 60V26Ah
				<u>Variant(s)-E3, E4:</u> <u>Type: DM2851709</u>
* 3.3.6.3.	L1e-L7e	Kind of electrochemical couple	:	Lithium battery
3.3.6.4.	L1e-L7e	Energy (for battery: voltage and capacity Ah in 2h, for capacitor: J,, for flywheel/generator: J,,)	:	Variant(s)-E1, E2: 60V, 26Ah <u>Variant(s)-E3, E4: 60V, 23.4Ah</u>
3.3.6.5.	L1e-L7e	Charger	:	on-board/external/without (4)
3.3.7.		Electric motor (describe each type of electri	c m	otor separately)
3.3.7.1.	L1e-L7e	Primary use	:	Propulsion motor/generator (4)
3.3.7.2.	L1e-L7e	When used as propulsion motor: single-/multi-motors (number) (4)	:	single-motor
3.3.7.3.	L1e-L7e	Working principle	:	Permanent magnet, Direct Current Brushless
3.3.7.4.	L1e-L7e	Direct current/alternating current/number of phases	:	Direct current/three phases
3.3.7.5.	L1e-L7e	Separate excitation/series/compound (4)	:	Series
3.3.7.6.	L1e-L7e	Synchronous/asynchronous (4)	:	Synchronous

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Item No	(Sub) categories	Deta	iled i	information
3.3.8.		Electric motor control unit		
3.3.8.1.	L1e-L7e	Identification number	: <b>N</b>	Make: <b>6</b>
				Variant(s)-E1: Marking: ZWK060140A-1
				Variant(s)-E2: Marking: ZWK060140A
			T	Variant(s)-E3: Type: ZWK060040A-1 Marking: ZWK060040A-1
			<u>T</u>	Variant(s)-E4: Type: ZWK060040A Marking: ZWK060040A Refer to drawing No. LX05-08-01
3.3.9.		Power controller		
3.3.9.1.	L1e-L7e	Identification number	: N	Not applicable
3.4.		Other engines, electric motors or combination motors)	ıs (sp	pecific information concerning the parts of these
	L1e-L7e	From 3.4.1. to 3.4.2.5.1.	: N	Not applicable
3.5.		Drive-train and control (13)		
3.5.1.	L1e-L7e	Brief description and schematic drawing of the vehicle drive-train and its control system (gear shift control, clutch control or any other element of drive-train)		Electric vehicle, it has no clutch control and gear hift control.
3.5.2.		Clutch		
3.5.2.1.	L1e-L7e	Brief description and schematic drawing of the clutch and its control system	: N	Not applicable
3.5.3.		Transmission		
3.5.3.1.	L1e-L7e	Brief description and schematic drawing of gear shift system(s) and its control	: N	Not applicable
3.5.3.2.	L1e-L7e	Drawing of the transmission	: N	Not applicable
3.5.3.3.	L1e-L7e	Type(mechanical, hydraulie, electric, manual/manual automated/automatic/CVT/other (indicate) <sup>(4)</sup>	: V	Vheel-hub motor
3.5.3.4.	L1e-L7e	A brief description of the electrical/ electronic components (if any)	: N	Not applicable
3.5.3.5.	L1e-L7e	Location relative to the engine	: N	Not applicable
3.5.3.6.	L1e-L7e	Method of control	: N	Not applicable

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Item No	(Sub) categories	Detailed information					
3.5.4.	L1e-L7e	Gear ratios					
		Overview ge	ar ratios				
		Gear <sup>(24)</sup>	Internal transmission ratio (ratio of engine to transmission output shaft revolutions)	ratio transmis shaft	al drive (ratio of sion output to driven evolutions)	Total gear ratio	Ratio(engine speed vehicle speed) for manual transmission only
		1/2/3	Not applicable		pplicable	Not applicable	Not applicable
		Reverse	Not applicable	Not a	pplicable	Not applicable	Not applicable
3.5.4.1.	L3e-AxE, L3e-AxT	Final drive ra	atio		: Not appli	cable	
3.5.4.2.	L3e-AxE, L3e-AxT	Overall gear	ratio in highest gear		: Not appli	icable	
3.6.		Safe-cornerin	ng device				
3.6.1.			ng device (Annex VIII EU) No 168/2013	to	•	; differential/other (4) I with twinned wheels, I	L2e, L5e, L6e, L7e)
3.6.2.		Differential l	ock		: <del>yes/</del> no <del>/oj</del> (Equipped	otional <sup>(4)</sup> I with twinned wheels, I	L2e, L5e,L6e, L7e)
3.6.3.	L1e-L7e	the safe-corn	tion and schematic dra tering device, the differ r control systems		: Not appli	cable	
3.7.		Suspension a	and control				
3.7.1.	L1e-L7e		tion and schematic dra nd its control system	wing of		drawing No. LX05-09 drawing No. LX05-10	
3.7.2.	L1e-L7e	Drawing of t	he suspension arranger	ments		drawing No. LX05-09 drawing No. LX05-10	
3.7.3.	L1e-L7e	Level adjusts	ment		: <del>yes/</del> no <del>/o</del> j	otional <sup>(4)</sup>	
3.7.4.	L1e-L7e	Brief descrip	tion of the electrical/		: Not appli	icable	
3.7.5.	L1e-L7e	Stabilisers			: <del>yes/</del> no <del>/o</del> p	otional	
3.7.6.	L1e-L7e	Shock absort	pers		: yes <del>/no/op</del>	otional	
3.8.		Passenger-co	ompartment heating sys	stem and a	air-conditioni	ing	
		From 3.8.1.	to 3.8.2.3.4.		: Not appli (Only for	icable : L2e, L5e-B, L6e- B,	L7e)
3.9.		Cycles desig	ned to pedal				
	L1e	From 3.9.1.	to 3.9.4.		: Not appli	icable	
4.		GENERAL	INFORMATION ON I	ENVIRON	NMENTAL A	AND PROPULSION	PERFORMANCE
4.0.		General info	rmation on environmer	ntal and p	ropulsion per	formance	
4.0.1.	L1e-L7e	Environment	tal step (16)		: Euro: 5		
4.0.2.	L1e-L7e	Fuel consum reference fue	ption (provide details fel tested)	for each	: Not appl	icable	
4.0.3.	L1e-L7e	CO <sub>2</sub> emission	n		: Not appli	icable	

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4.0.4	L1e-L7e	Energy consumption	:	Variant(s)-E1: 34 Wh/km Variant(s)-E2: 40 Wh/km <u>Variant(s)-E3: 32Wh/km</u> <u>Variant(s)-E4: 38Wh/km</u>
4.0.5.	L1e-L7e	Electric range	:	Variant(s)-E1: 130 km Variant(s)-E2: 120 km <u>Variant(s)-E3: 137 km</u> <u>Variant(s)-E4: 113 km</u>
4.1.		Tailpipe emission-control system		
	L1e-L7e	From 4.1.1. to 4.1.8.1.	:	Not applicable
4.2.		Crankcase emission control system		
4.2.1.	L1e-L7e	Configuration of crank-case gas recycling system (breather system, positive crank-case ventilation system, other) (description and drawings)		Not applicable
4.3.		Evaporative emission control system		
	L1e-L7e	From 4.3.1. to 4.3.8.	:	Not applicable
4.4.		Additional information on environmental and	d p	ropulsion unit performance
	L1e-L7e	From 4.4.1. to 4.4.4.	:	Not applicable
5.		VEHICLE PROPULSION FAMILY		
5.1.	L1e-L7e	To define the vehicle propulsion family, the classification criteria set out in point 3 of An		nufacturer shall submit the information required for x XI to Commission Delegated Regulation
			:	Not applicable
6.		INFORMATION ON FUNCTIONAL SAFE	TY	<i>T</i>
6.1.		Audible warning devices		
6.1.1.	L1e-L7e	Summary description of device(s) used and their purpose	:	One Electro-magnetic horn with resonator disc, single-tone warning
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. LX05-11-01
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	:	Attached to the chassis by bolt Refer to drawing No. LX05-11-01
6.1.4.	L1e-L7e	Electrical/pneumatic circuit diagram	:	Electromagnetic horn Refer to drawing No. LX05-12-01
6.1.4.1.	L1e-L7e	Voltage	:	<del>AC/</del> 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. LX05-11-01
6.2.		Braking, including anti-lock and combined b	rak	ring systems
6.2.1.	L1e-L7e	type of shoe/pad assemblies and/or linings, e	ffe pai	and drawings of the drums, discs, hoses, make and ctive braking areas, radius of drums, shoes or discs, rts of the axle(s) and suspension, levers, pedals (4)
			:	Refer to drawing No. LX05-13-01 Refer to drawing No. LX05-13-02 Refer to drawing No. LX05-13-03

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Item No	(Sub) categories	Detailed information			
6.2.2.	L1e-L7e	Operating diagram, description and/or drawing of the transmission and controls as well as a broomponents used in the braking system (4)		of the braking system, including details and drawings f description of the electrical and/or electronic	
			:	Refer to drawing No. LX05-13-02 Refer to drawing No. LX05-13-03	
6.2.2.1.	L1e-L7e	Front, rear and sidecar brakes, disc and/or drum (4)	:	Front: disc Rear: disc	
6.2.2.2.	L1e-L7e	Parking braking system	:	Not applicable	
5.2.2.3.	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	:	<del>yes/</del> no <sup>(4)</sup>	
6.2.4.	L1e-L7e	Anti-lock/Combined braking system			
5.2.4.1.	L1e-L7e	Anti-lock braking system	:	<del>yes/</del> no <del>/optional</del> <sup>(4)</sup>	
5.2.4.2.	L1e-L7e	Combined braking system	:	<del>yes/</del> no <del>/optional</del> (4)	
5.2.4.3.	L1e-L7e	Anti-lock and combined braking system	:	<del>yes/</del> no <del>/optional</del> <sup>(4)</sup>	
5.2.4.4.	L1e-L7e	Schematic drawing(s)	:	Not applicable	
5.2.5.	L1e-L7e	Hydraulic reservoir(s) (volume and location)	:	Refer to drawing No. LX05-13-02 Refer to drawing No. LX05-13-03	
5.2.6.	L1e-L7e	Particular characteristics of the braking syste	m(	(s)	
5.2.6.1.	L1e-L7e	Brake shoes and/or pads (4)	:	Refer to drawing No. LX05-13-02 Refer to drawing No. LX05-13-03	
5.2.6.2.	L1e-L7e	Linings and/or pads (indicate make, type, grade of material or identification mark)	:	Refer to drawing No. LX05-13-02 Refer to drawing No. LX05-13-03	
5.2.6.3.	L1e-L7e	Brake levers <del>and/or pedals</del> (4)	:	Refer to drawing No. LX05-13-02 Refer to drawing No. LX05-13-03	
6.2.6.4.	L1e-L7e	Other devices (where applicable) drawing and description	:	Not applicable	
5.3.		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. LX05-12-01 Refer to drawing No. LX05-25-01	
6.3.2.	L1e-L7e	Schematic diagram of all electrical functions included in power circuit	:	Refer to drawing No. LX05-12-01	
5.3.3.	L1e-L7e	Working voltage(s) (V)	:	Power working voltage: 60V DC Other electrical components voltage: 12V DC	
5.3.4.	L1e-L7e	Description of protection against electric- shocks	:	Using terminal box that made by high and low pressure polyethylene material, and nylon plug to protect against electric-shocks. the high voltage marking is provided; charger and controller have good grounding.	
5.3.5.	L1e-L7e	Fuse and/or circuit breaker	:	yes <del>/no/optional</del> <sup>(4)</sup> circuit breaker	
5.3.5.1.	L1e-L7e	Diagram showing the functional range	:	Refer to drawing No. LX05-14-01	

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6.3.6.	L1e-L7e	Configuration of power wiring harness	: According with national standard Refer to drawing No. LX05-12-01
6.4.		Front and rear protective structures	
6.4.1.		Front protective structure	
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.		Rear protective structure	
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
		From 6.5.1. to 6.5.4.1.	: Not applicable (Only for L2e, L5e, L6e, L7e)
6.6.		Windscreen wiper(s)	
6.6.1.		Detailed technical description (including photographs or drawings)	: Not applicable (Only for L2e, L5e, L6e, L7e)
6.7.		Windscreen washer	
6.7.1.		Detailed technical description (including photographs or drawings)	: Not applicable (Only for L2e, L5e, L6e, L7e)
6.7.2.		Capacity of the reservoir	: Not applicable (Only for L2e, L5e, L6e, L7e)
6.8.		Defrosting and demisting	
6.8.1.		Detailed technical description (including photographs or drawings)	: Not applicable (Only for L2e, L5e, L6e, L7e)
6.9.		Driver-operated controls including identifica	tion of controls, tell- tales and indicators
6.9.1.	L1e-L7e	Arrangement and identification of controls, tell-tales and indicators	: Refer to drawing No. LX05-15-01
6.9.2.	L1e-L7e	Photographs and/or drawings of the arrangement of symbols and controls, tell-tales and indicators	: Refer to drawing No. LX05-15-01
6.9.3.	L1e-L7e	Controls, tell-tales and indicators for which, when fitted, identification is mandatory, including the identification symbols to be used for that purpose	: See table 6.9.4.
6.9.4.	L1e-L7e	Summary table: the vehicle is equipped with the following driver-operated controls, including indicators and tell-tales (4)	: See table 6.9.4.
6.9.5.	L1e-L7e	Controls, tell-tales and indicators for which, when fitted, identification is optional, and Symbols which shall be used if they are to be identified	: See table 6.9.5.

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Item No	(Sub) categories	Detailed information				
6.10.		Speedometer and odometer				
6.10.1.		Speedometer				
6.10.1.1.	L1e-L7e	Photographs and/or drawings of the complete system	:	Make(s) of Speedometer: 1: 2: JIANWEI		
				Type(s): 1: S5-W 2: <u>W-001</u>		
				Refer to drawing No. LX05-16-01 Refer to drawing No. LX05-16-02		
6.10.1.2.	L1e-L7e	Vehicle speed range displayed	:	0~80 km/h, 0~50mph		
6.10.1.3.	L1e-L7e	Tolerance of the measuring mechanism of the speedometer	:	$0 \le (V1-V2) \le 0.1*V2+4$ V1: the speed of the speedometer V2: the actual testing speed		
6.10.1.4.	L1e-L7e	Technical constant of the speedometer	:	147Hz@30km/h		
6.10.1.5.	L1e-L7e	Method of operation and description of the drive mechanism		Magnet sensor makes pulse signal from the rolling of rear wheel, speedometer receives pulse signal from magnet sensor by transmission cable.		
6.10.1.6.	L1e-L7e	Overall transmission ratio of the drive mechanism	:	24 pulses / 1 rear wheel cycle		
6.10.2.		Odometer				
6.10.2.1.	L1e-L7e	Tolerance of the measuring mechanism of the odometer	:	0~5%		
6.10.2.2.	L1e-L7e	Method of operation and description of the drive mechanism	:	: See 6.10.1.5.		
6.11.		Installation of lighting, light-signalling device	ces,	s, including automatic switching of lighting		
6.11.1.	L1e-L7e	List of all devices (mentioning the number, make(s), type, component type-approval mark(s), the maximum intensity of the main-beam headlamps, color, the corresponding tell-tale)	:	: See table 6.11.1.		
6.11.2.	L1e-L7e	Diagram showing the location of the lighting and light-signaling devices	:	: Refer to drawing No. LX05-17-01		
6.11.3.	L1e-L7e	Hazard warning lamps	:	Not applicable		
6.11.4.	L1e-L7e	Brief description of the electrical and/or electronic components used in the lighting system and in the light-signaling system	:	Not applicable		
6.11.5.	L1e-L7e	For every lamp and reflector, supply the following information (in writing and/or by diagram)	:	: See components certificate		
6.11.5.1.	L1e-L7e	Drawing showing the extent of the illuminating surface	:	: See components certificate		
6.11.5.2.	L1e-L7e	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 components certificate		
6.11.5.3.	L1e-L7e	Axis of reference and centre of reference	:	: See components certificate		
6.11.5.4.	L1e-L7e	Method of operation of concealable lamps	:	Not applicable		

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6.11.6.	L1e-L7e	Description/drawing and type of headlamp leveling device (e.g. automatic, stepwise manually adjustable, continuously manually adjustable) (4)		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.	L1e-L7e	Marks assigned for loading conditions		Not applicable
6.12.		Rearward visibility		
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. LX05-18-01
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. LX05-18-01
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 mirro	ors	
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/color (4)), image repetition frequency, luminance reach of the monitor	ce	Not applicable
6.12.2.3.	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	ne :	Not applicable
6.13.		Rollover protective structure (ROPS)		
	L7e-B2	From 6.13.1. to 6.13.4.2.		Not applicable
6.14.		Safety belts and/or other restraints		Not applicable (Only for L2e, L4e, L5e-B, L6e-B, L7e)
6.15.		Safety belt anchorages		Not applicable (Only for L2e, L4e, L5e-B, L6e-B, L7e)
6.16.		Seating positions (saddles and seats)		
6.16.1.	L1e-L7e	Number of seating positions		Version(s)-01: 2 Version(s)-02 & 03: 1
6.16.1.1.		Location and arrangement (8)		Not applicable (Only for L2e, L5e, L6e, L7e)
6.16.2.	L1e-L7e	Seating position configuration		seat/saddle (4)
6.16.3.	L1e-L7e	Description and drawings of		
6.16.3.1.	L1e-L7e	The seats and their anchorages		: Not applicable
6.16.3.2.	L1e-L7e	The adjustment system		Not applicable
6.16.3.3.	L1e-L7e	The displacement and locking systems		Not applicable

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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.		Coordinates or drawing of the R-point(s) of all seating positions	:	Not applicable (only for L2e, L4e, L5e-B, L6e-B, L7e)
6.16.4.1.		Driver's seat	:	Not applicable (Only for L2e, L4e, L5e-B, L6e-B, L7e)
6.16.4.2.		All other seating positions	:	Not applicable (Only for L2e, L4e, L5e-B, L6e-B, L7e)
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	:	Not applicable
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-a	bil	ity
6.17.1.	L1e-L7e	Schematic diagram of steered axle(s) showing steering geometry	:	Refer to drawing No. LX05-19-01
6.17.2.		Transmission and control of steering		
6.17.2.1.	L1e-L7e	Configuration of steering transmission (specify for front and rear)	:	Handle bar, front only Refer to drawing No. LX05-19-01
6.17.2.2.	L1e-L7e	Linkage to wheels (including other than mechanical means; specify for front and rear		Refer to drawing No. LX05-19-01
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. LX05-19-01
6.17.2.4.		Schematic diagram(s) of the steering control(s)	:	Not applicable (Only for L2e, L5e, L6e, L7e)
6.17.2.5.		Range and method of adjustment of the steering control(s)	:	Not applicable (Only for L2e, L5e, L6e, L7e)
6.17.2.6.		Method of assistance	:	Not applicable (Only for L2e, L5e, L6e, L7e)
6.17.3.		Maximum steering angle of the wheels		
6.17.3.1.	L1e-L7e	To the right	:	42°; number of turns of the steering wheel (or equivalent data): Not applicable
6.17.3.2.	L1e-L7e	To the left	:	40°; number of turns of the steering wheel (or equivalent data): Not applicable
6.18.		Tyres/wheels combination		
6.18.1.		Tyres		
6.18.1.1.		Size designation		
6.18.1.1.1.	L1e-L7e	Axle 1	:	Front: 90/90-12 44J, 54J, 59J
6.18.1.1.2.	L1e-L7e	Axle 2		Rear: 90/90-12 44J, 54J, 59J
6.18.1.1.3.	L4e	Sidecar wheel		Not applicable
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6.18.1.2.	L1e-L7e	Minimum load-capacity index with the maximum load on each tyre	: Front: 20 Rear: 44	
6.18.1.3.	L1e-L7e	Minimum-speed category symbol compatible with the theoretical maximum design vehicle speed	: B	
6.18.1.4.	L1e-L7e	Tyre pressure(s) as recommended by the vehicle manufacturer	: Front: 200kPa Rear: 220kPa	
6.18.2.		Wheels		
6.18.2.1.	L1e-L7e	Rim size(s)	: Front: 2.50-12 Rear: 2.50-12	
6.18.2.2.	L1e-L7e	Categories of use compatible with the vehicle	: Normal	
6.18.2.3.	L1e-L7e	Nominal rolling circumference	: Front: 1450mm Rear: 1450mm	
6.19.		Vehicle maximum speed limitation plate and its location on the vehicle	: Not applicable (only for L7e-B1 and L7e-B2)	
6.20.		Vehicle occupant protection, including interior fittings and vehicle doors	: Not applicable (only for L7e-B1 and L7e-B2)	
6.21.		Maximum continuous total power and/or ma	naximum vehicle speed limitation by design	
6.21.1.		Propulsion and/or drive-train output govern	rnors	
6.21.1.1.	L1e-L7e	Number (minimum two, exemption L3e-A3 and L4e-A3)	: 2	
6.21.1.2.	L1e-L7e	How is the redundancy of governors ensured?	: Limited the electric motor revolutions internally a the electric motor revolutions externally by controller	and
6.21.1.3.	L1e-L7e	Nominal cut-off point no 1		
6.21.1.3.1.	L1e-L7e	Engine/motor/drive-train rotation speed 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 (4)	: 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)	: Not applicable	
7.		INFORMATION ON VEHICLE CONSTR	RUCTION	
7.1.		Coupling devices and attachments		
	L1e-L7e	From 7.1.1. to 7.1.6.	: Not applicable	

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	(Sub)			
Item No	categories	Det	aile	ed information
7.2.		Devices to prevent unauthorized use		
7.2.1.		Protective device		
7.2.1.1.	L1e-L7e	Summary description of protective device(s) used	) :	Type of device(s): Type 2 Steering lock with handle bar operating on the steering and engine is operated by combination switch Refer to drawing No. LX05-20-01
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	:	Not applicable
7.2.3.2.	L1e-L7e	List of the main components comprising the alarm system	:	Not applicable
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</del> <sup>(4)</sup>
7.3.2.	L1e-L7e	Table or drawing of radio-interference control equipment	:	Refer to drawing No. LX05-25-01
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	:	1. 1.50 mm <sup>2</sup> (max. resistance: 13.3 Ohm/km) 2. 1.00 mm <sup>2</sup> (max. resistance: 19.5 Ohm/km) 3. 0.75 mm <sup>2</sup> (max. resistance: 26.0 Ohm/km) 4. 0.50 mm <sup>2</sup> (max. resistance: 39.0 Ohm/km) 5. 0.30 mm <sup>2</sup> (max. resistance: 69.2 Ohm/km)
7.4.		External projections		
7.4.1.	L1e-L7e vehicles with bodywork	and/or text) indicating the position of the atta surface which can be regarded as critical for bumpers, floor line, door and window pillars rain gutter channels, handles, slide rails, flap	ext s, ai ss, c ses a ent)	and any other parts of the exterior surface which can
			:	Not applicable (only for vehicle with bodywork)
7.5.		Fuel storage		
		From 7.5.1. to 7.5.3.1.	:	Not applicable
7.6.		On-board diagnostics (OBD) functional requ	ire	ements
		From 7.6.1. to 7.6.5.1.	:	Not applicable
7.7.		Passenger handholds and footrests		
7.7.1.		Handholds		
7.7.1.1.	L1e-L7e	Configuration	:	Strap and/or handle (4)
7.7.1.2.	L1e-L7e	Photographs and/or drawings showing the location and the construction	:	Refer to drawing No. LX05-21-01

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Item No	(Sub) categories	Deta	ile	d information
7.7.2.		Footrests		
7.7.2.1.	L1e-L7e	Photographs and/or drawings showing the location and the construction	:	Refer to drawing No. LX05-22-01
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. LX05-23-01
7.8.1.1.	L1e-L7e	Height above road surface, upper edge	:	Refer to drawing No. LX05-23-01
7.8.1.2.	L1e-L7e	Height above road surface, lower edge	:	Refer to drawing No. LX05-23-01
7.8.1.3.	L1e-L7e	Distance of the centre line from the longitudinal median plane of the vehicle	:	0 mm
7.8.1.4.	L1e-L7e	Dimensions (length x width)	:	145mm × 125mm
7.8.1.5.	L1e-L7e	Inclination of the plane to the vertical	:	Refer to drawing No. LX05-23-01
7.8.1.6.	L1e-L7e	Angle of visibility in the horizontal plane	:	Refer to drawing No. LX05-23-01
7.9.		Stands		
7.9.1.	L1e, L3e	Configuration	:	central and <del>/or</del> -side (4)
7.9.2.	L1e, L3e	Construction material used		Metal
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. LX05-24-01 Refer to drawing No. LX05-24-02
7.9.4.	L1e, L3e	Description of the method to prevent contact of the stand with the ground when the	:	Refer to drawing No. LX05-24-01 Refer to drawing No. LX05-24-02
		vehicle is being propelled		Vehicle cannot be propelled when the prop side stand is in the in-use position.
				Center stand is able to swing back automatically into the not-in-use position

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#### Table 6.9.4. Controls, tell-tales and indicators for which, when fitted, identification is mandatory, and symbols to be used for that purpose Control/ Identified Identified Tell-tale symbol indicator by Where by Where available Device (++) available symbol (++)Symbol No (+)(+) (+) Master light \_ \_ $\mathbf{X}$ $\mathbf{X}$ cFor Speedometer system type: S5-W 2 Dipped-beam/head lamps X X c 3 Main-beam/head lamps d X X c X X 4 Position(side) lamps ---\_ \_ \_ For Speedometer system type: W-001 Dipped-beam/head lamps X X <u>c</u> X d Main-beam/head lamps 3 d X <u>X</u> <u>c</u> <u>X</u> <u>X</u> 4 Position(side) lamps d X X 5 Front fog Lamp 6 Rear fog Lamps 7 Headlamp/Levelling device 8 Parking Lamps \_ 9 **Direction Indicators** С X X d X X 10 Hazard Warning 11 Windscreen Wiper \_ \_ \_ \_ \_ \_ 12 Windscreen Washer 13 Windscreen wiper and washer 14 Headlamp cleaning device Windscreen demisting and 15 defrosting Rear window demisting and 16 defrosting Ventilating fan 17 18 Diesel pre-heat 19 Choke Brake failure 20 \_ \_ \_ \_ 21 Fuel level \_ 22 Battery charging condition d X X 23 Engine coolant temperature 24 Malfunction Indicator light (MI)

<sup>(+)</sup> x = Yes.

<sup>- =</sup> No or not separately available.

o = Optional.

<sup>(++)</sup>d = Directly on control, indicator or tell-tale.

c = In close vicinity.

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### Table 6.9.5.

Controls, tell-tales and indicators for which, when fitted, identification is optional, and Symbols which shall be used if they are to be identified

Symbol No	Device	Control/ indicator available (+)	Identified By Symbol	Where (++)	Tell-tale available (+)	Identified By Symbol	Where (++)
1	Parking brake	-	-	-	-	-	-
2	Rear window wiper	-	-	-	-	-	-
3	Rear window washer	-	-	-	-	-	-
4	Rear window wiper and washer	-	-	-	-	-	-
5	Intermittent Windscreen wiper	-	-	-	-	-	-
6	Audible warning device (horn)	X	X	d	-	-	-
7	Front hood (bonnet)	-	-	-	-	-	-
8	Rear hood (boot)	-	-	-	-	-	-
9	Seat belt	-	-	-	-	-	-
10	Engine oil Pressure	-	-	-	-	-	-
11	Unleaded petrol	-	-	-	-	-	-

 $<sup>^{(+)}</sup> x = Yes.$ 

<sup>- =</sup> No or not separately available.

o = Optional.

 $<sup>^{(++)}</sup>d$  = Directly on control, indicator or tell-tale.

c = In close vicinity.

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### Table 6.11.1.

List of all devices (mentioning the number, make(s), type, component type-approval mark(s), the maximum intensity of the main-beam headlamps, color, the corresponding tell-tale)

intensity of the main-beam headiamps, color, the corresponding ten-tale)							
Lamp Function		QTY	Make(s)/Model	Component type-approval mark	Color	Corresponding Tell tale	Max. Intensity
Haad lamm	Driving beam	1	LVNENG/GH-KK-DD	E13*113R02/00*	White	Blue	22500cd
Head lamp	Passing beam	1	LVNENG/GH-KK-DD	35432*00	wnite		
Front position lamp		1	LVNENG/GH-KK-DD	E13*50R00/20* 35432*00	White	Via panel lamp	
Front direction Indicator		2	GUANGHUAN/ GH-SU8-FD	11 E9→←50R-00 16962	Amber	Green	
Rear direction Indicator		2	GUANGHUAN/ GH-DJCP-CRT	12 E9→←50R-00 16961 Amber		Green	
Rear position	Rear position lamp		GUANGHUAN/ E9 50R-00 16961		Red	Via panel lamp	
Stop lamp		1	GH-DJCP-CRT	E9 30K-00 10901	Keu		<del></del>
Rear registr	ation plate lamp	1	GUANGHUAN/ GH-RP-55	E24 50R-000057	White	Via panel lamp	
Non-	Side reflector	2	K-LITE/KM206	IA E4 02 3713	Amber		
triangular	Rear reflector	1	K-LITE/KM202	IA E4 02 3712	Red		
Optional he	ad lamp and fron	t positi	on lamp				
Haad lamm	Driving beam	1	LVNENG/GH-N1-DD	E13*113R02/00*	White	Blue	22500cd
Head lamp	Passing beam	1	LVNENU/UH-N1-DD	35431*00	wnite		
Front position	on lamp	1	LVNENG/GH-N1-DD	E13*50R00/20* 35431*00	White	Via panel lamp	

Front position lamp	1	LVNENG/GH-N1-DD	E13*50R00/20* 35431*00	White	Via panel lamp			
Type Approval Components Overview Excluding Lighting Device								

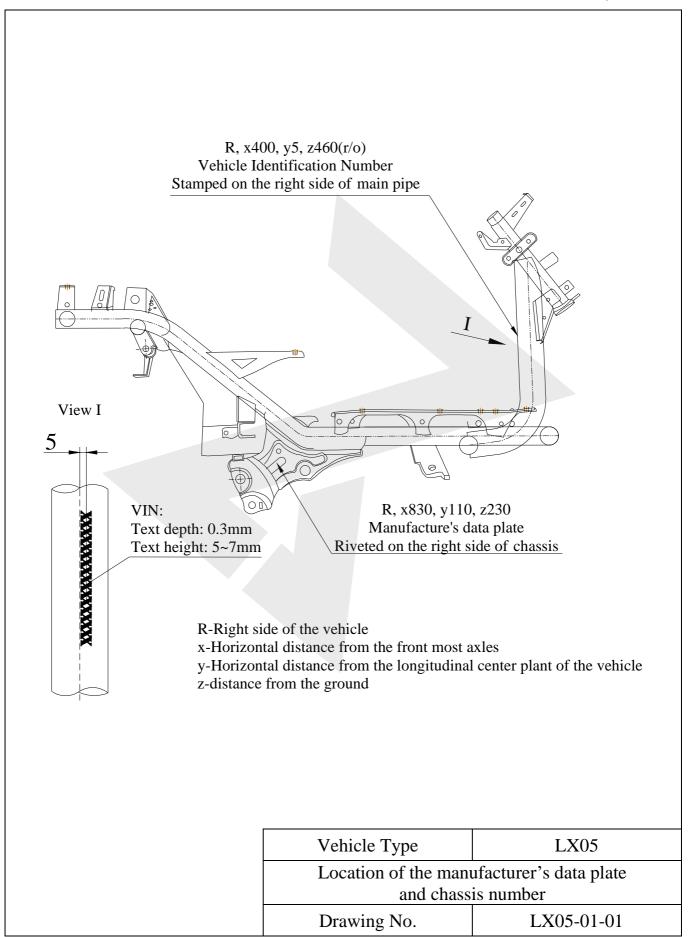
•			0 0 0	
Item subject	Make	Type or Tyre Size	Component Approval No.	Remarks
Audible warning devices	LVEE	DL70-II	E32*28R00/05*0002*01	
Rear view mirror	(i) (g)	WY-032	E13*81R00/02*6472*00	

	Tyres Approval Components										
Axle	Make	Dimension	Load index	Speed category	Component Approval No.	Remarks					
	refer to component certificate	90/90-12	44	J	E4-75R-0004203						
E		90/90-12	54	J	E4*75R00/17*06805*04						
Front/Rear		90/90-12	54	J	E4*75R00/17*14655*00						
		90/90-12	59	J	E4-75R-0012445						

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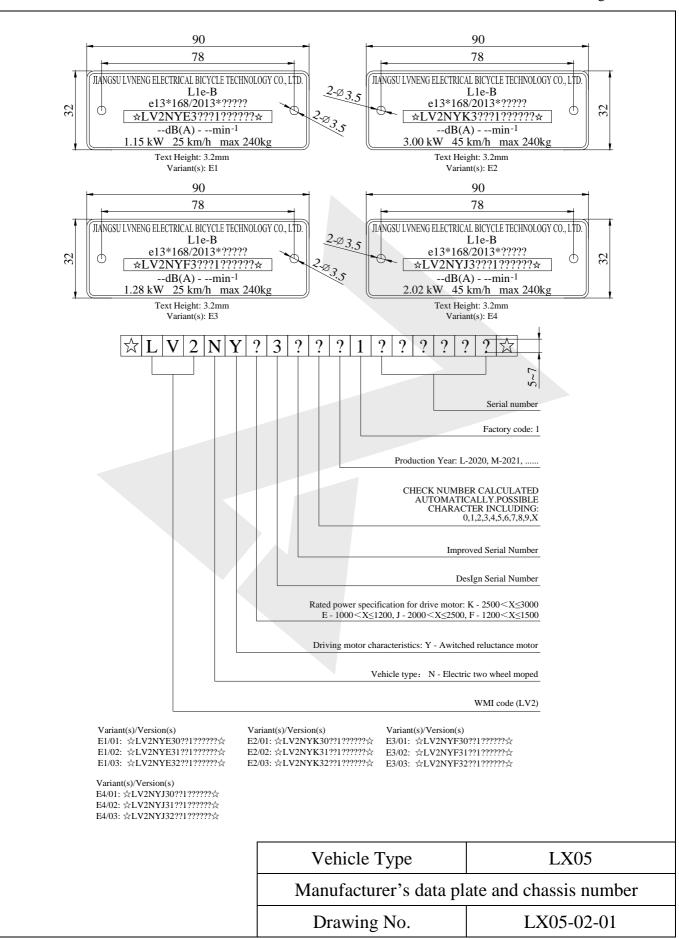
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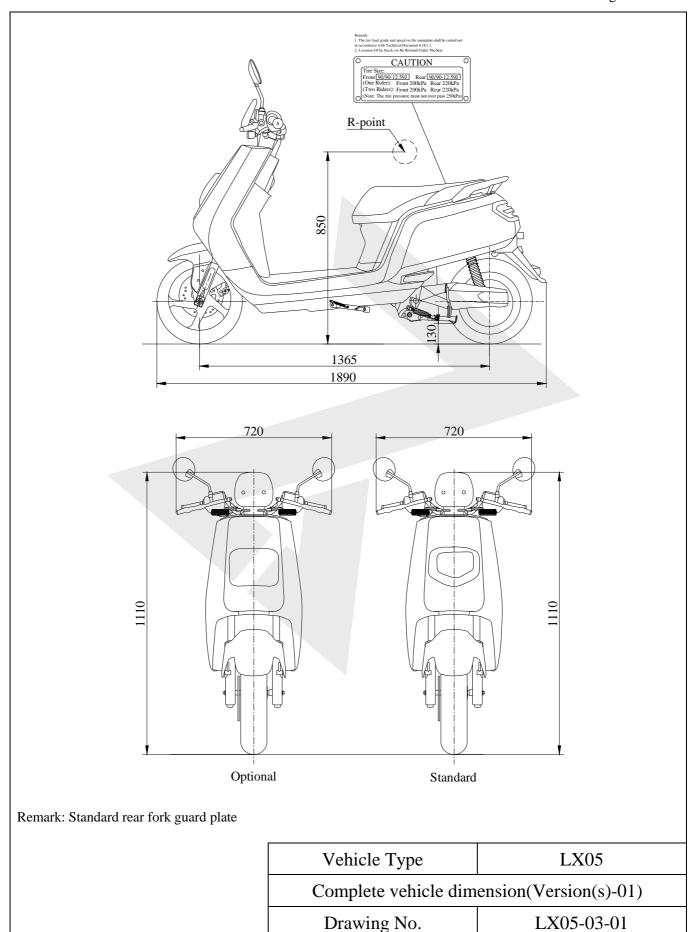
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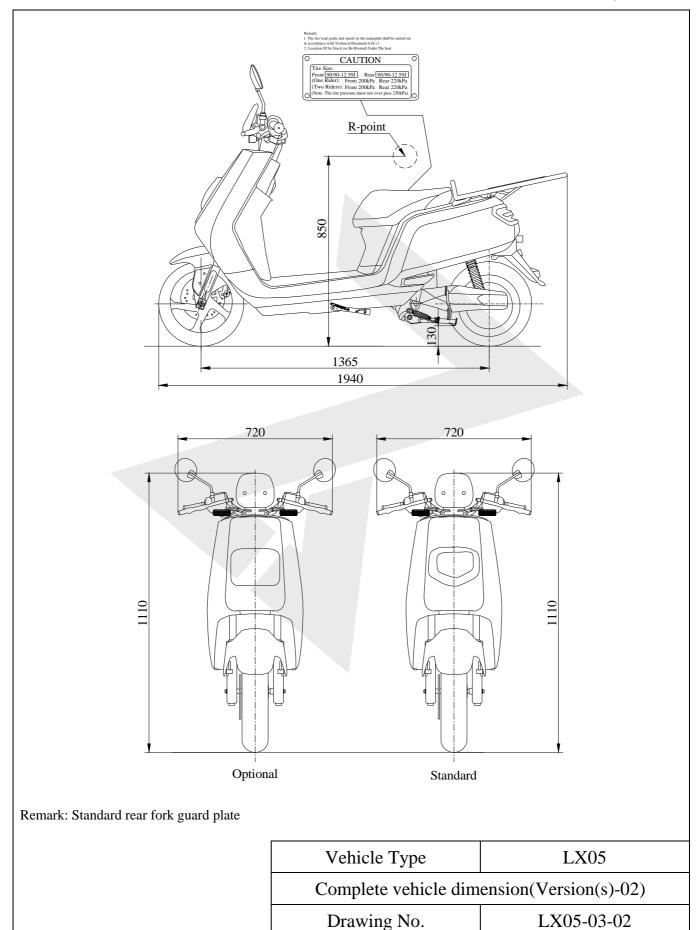
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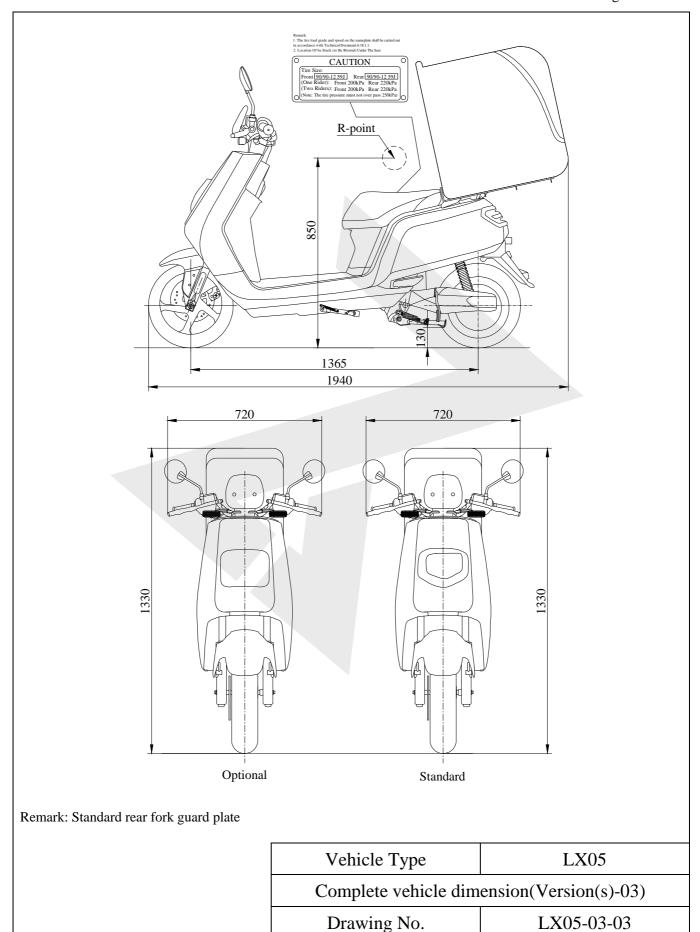
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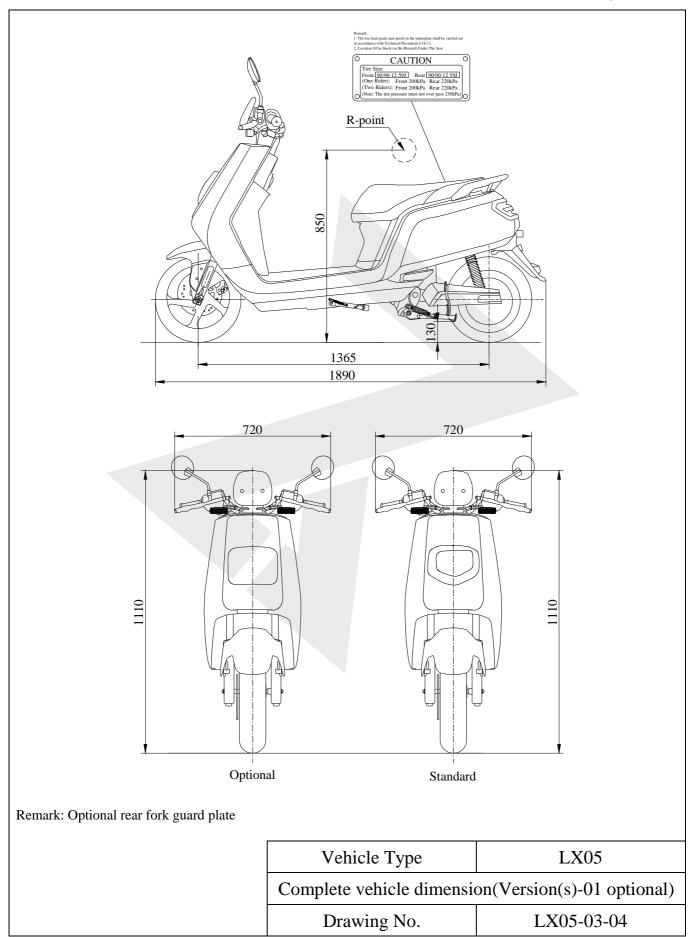
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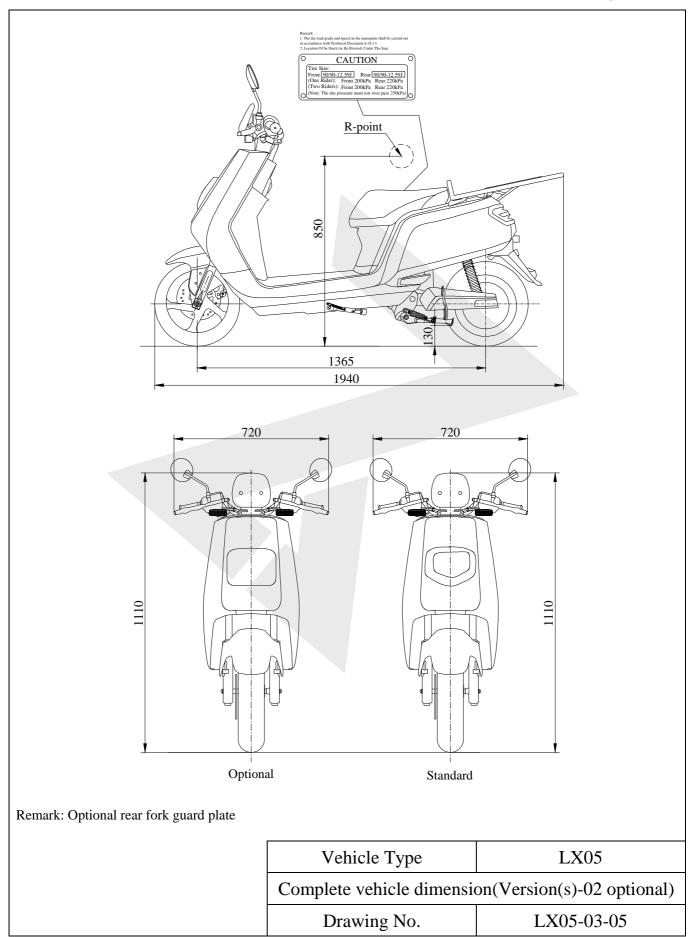
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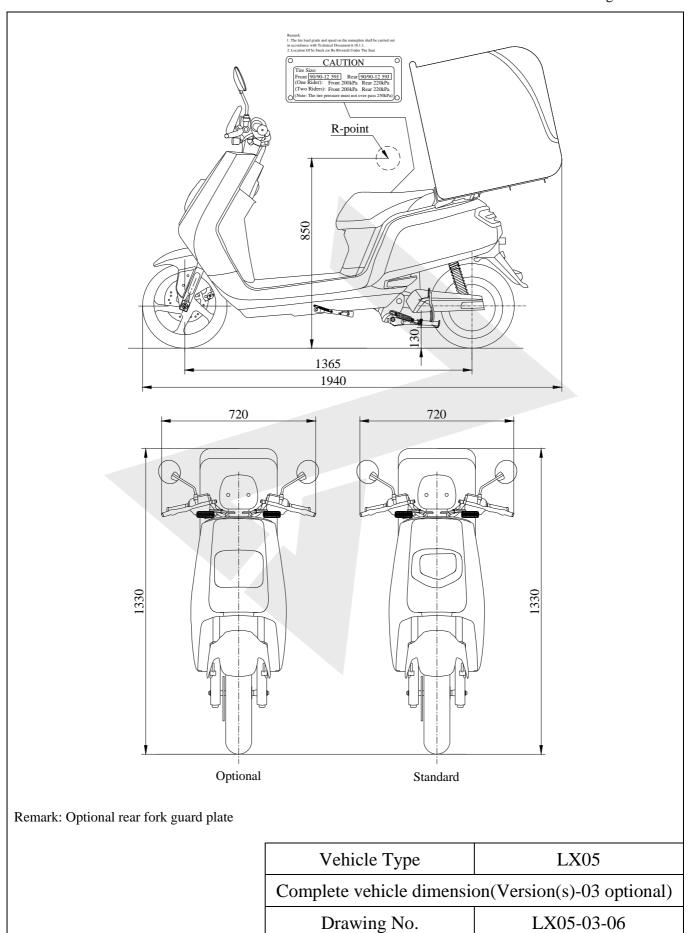
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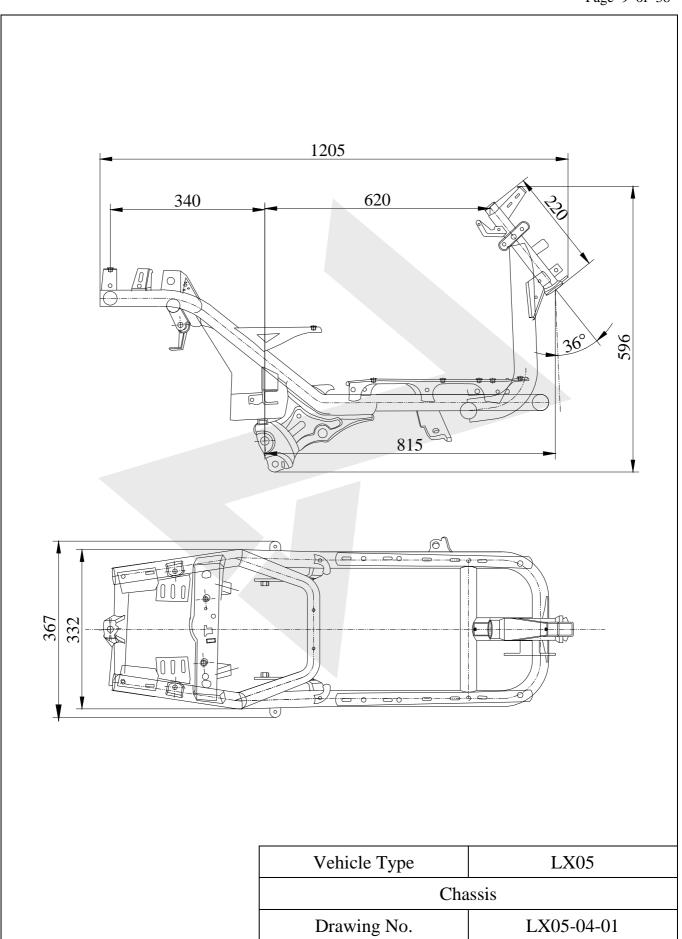
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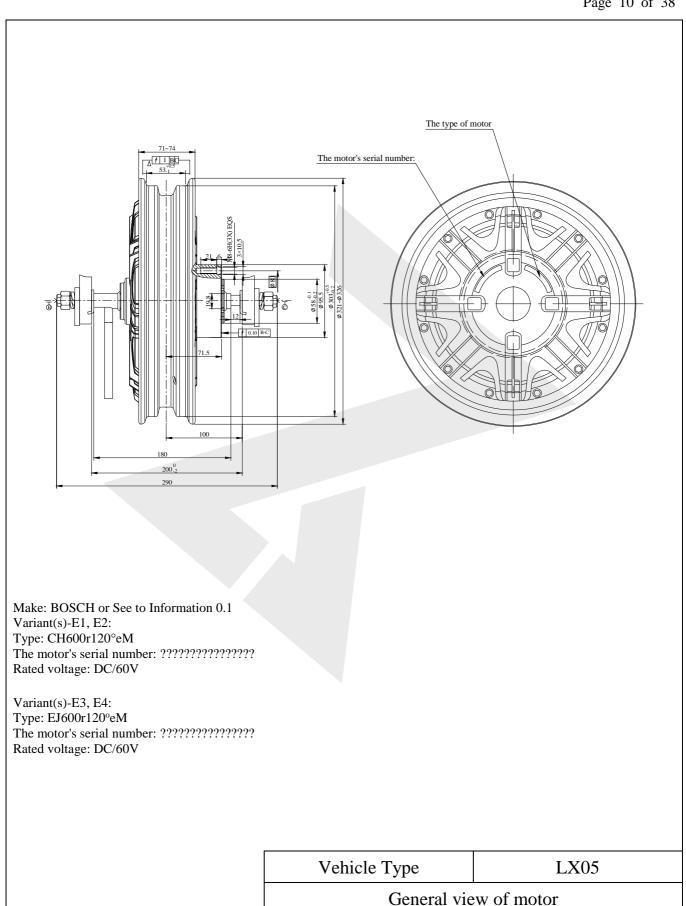
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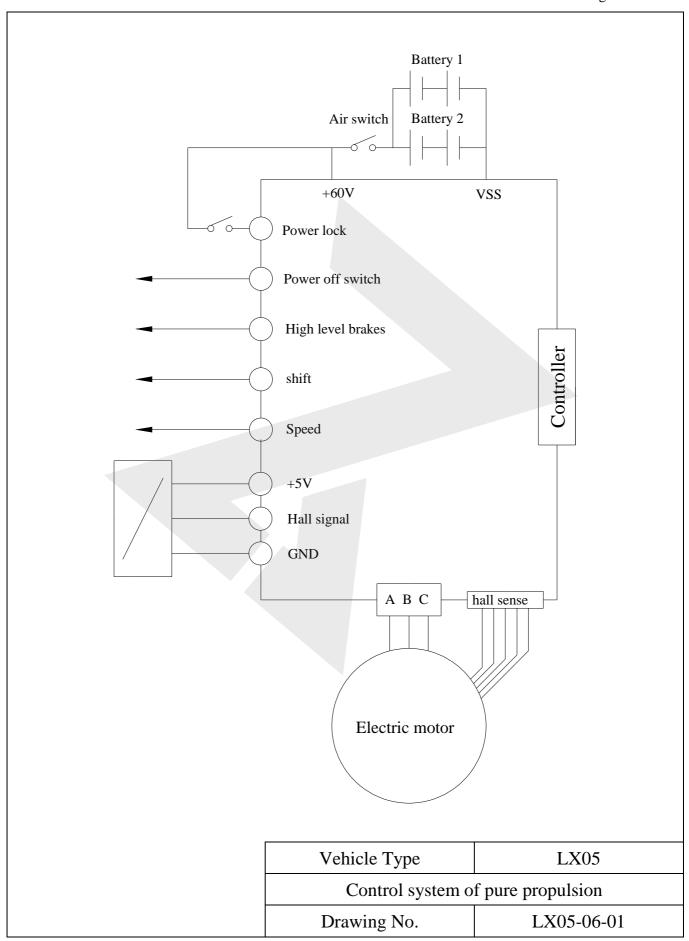
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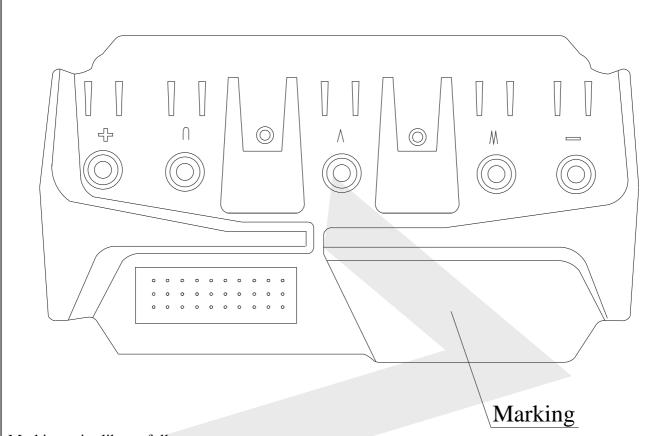
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Marking print like as follow:

Manufacturer: Wuxi Lingbo Electronic Technology Co., Ltd.



Variant(s)-E1:

Type: ZWK060140A-1 Marking: ZWK060140A-1

Variant(s)-E2:

Type: ZWK060140A Marking: ZWK060140A

Variant(s)-E3:

Type: ZWK060040A-1 Marking: ZWK060040A-1

Variant(s)-E4:

Type: ZWK060040A Marking: ZWK060040A

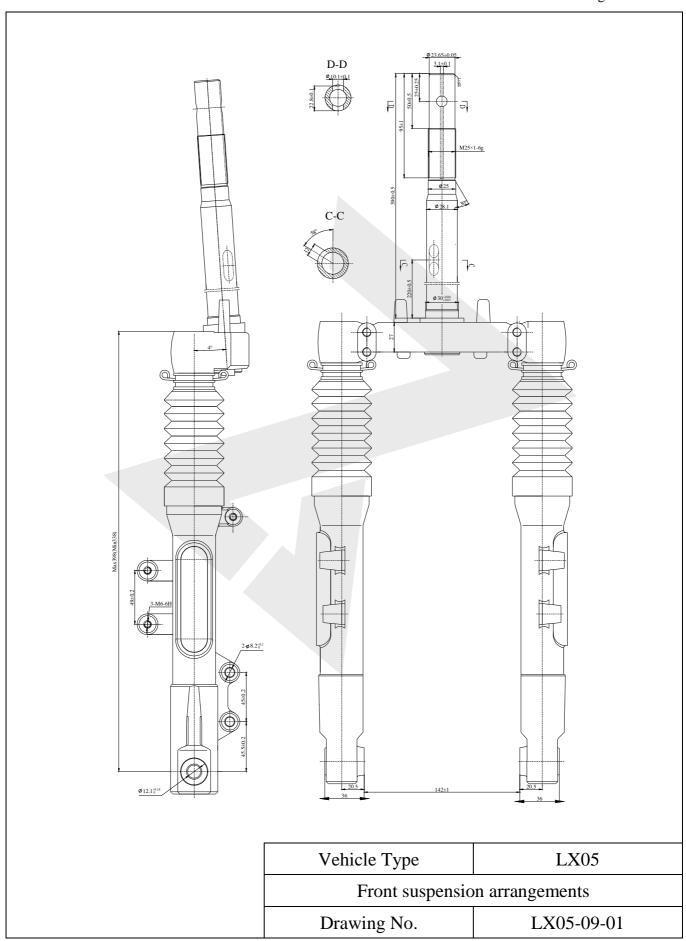
Vehicle Type	LX05	
Controller		
Drawing No.	LX05-08-01	

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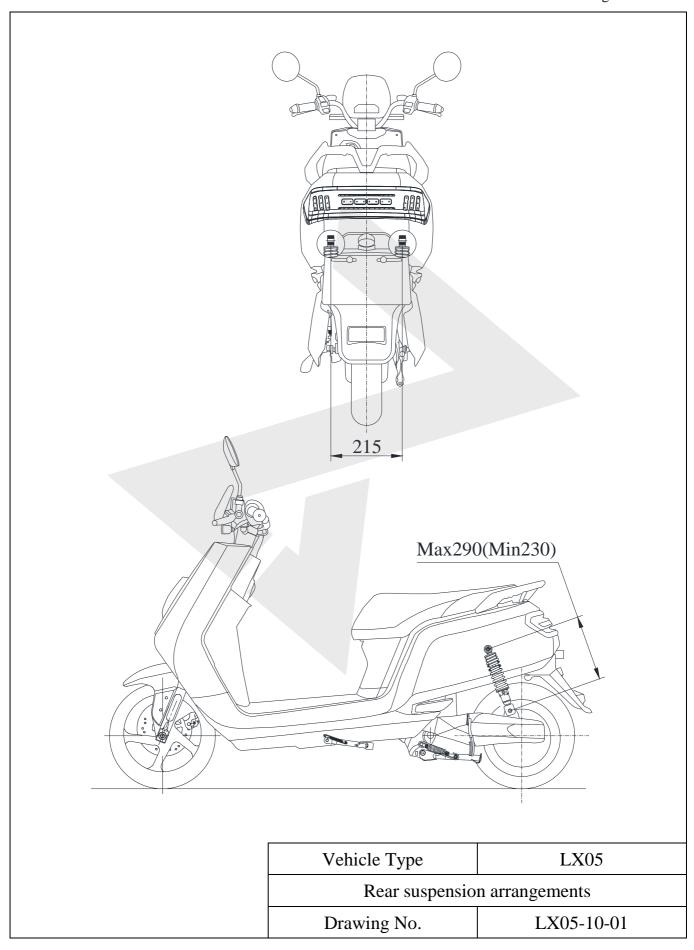


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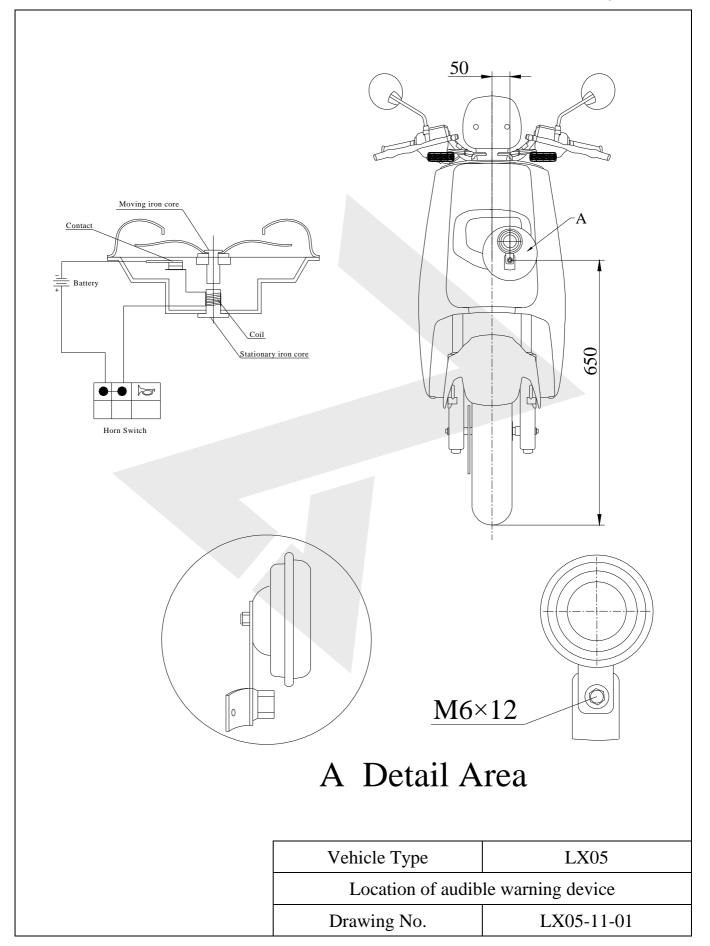
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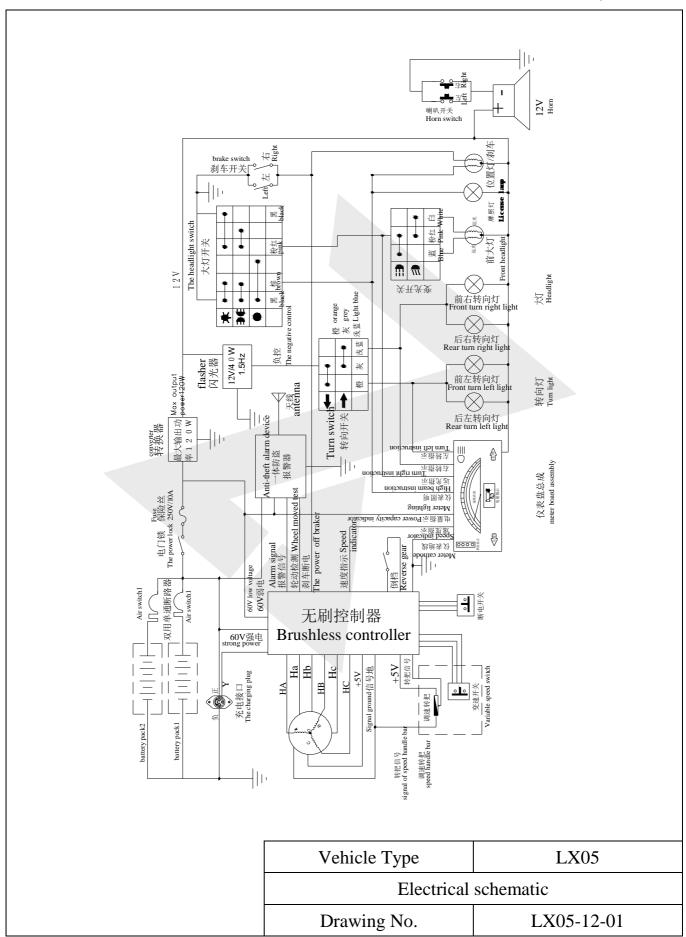
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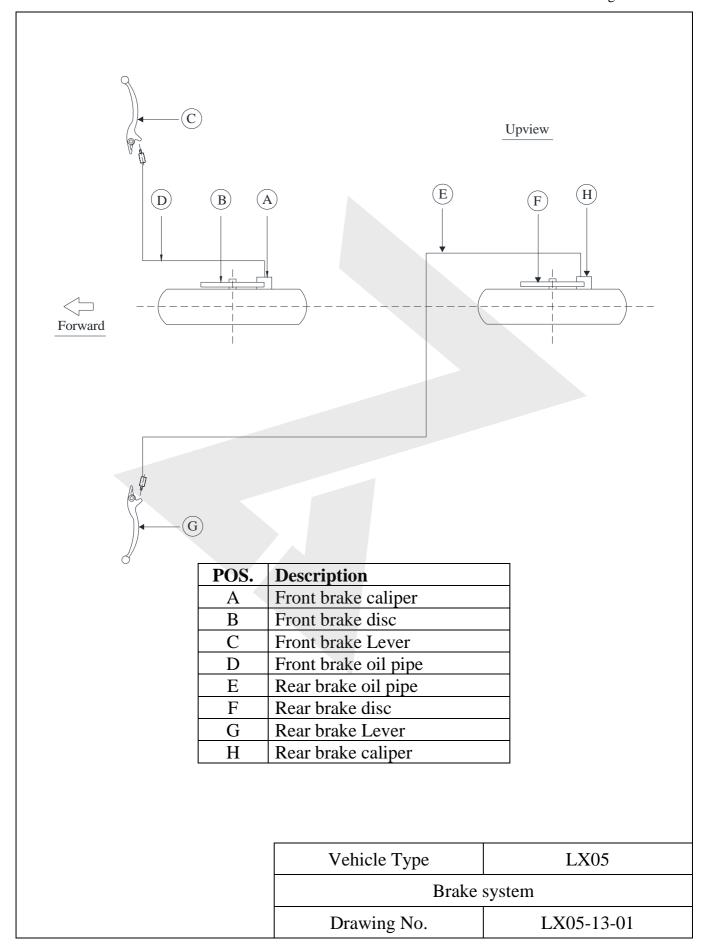
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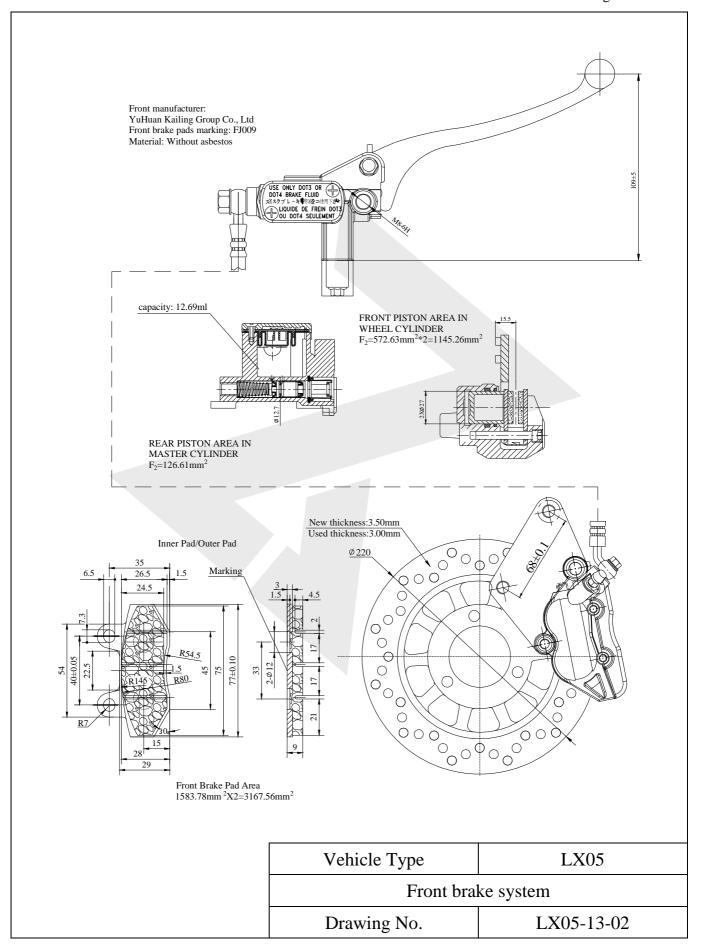
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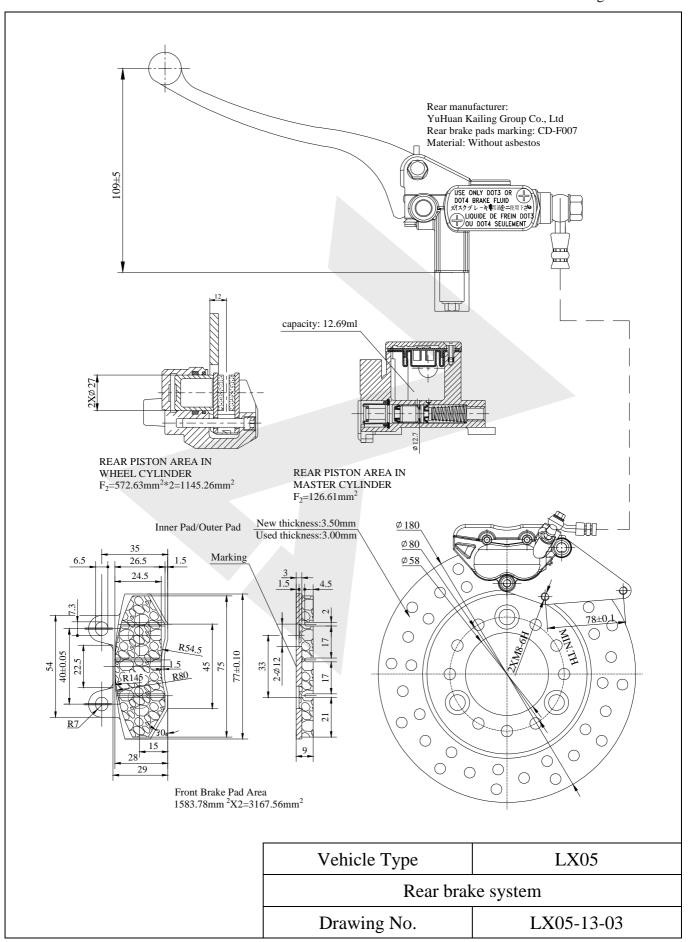
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When the current reaches 50A, the overload protector is disconnected.

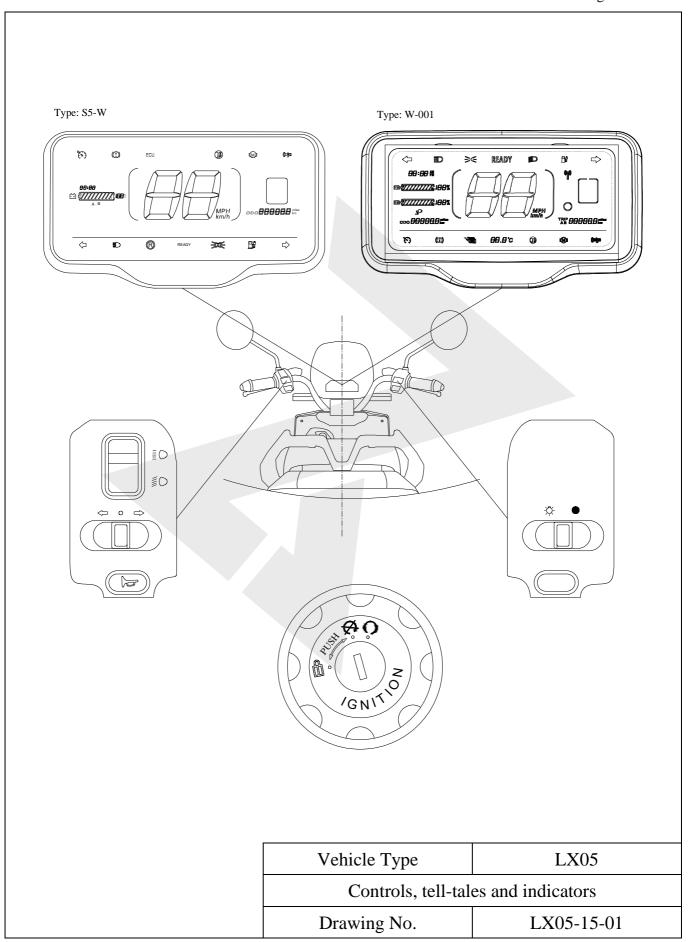
Vehicle Type	LX05	
Functional range of circuit breaker		
Drawing No.	LX05-14-01	

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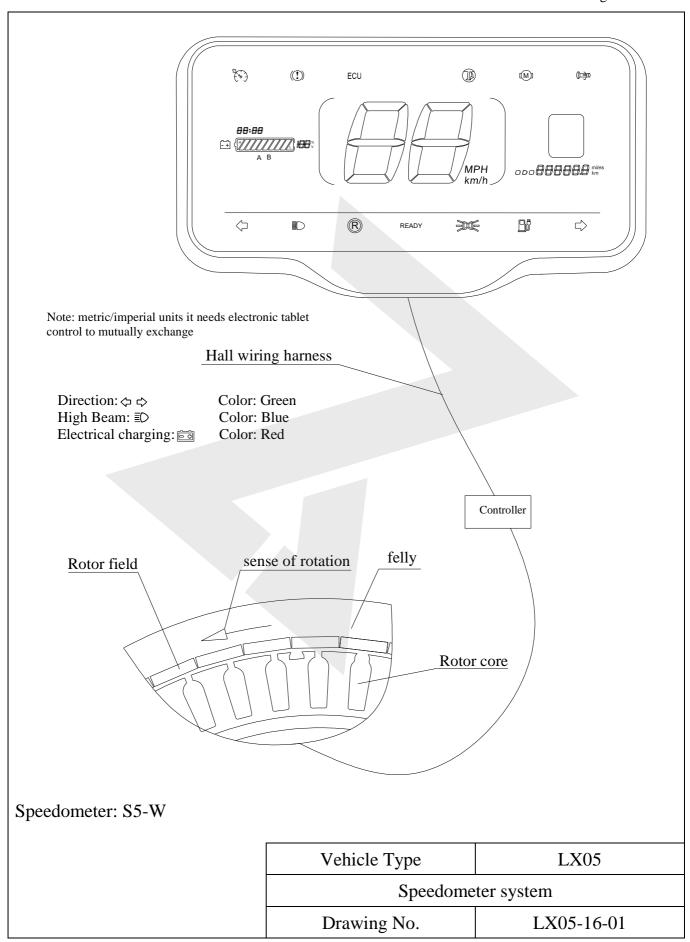
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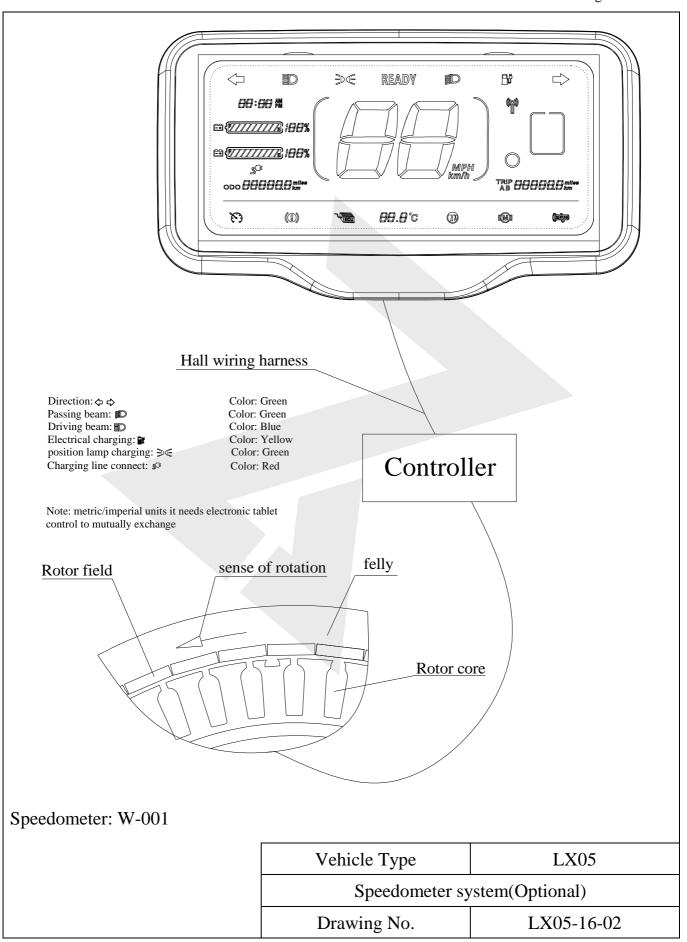
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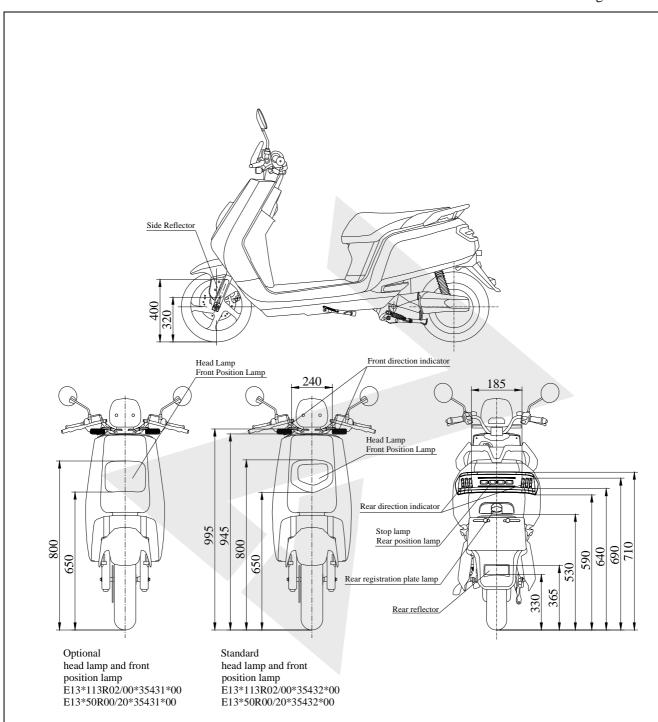
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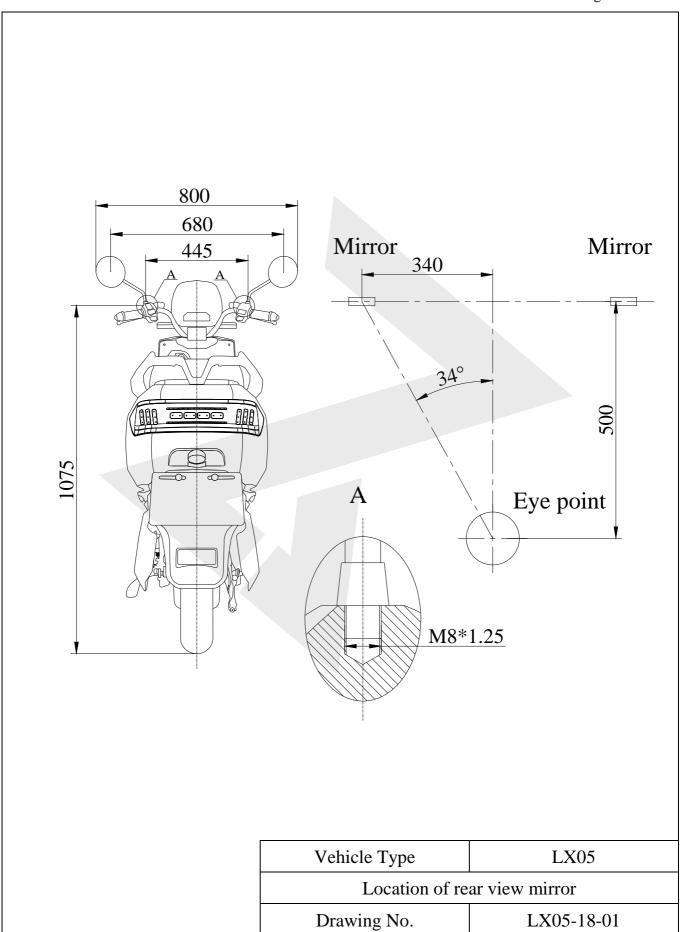
Remark: Dipped beam with function of automatically switch on.

Vehicle Type	LX05	
Lighting installation		
Drawing No.	LX05-17-01	

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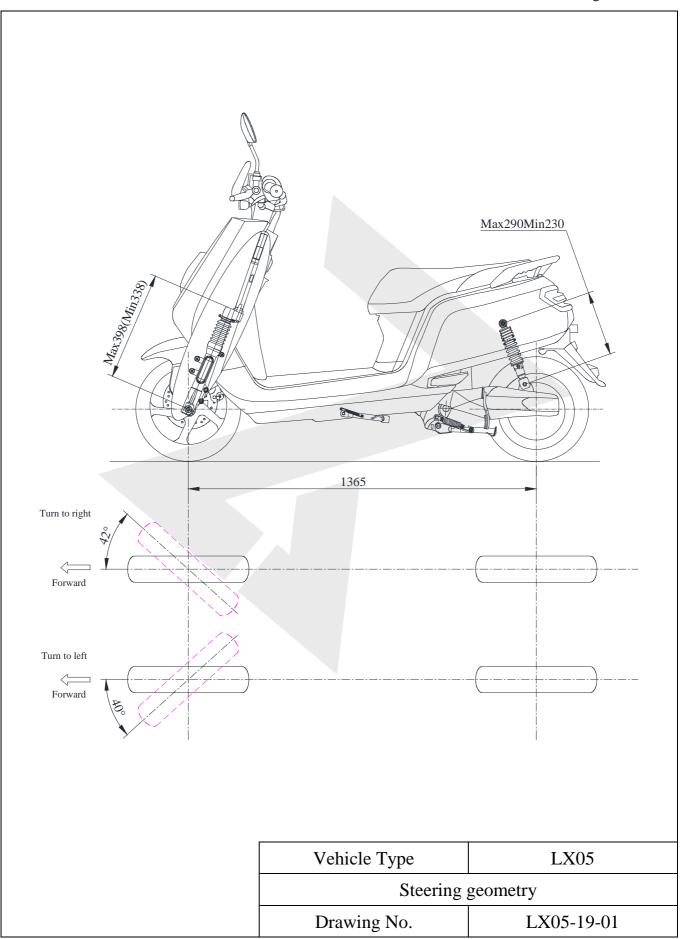


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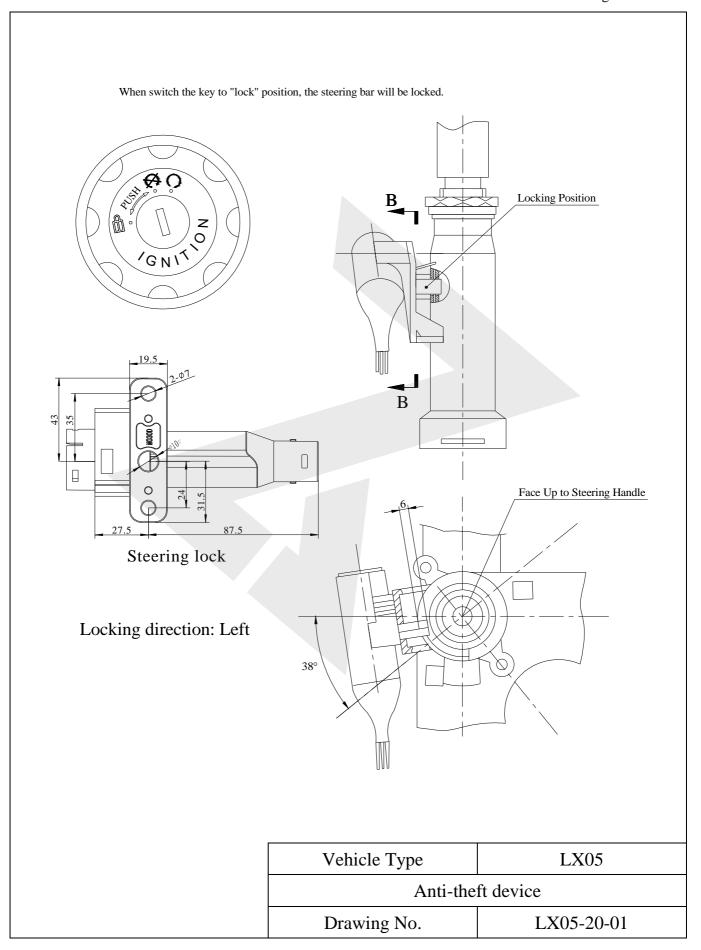
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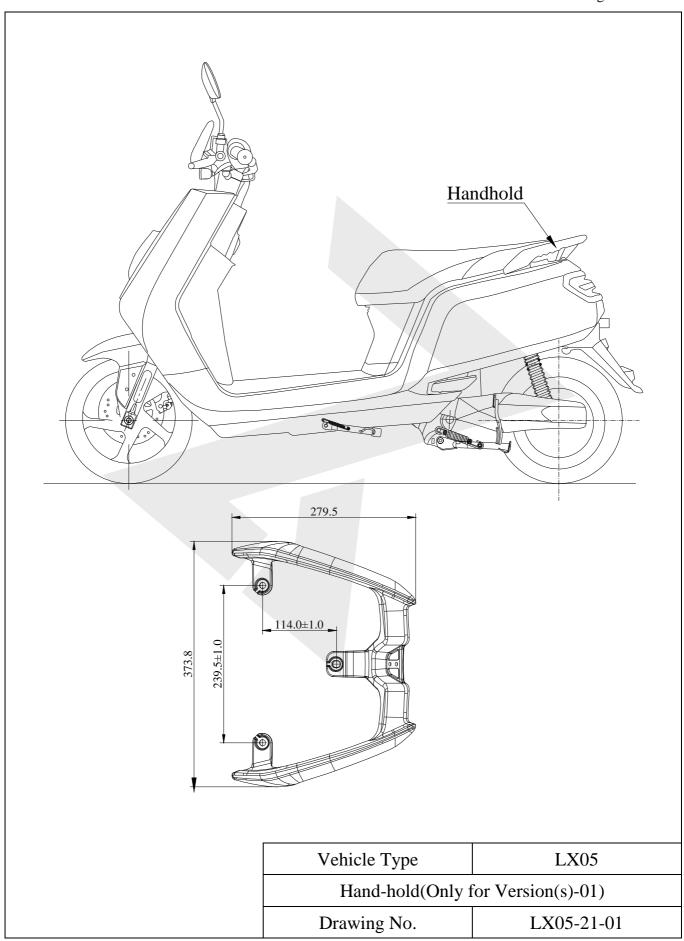


### Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China Information document number: 168/2013-LX05-01

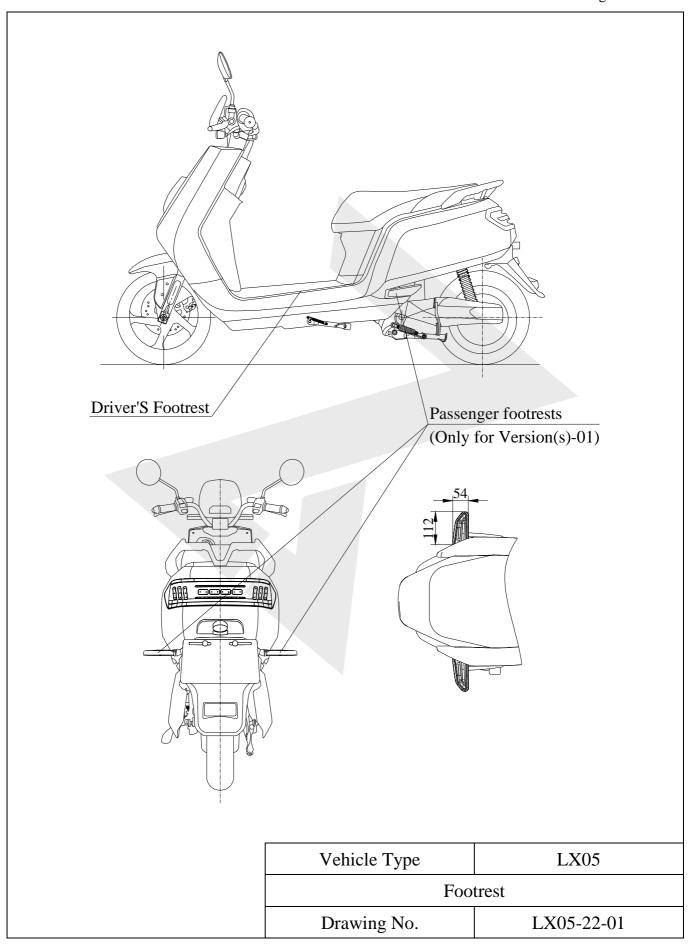
Application date: November 20, 2020

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**Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.**No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China Information document number: 168/2013-LX05-01 Application date: November 20, 2020

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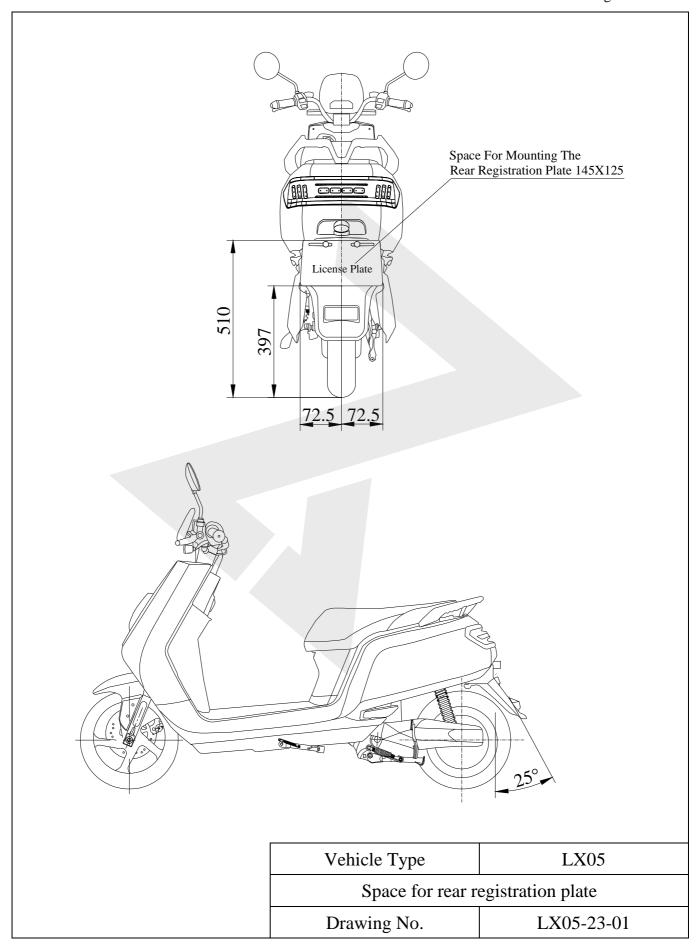


#### Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China Information document number: 168/2013-LX05-01

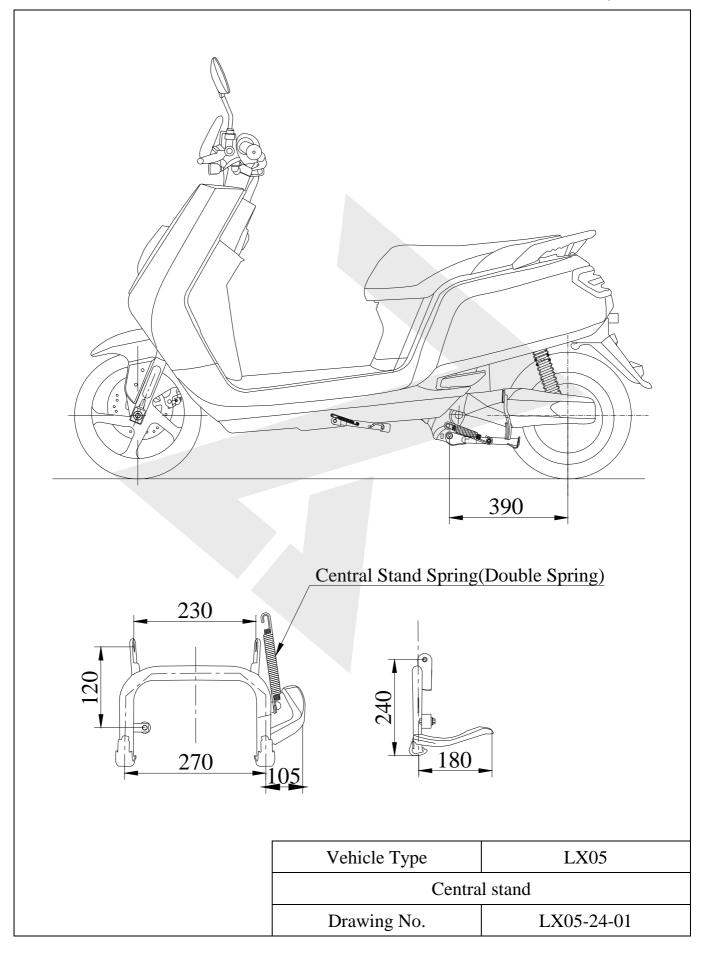
Application date: November 20, 2020

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**Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.**No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China Information document number: 168/2013-LX05-01 Application date: November 20, 2020

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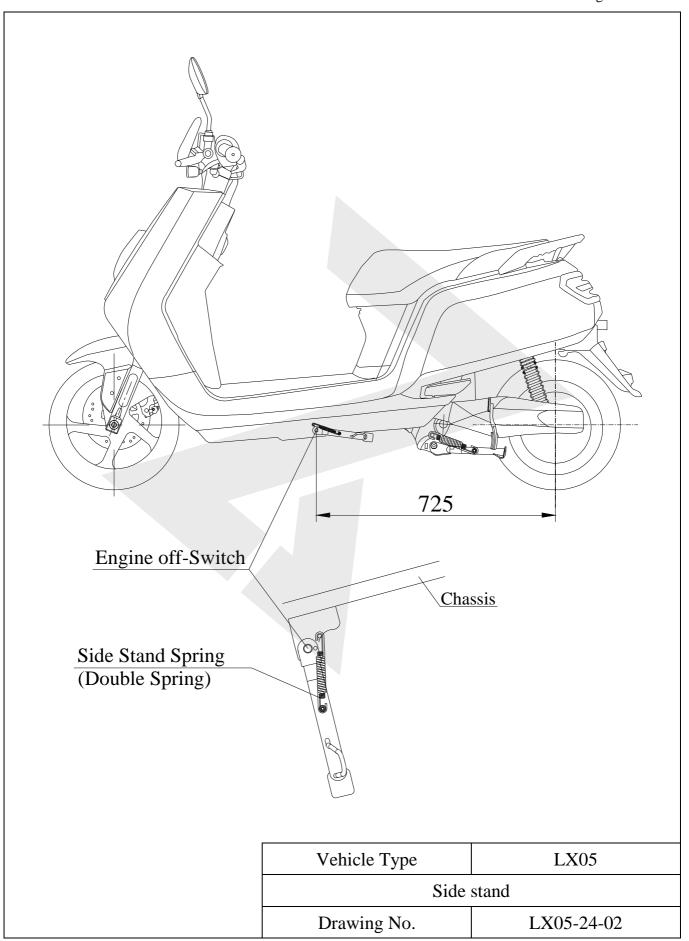


### Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China Information document number: 168/2013-LX05-01

Application date: November 20, 2020

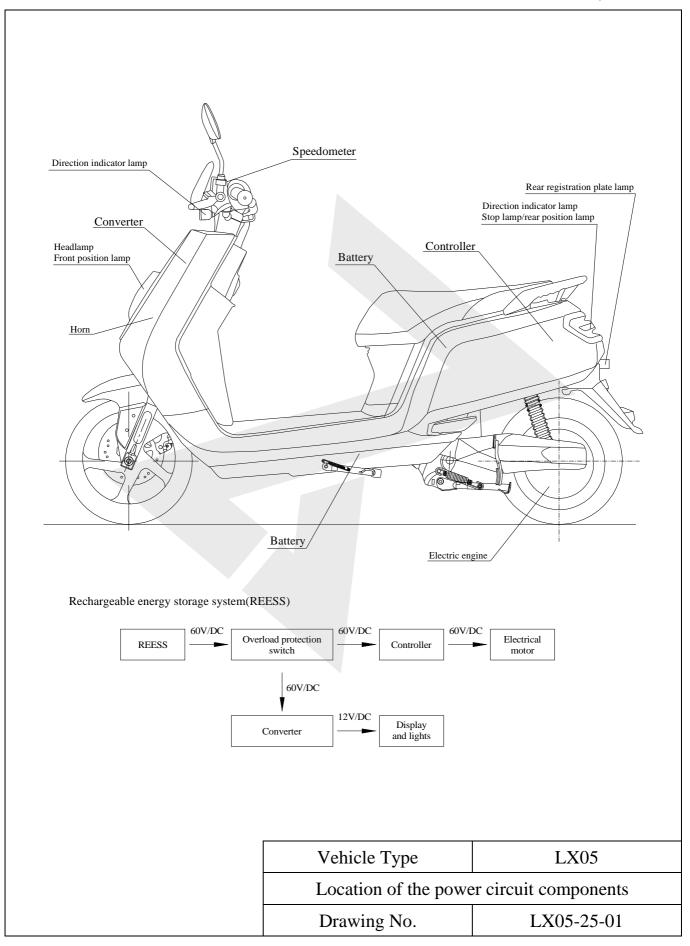
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No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China Information document number: 168/2013-LX05-01

Application date: November 20, 2020

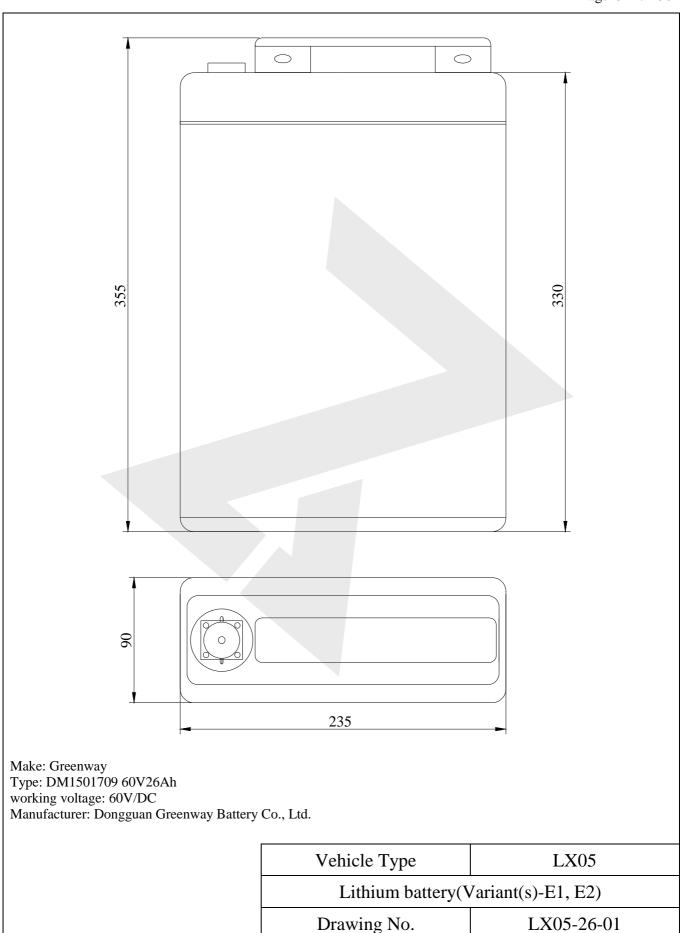
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No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China Information document number: 168/2013-LX05-01

Application date: November 20, 2020

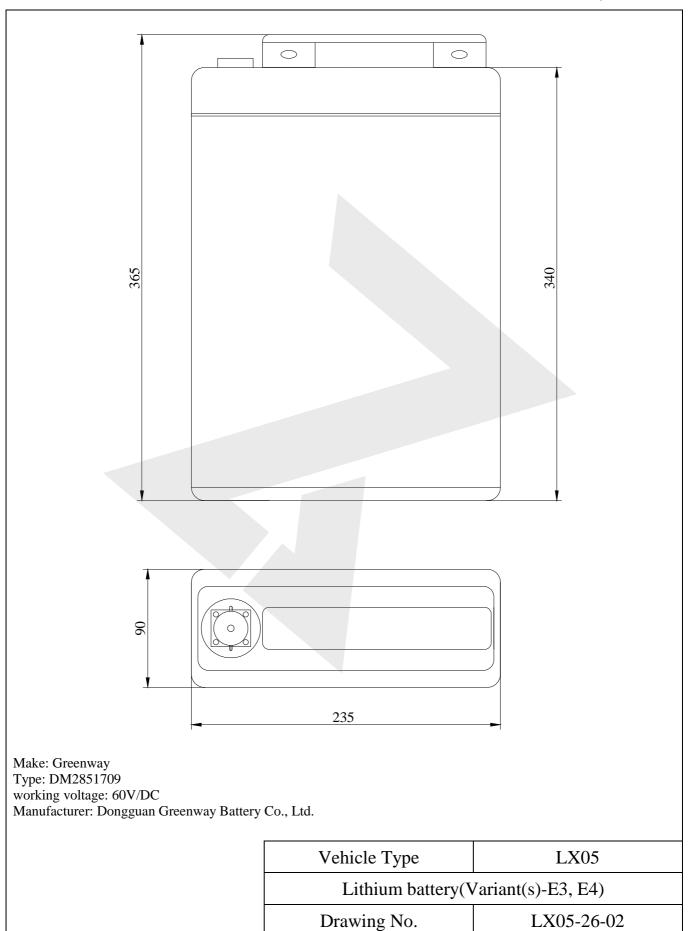
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No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China Information document number: 168/2013-LX05-01

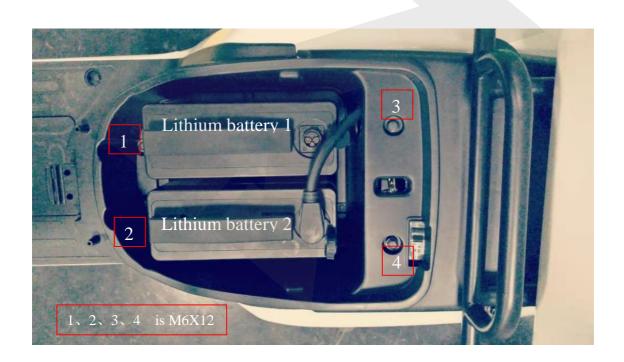
Application date: November 20, 2020

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**Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.**No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China Information document number: 168/2013-LX05-01 Application date: November 20, 2020

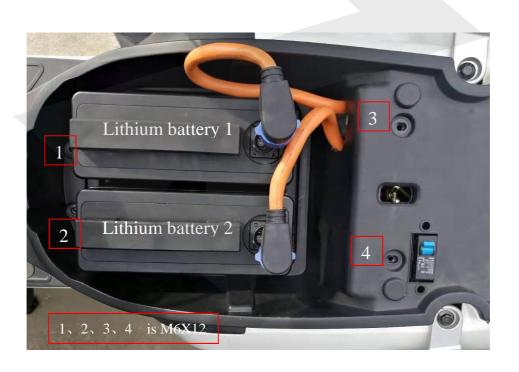
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Vehicle Type	LX05	
Installation of the battery Lithium battery		
(Variant(s)-E1, E2)		
Drawing No.	LX05-27-01	

**Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.**No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China Information document number: 168/2013-LX05-01 Application date: November 20, 2020

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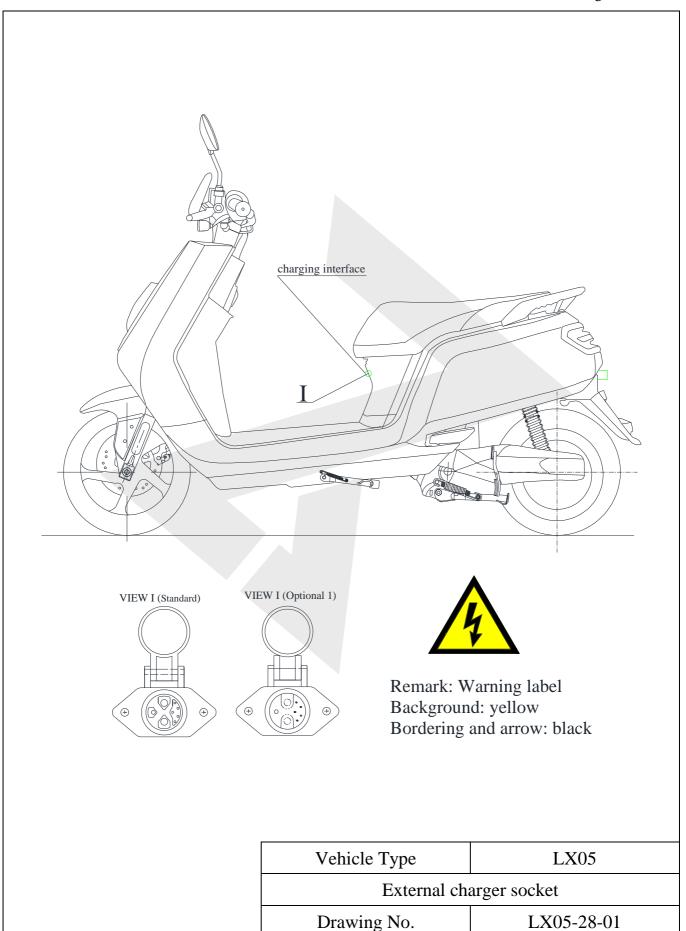


Vehicle Type	LX05	
Installation of the battery Lithium battery		
(Variant(s)-E3, E4)		
Drawing No.	LX05-27-02	

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China Information document number: 168/2013-LX05-01

Application date: November 20, 2020

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No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China

### **Information folder sheet**

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

The undersigned: [Mr. Lu Wei / Manager]

Company name and address of the manufacturer:

Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China

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

#### IVA Mobility B.V.

### Sportlaan 391, 3364DK Sliedrecht, The Netherlands

Hereby applies for type-approval procedure(4):

- (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) No 168/2013: yes/no(4)

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

0.1. Make (trade name of the manufacturer):

LVNENG, LVNENG 绿龍, Ngenergia, Uutoo, Smartway, IVA, Senzo, Monasso,

Generic, KSR MOTO AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA SOURIS, WAYEL,

Lexmoto, CETUR, bensom

- 0.2. Type(17): LX05
- 0.2.1. Variant(s)(17): E1, E2, E3, E4
- 0.2.2. Version(s)(17): **01, 02, 03**
- 0.2.3. Commercial name(s) (if available):

### S5-W, S5, E-go S5, LX05, Elex, BuzzE, Alegra

0.3. Category, subcategory and sub-subcategory of vehicle(2): L1e-B

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

- 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(3)

### Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China

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) No 44/2014 below:

### Overview table virtual and/or self-testing

Delegated act	Annex	Subject	Virtual and/or self-tested: yes/no(4)
Commission Delegated Regulation (EU) No134/2014(*)	X	Testing procedures on maximum design vehicle speed	Self-testing: <del>yes/</del> no(4)
Commission Delegated Regulation (EU) No3/2014	II	Audible warning devices	Self-testing: yes/no(4)
Commission Delegated Regulation (EU) No3/2014	VIII	Driver-operated controls including identification of controls, tell-tales and indicators	Self-testing: <del>yes/</del> no(4)
Commission Delegated Regulation (EU) No3/2014	IX	Installation of lighting and light- signaling devices	Virtual testing: yes/no(4)
Commission Delegated Regulation (EU) No3/2014	X	Rearward visibility	Virtual testing: yes/no(4)
Commission Delegated Regulation (EU) No3/2014	XV	Installation of tyres	Virtual testing: yes/no(4)
Commission Delegated Regulation (EU) No44/2014	XIV	Registration plate space	Self & Virtual testing: yes/no(4)
Commission Delegated Regulation (EU) No44/2014	XVI	Stands	Self-testing: <del>yes/</del> no(4)
This Commission Implementing Regulation (EU) No 901/2014	V	Statutory plate and EU type-approval mark	Self-testing: <del>yes/</del> no(4)

(\*) 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 (OJL 53, 21.2.2014, p. 1).

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

Place: Changzhou City, Jiangsu Province, China Date: November 20, 2020

Signature:

Name and position in the company: Mr. Lu Wei / Manager

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China

# 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. Lu Wei / Manager]

Company name and address of the manufacturer:

Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R.

China

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

IVA Mobility B.V.

Sportlaan 391, 3364DK Sliedrecht, The Netherlands

Hereby states that the vehicles:

0.1. Make (trade name of the manufacturer):

LVNENG, LVNENG 绿龍, J genergia, U Urban, Smartway, IVA, Senzo, Monasso,

Generic, KSR MOTO AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA SOURIS, WAYEL,

Lexmoto, CULEC, CETUR, bensom

0.2. Type (1): **LX05** 

0.2.1. Variant(s) (1): E1, E2, E3, E4

0.2.2. Version(s) (1): **01, 02, 03** 

0.2.3. Commercial name(s) (if available):

S5-W, S5, E-go S5, LX05, Elex, BuzzE, Alegra

0.3. Category, subcategory and sub-subcategory of vehicle (2): L1e-B

for which type-approval is sought shall withstand normal use as intended for at least 16500 km 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.

Place: Changzhou City, Jiangsu Province, China Date: November 20, 2020

Signature: F

Name and position in the company: Mr. Lu Wei / Manager

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China

# 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. Lu Wei / Manager]

Company name and address of the manufacturer:

Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R.

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

IVA Mobility B.V.

Sportlaan 391, 3364DK Sliedrecht, The Netherlands

Hereby states that the vehicles:

0.1. Make (trade name of the manufacturer):

LVNENG, LVNENG 绿龍, J genergia, J genergia, Smartway, IVA, Senzo, Monasso,

Generic, KSR MOTO AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA SOURIS, WAYEL,

Lexmoto, CULEC, CETUR, bensom

0.2. Type (1): LX05

0.2.1. Variant(s) (1): E1, E2, E3, E4

0.2.2. Version(s) (1): **01**, **02**, **03** 

0.2.3. Commercial name(s) (if available): S5-W, S5, E-go S5, LX05, Elex, BuzzE, Alegra

0.3. Category, subcategory and sub-subcategory of vehicle (2): 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-approval to which this statement is annexed and has no bearing on any vehicle warranty.

Place: Changzhou City, Jiangsu Province, China Date: November 20, 2020

Signature:

Name and position in the company: Mr. Lu Wei / Manager

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China

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

# 1. 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.

#### The undersigned: [Mr. Lu Wei / Manager]

0.4. Company name and address of manufacturer:

Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China

0.4.2. Name and address of the manufacturer's representative (if any) (0):

IVA Mobility B.V.

Sportlaan 391, 3364DK Sliedrecht, The Netherlands

### Hereby declares that:

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

0.1 Make (trade name of the manufacturer):

LVNENG, LVNENG 绿龍, J genergia, UUton, Smartway, IVA, Senzo, Monasso,

Generic, KSR MOTO AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA SOURIS, WAYEL,

Lexmoto, CETUR, bensom

- 0.2. Type (4): LX05
- 0.2.1. Variant(s) (4): E1, E2, E3, E4
- 0.2.2. Version(s) (4): **01, 02, 03**
- 0.2.3 Commercial name(s) (if available):

### S5-W, S5, E-go S5, LX05, Elex, BuzzE, Alegra

0.3. Category, subcategory and sub-subcategory of vehicle (5): L1e-B

### Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China

# 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

For <del>L3e-A2/L4e-A2/L7e (1)</del> 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 Annex II (A) to Regulation (EU) No 168/2013

shall comply with the requirements set out in point 5.2 of Annex II to Commission Delegated Regulation (EU) No 44/2014

Place: Changzhou City, Jiangsu Province, China Date: November 20, 2020

Signature:

Name and position in the company: Mr. Lu Wei / Manager

F-130

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

0.1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's logo AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA logo*1, bensom		General con 1.3. 1.3.1. 1.3.2.
0.2.	Type: LX05		6.2.4.
0.2.1.	Variant: E1		Main dimens
0.2.2.	Version: 01		2.2.1. 2.2.2.
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05,	Elex, BuzzE, Alegra	2.2.3. 2.2.4.
0.3.	Category, subcategory and sub-subcategory of vehicle: L1e-	3	2.2.4.1. 2.2.5.
0.4.	Company name and address of manufacturer: Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town,	Wujin district, Changzhou, P.R. China	2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6
0.4.2.	Name and address of manufacturer's authorized representat IVA Mobility B.V. Sportlaan 391, 3364DK Sliedrecht, The Netherlands	ve (if any):	2.2.15. 2.2.17
0.5.1.	Location of the manufacturer's statutory plate(s): R, x830, y:110, z:230		Masses
0.5.2.	Method of attachment of the manufacturer's statutory plate(s) Riveted on the chassis	j:	2.1.1. 2.1.2. 2.1.3. 2.1.3.1.
0.6.	Location of the vehicle identification number: R, x:400, y:5, z:460(r/o)		2.1.3.2. 2.1.3.3. 2.1.7.
1.	Vehicle identification number: $$\not \simeq$LV2NYE30??1???????$ $$\not \simeq$$		2.1.7.
extensio	s in all respects to the type described in EU type-approval (e13*1 n number) issued on (DD, MM, YYYY date of issue) and can be ffic and using metric/imperial units for the speedometer.		2.1.7.1. 2.1.7.2.
		DD 1441 10004	Powertrain
	zhou, P.R.China 	DD, MM, YYYY 	3.1.1.1.
(t	olace)		3.1.1.2. 3.2.1.2.
	E-13	(date)	3.2.1.4.1. 3.2.1.4.2.
(si	gnature) ,		3.2.1.5. 1.9.

1.3. 1.3.1. 1.3.2. 6.2.4.	Number of axles: 2 and wheels: 2 Axles with twinned wheels: Powered axles: Advanced braking system:	N.A. R N.A.
Main dimen	sions	
2.2.1. 2.2.2. 2.2.3. 2.2.4. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.17	Length: Width: Height: Wheelbase: Wheelbase sidecar: Track width Track width front: Track width rear: Track width sidecar: Ground clearance between the axles: Wheelbase to ground clearance ratio: Seat height:	1890mm 720mm 1110mm 1365mm N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.
Masses		
2.1.1. 2.1.2. 2.1.3. 2.1.3.1. 2.1.3.2. 2.1.3.3. 2.1.7.	Mass in running order: Actual mass: Technically permissible maximum laden mass: Technically permissible maximum mass on front axle: Technically permissible maximum mass on rear axle: Technically permissible maximum mass on sidecar axle: Technically permissible maximum towable mass: Braked: Unbraked: Technically permissible maximum laden mass of the combination: Technically permissible maximum mass at the coupling point:	72 kg 168 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A. N.A.
Powertrain 3.1.1.1.	Manufacturer:	N.A.
3.1.1.2. 3.2.1.2. 3.2.1.4.1. 3.2.1.4.2. 3.2.1.5. 1.9. 1.10.	Engine code (as marked on the engine or other means of identification): Working principle of the combustion engine: internal combustion engine (ICE)/positive-compression ignition/external combustion engine (ECE)/turbine/compressed air-Number of cylinders: Arrangement of cylinders: Engine capacity: Maximum net power: Ratio maximum net power/mass of the vehicle in running order:	N.A. ignition/ N.A. N.A. N.A. N.A. N.A. N.A.
	1.3.1. 1.3.2. 6.2.4.  Main dimen 2.2.1. 2.2.2. 2.2.3. 2.2.4. 2.2.4.1. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.13. 2.1.3. 2.1.3.1. 2.1.3.2. 2.1.3.3. 2.1.7.  Powertrain 3.1.1.1. 3.1.1.2. 3.2.1.2. 3.2.1.4.1. 3.2.1.4.2. 3.2.1.5. 1.9.	1.3.1. Axles with twinned wheels: 1.3.2. Powered axles: 6.2.4. Advanced braking system:  Main dimensions  2.2.1. Length: 2.2.2. Width: 2.2.3. Height: 2.2.4. Wheelbase: 2.2.4.1. Wheelbases: 2.2.4.1. Wheelbase sidecar: 2.2.5. Track width front: 2.2.5. Track width rear: 2.2.5. Track width rear: 2.2.5. Track width rear: 2.2.5. Track width sidecar: 2.2.5. Track width sidecar: 2.2.5. Seat height:  Masses  2.1.1. Mass in running order: 2.1.2. Actual mass: 2.1.3. Technically permissible maximum laden mass: 2.1.3. Technically permissible maximum mass on front axle: 2.1.3.1. Technically permissible maximum mass on sidecar axle: 2.1.3.2. Technically permissible maximum towable mass: 3.1.3. Technically permissible maximum mass on sidecar axle: 2.1.7. Technically permissible maximum towable mass: 3.1.8 Braked: 3.1.9 Unbraked: 3.1.1.1. Manufacturer: 3.1.1.2 Technically permissible maximum mass at the coupling point:  Powertrain  3.1.1. Manufacturer: 3.1.1.1. Manufacturer: 3.1.1.2 Engine code (as marked on the engine or other means of identification): 3.2.1.2. Vorking principle of the combustion engine: internal combustion engine (ICE)/positive compression ignition/external combustion engine (ECE)/turbine/compressed air: 3.2.1.4.1 Number of cylinders: 3.2.1.4.2 Arrangement of cylinders: 3.2.1.5. Engine capacity: Maximum net power:

3.2.3.1. 3.2.3.2.1. 3.1.2.1. 3.1.2.2. 3.3.3.4. 3.1.3.1. 3.1.3.2. 3.3.1. 3.3.5.2. 3.9.2.	Fuel type: Vehicle fuel combination:mono-fuel/bi fuel/flex fuel Maximum amount of bio-fuel acceptable in fuel: Manufacturer: BOSCH (Ningbo) light electric vehiclectric motor code (as marked on the engine or other means of identification): CH60 15/30 minutes power: Manufacturer: Application code (as marked on the engine or other means of identification): Electric vehicle configuration: pure electric/hybrid electric/manpower electric Category of hybrid electric vehicle: Maximum assistance factor:		4.0.1. 4.0.6. 4.0.6.1. 4.0.6.2. 4.0.6.3. 3.2.15. 3.2.15.1.	Environmental step: Sound level measured according to: Stationary: Drive-by: Limit value for L <sub>urban</sub> : Exhaust emissions measured according to Type I test: tailpipe emissions after cold start, including the deterioration factor, if app CO: N.A.	Euro 5 N.A. N.A. N.A. N.A. N.A.
Maximum	speed			THC: N.A.  NMHC: N.A.  NOx: N.A.	
1.8. 3.9.3.	Maximum speed of vehicle: Maximum vehicle speed for which the electric motor gives assistance:	25 km/h N.A.		THC+NOx: N.A. PM: N.A.	
Drive-train	and control		3.2.15.2 3.2.15.3.	Type II test: tailpipe emissions at (increased) idle and free acceleration: Smoke corrected absorption coefficient:	N.A. N.A.
3.5.3.9. 3.5.4. 3.5.4.1. 3.5.4.2. Installation	Transmission (type): Gear ratios: Final drive ratio: Overall gear ratio in highest gear: of tyres	W N.A. N.A N.A.	Energy eff 4.0.2. 4.0.3. 4.0.4. 4.0.5.	Fuel consumption:  CO <sub>2</sub> emissions:  Energy consumption:  Electric range:	N.A. N.A. 34 Wh/km 130 km
6.18.1.1.	Tyre size designation: Front: 90/90-12 44J, 54J, 59J 200kPa 2.50-12; Rear: 90/90-12 44J, 54J, 59J 220kPa 2.50-12; Sidecar wheel:	N.A.	8.1.	on of the performance of the vehicle:  Vehicle appropriate for converting its performance level between subcategories (L3e/L4e)-A3 and vice versa:  information:	/L4e)-A2 and N.A.
Bodywork			9.1.	Remarks:	N.A.
6.20.2.1. 6.16.1. 6.16.1.1.	Door configuration and number of doors:  Number of seating positions:  Location and arrangement:	N.A. 2 N.A.	9.2.	Exemptions:	N.A.
Coupling of	devices				
7.2.8.	Type-approval number of coupling-device:	N.A.			

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

).1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's logo*1, Smart AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA SOURIS logo*1, bensom	
0.2.	Type: LX05	
0.2.1.	Variant: E1	
).2.2.	Version: 02	
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05, Elex, Buz	zE, Alegra
0.3.	Category, subcategory and sub-subcategory of vehicle: L1e-B	
0.4.	Company name and address of manufacturer: Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin dis	strict, Changzhou, P.R. China
).4.2. ).5.1.	Name and address of manufacturer's authorized representative (if any IVA Mobility B.V. Sportlaan 391, 3364DK Sliedrecht, The Netherlands Location of the manufacturer's statutory plate(s): R, x830, y:110, z:230	):
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: R, x:400, y:5, z:460(r/o)	
1.	Vehicle identification number: ☆LV2NYE31??1?????? ☆	
extension n	in all respects to the type described in EU type-approval (e13*168/2013* number) issued on (DD, MM, YYYY date of issue) and can be permane ic and using metric/imperial units for the speedometer.	
Changzh	hou, P.R.China	DD, MM, YYYY
(plac	ace)	
	F- 13p	(date)
(signa	nature)	

1.3. 1.3.1. 1.3.2. 6.2.4.	Number of axles: 2 and wheels: 2 Axles with twinned wheels: Powered axles: Advanced braking system:	N.A. R N.A.
Main dimen	sions	
2.2.1. 2.2.2. 2.2.3. 2.2.4. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.17	Length: Width: Height: Wheelbase: Wheelbase sidecar: Track width Track width front: Track width rear: Track width sidecar: Ground clearance between the axles: Wheelbase to ground clearance ratio: Seat height:	1940mm 720mm 1110mm 1365mm N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.
Masses		
2.1.1. 2.1.2. 2.1.3. 2.1.3.1. 2.1.3.2. 2.1.3.3. 2.1.7.	Mass in running order: Actual mass: Technically permissible maximum laden mass: Technically permissible maximum mass on front axle: Technically permissible maximum mass on rear axle: Technically permissible maximum mass on sidecar axle: Technically permissible maximum towable mass: Braked: Unbraked: Technically permissible maximum laden mass of the combination: Technically permissible maximum mass at the coupling point:	72 kg 168 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A. N.A.
Powertrain		
3.1.1.1. 3.1.1.2. 3.2.1.2. 3.2.1.4.1. 3.2.1.4.2. 3.2.1.5. 1.9. 1.10.	Manufacturer: Engine code (as marked on the engine or other means of identification): Working principle of the combustion engine: internal combustion engine (ICE)/positive-compression ignition/external combustion engine (ECE)/turbine/compressed air-Number of cylinders: Arrangement of cylinders: Engine capacity: Maximum net power: Ratio maximum net power/mass of the vehicle in running order:	N.A. N.A. ignition/ N.A. N.A. N.A. N.A. N.A. N.A.

3.2.3.2.1. Maximun 3.1.2.1. Manufact 3.1.2.2. Electric n 3.3.3.4. 45/30 min 3.1.3.1. Manufact 3.1.3.2. Application 3.3.1. Electric v 3.3.5.2. Category	fuel combination:mono-fuel/ <del>bi fuel/flex fuel</del> m amount of bio-fuel acceptable in fuel: sturer: BOSCH (Ningbo) light electric vehic motor code (as marked on the engine or other means of identification): CH600 inutes power:		Environme 4.0.1. 4.0.6. 4.0.6.1. 4.0.6.2. 4.0.6.3. 3.2.15. 3.2.15.1.	Environmental step: Sound level measured according to: Stationary: Drive-by: Limit value for Lurban: Exhaust emissions measured according to Type I test: tailpipe emissions after cold start, including the deterioration factor, if app CO: N.A.	Euro 5 N.A. N.A. N.A. N.A. N.A. licable:
Maximum speed	Tudosistando tattor.			THC: N.A. NMHC: N.A. NOx: N.A.	
	m speed of vehicle: m vehicle speed for which the electric motor gives assistance:	25 km/h N.A.	0.045.0	THC+NOx: N.A. PM: N.A.	
Drive-train and contro	ol		3.2.15.2 3.2.15.3.	Type II test: tailpipe emissions at (increased) idle and free acceleration: Smoke corrected absorption coefficient:	N.A. N.A.
3.5.4. Gear ration 3.5.4.1. Final driv		W N.A. N.A N.A.	Energy eff 4.0.2. 4.0.3. 4.0.4. 4.0.5.	Fuel consumption:  CO <sub>2</sub> emissions:  Energy consumption:  Electric range:	N.A. N.A. 34 Wh/km 130 km
Front: 90	e designation: )/90-12 44J, 54J, 59J 200kPa 2.50-12; //90-12 44J, 54J, 59J 220kPa 2.50-12; wheel:	N.A.	8.1.	on of the performance of the vehicle:  Vehicle appropriate for converting its performance level between subcategories (L3e/L4e)-A3 and vice versa:  information:	/L4e)-A2 and N.A.
Bodywork			9.1.	Remarks:	N.A.
6.16.1. Number	nfiguration and number of doors: of seating positions: and arrangement:	N.A. 1 N.A.	9.2.	Exemptions:	N.A.
Coupling devices					
7.2.8. Туре-арр	proval number of coupling-device:	N.A.			

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

).1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's logo*1, Smartw AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA SOURIS, logo*1, bensom	
0.2.	Type: LX05	
0.2.1.	Variant: E1	
0.2.2.	Version: 03	
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05, Elex, Buzz	E, Alegra
0.3.	Category, subcategory and sub-subcategory of vehicle: L1e-B	
).4.	Company name and address of manufacturer: Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin distr	rict, Changzhou, P.R. China
).4.2. ).5.1.	Name and address of manufacturer's authorized representative (if any): IVA Mobility B.V.  Sportlaan 391, 3364DK Sliedrecht, The Netherlands Location of the manufacturer's statutory plate(s): R, x830, y:110, z:230	
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: R, x:400, y:5, z:460(r/o)	
1.	Vehicle identification number: $\Leftrightarrow$ LV2NYE32???1?????? $\Leftrightarrow$	
extension n	in all respects to the type described in EU type-approval (e13*168/2013*0 number) issued on (DD, MM, YYYY date of issue) and can be permanen ic and using metric/imperial units for the speedometer.	
Changzh	hou, P.R.China	DD, MM, YYYY
(plac	ace)	
	Friz	(date)
(signa	nature)	

1.3. 1.3.1. 1.3.2. 6.2.4.	Number of axles: 2 and wheels: 2 Axles with twinned wheels: Powered axles: Advanced braking system:	N.A. R N.A.
Main dime	ensions	
2.2.1. 2.2.2. 2.2.3. 2.2.4. 2.2.4.1. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.17	Length: Width: Height: Wheelbase: Wheelbase sidecar: Track width Track width front: Track width rear: Track width sidecar: Ground clearance between the axles: Wheelbase to ground clearance ratio: Seat height:	1940mm 720mm 1330mm 1365mm N.A. N.A. N.A. N.A. N.A. N.A. N.A.
Masses		
2.1.1. 2.1.2. 2.1.3. 2.1.3.1. 2.1.3.2. 2.1.3.3. 2.1.7.	Mass in running order: Actual mass: Technically permissible maximum laden mass: Technically permissible maximum mass on front axle: Technically permissible maximum mass on rear axle: Technically permissible maximum mass on sidecar axle: Technically permissible maximum towable mass: Braked: Unbraked: Technically permissible maximum laden mass of the combination: Technically permissible maximum mass at the coupling point:	83 kg 179 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A.
Powertrain	1	
3.1.1.1. 3.1.1.2. 3.2.1.2.	Manufacturer: Engine code (as marked on the engine or other means of identification): Working principle of the combustion engine: internal combustion engine (ICE)/pos	N.A. N.A. itive ignition/
3.2.1.4.1. 3.2.1.4.2. 3.2.1.5. 1.9. 1.10.	compression ignition/external combustion engine (ECE)/turbine/compressed air	N.A. N.A. N.A. N.A. N.A. N.A.

3.2.3.1. 3.2.3.2. 3.2.3.2.1.	Fuel type: Vehicle fuel combination:mono-fuel <del>/bi fuel/flex fuel</del> Maximum amount of bio-fuel acceptable in fuel:	N.A. N.A. N.A.	Environme	ental performance	
3.1.2.1.	Manufacturer: BOSCH (Ningbo) light electric vehi	cle motor Co., Ltd.	4.0.1.	Environmental step:	Euro 5
3.1.2.2.	Electric motor code (as marked on the engine or other means of identification): CH60		4.0.6.	Sound level measured according to:	N.A.
3.3.3.4.	<del>15</del> /30 minutes power:	1.15 kW at 280 min-1	4.0.6.1.	Stationary:	N.A.
3.1.3.1.	Manufacturer:	N.A.	4.0.6.2.	Drive-by:	N.A.
3.1.3.2.	Application code (as marked on the engine or other means of identification):	N.A.	4.0.6.3.	Limit value for L <sub>urban</sub> :	N.A.
3.3.1.	Electric vehicle configuration: pure electric/hybrid electric/manpower electric	Pure electric	3.2.15.	Exhaust emissions measured according to	N.A.
3.3.5.2.	Category of hybrid electric vehicle: off vehicle charging/not off vehicle charging	N.A.	3.2.15.1.	Type I test: tailpipe emissions after cold start, including the deterioration factor, if app	licable:
3.9.2.	Maximum assistance factor:	N.A.		CO: N.A.	
Mandania				THC: N.A.	
Maximum	speed			NMHC: N.A. NOx: N.A.	
1.8.	Maximum speed of vehicle:	25 km/h		THC+NOx: N.A.	
3.9.3.	Maximum vehicle speed for which the electric motor gives assistance:	N.A.		PM: N.A.	
5.7.5.	Maximum vehicle speed for which the electric motor gives assistance.	IV.A.	3.2.15.2	Type II test: tailpipe emissions at (increased) idle and free acceleration:	N.A.
Drive-train	and control		3.2.15.3.	Smoke corrected absorption coefficient:	N.A.
3.5.3.9.	Transmission (type):	W	Energy ef	ficiency	
3.5.4.	Gear ratios:	N.A.			
3.5.4.1.	Final drive ratio:	N.A	4.0.2.	Fuel consumption:	N.A.
3.5.4.2.	Overall gear ratio in highest gear:	N.A.	4.0.3.	CO <sub>2</sub> emissions:	N.A.
			4.0.4.	Energy consumption:	34 Wh/km
Installation	of tyres		4.0.5.	Electric range:	130 km
6.18.1.1.	Tyre size designation:		Conversio	on of the performance of the vehicle:	
	Front: 90/90-12 44J, 54J, 59J 200kPa 2.50-12;				
	Rear: 90/90-12 44J, 54J, 59J 220kPa 2.50-12;		8.1.	Vehicle appropriate for converting its performance level between subcategories (L3e	/L4e)-A2 and
	Sidecar wheel:	N.A.		(L3e/L4e)-A3 and vice versa:	N.A.
			A -1-1141 1	Coffee and all the second	
Doduuork			Additional	information:	
Bodywork			9.1.	Remarks:	N.A.
6.20.2.1.	Door configuration and number of doors:	N.A.	9.2.	Exemptions:	N.A.
6.16.1.	Number of seating positions:	1	7.2.	Exemptions.	14.71.
6.16.1.1.	Location and arrangement:	N.A.			
Coupling of	devices				
7.2.8.	Type-approval number of coupling-device:	N.A.			

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

0.1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's logo*1, Smartway, IVA, Senzo, Monasso, Generic, KSR MOTO AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA SOURIS, WAYEL, Lexmoto, rutec's logo*1, CETUR's logo*1, bensom	Gen 1.3. 1.3.1 1.3.2
0.2.	Type: LX05	6.2.4
0.2.1.	Variant: E2	Mair
0.2.2.	Version: 01	2.2.1 2.2.2
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05, Elex, BuzzE, Alegra	2.2.3 2.2.4
0.3.	Category, subcategory and sub-subcategory of vehicle: L1e-B	2.2.4 2.2.4 2.2.5
0.4.	Company name and address of manufacturer: Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China	2.2.5 2.2.5 2.2.5 2.2.5 2.2.1
0.4.2.	Name and address of manufacturer's authorized representative (if any): IVA Mobility B.V. Sportlaan 391, 3364DK Sliedrecht, The Netherlands	2.2.1
0.5.1.	Location of the manufacturer's statutory plate(s): R, x830, y:110, z:230	Mas
0.5.2.	Method of attachment of the manufacturer's statutory plate(s): Riveted on the chassis	2.1.1 2.1.2 2.1.3 2.1.3
0.6.	Location of the vehicle identification number: R, x:400, y:5, z:460(r/o)	2.1.3 2.1.3 2.1.3
1.	Vehicle identification number: ☆LV2NYK30??1?????? ☆	Z.1. <i>1</i>
extensio	s in all respects to the type described in EU type-approval (e13*168/2013*00874*01 type-approval number including n number) issued on (DD, MM, YYYY date of issue) and can be permanently registered in Member States having right/left-ffic and using metric/imperial units for the speedometer.	2.1.7 2.1.7
		Pow
Chang	zhou, P.R.China DD, MM, YYYY	3.1.1
(þ	olace)	3.1.1 3.2.1
(sią	gnature) (date)	3.2.1 3.2.1 3.2.1 1.9.
		1 10

1.3. 1.3.1. 1.3.2. 6.2.4.	Number of axles: 2 and wheels: 2 Axles with twinned wheels: Powered axles: Advanced braking system: 2	N.A. R N.A.
Main dimen	sions	
2.2.1. 2.2.2. 2.2.3. 2.2.4. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.17	Length: Width: Height: Wheelbase: Wheelbase sidecar: Track width Track width front: Track width rear: Track width sidecar: Ground clearance between the axles: Wheelbase to ground clearance ratio: Seat height:	1890mm 720mm 1110mm 1365mm N.A. N.A. N.A. N.A. N.A. N.A. N.A.
Masses		
2.1.1. 2.1.2. 2.1.3. 2.1.3.1. 2.1.3.2. 2.1.3.3. 2.1.7.	Mass in running order: Actual mass: Technically permissible maximum laden mass: Technically permissible maximum mass on front axle: Technically permissible maximum mass on rear axle: Technically permissible maximum mass on sidecar axle: Technically permissible maximum towable mass: Braked: Unbraked: Technically permissible maximum laden mass of the combination: Technically permissible maximum mass at the coupling point:	72 kg 168 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A.
Powertrain		
3.1.1.1. 3.1.1.2. 3.2.1.2. 3.2.1.4.1. 3.2.1.4.2. 3.2.1.5. 1.9. 1.10.	Manufacturer: Engine code (as marked on the engine or other means of identification): Working principle of the combustion engine: internal combustion engine (ICE)/positive compression ignition/external combustion engine (ECE)/turbine/compressed air Number of cylinders: Arrangement of cylinders: Engine capacity: Maximum net power: Ratio maximum net power/mass of the vehicle in running order:	N.A. N.A. ignition/ N.A. N.A. N.A. N.A. N.A.

3.2.3.1. 3.2.3.2.1. 3.1.2.1. 3.1.2.2. 3.3.3.4. 3.1.3.1. 3.1.3.2. 3.3.1. 3.3.5.2. 3.9.2.	Fuel type:  Vehicle fuel combination:mono-fuel/bi fuel/flex fuel  Maximum amount of bio-fuel acceptable in fuel:  Manufacturer:  BOSCH (Ningbo) light electric vehicle:  Electric motor code (as marked on the engine or other means of identification): CH60  15/30 minutes power:  Manufacturer:  Application code (as marked on the engine or other means of identification):  Electric vehicle configuration: pure electric/hybrid electric/manpower electric  Category of hybrid electric vehicle:  Maximum assistance factor:		4.0.1. 4.0.6. 4.0.6.1. 4.0.6.2. 4.0.6.3. 3.2.15. 3.2.15.1.	Environmental step: Sound level measured according to: Stationary: Drive-by: Limit value for L <sub>urban</sub> : Exhaust emissions measured according to Type I test: tailpipe emissions after cold start, including the deterioration factor, if app CO: N.A.	Euro 5 N.A. N.A. N.A. N.A. N.A.
Maximum	speed			THC: N.A.  NMHC: N.A.  NOx: N.A.	
1.8. 3.9.3.	Maximum speed of vehicle: Maximum vehicle speed for which the electric motor gives assistance:	45 km/h N.A.		THC+NOx: N.A. PM: N.A.	
Drive-train	and control		3.2.15.2 3.2.15.3.	Type II test: tailpipe emissions at (increased) idle and free acceleration: Smoke corrected absorption coefficient:	N.A. N.A.
3.5.3.9. 3.5.4. 3.5.4.1. 3.5.4.2. Installation	Transmission (type): Gear ratios: Final drive ratio: Overall gear ratio in highest gear: of tyres	W N.A. N.A N.A.	Energy eff 4.0.2. 4.0.3. 4.0.4. 4.0.5.	Fuel consumption:  CO <sub>2</sub> emissions:  Energy consumption:  Electric range:	N.A. N.A. 40 Wh/km 120 km
6.18.1.1.	Tyre size designation: Front: 90/90-12 44J, 54J, 59J 200kPa 2.50-12; Rear: 90/90-12 44J, 54J, 59J 220kPa 2.50-12; Sidecar wheel:	N.A.	8.1.	on of the performance of the vehicle:  Vehicle appropriate for converting its performance level between subcategories (L3e/L4e)-A3 and vice versa:  information:	/L4e)-A2 and N.A.
Bodywork			9.1.	Remarks:	N.A.
6.20.2.1. 6.16.1. 6.16.1.1.	Door configuration and number of doors:  Number of seating positions:  Location and arrangement:	N.A. 2 N.A.	9.2.	Exemptions:	N.A.
Coupling of	levices				
7.2.8.	Type-approval number of coupling-device:	N.A.			

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

0.1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's logo*1	, Smartway, IVA, Senzo, Monasso, Generic, KSR MOTO	Gei
	AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA Si logo*1, bensom		1.3 1.3 1.3
0.2.	Type: LX05		6.2
0.2.1.	Variant: E2		Mai
0.2.2.	Version: 02		2.2 2.2
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05, Ele	ex, BuzzE, Alegra	2.2
0.3.	Category, subcategory and sub-subcategory of vehicle: L1e-B		2.2
0.4.	Company name and address of manufacturer: Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town, W	ujin district, Changzhou, P.R. China	2.2 2.2 2.2
0.4.2.	Name and address of manufacturer's authorized representative IVA Mobility B.V.	e (if any):	2.2 2.2 2.2
0.5.1.	Sportlaan 391, 3364DK Sliedrecht, The Netherlands Location of the manufacturer's statutory plate(s): R, x830, y:110, z:230		Ma
0.5.2.	Method of attachment of the manufacturer's statutory plate(s): Riveted on the chassis		2.1 2.1 2.1 2.1
0.6.	Location of the vehicle identification number: R, x:400, y:5, z:460(r/o)		2.1 2.1 2.1 2.1
1.	Vehicle identification number: ☆LV2NYK31???1?????? ☆		2.1
extensio	s in all respects to the type described in EU type-approval (e13*168 n number) issued on (DD, MM, YYYY date of issue) and can be peffic and using metric/imperial units for the speedometer.		2.1 2.1
	inc and using memorinpenal units for the speculometer.	DD MM WWW	Pov
		DD, MM, YYYY 	3.1 3.1
(1	olace)	4	3.2
	F 130	(date)	3.2 3.2
(si	gnature) /		3.2 1.9

1.3. 1.3.1. 1.3.2. 6.2.4.	Number of axles: 2 Axles with twinned wheels: Powered axles: Advanced braking system:	and wheels:	2	N.A. R N.A.
Main dime	nsions			
2.2.1. 2.2.2. 2.2.3. 2.2.4. 2.2.4.1. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.17	Length: Width: Height: Wheelbase: Wheelbase sidecar: Track width Track width front: Track width rear: Track width sidecar: Ground clearance between the axl Wheelbase to ground clearance ra Seat height:			1940mm 720mm 1110mm 1365mm N.A. N.A. N.A. N.A. N.A. N.A.
Masses				
2.1.1. 2.1.2. 2.1.3. 2.1.3.1. 2.1.3.2. 2.1.3.3. 2.1.7.	Mass in running order: Actual mass: Technically permissible maximum in Technically per	mass on front axle: mass on rear axle: mass on sidecar axle towable mass: laden mass of the co	mbination:	72 kg 168 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A.
Powertrair	I			
3.1.1.1. 3.1.1.2. 3.2.1.2.	Manufacturer: Engine code (as marked on the en Working principle of the combustion			N.A. N.A. tive ignition/
3.2.1.4.1. 3.2.1.4.2. 3.2.1.5. 1.9. 1.10.	compression ignition/external comb Number of cylinders: Arrangement of cylinders: Engine capacity: Maximum net power: Ratio maximum net power/mass of	<del>ustion engine (ECE)</del> /	<del>(turbine/compressed air</del>	N.A. N.A. N.A. N.A. N.A.

3.2.3.1. 3.2.3.2. 3.2.3.2.1. 3.1.2.1. 3.1.2.2. 3.3.3.4.	Fuel type: Vehicle fuel combination:mono-fuel/bi fuel/flex fuel Maximum amount of bio-fuel acceptable in fuel: Manufacturer: BOSCH (Ningbo) light electric vehi Electric motor code (as marked on the engine or other means of identification): CH60 15/30 minutes power:	N.A. N.A. N.A. cle motor Co., Ltd. J0r120°eM *????????????* 3.00 kW at 420 min <sup>-1</sup>	Environme 4.0.1. 4.0.6. 4.0.6.1.	ental performance  Environmental step: Sound level measured according to: Stationary:	Euro 5 N.A. N.A.
3.1.3.1. 3.1.3.2. 3.3.1. 3.3.5.2. 3.9.2.	Manufacturer:  Application code (as marked on the engine or other means of identification):  Electric vehicle configuration: pure electric/hybrid electric/manpower electric  Category of hybrid electric vehicle: off vehicle charging/not off vehicle charging  Maximum assistance factor:	N.A. Pure electric N.A. N.A.	4.0.6.2. 4.0.6.3. 3.2.15. 3.2.15.1.	Drive-by: Limit value for L <sub>urban</sub> : Exhaust emissions measured according to Type I test: tailpipe emissions after cold start, including the deterioration factor, if app CO: N.A. THC: N.A.	N.A. N.A. N.A.
Maximum				NMHC: N.A. NOx: N.A.	
1.8. 3.9.3.	Maximum speed of vehicle: Maximum vehicle speed for which the electric motor gives assistance:	45 km/h N.A.		THC+NOx: N.A. PM: N.A.	
Drive-train	and control		3.2.15.2 3.2.15.3.	Type II test: tailpipe emissions at (increased) idle and free acceleration: Smoke corrected absorption coefficient:	N.A. N.A.
3.5.3.9. 3.5.4. 3.5.4.1. 3.5.4.2.	Transmission (type): Gear ratios: Final drive ratio: Overall gear ratio in highest gear:	W N.A. N.A N.A.	Energy ef 4.0.2. 4.0.3.	Fuel consumption: CO <sub>2</sub> emissions:	N.A. N.A.
Installation	n of tyres		4.0.4. 4.0.5.	Energy consumption: Electric range:	40 Wh/km 120 km
6.18.1.1.	Tyre size designation: Front: 90/90-12 44J, 54J, 59J 200kPa 2.50-12; Rear: 90/90-12 44J, 54J, 59J 220kPa 2.50-12; Sidecar wheel:	N.A.	8.1.	on of the performance of the vehicle:  Vehicle appropriate for converting its performance level between subcategories (L3e/L4e)-A3 and vice versa:	/L4e)-A2 and N.A.
Bodywork			9.1.	Remarks:	N.A.
6.20.2.1. 6.16.1. 6.16.1.1.	Door configuration and number of doors:  Number of seating positions:  Location and arrangement:	N.A. 1 N.A.	9.2.	Exemptions:	N.A. N.A.
Coupling of	devices				
7.2.8.	Type-approval number of coupling-device:	N.A.			

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

).1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's logo*1, Smartway, IVA, AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA SOURIS, WAYEL, logo*1, bensom	
0.2.	Type: LX05	
0.2.1.	Variant: E2	
).2.2.	Version: 03	
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05, Elex, BuzzE, Alegra	a
0.3.	Category, subcategory and sub-subcategory of vehicle: L1e-B	
0.4.	Company name and address of manufacturer: Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Cha	ngzhou, P.R. China
).4.2. ).5.1.	Name and address of manufacturer's authorized representative (if any): IVA Mobility B.V. Sportlaan 391, 3364DK Sliedrecht, The Netherlands Location of the manufacturer's statutory plate(s): R, x830, y:110, z:230	
).5.2.	Method of attachment of the manufacturer's statutory plate(s): Riveted on the chassis	
0.6.	Location of the vehicle identification number: R, x:400, y:5, z:460(r/o)	
1.	Vehicle identification number: ☆LV2NYK32??1?????? ☆	
extension r	ns in all respects to the type described in EU type-approval (e13*168/2013*00874*01 on number) issued on (DD, MM, YYYY date of issue) and can be permanently regist affic and using metric/imperial units for the speedometer.	
Changzh	gzhou, P.R.China DD, I	MM, YYYY
(plac	rplace)	
	F-130	(date)
(signa	ignature)	

1940mm 720mm 1330mm
720mm
1365mm N.A. N.A. N.A. N.A. N.A. N.A. N.A.
83 kg 179 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A.
N.A. N.A. Isitive ignition/ N.A. N.A. N.A. N.A. N.A.

3.2.3.1. 3.2.3.2.1. 3.1.2.1. 3.1.2.2. 3.3.3.4. 3.1.3.1. 3.1.3.2. 3.3.1. 3.3.5.2. 3.9.2.	Fuel type:  Vehicle fuel combination:mono-fuel/bi fuel/flex fuel  Maximum amount of bio-fuel acceptable in fuel:  Manufacturer:  BOSCH (Ningbo) light electric vehicle:  Electric motor code (as marked on the engine or other means of identification): CH60  45/30 minutes power:  Manufacturer:  Application code (as marked on the engine or other means of identification):  Electric vehicle configuration: pure electric/hybrid electric/manpower—electric  Category of hybrid electric vehicle:  off vehicle charging/not off vehicle charging  Maximum assistance factor:		Environme 4.0.1. 4.0.6. 4.0.6.1. 4.0.6.2. 4.0.6.3. 3.2.15. 3.2.15.1.	Environmental step: Sound level measured according to: Stationary: Drive-by: Limit value for L <sub>urban</sub> : Exhaust emissions measured according to Type I test: tailpipe emissions after cold start, including the deterioration factor, if app CO: N.A.	Euro 5 N.A. N.A. N.A. N.A. N.A. licable:
Maximum	speed			THC: N.A.  NMHC: N.A.  NOx: N.A.	
1.8. 3.9.3.	Maximum speed of vehicle: Maximum vehicle speed for which the electric motor gives assistance:	45 km/h N.A.		THC+NOx: N.A. PM: N.A.	
Drive-train	and control		3.2.15.2 3.2.15.3.	Type II test: tailpipe emissions at (increased) idle and free acceleration: Smoke corrected absorption coefficient:	N.A. N.A.
3.5.3.9. 3.5.4. 3.5.4.1. 3.5.4.2. Installation	Transmission (type): Gear ratios: Final drive ratio: Overall gear ratio in highest gear: of tyres	W N.A. N.A N.A.	Energy eff 4.0.2. 4.0.3. 4.0.4. 4.0.5.	Fuel consumption:  CO <sub>2</sub> emissions: Energy consumption: Electric range:	N.A. N.A. 40 Wh/km 120 km
6.18.1.1.	Tyre size designation: Front: 90/90-12 44J, 54J, 59J 200kPa 2.50-12; Rear: 90/90-12 44J, 54J, 59J 220kPa 2.50-12; Sidecar wheel:	N.A.	8.1.	on of the performance of the vehicle:  Vehicle appropriate for converting its performance level between subcategories (L3e/L4e)-A3 and vice versa:  information:	/L4e)-A2 and N.A.
Bodywork			9.1.	Remarks:	N.A.
6.20.2.1. 6.16.1. 6.16.1.1.	Door configuration and number of doors:  Number of seating positions:  Location and arrangement:	N.A. 1 N.A.	9.2.	Exemptions:	N.A.
Coupling of	devices				
7.2.8.	Type-approval number of coupling-device:	N.A.			

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

0.1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's logo*1, Smartway AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA SOURIS, W. logo*1, bensom	y, IVA, Senzo, Monasso, Generic, KSR MOTO AYEL, Lexmoto, rutec's logo*1, CETUR's
0.2.	Type: LX05	
0.2.1.	Variant: E3	
0.2.2.	Version: 01	
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05, Elex, BuzzE,	Alegra
0.3.	Category, subcategory and sub-subcategory of vehicle: L1e-B	
0.4.	Company name and address of manufacturer: Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin distric	t, Changzhou, P.R. China
0.4.2.	Name and address of manufacturer's authorized representative (if any): IVA Mobility B.V.	
0.5.1.	Sportlaan 391, 3364DK Sliedrecht, The Netherlands Location of the manufacturer's statutory plate(s): R, x830, y:110, z:230	
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: R, x:400, y:5, z:460(r/o)	
1.	Vehicle identification number: ☆LV2NYF30??1?????? ☆	
extension i	n all respects to the type described in EU type-approval (e13*168/2013*008 number) issued on (DD, MM, YYYY date of issue) and can be permanently and using metric/imperial units for the speedometer.	
Changzh	iou, P.R.China	DD, MM, YYYY
(pla	 ce)	
	F- 130	(date)
(signa	ature)	

1.3. 1.3.1. 1.3.2. 6.2.4.	Number of axles: 2 and wheels: 2 Axles with twinned wheels: Powered axles: Advanced braking system:	N.A. R N.A.
Main dime	ensions	
2.2.1. 2.2.2. 2.2.3. 2.2.4. 2.2.4.1. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.17	Length: Width: Height: Wheelbase: Wheelbase sidecar: Track width Track width front: Track width rear: Track width sidecar: Ground clearance between the axles: Wheelbase to ground clearance ratio: Seat height:	1890mm 720mm 1110mm 1365mm N.A. N.A. N.A. N.A. N.A. N.A.
Masses		
21.1. 21.2. 21.3. 21.3.1. 21.3.2. 21.3.3. 21.7.	Mass in running order: Actual mass: Technically permissible maximum laden mass: Technically permissible maximum mass on front axle: Technically permissible maximum mass on rear axle: Technically permissible maximum mass on sidecar axle: Technically permissible maximum towable mass: Braked: Unbraked: Technically permissible maximum laden mass of the combination: Technically permissible maximum mass at the coupling point:	72 kg 168 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A.
Powertrain	n	
3.1.1.1. 3.1.1.2. 3.2.1.2.	Manufacturer: Engine code (as marked on the engine or other means of identification): Working principle of the combustion engine: internal combustion engine (ICE)/positi	N.A. N.A.
3.2.1.4.1. 3.2.1.4.2. 3.2.1.5. 1.9. 1.10.	compression ignition/external combustion engine (ECE)/turbine/compressed air-	N.A. N.A. N.A. N.A. N.A. N.A.

3.2.3.1. 3.2.3.2.1. 3.1.2.1. 3.1.2.2. 3.3.3.4. 3.1.3.1. 3.1.3.2. 3.3.1. 3.3.5.2. 3.9.2.	Fuel type: Vehicle fuel combination:mono-fuel/bi fuel/flex fuel Maximum amount of bio-fuel acceptable in fuel: Manufacturer: BOSCH (Ningbo) light electric vehicle: Electric motor code (as marked on the engine or other means of identification): EJ60 15/30 minutes power: Manufacturer: Application code (as marked on the engine or other means of identification): Electric vehicle configuration: pure electric/hybrid electric/manpower—electric Category of hybrid electric vehicle:  off vehicle charging/not off vehicle charging Maximum assistance factor:		4.0.1. 4.0.6. 4.0.6.1. 4.0.6.2. 4.0.6.3. 3.2.15. 3.2.15.1.	Environmental step: Sound level measured according to: Stationary: Drive-by: Limit value for L <sub>urban</sub> : Exhaust emissions measured according to Type I test: tailpipe emissions after cold start, including the deterioration factor, if app CO:  N.A.	Euro 5 N.A. N.A. N.A. N.A. N.A. licable:
Maximum	speed			THC: N.A.  NMHC: N.A.  NOx: N.A.	
1.8. 3.9.3.	Maximum speed of vehicle: Maximum vehicle speed for which the electric motor gives assistance:	25 km/h N.A.		THC+NOx: N.A. PM: N.A.	
Drive-train	and control		3.2.15.2 3.2.15.3.	Type II test: tailpipe emissions at (increased) idle and free acceleration: Smoke corrected absorption coefficient:	N.A. N.A.
3.5.3.9. 3.5.4. 3.5.4.1. 3.5.4.2.	Transmission (type): Gear ratios: Final drive ratio: Overall gear ratio in highest gear:	W N.A. N.A N.A.	Energy eff 4.0.2. 4.0.3. 4.0.4. 4.0.5.	Fuel consumption:  CO <sub>2</sub> emissions:  Energy consumption:  Electric range:	N.A. N.A. 32 Wh/km 137 km
6.18.1.1.	Tyre size designation: Front: 90/90-12 44J, 54J, 59J 200kPa 2.50-12; Rear: 90/90-12 44J, 54J, 59J 220kPa 2.50-12; Sidecar wheel:	N.A.	8.1.	on of the performance of the vehicle:  Vehicle appropriate for converting its performance level between subcategories (L3e (L3e/L4e)-A3 and vice versa:  information:	/L4e)-A2 and N.A.
Bodywork			9.1.	Remarks:	N.A.
6.20.2.1. 6.16.1. 6.16.1.1.	Door configuration and number of doors:  Number of seating positions:  Location and arrangement:	N.A. 2 N.A.	9.2.	Exemptions:	N.A.
Coupling of	devices				
7.2.8.	Type-approval number of coupling-device:	N.A.			

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

0.1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's logo*	1, Smartway, IVA, Senzo, Monasso, Generic, KSR MOTO	Gene
	AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA S logo*1, bensom		1.3. 1.3.1.
			1.3.2.
0.2.	Type: LX05		6.2.4.
0.2.1.	Variant: E3		Main
0.2.2.	Version: 02		2.2.1.
0.2.2.	70.00.111 02		2.2.2.
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05, E	lex, BuzzE, Alegra	2.2.3.
0.0	·	Ÿ	2.2.4.
0.3.	Category, subcategory and sub-subcategory of vehicle: L1e-B		2.2.4. 2.2.5.
0.4.	Company name and address of manufacturer:		2.2.5.
0.4.	Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.		2.2.5.
	No 158 shengjia village, Wuyi village, Heng shan qiao town, V	Muiin district Changzhou P.R. China	2.2.5.
	100 100 Sherigha village, wayi village, Herig Shari qiao town, v	vajin district, oriangznoa, i .ix. oriina	2.2.10
0.4.2.	Name and address of manufacturer's authorized representativ	e (if any):	2.2.15
	IVA Mobility B.V.	- ()	2.2.17
	Sportlaan 391, 3364DK Sliedrecht, The Netherlands		
0.5.1.	Location of the manufacturer's statutory plate(s):		Masse
	R, x830, y:110, z:230		
			2.1.1.
0.5.2.	Method of attachment of the manufacturer's statutory plate(s):		2.1.2.
	Riveted on the chassis		2.1.3.
			2.1.3.
0.6.	Location of the vehicle identification number:		2.1.3.
	R, x:400, y:5, z:460(r/o)		2.1.3.
1.	Vehicle identification number: ☆LV2NYF31???????? ☆		2.1.7.
			217
	s in all respects to the type described in EU type-approval (e13*16		2.1.7. 2.1.7.
	n number) issued on (DD, MM, YYYY date of issue) and can be p	ermanently registered in Member States having right/left-	Z.1.7.
nano tra	ffic and using metric/imperial units for the speedometer.		Powe
Chana	zhou, P.R.China	DD, MM, YYYY	1 0000
Chang	ZHOU, F.R.CHIHA	DD, IVIIVI, TTTT	3.1.1.
(r	olace)		3.1.1.
11	nace)		3.2.1.
		(date)	
	F-130	()	3.2.1.
			3.2.1.
(si	gnature) /		3.2.1.
• • •	•		1.9.
			1 10

1.3. 1.3.1. 1.3.2. 6.2.4.	Number of axles: 2 and wheels: 2 Axles with twinned wheels: Powered axles: Advanced braking system: 2	N.A. R N.A.
Main dimen	sions	
2.2.1. 2.2.2. 2.2.4. 2.2.4.1. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.17	Length: Width: Height: Wheelbase: Wheelbase sidecar: Track width Track width front: Track width rear: Track width sidecar: Ground clearance between the axles: Wheelbase to ground clearance ratio: Seat height:	1940mm 720mm 1110mm 1365mm N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.
Masses		
2.1.1. 2.1.2. 2.1.3. 2.1.3.1. 2.1.3.2. 2.1.3.3. 2.1.7.	Mass in running order: Actual mass: Technically permissible maximum laden mass: Technically permissible maximum mass on front axle: Technically permissible maximum mass on rear axle: Technically permissible maximum mass on sidecar axle: Technically permissible maximum towable mass: Braked: Unbraked: Technically permissible maximum laden mass of the combination: Technically permissible maximum mass at the coupling point:	72 kg 168 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A. N.A.
Powertrain		
3.1.1.1. 3.1.1.2. 3.2.1.2. 3.2.1.4.1. 3.2.1.4.2. 3.2.1.5. 1.9. 1.10.	Manufacturer: Engine code (as marked on the engine or other means of identification): Working principle of the combustion engine: internal combustion engine (ICE)/positive-compression ignition/external combustion engine (ECE)/turbine/compressed air-Number of cylinders: Arrangement of cylinders: Engine capacity: Maximum net power: Ratio maximum net power/mass of the vehicle in running order:	N.A. N.A. ignition/ N.A. N.A. N.A. N.A. N.A.

3.2.3.1. Fuel type: 3.2.3.2. Vehicle fuel combination:mono-fuel/bi fuel/flex fuel 3.2.3.2.1. Maximum amount of bio-fuel acceptable in fuel: 3.1.2.1. Manufacturer: BOSCH (Ningbo) light electric veh	N.A. N.A. N.A.	Environm	ental performance  Environmental step:	Euro 5
3.1.2.2. Electric motor code (as marked on the engine or other means of identification): EJ60 13.3.3.4. Hs/30 minutes power: 3.1.3.1. Manufacturer: 3.1.3.2. Application code (as marked on the engine or other means of identification):	Oor120°eM *???????????????* 1.28 kW at 270 min <sup>-1</sup> N.A. N.A.	4.0.6. 4.0.6.1. 4.0.6.2. 4.0.6.3.	Sound level measured according to: Stationary: Drive-by: Limit value for L <sub>urban</sub> :	N.A. N.A. N.A. N.A.
3.3.1. Electric vehicle configuration: pure electric/hybrid electric/manpower electric 3.3.5.2. Category of hybrid electric vehicle: off vehicle charging/not off vehicle charging Maximum assistance factor:	Pure electric N.A. N.A.	3.2.15. 3.2.15.1.	Exhaust emissions measured according to  Type I test: tailpipe emissions after cold start, including the deterioration factor, if app CO: N.A.  THC: N.A.	N.A. blicable:
Maximum speed			NMHC: N.A. NOx: N.A.	
<ul><li>1.8. Maximum speed of vehicle:</li><li>3.9.3. Maximum vehicle speed for which the electric motor gives assistance:</li></ul>	25 km/h N.A.	3.2.15.2	THC+NOx: N.A. PM: N.A. Time II test tellping emissions at (ingressed) idle and free acceleration.	N.A.
Drive-train and control		3.2.15.3.	Type II test: tailpipe emissions at (increased) idle and free acceleration: Smoke corrected absorption coefficient:	N.A. N.A.
3.5.3.9. Transmission (type): 3.5.4. Gear ratios:	W N.A.	Energy el	fficiency	
<ul><li>3.5.4.1. Final drive ratio:</li><li>3.5.4.2. Overall gear ratio in highest gear:</li></ul>	N.A N.A.	4.0.2. 4.0.3.	Fuel consumption: CO <sub>2</sub> emissions:	N.A. N.A.
Installation of tyres		4.0.4. 4.0.5.	Energy consumption: Electric range:	32 Wh/km 137 km
6.18.1.1. Tyre size designation: Front: 90/90-12 44J, 54J, 59J 200kPa 2.50-12;		Conversion	on of the performance of the vehicle:	
Rear: 90/90-12 44J, 54J, 59J 220kPa 2.50-12; Sidecar wheel:	N.A.	8.1.	Vehicle appropriate for converting its performance level between subcategories (L3e/L4e)-A3 and vice versa:	e/L4e)-A2 and N.A.
Bodywork		Additiona	I information:	
6.20.2.1. Door configuration and number of doors: 6.16.1. Number of seating positions: 6.16.1.1. Location and arrangement:	N.A. 1 N.A.	9.1. 9.2.	Remarks: Exemptions:	N.A. N.A.
Coupling devices				
7.2.8. Type-approval number of coupling-device:	N.A.			

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

0.1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's logo	1, Smartway, IVA, Senzo, Monasso, Generic, KSR MOTO	Gen
	AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, LA logo*1, bensom		1.3. 1.3. 1.3.2
0.2.	Type: LX05		6.2.4
0.2.1.	Variant: E3		Mair
0.2.2.	Version: 03		2.2.1 2.2.2
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05,	Elex, BuzzE, Alegra	2.2.3 2.2.4
0.3.	Category, subcategory and sub-subcategory of vehicle: L1e-	3	2.2. <sup>2</sup> 2.2. <sup>2</sup>
0.4.	Company name and address of manufacturer: Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town,	Wujin district, Changzhou, P.R. China	2.2.5 2.2.5 2.2.5
0.4.2.	Name and address of manufacturer's authorized representation IVA Mobility B.V.	ve (if any):	2.2.1 2.2.1 2.2.1
0.5.1.	Sportlaan 391, 3364DK Sliedrecht, The Netherlands Location of the manufacturer's statutory plate(s): R, x830, y:110, z:230		Mas
0.5.2.	Method of attachment of the manufacturer's statutory plate(s) Riveted on the chassis		2.1.1 2.1.2 2.1.3 2.1.3
0.6.	Location of the vehicle identification number: R, x:400, y:5, z:460(r/o)		2.1.3 2.1.3 2.1.3
1.	Vehicle identification number: ${\rm  \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! $		2.1
extension	n all respects to the type described in EU type-approval (e13*1 number) issued on (DD, MM, YYYY date of issue) and can be		2.1.7 2.1.7
	c and using metric/imperial units for the speedometer.		Pow
Changzh	ou, P.R.China	DD, MM, YYYY 	3.1.1
(pla	ce)		3.1.1 3.2.1
	E 130	(date)	3.2.1
(sign	ature)		3.2.1 3.2.1 1.9.
			1 10

1.3. 1.3.1. 1.3.2. 6.2.4.	Number of axles: 2 and wheels: 2 Axles with twinned wheels: Powered axles: Advanced braking system: 2	N.A. R N.A.
Main dimen	sions	
2.2.1. 2.2.2. 2.2.3. 2.2.4. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.17	Length: Width: Height: Wheelbase: Wheelbase sidecar: Track width Track width front: Track width rear: Track width sidecar: Ground clearance between the axles: Wheelbase to ground clearance ratio: Seat height:	1940mm 720mm 1330mm 1365mm N.A. N.A. N.A. N.A. N.A. N.A. N.A.
Masses		
2.1.1. 2.1.2. 2.1.3. 2.1.3.1. 2.1.3.2. 2.1.3.3. 2.1.7.	Mass in running order: Actual mass: Technically permissible maximum laden mass: Technically permissible maximum mass on front axle: Technically permissible maximum mass on rear axle: Technically permissible maximum mass on sidecar axle: Technically permissible maximum towable mass: Braked: Unbraked: Technically permissible maximum laden mass of the combination: Technically permissible maximum mass at the coupling point:	83 kg 179 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A.
Powertrain		
3.1.1.1. 3.1.1.2. 3.2.1.2. 3.2.1.4.1. 3.2.1.4.2. 3.2.1.5. 1.9. 1.10.	Manufacturer: Engine code (as marked on the engine or other means of identification): Working principle of the combustion engine: internal combustion engine (ICE)/positive-compression ignition/external combustion engine (ECE)/turbine/compressed air-Number of cylinders: Arrangement of cylinders: Engine capacity: Maximum net power: Ratio maximum net power/mass of the vehicle in running order:	N.A. N.A. ignition/ N.A. N.A. N.A. N.A. N.A. N.A.

3.2.3.2.1. Maximum a 3.1.2.1. Manufactur	I combination:mono-fuel/bi fuel/flex fuel amount of bio-fuel acceptable in fuel: er: BOSCH (Ningbo) light electric vehic tor code (as marked on the engine or other means of identification): EJ600	N.A. N.A. N.A. Cle motor Co., Ltd.	Environme 4.0.1. 4.0.6.	ental performance  Environmental step: Sound level measured according to:	Euro 5 N.A.
3.3.3.4. 45/30 minu 3.1.3.1. Manufactur 3.1.3.2. Application 3.3.1. Electric veh 3.3.5.2. Category of	tes power:	1.28 kW at 270 min <sup>-1</sup> N.A. N.A. Pure electric N.A. N.A.	4.0.6.1. 4.0.6.2. 4.0.6.3. 3.2.15. 3.2.15.1.	Stationary: Drive-by: Limit value for L <sub>urban</sub> : Exhaust emissions measured according to Type I test: tailpipe emissions after cold start, including the deterioration factor, if app CO: N.A.	N.A. N.A. N.A. N.A.
Maximum speed	assistance rector.	14.76		THC: N.A. NMHC: N.A. NOx: N.A.	
	speed of vehicle: vehicle speed for which the electric motor gives assistance:	25 km/h N.A.	3.2.15.2	THC+NOx: N.A. PM: N.A. Type II test: tailpipe emissions at (increased) idle and free acceleration:	N.A.
Drive-train and control			3.2.15.3.	Smoke corrected absorption coefficient:	N.A.
3.5.3.9. Transmission 3.5.4. Gear ratios 3.5.4.1. Final drive	:	W N.A. N.A	Energy eff 4.0.2.	Fuel consumption:	N.A.
	ar ratio in highest gear:	N.A.	4.0.3. 4.0.4. 4.0.5.	CO <sub>2</sub> emissions: Energy consumption: Electric range:	N.A. 32 Wh/km 137 km
,					137 KIII
Rear: 90/90	0-12 44J, 54J, 59J 200kPa  2.50-12; 0-12 44J, 54J, 59J 220kPa  2.50-12;		8.1.	on of the performance of the vehicle:  Vehicle appropriate for converting its performance level between subcategories (L3e	/L4e)-A2 and
Sidecar wh	eel:	N.A.		(L3e/L4e)-A3 and vice versa:	N.A.
Bodywork			Additional	information:	
6.20.2.1. Door config 6.16.1. Number of	guration and number of doors: seating positions: nd arrangement:	N.A. 1 N.A.	9.1. 9.2.	Remarks: Exemptions:	N.A. N.A.
Coupling devices					
7.2.8. Type-appro	oval number of coupling-device:	N.A.			

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

0.1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's logo	o*1, Smartway, IVA, Senzo, Monasso, Generic, KSR MOTO	Gen
	AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, L/ logo*1, bensom		1.3. 1.3. 1.3.2
0.2.	Type: LX05		6.2.4
0.2.1.	Variant: E4		Mair
0.2.2.	Version: 01		2.2.1 2.2.2
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05,	Elex, BuzzE, Alegra	2.2.3 2.2.4
0.3.	Category, subcategory and sub-subcategory of vehicle: L1e	-B	2.2.4 2.2.5
0.4.	Company name and address of manufacturer: Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town	, Wujin district, Changzhou, P.R. China	2.2.5 2.2.5 2.2.5 2.2.5 2.2.5
0.4.2.	Name and address of manufacturer's authorized representa	tive (if any):	2.2.1 2.2.1
0.5.1.	Sportlaan 391, 3364DK Sliedrecht, The Netherlands Location of the manufacturer's statutory plate(s): R, x830, y:110, z:230		Mas
0.5.2.	Method of attachment of the manufacturer's statutory plate(street on the chassis	s):	2.1.1 2.1.2 2.1.3 2.1.3
0.6.	Location of the vehicle identification number: R, x:400, y:5, z:460(r/o)		2.1.3 2.1.3 2.1.3
1.	lem:lem:lem:lem:lem:lem:lem:lem:lem:lem:		2
extensio	s in all respects to the type described in EU type-approval (e13* n number) issued on (DD, MM, YYYY date of issue) and can be		2.1.7 2.1.7
	fic and using metric/imperial units for the speedometer.		Pow
Chang	zhou, P.R.China 	DD, MM, YYYY 	3.1.1
(p	lace)		3.1.1 3.2.1
	E-130	(date)	3.2.1
(sig	nature)		3.2.1 3.2.1 1.9.
			1 10

1.3. 1.3.1. 1.3.2. 6.2.4.	Number of axles: 2 and wheels: 2 Axles with twinned wheels: Powered axles: Advanced braking system:	N.A. R N.A.
Main dimen	sions	
2.2.1. 2.2.2. 2.2.3. 2.2.4. 2.2.4.1. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.17	Length: Width: Height: Wheelbase: Wheelbase sidecar: Track width Track width front: Track width rear: Track width sidecar: Ground clearance between the axles: Wheelbase to ground clearance ratio: Seat height:	1890mm 720mm 1110mm 1365mm N.A. N.A. N.A. N.A. N.A. N.A. N.A.
Masses		
2.1.1. 2.1.2. 2.1.3. 2.1.3.1. 2.1.3.2. 2.1.3.3. 2.1.7.	Mass in running order: Actual mass: Technically permissible maximum laden mass: Technically permissible maximum mass on front axle: Technically permissible maximum mass on rear axle: Technically permissible maximum mass on sidecar axle: Technically permissible maximum towable mass: Braked: Unbraked: Technically permissible maximum laden mass of the combination: Technically permissible maximum mass at the coupling point:	72 kg 168 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A. N.A.
Powertrain		
	Manufacturer: Engine code (as marked on the engine or other means of identification): Working principle of the combustion engine: internal combustion engine (ICE)/positive compression ignition/external combustion engine (ECE)/turbine/compressed air- Number of cylinders: Arrangement of cylinders: Engine capacity: Maximum net power: Ratio maximum net power/mass of the vehicle in running order:	N.A. N.A. e ignition/ N.A. N.A. N.A. N.A. N.A.

3.2.3.1. Fuel type: 3.2.3.2. Vehicle fuel combination:mono-fuel/bi fuel/flex fuel 3.2.3.2.1. Maximum amount of bio-fuel acceptable in fuel:	N.A. N.A. N.A.		nental performance	
3.1.2.1. Manufacturer: BOSCH (Ningbo) light electric veh 3.1.2.2. Electric motor code (as marked on the engine or other means of identification): EJ60 45/30 minutes power: 3.1.3.1. Manufacturer: 3.1.3.2. Application code (as marked on the engine or other means of identification): 3.3.1. Electric vehicle configuration: pure electric/hybrid electric/manpower electric 3.3.5.2. Category of hybrid electric vehicle: off vehicle charging/not off vehicle charging	00r120° eM *???????????????* 2.02 kW at 390 min-1 N.A. N.A. Pure electric N.A.	4.0.1. 4.0.6. 4.0.6.1. 4.0.6.2. 4.0.6.3. 3.2.15. 3.2.15.1.	Environmental step: Sound level measured according to: Stationary: Drive-by: Limit value for L <sub>urban</sub> : Exhaust emissions measured according to Type I test: tailpipe emissions after cold start, including the deterioration factor, if app	Euro 5 N.A. N.A. N.A. N.A. N.A. Olicable:
3.9.2. Maximum assistance factor:  Maximum speed	N.A.		CO: N.A. THC: N.A. NMHC: N.A. NOX: N.A.	
<ul><li>1.8. Maximum speed of vehicle:</li><li>3.9.3. Maximum vehicle speed for which the electric motor gives assistance:</li></ul>	45 km/h N.A.	3.2.15.2	THC+NOx: N.A. PM: N.A. Type II test: tailpipe emissions at (increased) idle and free acceleration:	N.A.
Drive-train and control		3.2.15.3.	Smoke corrected absorption coefficient:	N.A.
3.5.3.9. Transmission (type): 3.5.4.1. Gear ratios: 3.5.4.1. Final drive ratio:	W N.A. N.A	Energy ef	Fuel consumption:	N.A.
3.5.4.2. Overall gear ratio in highest gear: Installation of tyres	N.A.	4.0.3. 4.0.4. 4.0.5.	CO <sub>2</sub> emissions: Energy consumption: Electric range:	N.A. 38 Wh/km 113 km
6.18.1.1. Tyre size designation: Front: 90/90-12 44J, 54J, 59J 200kPa 2.50-12; Rear: 90/90-12 44J, 54J, 59J 220kPa 2.50-12;		Conversion 8.1.	on of the performance of the vehicle:  Vehicle appropriate for converting its performance level between subcategories (L3c)	
Sidecar wheel:	N.A.		(L3e/L4e)-A3 and vice versa:	N.A.
Bodywork		Additiona	l information:	
6.20.2.1. Door configuration and number of doors: 6.16.1. Number of seating positions: 6.16.1.1. Location and arrangement:	N.A. 2 N.A.	9.1. 9.2.	Remarks: Exemptions:	N.A. N.A.
Coupling devices				
7.2.8. Type-approval number of coupling-device:	N.A.			

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

).1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's log AUSTRIA, EXPLORER MOTOR COMPANY, Doc Green, L logo*1, bensom	
0.2.	Type: LX05	
0.2.1.	Variant: E4	
0.2.2.	Version: 02	
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05	, Elex, BuzzE, Alegra
0.3.	Category, subcategory and sub-subcategory of vehicle: L1	е-В
0.4.	Company name and address of manufacturer: Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao tow	n, Wujin district, Changzhou, P.R. China
).4.2. ).5.1.	Name and address of manufacturer's authorized represent IVA Mobility B.V. Sportlaan 391, 3364DK Sliedrecht, The Netherlands Location of the manufacturer's statutory plate(s): R, x830, y:110, z:230	ative (if any):
0.5.2.	Method of attachment of the manufacturer's statutory plate Riveted on the chassis	(s):
0.6.	Location of the vehicle identification number: R, x:400, y:5, z:460(r/o)	
1.	Vehicle identification number: ☆LV2NYJ31???????? ☆	
extension r	n all respects to the type described in EU type-approval (e13 number) issued on (DD, MM, YYYY date of issue) and can be and using metric/imperial units for the speedometer.	
Changzh	ou, P.R.China	DD, MM, YYYY
(plac	ce)	
	F-130	(date)
(signa		

1.3. 1.3.1. 1.3.2. 6.2.4.	Number of axles: 2 and wheels: 2 Axles with twinned wheels: Powered axles: Advanced braking system:	N.A. R N.A.
Main dime	ensions	
2.2.1. 2.2.2. 2.2.3. 2.2.4. 2.2.4.1. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.17	Length: Width: Height: Wheelbase: Wheelbase sidecar: Track width Track width front: Track width rear: Track width sidecar: Ground clearance between the axles: Wheelbase to ground clearance ratio: Seat height:	1940mm 720mm 1110mm 1365mm N.A. N.A. N.A. N.A. N.A. N.A. N.A.
Masses		
2.1.1. 2.1.2. 2.1.3. 2.1.3.1. 2.1.3.2. 2.1.3.3. 2.1.7.	Mass in running order: Actual mass: Technically permissible maximum laden mass: Technically permissible maximum mass on front axle: Technically permissible maximum mass on rear axle: Technically permissible maximum mass on sidecar axle: Technically permissible maximum towable mass: Braked: Unbraked: Technically permissible maximum laden mass of the combination: Technically permissible maximum mass at the coupling point:	72 kg 168 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A.
Powertrain	1	
3.1.1.1. 3.1.1.2. 3.2.1.2.	Manufacturer: Engine code (as marked on the engine or other means of identification): Working principle of the combustion engine: internal combustion engine (ICE)/g	N.A. N.A.
3.2.1.4.1. 3.2.1.4.2. 3.2.1.5. 1.9. 1.10.	compression ignition/external combustion engine (ECE)/turbine/compressed air	

3.2.3.1. Fuel type: 3.2.3.2. Vehicle fuel combination:mono-fuel/bi-fuel/flex-fuel 3.2.3.2.1. Manufacturer amount of bio-fuel acceptable in fuel:	N.A. N.A. N.A.		ental performance	F.1700 F
<ul> <li>3.1.2.1. Manufacturer: BOSCH (Ningbo) light electric v</li> <li>3.1.2.2. Electric motor code (as marked on the engine or other means of identification): E.</li> <li>3.3.3.4. 45/30 minutes power:</li> <li>3.1.3.1. Manufacturer:</li> <li>3.1.3.2. Application code (as marked on the engine or other means of identification):</li> <li>3.3.1. Electric vehicle configuration: pure electric/hybrid electric/manpower electric</li> <li>3.3.5.2. Category of hybrid electric vehicle: off vehicle charging/not off vehicle charging</li> </ul>		4.0.1. 4.0.6. 4.0.6.1. 4.0.6.2. 4.0.6.3. 3.2.15. 3.2.15.1.	Environmental step: Sound level measured according to: Stationary: Drive-by: Limit value for Lurban: Exhaust emissions measured according to Type I test: tailpipe emissions after cold start, including the deterioration factor, if ap	Euro 5 N.A. N.A. N.A. N.A. N.A. plicable:
3.9.2. Maximum assistance factor:  Maximum speed	N.A.		CO: N.A. THC: N.A. NMHC: N.A. NOX: N.A.	
<ul><li>1.8. Maximum speed of vehicle:</li><li>3.9.3. Maximum vehicle speed for which the electric motor gives assistance:</li></ul>	45 km/h N.A.	3.2.15.2	THC+NOx: N.A. PM: N.A. Type II test: tailpipe emissions at (increased) idle and free acceleration:	N.A.
Drive-train and control		3.2.15.3.	Smoke corrected absorption coefficient:	N.A.
3.5.3.9. Transmission (type): 3.5.4. Gear ratios: 3.5.4.1. Final drive ratio: 3.5.4.2. Overall gear ratio in highest gear:	W N.A. N.A N.A.	Energy eff 4.0.2. 4.0.3.	ficiency $ Fuel \ consumption: \\ CO_2 \ emissions: $	N.A. N.A.
Installation of tyres		4.0.4. 4.0.5.	Energy consumption: Electric range:	38 Wh/km 113 km
6.18.1.1. Tyre size designation: Front: 90/90-12 44J, 54J, 59J 200kPa 2.50-12; Rear: 90/90-12 44J, 54J, 59J 220kPa 2.50-12; Sidecar wheel:	N.A.	Conversion 8.1.	on of the performance of the vehicle:  Vehicle appropriate for converting its performance level between subcategories (L3e/L4e)-A3 and vice versa:	e/L4e)-A2 and N.A.
Bodywork		Additional	Information:	
6.20.2.1. Door configuration and number of doors: 6.16.1. Number of seating positions: 6.16.1.1. Location and arrangement:	N.A. 1 N.A.	9.1. 9.2.	Remarks: Exemptions:	N.A. N.A.
Coupling devices				
7.2.8. Type-approval number of coupling-device:	N.A.			

# COMPLETE VEHICLE EU CERTIFICATE OF CONFORMITY

The undersigned, Lu Wei / Manager Hereby certifies that the following complete vehicle:

0.1.	Make (trade name of the manufacturer): LVNENG, LVNENG's logo*2, genergia's logo*1, ufban's logo*1, Smartway, IVA, Senzo, Maustria, Explorer Motor Company, Doc Green, LA Souris, Wayel, Lexmoto, logo*1, bensom	
0.2.	Type: LX05	
0.2.1.	Variant: E4	
0.2.2.	Version: 03	
0.2.3.	Commercial name (if available): S5-W, S5, E-go S5, LX05, Elex, BuzzE, Alegra	
0.3.	Category, subcategory and sub-subcategory of vehicle: L1e-B	
0.4.	Company name and address of manufacturer: Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.	R. China
0.4.2.	Name and address of manufacturer's authorized representative (if any): IVA Mobility B.V.	
0.5.1.	Sportlaan 391, 3364DK Sliedrecht, The Netherlands Location of the manufacturer's statutory plate(s): R, x830, y:110, z:230	
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: R, x:400, y:5, z:460(r/o)	
1.	Vehicle identification number: ☆LV2NYJ32??1?????? ☆	
extension r	s in all respects to the type described in EU type-approval (e13*168/2013*00874*01 type-approval (number) issued on (DD, MM, YYYY date of issue) and can be permanently registered in Medific and using metric/imperial units for the speedometer.	
Changzh	gzhou, P.R.China DD, MM, YYYY	
(plac	olace)	
	(date)	
(signa	gnature)	

1.3. 1.3.1. 1.3.2. 6.2.4.	Number of axles: 2 and wheels: 2 Axles with twinned wheels: Powered axles: Advanced braking system:	N.A. R N.A.
Main dimen	sions	
2.2.1. 2.2.2. 2.2.3. 2.2.4. 2.2.4.1. 2.2.5. 2.2.5.1. 2.2.5.2. 2.2.5.3. 2.2.10.6 2.2.15. 2.2.17	Length: Width: Height: Wheelbase: Wheelbase sidecar: Track width Track width front: Track width rear: Track width sidecar: Ground clearance between the axles: Wheelbase to ground clearance ratio: Seat height:	1940mm 720mm 1330mm 1365mm N.A. N.A. N.A. N.A. N.A. N.A. N.A.
Masses		
2.1.1. 2.1.2. 2.1.3. 2.1.3.1. 2.1.3.2. 2.1.3.3. 2.1.7.	Mass in running order: Actual mass: Technically permissible maximum laden mass: Technically permissible maximum mass on front axle: Technically permissible maximum mass on rear axle: Technically permissible maximum mass on sidecar axle: Technically permissible maximum towable mass: Braked: Unbraked: Technically permissible maximum laden mass of the combination: Technically permissible maximum mass at the coupling point:	83 kg 179 kg 240 kg 80 kg 160 kg N.A. N.A. N.A. N.A.
Powertrain		
3.1.1.1. 3.1.1.2. 3.2.1.2. 3.2.1.4.1. 3.2.1.4.2. 3.2.1.5. 1.9. 1.10.	Manufacturer: Engine code (as marked on the engine or other means of identification): Working principle of the combustion engine: internal combustion engine (ICE)/positive compression ignition/external combustion engine (ECE)/turbine/compressed air Number of cylinders: Arrangement of cylinders: Engine capacity: Maximum net power: Ratio maximum net power/mass of the vehicle in running order:	N.A. N.A. • ignition/ N.A. N.A. N.A. N.A. N.A.

3.2.3.1. 3.2.3.2.1. 3.1.2.1. 3.1.2.2. 3.3.3.4. 3.1.3.1. 3.1.3.2. 3.3.1. 3.3.5.2. 3.9.2.	Fuel type:  Vehicle fuel combination:mono-fuel/bi fuel/flex fuel  Maximum amount of bio-fuel acceptable in fuel:  Manufacturer:  BOSCH (Ningbo) light electric vehic  Electric motor code (as marked on the engine or other means of identification): EJ600  15/30 minutes power:  Manufacturer:  Application code (as marked on the engine or other means of identification):  Electric vehicle configuration: pure electric/hybrid electric/manpower  Category of hybrid electric vehicle:  off vehicle charging/not off vehicle charging  Maximum assistance factor:		4.0.1. 4.0.6. 4.0.6.1. 4.0.6.2. 4.0.6.3. 3.2.15. 3.2.15.1.	Environmental step: Sound level measured according to: Stationary: Drive-by: Limit value for Lurban: Exhaust emissions measured according to Type I test: tailpipe emissions after cold start, including the deterioration factor, if appl CO: N.A. THC: N.A.	Euro 5 N.A. N.A. N.A. N.A. N.A. icable:
Maximum	speed			NMHC: N.A. NOx: N.A.	
1.8. 3.9.3.	Maximum speed of vehicle: Maximum vehicle speed for which the electric motor gives assistance:	45 km/h N.A.	3.2.15.2	THC+NOx: N.A. PM: N.A. Type II test: tailpipe emissions at (increased) idle and free acceleration:	N.A.
Drive-train	and control		3.2.15.3.	Smoke corrected absorption coefficient:	N.A.
3.5.3.9. 3.5.4. 3.5.4.1. 3.5.4.2.	Transmission (type): Gear ratios: Final drive ratio: Overall gear ratio in highest gear: of tyres	W N.A. N.A N.A.	Energy eff 4.0.2. 4.0.3. 4.0.4. 4.0.5.	Fuel consumption:  CO <sub>2</sub> emissions: Energy consumption: Electric range:	N.A. N.A. 38 Wh/km 113 km
6.18.1.1.	Tyre size designation: Front: 90/90-12 44J, 54J, 59J 200kPa 2.50-12; Rear: 90/90-12 44J, 54J, 59J 220kPa 2.50-12; Sidecar wheel:	N.A.	8.1.	n of the performance of the vehicle:  Vehicle appropriate for converting its performance level between subcategories (L3e/L4e)-A3 and vice versa:  information:	(L4e)-A2 and N.A.
Bodywork			9.1.	Remarks:	N.A.
6.20.2.1. 6.16.1. 6.16.1.1.	Door configuration and number of doors:  Number of seating positions:  Location and arrangement:	N.A. 1 N.A.	9.1. 9.2.	Exemptions:	N.A. N.A.
Coupling of	levices				
7.2.8.	Type-approval number of coupling-device:	N.A.			

### Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. No 158 shengjia village, Wuyi village, Heng shan qiao town, Wujin district, Changzhou, P.R. China

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

We, Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd. declare that the undersigned, Lu Wei the manager of our company, will be the authorized person to sign the COC paper of the motorcycle.

Type: LX05

Specification of signature of COC:

Mr. Lu Wei / Manager

Jiangsu LVNENG Electrical Bicycle Technology Co., Ltd.

Date: November 20, 2020

## **Common Information**

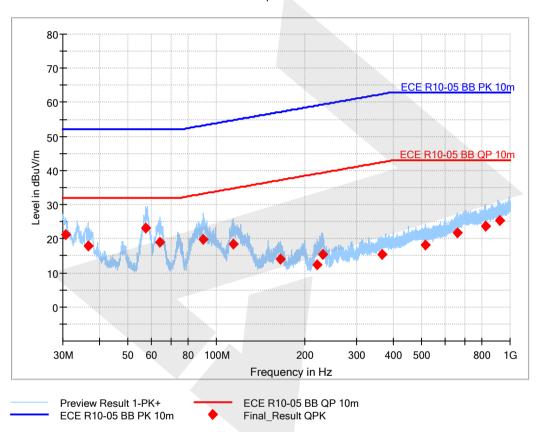
Test Description: Emission
Test Site: SMVIC
Test Standard: ECE R10-05

Test Distance: 10m

Polarity: Vertical and Horizontal
Comment: Antenna:HL562
Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

Full Spectrum



Frequency (MHz)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)
30.650000	21.28	32.00	10.72
36.500000	17.80	32.00	14.20
57.600000	23.01	32.00	8.99
64.400000	18.92	32.00	13.08
90.450000	19.70	33.23	13.53
113.900000	18.52	34.75	16.23
164.600000	14.11	37.17	23.06
220.250000	12.46	39.08	26.62
229.700000	15.46	39.36	23.90
366.650000	15.50	42.43	26.93
514.600000	18.24	43.00	24.76
662.450000	21.76	43.00	21.24
824.250000	23.73	43.00	19.27
923.800000	25.31	43.00	17.69

## **Common Information**

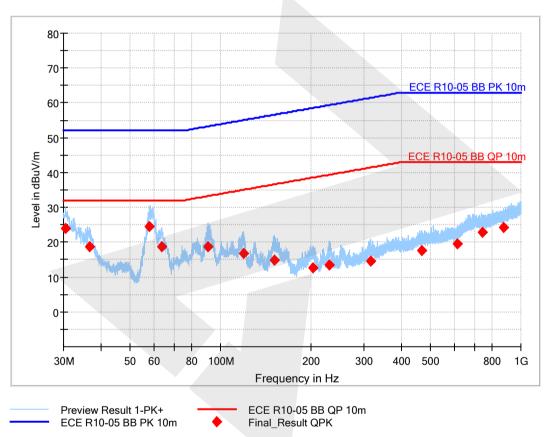
Test Description: Emission
Test Site: SMVIC
Test Standard: ECE R10-05

Test Distance: 10m

Polarity: Vertical and Horizontal
Comment: Antenna:HL562
Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

### Full Spectrum



Frequency	QuasiPeak	Limit	Margin
(MHz)	(dBuV/m)	(dBuV/m)	(dB)
` '	, ,	,	` '
30.500000	24.06	32.00	7.94
36.700000	18.77	32.00	13.23
58.050000	24.48	32.00	7.52
63.550000	18.69	32.00	13.31
91.000000	18.61	33.27	14.66
118.900000	16.86	35.03	18.17
151.350000	14.73	36.61	21.88
202.300000	12.61	38.52	25.91
230.850000	13.54	39.39	25.85
316.800000	14.65	41.47	26.82
466.950000	17.70	43.00	25.30
616.050000	19.54	43.00	23.46
745.650000	22.72	43.00	20.28
874.550000	24.36	43.00	18.64

## **Common Information**

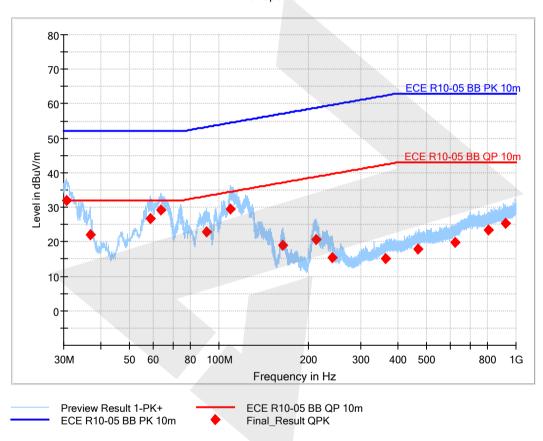
Test Description: Emission
Test Site: SMVIC
Test Standard: ECE R10-05

Test Distance: 10m

Polarity: Vertical and Horizontal
Comment: Antenna:HL562
Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

### Full Spectrum



Frequency	QuasiPeak	Limit	Margin
(MHz)	(dBuV/m)	(dBuV/m)	(dB)
30.700000	31.87	32.00	0.13
36.800000	22.16	32.00	9.84
58.700000	26.83	32.00	5.17
63.700000	29.14	32.00	2.86
90.800000	22.75	33.26	10.51
109.500000	29.47	34.49	5.02
163.800000	19.05	37.13	18.08
211.650000	20.78	38.82	18.04
240.000000	15.40	39.64	24.24
362.700000	15.13	42.36	27.23
468.400000	17.75	43.00	25.25
623.500000	19.82	43.00	23.18
804.550000	23.43	43.00	19.57
919.850000	25.33	43.00	17.67

## **Common Information**

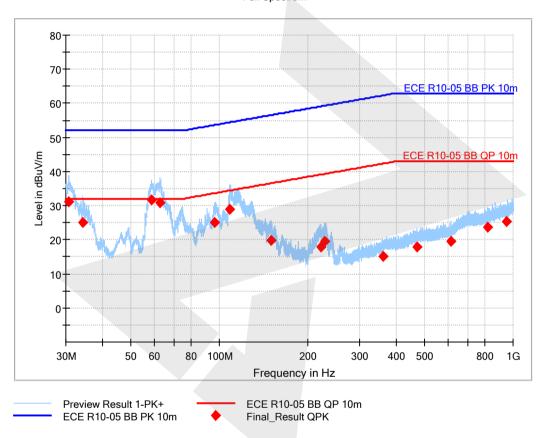
Test Description: Emission
Test Site: SMVIC
Test Standard: ECE R10-05

Test Distance: 10m

Polarity: Vertical and Horizontal
Comment: Antenna:HL562
Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

### Full Spectrum



Frequency (MHz)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)
30.750000	31.21	32.00	0.79
34.350000	25.05	32.00	6.95
58.750000	31.66	32.00	0.34
62.900000	30.95	32.00	1.05
96.450000	25.10	33.65	8.55
108.700000	28.89	34.44	5.55
149.950000	19.91	36.55	16.64
221.550000	17.90	39.12	21.22
228.550000	19.44	39.32	19.88
360.950000	15.02	42.32	27.30
472.600000	17.76	43.00	25.24
616.550000	19.54	43.00	23.46
817.700000	23.60	43.00	19.40
946.300000	25.30	43.00	17.70

NB HL

# **Test Report**

## **Common Information**

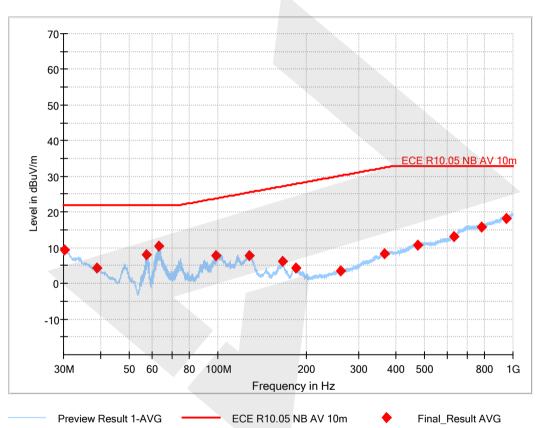
Test Description: Emission
Test Site: SMVIC
Test Standard: ECE R10-05

Test Distance: 10m

Polarity: Vertical and Horizontal
Comment: Antenna:HL562
Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

### Full Spectrum



Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)
30.250000	9.43	22.00	12.57
38.850000	4.37	22.00	17.63
57.400000	8.03	22.00	13.97
63.050000	10.56	22.00	11.44
98.400000	7.70	23.78	16.08
128.000000	7.83	25.51	17.68
166.000000	6.24	27.22	20.98
183.950000	4.41	27.90	23.49
261.350000	3.37	30.20	26.83
367.000000	8.40	32.43	24.03
475.150000	10.84	33.00	22.16
629.200000	13.00	33.00	20.00
784.700000	15.82	33.00	17.18
946.050000	18.29	33.00	14.71

### **Common Information**

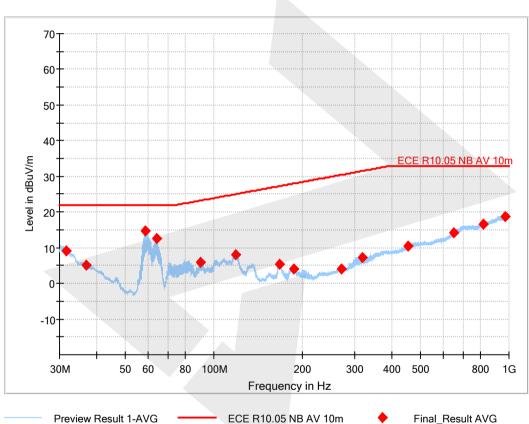
Test Description: Test Site: Emission **SMVIC** ECE R10-05 Test Standard:

Test Distance: 10m

Polarity: Vertical and Horizontal Comment: Antenna:HL562 Chen Yi, Wang Tao Operator Name:

Test Date: 2019/1/31

### Full Spectrum



Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)
31.700000	9.21	22.00	12.79
36.900000	5.07	22.00	16.93
58.450000	14.78	22.00	7.22
63.950000	12.57	22.00	9.43
90.200000	6.01	23.21	17.20
118.700000	7.92	25.02	17.10
166.600000	5.46	27.24	21.78
186.900000	3.95	28.00	24.05
269.550000	4.04	30.41	26.37
318.450000	7.15	31.50	24.35
455.800000	10.37	33.00	22.63
649.150000	14.07	33.00	18.93
819.150000	16.64	33.00	16.36
970.750000	18.71	33.00	14.29

### **Common Information**

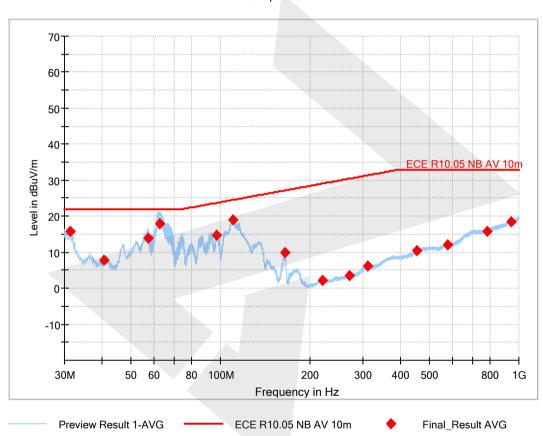
Test Description: Test Site: Emission **SMVIC** ECE R10-05 Test Standard:

Test Distance: 10m

Vertical and Horizontal Polarity: Comment: Antenna:HL562 Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

#### Full Spectrum



Frequency	Average	Limit	Margin
(MHz)	(dBuV/m)	(dBuV/m)	(dB)
` '	,	,	
31.450000	15.89	22.00	6.11
40.750000	7.73	22.00	14.27
57.150000	13.94	22.00	8.06
62.700000	17.88	22.00	4.12
97.300000	14.62	23.71	9.09
109.800000	18.95	24.50	5.55
164.550000	10.03	27.16	17.13
220.300000	2.20	29.08	26.88
270.150000	3.49	30.42	26.93
310.550000	6.18	31.34	25.16
455.300000	10.35	33.00	22.65
578.750000	12.06	33.00	20.94
781.650000	15.76	33.00	17.24
945.200000	18.33	33.00	14.67

### **Common Information**

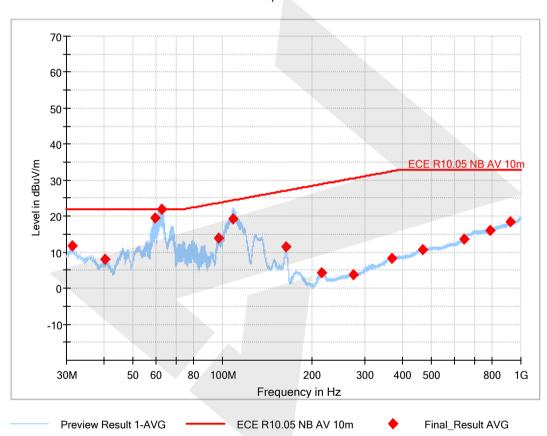
Test Description: Emission
Test Site: SMVIC
Test Standard: ECE R10-05

Test Distance: 10m

Polarity: Vertical and Horizontal
Comment: Antenna:HL562
Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

#### Full Spectrum



Frequency	Average	Limit	Margin
(MHz)	(dBuV/m)	(dBuV/m)	(dB)
, ,	,	,	` '
31.300000	11.70	22.00	10.30
40.450000	7.99	22.00	14.01
59.400000	19.62	22.00	2.38
62.450000	21.94	22.00	0.06
96.800000	13.93	23.68	9.75
108.600000	19.30	24.43	5.13
163.550000	11.49	27.12	15.63
215.100000	4.28	28.92	24.64
274.100000	3.68	30.52	26.84
368.350000	8.24	32.46	24.22
467.000000	10.69	33.00	22.31
643.750000	13.70	33.00	19.30
789.250000	15.98	33.00	17.02
920.600000	18.36	33.00	14.64

### **Common Information**

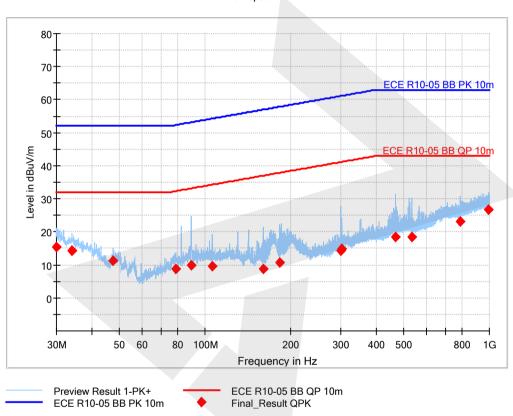
Test Description: Emission
Test Site: SMVIC
Test Standard: ECE R10-05

Test Distance: 10m

Polarity: Vertical and Horizontal
Comment: Antenna:HL562
Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

#### Full Spectrum



Frequency (MHz)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)
30.100000	15.30	32.00	16.70
34.050000	14.23	32.00	17.77
34.050000	14.39	32.00	17.61
47.400000	11.12	32.00	20.88
78.950000	8.69	32.34	23.65
89.400000	9.87	33.15	23.28
106.050000	9.60	34.28	24.68
159.850000	8.67	36.97	28.30
182.850000	10.83	37.86	27.03
299.700000	14.38	41.10	26.72
302.150000	14.72	41.16	26.44
466.650000	18.46	43.00	24.54
532.700000	18.41	43.00	24.59
789.750000	23.24	43.00	19.76
995.500000	26.60	43.00	16.40

### **Common Information**

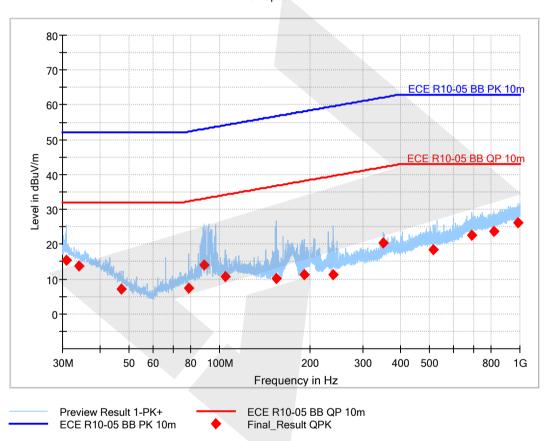
Test Description: Emission
Test Site: SMVIC
Test Standard: ECE R10-05

Test Distance: 10m

Polarity: Vertical and Horizontal
Comment: Antenna:HL562
Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

#### Full Spectrum



Frequency	QuasiPeak	Limit	Margin
(MHz)	(dBuV/m)	(dBuV/m)	(dB)
` '	,	,	` '
30.950000	15.34	32.00	16.66
34.100000	13.65	32.00	18.35
46.900000	7.12	32.00	24.88
78.700000	7.40	32.32	24.92
88.900000	14.03	33.12	19.09
104.300000	10.58	34.17	23.59
154.250000	10.02	36.74	26.72
191.550000	11.30	38.16	26.86
239.050000	11.25	39.62	28.37
351.650000	20.45	42.15	21.70
516.050000	18.46	43.00	24.54
692.900000	22.62	43.00	20.38
816.700000	23.73	43.00	19.27
986.750000	26.29	43.00	16.71

### **Common Information**

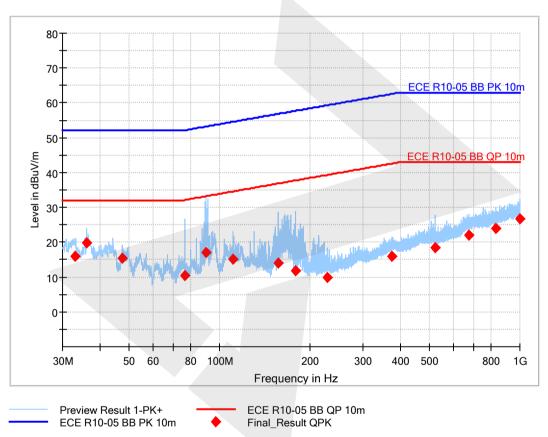
Test Description: Test Site: Emission **SMVIC** ECE R10-05 Test Standard:

Test Distance: 10m

Polarity: Vertical and Horizontal Comment: Antenna:HL562 Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

#### Full Spectrum



Frequency (MHz)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)
33.050000	15.99	32.00	16.01
36.050000	19.84	32.00	12.16
47.550000	15.41	32.00	16.59
76.650000	10.39	32.14	21.75
90.400000	17.18	33.23	16.05
110.950000	15.07	34.57	19.50
156.700000	14.07	36.84	22.77
179.350000	11.77	37.73	25.96
228.000000	9.84	39.31	29.47
373.750000	15.95	42.55	26.60
521.250000	18.50	43.00	24.50
678.450000	21.99	43.00	21.01
834.150000	24.07	43.00	18.93
998.000000	26.70	43.00	16.30

### **Common Information**

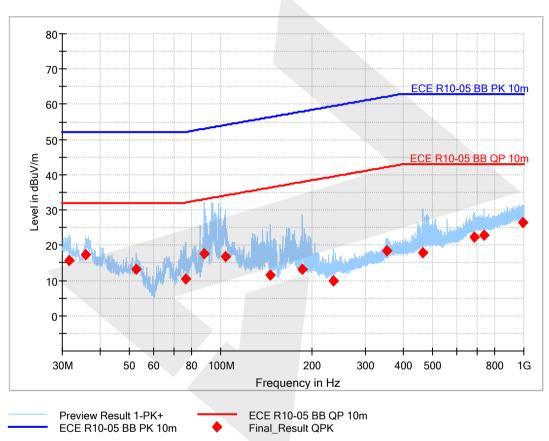
Test Description: Test Site: Emission **SMVIC** ECE R10-05 Test Standard:

Test Distance: 10m

Polarity: Vertical and Horizontal Comment: Antenna:HL562 Chen Yi, Wang Tao Operator Name:

Test Date: 2019/1/31

#### Full Spectrum



Frequency (MHz)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)
31.550000	15.70	32.00	16.30
35.900000	17.26	32.00	14.74
52.550000	13.13	32.00	18.87
76.350000	10.50	32.12	21.62
88.400000	17.51	33.08	15.57
103.600000	16.67	34.12	17.45
145.550000	11.54	36.36	24.82
185.250000	13.22	37.94	24.72
235.450000	9.87	39.52	29.65
351.850000	18.52	42.16	23.64
464.350000	18.01	43.00	24.99
686.600000	22.35	43.00	20.65
737.150000	22.82	43.00	20.18
991.050000	26.47	43.00	16.53

### **Common Information**

Test Description: CE
Test Site: SMVIC

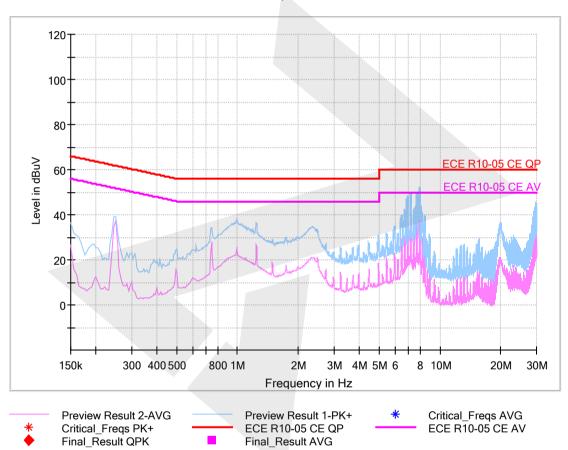
Test Standard: GB 9254/CISPR 22

Test Distance: 0.8M
Polarity: Power+/Comment: AN

Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

#### Full Spectrum



Frequency	QuasiPeak	Limit	Margin
(MHz)	(dBuV)	(dBuV)	(dB)

### **Common Information**

Test Description: CE
Test Site: SMVIC

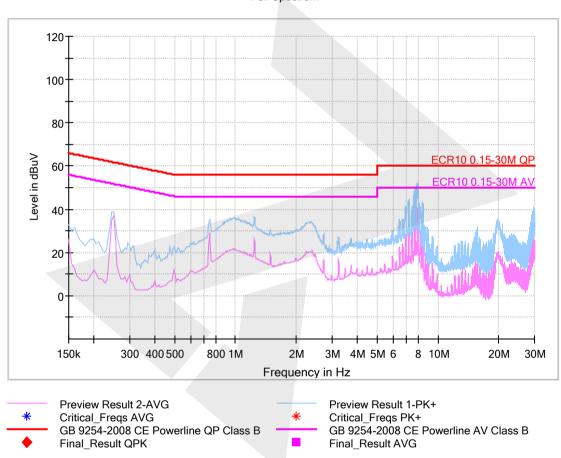
Test Standard: GB 9254/CISPR 22

Test Distance: 0.8M
Polarity: Power+/Comment: AN

Operator Name: Chen Yi, Wang Tao

Test Date: 2019/1/31

#### Full Spectrum



Frequency	QuasiPeak	Limit	Margin
(MHz)	(dBuV)	(dBuV)	(dB)
	-	-	-

### Flicker Test Summary per EN/IEC61000-3-3 (Run time)

EUT: Equipment under test Tested by: Tested by
Test category: All parameters (European limits) Test Margin: 100

Test duration (min): 120 Data file name: F-000077.cts\_data

**Comment: Comment** 

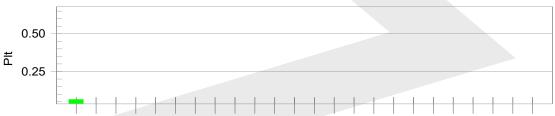
**Customer: Customer information** 

Test Result: Pass Status: Test Completed

# Pst<sub>i</sub> and limit line European Limits



#### Plt and limit line



Parameter values recorded during the test: Vrms at the end of test (Volt): 230.14

Highest dt (%): 0.00
Time(mS) > dt: 0.0
Highest dc (%): 0.00
Highest dmax (%): 0.00
Highest Pst (10 min. period): 0.064
Highest Plt (2 hr. period): 0.028

Test limit (%): Test limit (mS): 3.30 **Pass** 500.0 **Pass** Test limit (%): 3.30 **Pass** Test limit (%): 4.00 **Pass** Test limit: 1.000 **Pass Test limit:** 0.650 **Pass** 

### Harmonics - Class-A per Ed. 3.2 (2009)(Run time) incl. inter-harmonics

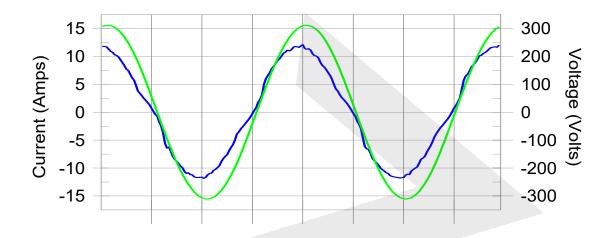
EUT: Equipment under test Tested by: Tested by Test category: Class-A per Ed. 3.2 (2009) (European limits) Test Margin: 100

Test duration (min): 2.5 Data file name: H-000210.cts\_data

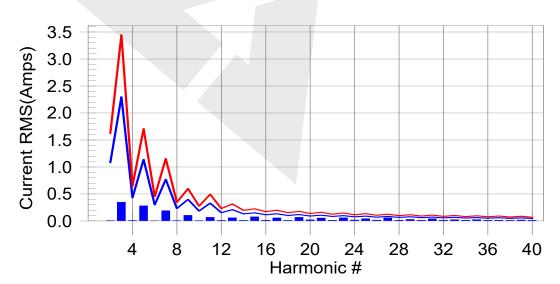
**Customer: Customer information** 

Test Result: Pass Source qualification: Normal

#### **Current & voltage waveforms**



### Harmonics and Class A limit line European Limits



Test result: Pass Worst harmonic was #27 with 65.95% of the limit.

### **Current Test Result Summary (Run time)**

**EUT: Equipment under test** Tested by: Tested by Test Margin: 100 Test category: Class-A per Ed. 3.2 (2009) (European limits)
Test duration (min): 2.5 Data file name: H-000210.cts

Data file name: H-000210.cts\_data

**Customer: Customer information** 

**Test Result: Pass** Source qualification: Normal

THC(A): 0.52 I-THD(%): 6.40 POHC(A): 0.095 POHC Limit(A): 0.251

Highest parameter values during test:

V\_RMS (Volts): 220.08

I\_Peak (Amps): 12.186

I\_Fund (Amps): 8.256

Power (Watts): 1784.1 Frequency(Hz): 50.00 I\_RMS (Amps): 8.278 **Crest Factor:** 1.479 **Power Factor:** 0.980

	·	•					
Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.006	1.080	0.6	0.009	1.620	0.54	Pass
3	0.344	2.300	15.0	0.350	3.450	10.14	Pass
4	0.008	0.430	1.8	0.010	0.645	1.49	Pass
5	0.280	1.140	24.5	0.281	1.710	16.42	Pass
6	0.005	0.300	1.8	0.006	0.450	1.36	Pass
7	0.190	0.770	24.7	0.192	1.155	16.62	Pass
8	0.007	0.230	3.0	0.008	0.345	2.42	Pass
9	0.103	0.400	25.7	0.105	0.600	17.54	Pass
10	0.007	0.184	3.5	0.008	0.276	2.74	Pass
11	0.065	0.330	19.8	0.067	0.495	13.47	Pass
12	0.009	0.153	5.8	0.011	0.230	4.69	Pass
13	0.059	0.210	28.0	0.061	0.315	19.24	Pass
14	0.009	0.131	7.0	0.011	0.197	5.46	Pass
15	0.077	0.150	51.1	0.078	0.225	34.71	Pass
16	0.012	0.115	10.8	0.015	0.173	8.68	Pass
17	0.012	0.113	40.3	0.056	0.179	28.25	Pass
18	0.010	0.102	9.5	0.012	0.153	7.60	Pass
19	0.010	0.102	54.4	0.067	0.178	37.58	Pass
20	0.016	0.092	17.6	0.021	0.178	15.48	Pass
21	0.052	0.032	48.4	0.055	0.161	34.29	Pass
22	0.032	0.107	14.2	0.014	0.101	11.39	Pass
23	0.012	0.004	59.2	0.061	0.123	41.16	Pass
23 24	0.016	0.038	21.2	0.019	0.147	16.73	Pass
2 <del>4</del> 25	0.010	0.077	45.9	0.045	0.115	32.96	Pass
26	0.041	0.090	21.1	0.045	0.135	16.54	Pass
26 27	0.055	0.071	65.9	0.018	0.106	45.79	Pass
28	0.035	0.066	21.1	0.037	0.125	16.63	Pass
20 29	0.014	0.066	35.0	0.018	0.099	25.41	
30	0.027	0.078	20.5	0.029	0.116	16.57	Pass Pass
30 31	0.039	0.073	53.3		0.092	38.12	Pass
32				0.042			
	0.012	0.058	21.0	0.015	0.086	17.46	Pass
33	0.024	0.068	34.9	0.026	0.102	25.82	Pass
34	0.011	0.054	21.3	0.015	0.081	18.68	Pass
35	0.024	0.064	37.5	0.026	0.096	27.19	Pass
36	0.011	0.051	20.9	0.014	0.077	18.07	Pass
37	0.013	0.061	21.3	0.015	0.091	16.41	Pass
38	0.010	0.048	20.7	0.013	0.073	17.59	Pass
39	0.017	0.058	29.9	0.019	0.087	22.20	Pass
40	0.011	0.046	22.9	0.013	0.069	18.57	Pass

### **Voltage Source Verification Data (Run time)**

EUT: Equipment under test
Test category: Class-A per Ed. 3.2 (2009) (European limits)
Test duration (min): 2.5 Data file name: H-000210.cts Tested by: Tested by Test Margin: 100

Data file name: H-000210.cts\_data

**Customer: Customer information** 

**Test Result: Pass Source qualification: Normal** 

Highest parameter values during test:
Voltage (Vrms): 220.08
I\_Peak (Amps): 12.186
I\_Fund (Amps): 8.256
Power (Watts): 1784.1 Frequency(Hz): 50.00 I\_RMS (Amps): 8.278 Crest Factor:
Power Factor: 1.479 0.980

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.049	0.440	11.05	ок
2 3	0.504	1.980	25.47	OK
4	0.040	0.440	9.20	OK
5	0.039	0.880	4.49	OK
5 6	0.042	0.440	9.63	OK
7	0.080	0.660	12.14	OK
8	0.027	0.440	6.08	OK
9	0.026	0.440	5.82	OK
10	0.026	0.440	6.00	OK
11	0.024	0.220	10.79	OK
12	0.028	0.220	12.91	OK
13	0.037	0.220	16.94	OK
14	0.011	0.220	4.96	OK
15	0.035	0.220	15.89	OK
16	0.016	0.220	7.40	OK
17	0.020	0.220	8.93	OK
18	0.009	0.220	4.23	OK
19	0.039	0.220	17.58	OK
20	0.025	0.220	11.23	OK
21	0.039	0.220	17.75	OK
22	0.010	0.220	4.47	OK
23	0.042	0.220	18.97	OK
24	0.013	0.220	5.90	OK
25	0.030	0.220	13.50	OK
26	0.013	0.220	6.11	OK
27	0.049	0.220	22.20	OK
28	0.010	0.220	4.51	OK
29	0.020	0.220	9.10	OK
30	0.008	0.220	3.49	OK
31	0.040	0.220	18.30	OK
32	0.008	0.220	3.45	OK
33	0.023	0.220	10.56	OK
34	0.007	0.220	3.18	OK
35 36	0.031	0.220	14.07	OK
36 37	0.006	0.220	2.86	OK
37	0.008 0.008	0.220	3.78	OK OK
38 30		0.220	3.69	
39 40	0.022 0.014	0.220 0.220	9.81 6.22	OK OK
40	0.014	0.220	0.22	UK