



Kraftfahrt-Bundesamt

DE-24932 Flensburg

Allgemeine Betriebserlaubnis (ABE) National Type Approval

ausgestellt von:

Kraftfahrt-Bundesamt (KBA)

nach § 20 der Straßenverkehrs-Zulassungsordnung (StVZO) in der Fassung vom 26.04.2012 (BGBl I S. 679) für einen Typ des folgenden Genehmigungsobjektes

Elektrokleinstfahrzeug

issued by:

Kraftfahrt-Bundesamt (KBA)

according to § 20 Straßenverkehrs-Zulassungs-Ordnung (StVZO) in the version of April 26, 2012 (BGBl I S. 679) for a type of the following approval object

Small electric vehicle

Genehmigungsnummer: **P390*00**

Approval number:

1. Genehmigungsinhaber:
Holder of the approval:
Axdia International GmbH
DE-47877 Willich
2. Name und Anschrift des Bevollmächtigten (gegebenenfalls):
Name and address of representative (if any):
Entfällt
Not applicable
3. Name und Anschrift des Herstellers:
Manufacturer's name and address:
Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.
CN-215000 Suzhou, Jiangsu
4. Typbezeichnung:
Type:
NKT2214-B20
5. Zuständiger Technischer Dienst:
Responsible Technical Service:
Technischer Dienst der TÜV Rheinland Kraftfahrt GmbH
DE-51105 Köln



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Genehmigungsnummer: **P390*00**

Approval number:

6. Datum des Gutachtens des Technischen Dienstes:
Date of test report issued by the Technical Service:
17.04.2023
7. Nummer des Gutachtens des Technischen Dienstes:
Number of test report issued by that Technical Service:
87-ekfv-0331/23-00
8. Ausnahmegenehmigungen nach §70 StVZO:
Exceptions according to §70 StVZO:
Entfällt
Not applicable
9. Auflagen:
Conditions:
Siehe Typbeschreibung zum Gutachten, Punkt 13.2.
See type description of the test report, point 13.2.

Für jedes Fahrzeug, das dem genehmigten Typ entspricht, ist eine Datenbestätigung gemäß Muster 2d der StVZO auszustellen und dem Fahrzeug mitzugeben.

A data confirmation in accordance with model 2d of the StVZO has to be issued for each vehicle that corresponds to the approved type and has to be given with the vehicle.

10. Die Genehmigung wird **erteilt**
Approval is **granted**
11. Grund (Gründe) für die Erweiterung der Genehmigung (gegebenenfalls):
Reason(s) for the extension (if any):
Entfällt
Not applicable
12. Bemerkungen:
Remarks:
Das Fahrzeug ist ein Elektrokleinstfahrzeug gemäß §1 der Elektrokleinstfahrzeuge-Verordnung (eKFV).
The vehicle is a small electric vehicle according to §1 of Elektrokleinstfahrzeuge-Verordnung (eKFV).



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Genehmigungsnummer: **P390*00**

Approval number:

13. Ort: **DE-24932 Flensburg**
Place:
14. Datum: **09.05.2023**
Date:
15. Unterschrift: **Im Auftrag**
Signature:

Kleist

Kleist



Anlagen:

Enclosures:

Gemäß Inhaltsverzeichnis

According to index



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Nummer der Genehmigung: **P390*00**
Approval No.

Ausgabedatum: **09.05.2023**
Date of issue:

letztes Änderungsdatum: --
last date of amendment:

Nebenbestimmungen und Rechtsbehelfsbelehrung
Collateral clauses and instruction on right to appeal

Prüfbericht(e) Nr.:
Test report(s) No.:
87-ekfv-0331/23-00

Datum:
Date
17.04.2023

Beschreibungsbogen Nr.:
Information document No.:
Entfällt
Not applicable

Datum:
Date

Liste der Änderungen:
List of modifications:
Entfällt
Not applicable

Datum:
Date



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Nummer der Genehmigung: **P390*00**

- Anlage -

Nebenbestimmungen und Rechtsbehelfsbelehrung

Nebenbestimmungen

Jede Einrichtung, die dem genehmigten Typ entspricht, ist gemäß der angewendeten Vorschrift zu kennzeichnen.

Die Einzelerzeugnisse der reihenweisen Fertigung müssen mit den Genehmigungsunterlagen genau übereinstimmen. Änderungen an den Einzelerzeugnissen sind nur mit ausdrücklicher Zustimmung des Kraftfahrt-Bundesamtes gestattet.

Änderungen der Firmenbezeichnung, der Anschrift und der Fertigungsstätten sowie eines bei der Erteilung der Genehmigung benannten Zustellungsbevollmächtigten oder bevollmächtigten Vertreters sind dem Kraftfahrt-Bundesamt unverzüglich mitzuteilen.

Verstöße gegen diese Bestimmungen können zum Widerruf der Genehmigung führen und können überdies strafrechtlich verfolgt werden.

Die Genehmigung erlischt, wenn sie zurückgegeben oder entzogen wird, oder der genehmigte Typ den Rechtsvorschriften nicht mehr entspricht. Der Widerruf kann ausgesprochen werden, wenn die für die Erteilung und den Bestand der Genehmigung geforderten Voraussetzungen nicht mehr bestehen, wenn der Genehmigungsinhaber gegen die mit der Genehmigung verbundenen Pflichten - auch soweit sie sich aus den zu dieser Genehmigung zugeordneten besonderen Auflagen ergeben - verstößt oder wenn sich herausstellt, dass der genehmigte Typ den Erfordernissen der Verkehrssicherheit oder des Umweltschutzes nicht entspricht.

Das Kraftfahrt-Bundesamt kann jederzeit die ordnungsgemäße Ausübung der durch diese Genehmigung verliehenen Befugnisse, insbesondere die genehmigungsgerechte Fertigung sowie die Maßnahmen zur Übereinstimmung der Produktion, nachprüfen. Es kann zu diesem Zweck Proben entnehmen oder entnehmen lassen. Dem Kraftfahrt-Bundesamt und/oder seinen Beauftragten ist ungehinderter Zutritt zu Produktions- und Lagerstätten zu gewähren.

Die mit der Erteilung der Genehmigung verliehenen Befugnisse sind nicht übertragbar. Schutzrechte Dritter werden durch diese Genehmigung nicht berührt.

Rechtsbehelfsbelehrung

Gegen diese Genehmigung kann innerhalb eines Monats nach Bekanntgabe Widerspruch erhoben werden. Der Widerspruch ist beim **Kraftfahrt-Bundesamt, Fördestraße 16, DE-24944 Flensburg**, schriftlich oder zur Niederschrift einzulegen.



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Approval No.: **P390*00**

- Attachment -

Collateral clauses and instruction on right to appeal

Collateral clauses

All equipment which corresponds to the approved type is to be identified according to the applied regulation.

The individual production of serial fabrication must be in exact accordance with the approval documents. Changes in the individual production are only allowed with express consent of the Kraftfahrt-Bundesamt.

Changes in the name of the company, the address and the manufacturing plant as well as one of the parties given the authority to delivery or authorised representative named when the approval was granted is to be immediately disclosed to the Kraftfahrt-Bundesamt.

Breach of this regulation can lead to recall of the approval and moreover can be legally prosecuted.

The approval expires if it is returned or withdrawn or if the type approved no longer complies with the legal requirements. The revocation can be made if the demanded requirements for issuance and the continuance of the approval no longer exist, if the holder of the approval violates the duties involved in the approval, also to the extent that they result from the assigned conditions to this approval, or if it is determined that the approved type does not comply with the requirements of traffic safety or environmental protection.

The Kraftfahrt-Bundesamt may check the proper exercise of the conferred authority taken from this approval at any time. In particular this means the compliant production as well as the measures for conformity of production. For this purpose samples can be taken or have taken. The employees or the representatives of the Kraftfahrt-Bundesamt may get unhindered access to the production and storage facilities.

The conferred authority contained with issuance of this approval is not transferable. Trade mark rights of third parties are not affected with this approval.

Instruction on right to appeal

This approval can be appealed within one month after notification. The appeal is to be filed in writing or as a transcript at the **Kraftfahrt-Bundesamt, Fördestraße 16, DE-24944 Flensburg.**

zur Erteilung einer Allgemeinen Betriebserlaubnis (ABE)
 eines Nachtrags zur ABE Nr.
 nach § 20 Straßenverkehrs-Zulassungs-Ordnung (StVZO)

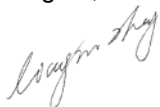
Fahrzeugart / category : **Elektrokleinstfahrzeug bis max. 500 Watt**
Typ / type : **NKT2214-B20**
Antragsteller / applicant : **AXDIA International GmbH**
Hanns-Martin-Schleyer-Str. 36-38 47877 Willich, Deutschland

1. Der genannte Fahrzeugtyp wird von der Fa. *Huzhou Luxshare Precision Industry Co., Ltd* mit Sitz in *No. 399, Shengxun Road, Zhili Town, Wuxing District, Huzhou City, Zhejiang Province, China* und *LUXSHARE ELECTRONIC TECHNOLOGY (KUNSHAN) LTD.* mit Sitz in *No.158, Jinchang Road, Jinxi Town Kunshan City, Jiangsu Province, China* gefertigt.
2. Der Antragsteller ermöglicht aufgrund
 - von technischen Fachkräften, Fertigungsanlagen und Kontrolleinrichtungen eine gleichmäßige, reihenweise Fertigung von
 - eigener Fachkunde, von technischen Fachkräften und Kontrolleinrichtungen eine erlaubnisgerechte Auslieferung von gleichmäßig und reihenweise gefertigten Fahrzeugen des in der Typbeschreibung festgelegten Fahrzeugtyps.
 - Die Eignung des Antragstellers konnte noch nicht beurteilt werden.

Tatsachen, die die Zuverlässigkeit des Antragstellers im Sinne des § 20 StVZO in Frage stellen, sind hier nicht bekannt.

 - dem beigefügten Schreiben vom zu entnehmen.
3. Die beigefügte Typbeschreibung besteht aus Blatt 1 bis 18 und ist
 - mit den darin unter Nr. 13.3. angegebenen Anlagen Bestandteil des Gutachtens.
4. Der Fahrzeugtyp entspricht der vollständigen Typbeschreibung und genügt den heute gültigen Bestimmungen
 - der StVZO in Verbindung mit eKFV.
 - der Verordnung über den Betrieb von Kraftfahrunternehmen im Personenverkehr (BOKraft).
 - den hierzu vom Bundesminister für Verkehr erlassenen heute gültigen Anweisungen und Richtlinien.
 - den in den herangezogenen ABG und ABE für Fahrzeugteile ggf. enthaltenen Auflagen.
 - bis auf die unter Nr. 13.1. der Typbeschreibung beschriebene(n) Abweichung(en).
5. Der Erteilung einer ABE
 - eines Nachtrags zur o.a. ABE
 - und der Genehmigung der aufgrund der unter Nr. 13.1. der beigefügten Typbeschreibung beschriebenen Abweichung(en) ggf. erforderlichen Ausnahme(n)
 - bei Einhaltung der unter Nr. 13.2. der beigefügten Typbeschreibung vorgeschlagenen Auflage(n) stehen technische Bedenken nicht entgegen.

Der technische Dienst ist für die angewendeten Prüfverfahren vom Kraftfahrt-Bundesamt für das nationale Typgenehmigungsverfahren anerkannt.
 Shanghai, 2023-04-17



B.Eng. Liangjun Zhang
 Sachverständiger Technischer Dienst
 Expert Technical Service

Fahrzeugtyp / *vehicle type* : NKT2214-B20

Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

0. Allgemeines / general

0.1. Fahrzeughersteller / *vehicle manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.
Building A2, Shangjinwan Headquarters Economic Park, No.2288, Wuzhong Avenue, Wuzhong Economic Development Zone, Suzhou Jiangsu P.R. China

0.2. Fahrzeug- und Aufbauart / *kind of vehicle and structure* : Elektrokleinstfahrzeug bis max. 500 Watt / *Small electric vehicle up to max. 500 Watt*

Fahrzeugklasse / *vehicle category*: 27
Art des Aufbaus / *kind of structure*: 0003

0.3. Typ / *type* : NKT2214-B20

0.4. Handelsbezeichnung / *commercial description* : *NAVEE Electric Scooter S65C*

0.5. Ort und Art der Anbringung des Fabrik Schildes und der Fahrzeug-Identifizierungsnummer / *location and method of affixing the identification plate and vehicle identification no.*

0.5.0. Genehmigung oder Prüfung / *approval or test* : Prüfung gem. / *test acc. to* § 2 (1) Nr. 3 eKFV i.V.m. § 59 StVZO

Anforderungen erfüllt / *requirements fulfilled*

0.5.1. Fabrik Schild / *identification plate* : vorne rechts am Rahmen, gelasert / *front right on the frame, lasered*

0.5.2. Fahrzeug-Identifizierungsnummer / *vehicle identification number* : vorne rechts am Rahmen, gelasert / *front right on frame, lasered*

0.6. Fahrzeug-Identifizierungsnummer und deren Aufbau / *vehicle identification number and its structure* : A65 450 2 G 000001

Stelle / <i>digit</i>	Beschreibung / <i>description</i>	Wert / <i>value</i>
1 - 3	Produkt-Code / <i>Product code</i>	A65 = NAVEE Electric Scooter S65C
4 - 6	Motor power	450 = 450W
7	Jahr / <i>year</i>	3 = 2023, 4 = 2024, ...
8	SKU code	G = Germany
9 - 14	Rahmennr. / <i>frame number</i>	000001

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Fahrzeugtyp / *vehicle type* : NKT2214-B20Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

- 0.7. Ort der Anbringung der Kennzeichnung der Antriebsmaschine / *location of affixing of the engine code* : auf Motorgehäuse, rechts / *on right side of motor housing*
- 0.8. Ort der Anbringung der ECE-Genehmigungszeichen / *location of affixing the ECE approval mark* : entfällt / *not applicable*
- 1. Änderungen, Ausführungen, wahlweise Ausrüstungen, Rüstzustände / *changes, versions, options, equipments***
- 1.1. Änderungen / *changes***
- Es wird berichtigt / *correction of* : entfällt / *not applicable*
- Es wird geändert / *modification of* : entfällt / *not applicable*
- Es wird hinzugefügt / *addition of* : entfällt / *not applicable*
- Es entfällt / *deletion of* : entfällt / *not applicable*
- 1.2. Ausführungen (Varianten) / *models (variants)*** : entfällt / *not applicable*
- 1.3. wahlweise Ausrüstungen (Versionen) / *optional equipment (versions)*** : 01: without direction indicator
02: with direction indicator
- 2. Hauptabmessungen und Gewichte / *main dimensions and weights***
- 2.1. Hauptabmessung in mm / *main dimensions in mm***
- 2.1.0. Genehmigung oder Prüfung / *approval or test* : Prüfung gem. / *test acc. to* § 1 (1) Nr. 4 eKFV
Anforderungen erfüllt / *requirements fulfilled*
- 2.1.1. Länge / *length* : 1228 mm
- 2.1.2. Breite / *width* : 01: 532 mm
02: 613 mm
- 2.1.3. Höhe / *height* : 1288 mm
- 2.1.4. Radstand / *wheelbase* : 944 mm
- 2.1.5. Höhe der Lenkstange / *height of steering rod* : 1036 mm
- 2.1.9. Weitere Angaben / *further informations* : keine / *none*

Fahrzeugtyp / *vehicle type* : NKT2214-B20Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.**2.2. Gewichte in kg / weights in kg**

- 2.2.0. Genehmigung oder Prüfung / *approval or test* : Prüfung gem. / *test acc. to* § 1 (1) Nr. 5 eKFV
Anforderungen erfüllt / *requirements fulfilled*
- 2.2.3. Leergewicht / *unladen weight* : 25,8 kg
- 2.2.4. Achslasten bzw. Radlasten bei
Leergewicht / *axle load or wheel
load at unladen weight*
Achse / *axle 1* : 13,5 kg
Achse / *axle 2* : 12,3 kg
- 2.2.5. Nutzlast / *load capacity* : 120 kg
- 2.2.7. Zul. Gesamtgewicht / *technically
permissible maximum weight as
stated by manufacturer* : 145,8 kg
- 2.2.8. Zul. Achslast bzw. zul. Radlast /
*permissible axle load or permissible
wheel load*
Achse / *axle 1* : 95 kg
Achse / *axle 2* : 95 kg
- 2.2.9. Zul. Anhängelast / *permissible tow-
ing mass* : entfällt / *not applicable*
- 2.2.11. Zul. Stützlast / *permissible bear
load* : entfällt / *not applicable*
- 2.2.12. Weitere Angaben / *further
informations* : keine / *none*

3. Antriebsmaschine / propulsion engine

- 3.1. Identifizierungsmerkmal / *identification code* : TD015 *****
- 3.2. Hersteller / *manufacturer* : Daao Electric (Jiangsu) Co., Ltd.
- 3.6. Elektromotor / *electric motor*
- 3.6.0. Genehmigung oder Prüfung / *approval or test* : Prüfung der Nenndauerleistung gem. / *test of
continuous rated power acc. to*
UN-Regelung Nr. 85 / *UN-Regulation no. 85*
Prüfbericht Nr. / *test report no.:*
87-R85-0333/23-00

Anforderungen erfüllt / *requirements fulfilled*
- 3.6.1. Bauart / *type of construction* : Radnabenmotor / *wheel hub motor*

Fahrzeugtyp / *vehicle type* : NKT2214-B20

Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

- 3.6.2. Nennspannung / *nominal voltage* : 36 V
- 3.6.3. Leistung / *power* : 0,45 kW
- 3.6.4. Energiequelle bzw. Batterie / *energy source or battery*
- 3.6.4.1. Nennspannung / *nominal voltage* : 36,5 V
- 3.6.4.2. Nennkapazität / *nominal capacity* : 15 Ah
- 3.6.4.3. Anzahl / *quantity* : 1
- 3.6.4.4. Maximaler Strom / *maximum electric current* : 19 A
- 3.6.4.5. Hersteller / *manufacturer* : Fujian SCUD Power Technology Co., Ltd.
- 3.6.4.6. Identifizierungsmerkmal / *identification code* : T2214-BA3A
- 3.6.4.7. Softwarestand des Batteriemanagementsystems nach Herstellerangabe/ *firmware version of the Battery Management System according to manufacturer* : 1.0.6.0
- 3.6.5. Steuerung / *control*
- 3.6.5.1. Identifizierungsmerkmal / *identification code* : T2214
- 3.6.5.2. Hersteller / *manufacturer* : Tianjin Songzheng Electric Technology Co., Ltd.
- 3.6.5.3. Softwarestand nach Herstellerangabe / *firmware version according to manufacturer* : 0005
- 3.6.6. Weitere Angaben / *further informations* : Prüfung der EMV gem. / *test of EMC acc. to UN-Regelung Nr. 10 / UN-Regulation no. 10*
Prüfbericht Nr. / *test report no.:*
87-R10-0332/23-00

Prüfung der Batteriesicherheit gem. / *test of battery safety acc. to*
DIN EN 15194:2018-11 Kap. 4.2.3 i.V.m EN 62133
Prüfbericht Nr. / *test report no.:*
CN23FQ81 001

Anforderungen erfüllt / *requirements fulfilled*

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Fahrzeugtyp / *vehicle type* : NKT2214-B20Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

4. Kraftübertragung / *power transmission*

- 4.1. **Art / *kind*** : mechanisch / ~~hydraulisch~~ / ~~elektrisch~~
mechanical / ~~hydraulic~~ / ~~electrical~~
- 4.3. **Getriebe / *gearbox***
- 4.3.1. Bauart / *construction* : entfällt / *not applicable*
 (Radnabenmotor / *wheel hub motor*)
- 4.3.4. Übersetzungen / *ratio* : 1 : 1
- 4.5. **Höchstgeschwindigkeit / *maximum design speed*** : 20 km/h
- 4.5.0. Genehmigung oder Prüfung / *approval or test* : Prüfung gem. / *test acc. to*
 § 1 (1) eKFV i.V.m. Anlage (zu § 7 Nummer 1)
 Nr. 2.1 eKFV

 Anforderungen erfüllt / *requirements fulfilled*
- 4.5.1. Geschwindigkeitsbegrenzer / *speed limiter* : siehe Abschnitt / *see section* 3.6.5.
- 4.5.1.0. Genehmigung oder Prüfung / *approval or test* : Herstellerbescheinigung zur Manipulationssicherheit
 gem. / *manufacturers declaration for manipulation*
security acc. to
 DIN EN 15194:2018-11 Kap. 4.2.17
 liegt vor / *is available.*

 Anforderungen erfüllt / *requirements fulfilled*
- 4.6. **Geschwindigkeitsmesser bzw. *Tachometer / speedometer*** : ja / *yes*
- 4.6.0. Genehmigung oder Prüfung / *approval or test* : Prüfung gem. / *test acc. to*
 Anlage (zu § 7 Nummer 1) Nr. 2.1.4 eKFV

 Anforderungen erfüllt / *requirements fulfilled*
- 4.6.1. Weitere Angaben / *further informations* : Die Abweichung der angezeigten Geschwindigkeit zur
 tatsächlichen beträgt max. + 10 %. / *The deviation of*
the displayed speed from the actual speed is max. + 10
 %.
- 4.9. **Antrieb auf / *traction on*** : Achse / *axle* 2

Fahrzeugtyp / *vehicle type* : NKT2214-B20Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.**5. Achsen, Radführungen / axles, wheel control**

5.1. **Bauart / construction** : Achse / *axle* 1: Geschobene Langarmschwinge, gefedert/ *pushed swing arm, suspended*
 Achse / *axle* 2: Geschobene Langarmschwinge, gefedert/ *pushed swing arm, suspended*

5.2. **Anzahl / number** : 2

5.3. **Anzahl angetriebener Achsen / number of driven axles** : 1

6. Federn, Dämpfer, Räder, Bereifung / suspension, shock absorber, wheels, tyres

6.1. **Federung / suspension** : Silentblock/ *rubber spring*

6.2. **Dämpfung / shock absorber** : Aus weichkautschuk/ *Vulcanize rubber*

6.3. Räder und Bereifung / wheels and tyres

6.3.1. **Bauart / construction** : Achse / *axle* 1: einteiliges Scheibenrad / *one-piece disc wheel*
 Achse / *axle* 2: Radnabenmotor/ *wheel hub motor*

6.3.2. **Hersteller / manufacturer** : Achse / *axle* 1: Jiangsu Yilin Lida New Energy Technology Co., Ltd.
 Achse / *axle* 2: siehe / *see* 3.2.

6.3.4. **Kennzeichnung / marking** : Achse / *axle* 1: entfällt / *not applicable*
 Achse / *axle* 2: siehe / *see* 3.1.

6.3.5. **Ort der Kennzeichnung / location of marking** : Achse / *axle* 1: entfällt / *not applicable*
 Achse / *axle* 2: siehe / *see* 0.7.

6.3.6. **Werkstoff / material** : Leichtmetall / *light metal*

6.3.7. **Anzahl / quantity** : 2

6.3.8. **Einpresstiefe / offset** : entfällt / *not applicable*

6.3.9. **Felgenreöße / rim size** : Achse / *axle* 1: 179 x 52
 Achse / *axle* 2: 179 x 52

6.3.10. **Größenbezeichnung der Bereifung / tyre size** : Achse / *axle* 1: 250 x 64
 Achse / *axle* 2: 250 x 64

6.3.11. **Art der Bereifung / kind of tyres** : einfach, Luftreifen, schlauchlos/
single, air tyre, tubeless

Fahrzeugtyp / *vehicle type* : NKT2214-B20Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

7. Lenkanlage / *steering system*

7.1. **Bauart / *construction*** : Kraftrad-/Steuerkopflenkung, mechanisch / *motorcycle or head tube steering, mechanic*

7.4. Lenkrad bzw. Lenker / *steering wheel or handlebar*

7.4.0. Genehmigung oder Prüfung / *approval or test* : entfällt / *not applicable*

7.4.2. Identifizierungsmerkmal und Ort / *identifier and location* : entfällt / *not applicable*

7.4.4. ~~Durchmesser des Lenkrades bzw. Lenkerbreite in mm / *diameter of the steering wheel or width of handlebar*~~ : 01: 532 mm
02: 613 mm

7.7. möglicher Lenkeinschlag / *maximum steering angle*

links / *left* : 60 °

rechts / *right* : 60 °

7.9. **Weitere Angaben / *further informations*** : Lenkstange, klappbar / *steering rod, foldable*

8. Bremsanlagen / *brake system*

8.0. **Genehmigung oder Prüfung / *approval or test*** : Prüfung gem. / *test acc. to*
§ 4 (1) eKFV i.V.m. Anlage (zu § 7 Nummer 1)
Nr. 2.2 eKFV

Anforderungen erfüllt / *requirements fulfilled*

8.1. Betriebsbremsanlage / *service brake*

8.1.1. Art / *kind*
Achse / *axle 1* : Muskelkraftbremsanlage, handbetätigt, mit mechanischer Übertragungseinrichtung / *muscle power brake system, operated by hand, with mechanic transmission device*

Achse / *axle 2* : Elektrische Bremsanlage, handbetätigt, mit elektrischer Übertragungseinrichtung / *electrical brake system, operated by hand, with electric transmission device*

8.1.4. Bremse / *brake*

8.1.4.1. Art / *kind*
Achse / *axle 1* : Trommelbremse/ *drum brake*
Achse / *axle 2* : Elektrische Bremse / *electrical brake*

Fahrzeugtyp / *vehicle type* : NKT2214-B20Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

- 8.1.4.2. Typ / *type*
 Achse / *axle 1* : KGZ080SXII-TT1
 Achse / *axle 2* : siehe / *see 3.1.*
- 8.1.4.3. Hersteller / *manufacturer*
 Achse / *axle 1* : KARASAWA TRAFFIC EQUIPMENT (TAIZHOU) CO., LTD.
 Achse / *axle 2* : siehe / *see 3.2*
- 8.1.4.5. Trommel- bzw. Scheibendurchmesser / *drum or disc diameter*
 Effektiver Brems Scheiben- / Trommeldurchmesser / *effective diameter of brake disc or drum*
 Achse / *axle 1* : 79 mm
 Achse / *axle 2* : entfällt / *not applicable*
- Außendurchmesser / *outer diameter*
 Achse / *axle 1* : 98 mm
 Achse / *axle 2* : entfällt / *not applicable*
- Anzahl der Scheiben je Bremse / *number of discs for each brake*
 Achse / *axle 1* : entfällt / *not applicable*
 Achse / *axle 2* : entfällt / *not applicable*
- 8.1.5. Bremsbelag / *brake lining*
- 8.1.5.3. Hersteller / *manufacturer*
 Achse / *axle 1* : KARASAWA TRAFFIC EQUIPMENT (TAIZHOU) CO., LTD.
 Achse / *axle 2* : entfällt / *not applicable*
- Kennzeichnung / *marking*
 Achse / *axle 1* : entfällt / *not applicable*
 Achse / *axle 2* : entfällt / *not applicable*
- 8.1.5.5. wirksame Bremsbelagfläche / *total friction area*
 Achse / *axle 1* : 33,6 cm²
 Achse / *axle 2* : entfällt / *not applicable*
- 8.1.6. Übersetzung bis Zuspaltung / *transformation ratio until disc or drum*
 Achse / *axle 1* : Handhebel / *hand lever*: 30 / 104 mm
 Achse / *axle 2* : entfällt / *not applicable*
- 8.1.20. Bremshebellänge an der Bremse / *brake lever length at brake*
 Achse / *axle 1* : 45 mm
 Achse / *axle 2* : entfällt / *not applicable*

Fahrzeugtyp / *vehicle type* : NKT2214-B20

Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

- 8.1.21. Hauptzylinder-Durchmesser / *brake master cylinder diameter*
 Achse / *axle* 1 : entfällt / *not applicable*
 Achse / *axle* 2 : entfällt / *not applicable*

- 8.1.22. Radzylinder- bzw. Bremszylinder-Durchmesser / *diameter of wheel-brake cylinder or brake cylinder*
 Achse / *axle* 1 : entfällt / *not applicable*
 Achse / *axle* 2 : entfällt / *not applicable*

- 8.1.23. Weitere Angaben / *further informations* : Elektrische Bremse / *electrical brake*:
 Die elektrische Bremse an Achse 2 wird über einen kombinierten Handhebel gemeinsam mit der mechanischen Bremse an Achse 1 betätigt und erfüllt die Anforderungen von § 4 Absatz 1 eKFV. / *The electrical brake on axle 2 is operated by a combined handlever together with the mechanical brake on axle 1 and meets the requirements of § 4 para. 1 eKFV.*

- 8.2. **Hilfsbremsanlage / *secondary brake system*** : Bei Ausfall einer von zwei unabhängigen Betriebsbremsen gem. Nr. 8.1 werden nach Vorgabe § 4 Absatz 1, Nr. 4 noch mindestens 44 % der Bremswirkung erreicht. / *In the event of failure of one of two independent service brakes in accordance with No. 8.1, at least 44 % of the braking effect is still achieved in accordance with § 4 para. 1, No. 4.*

- 8.10. **Weitere Angaben / *further information*** : Bei Betätigung der mechanischen Bremse an Achse 1 wird diese zusätzlich durch die elektrische Motorbremse an Achse 2 unterstützt. / *When the mechanical brake on axle 1 is applied, the electric motor brake on axle 2 additionally supports this brake.*

- 9. **Aufbau / *body***

- 9.0. **Genehmigung oder Prüfung für vorstehende Außenkanten / *approval or test for preceding outer edges*** : Prüfung gem. / *test acc. to* § 7 Nr. 6 eKFV
 Anforderungen erfüllt / *requirements fulfilled*

- 9.1. **Art / *kind*** : siehe / *see* 0.2.

- 9.2. **Werkstoff / *material*** : Leichtmetall, Stahl / *light metal, steel*

- 9.3. **Hersteller / *manufacturer*** : siehe / *see* 0.1.

- 9.4. **Sitze / *seats***

- 9.4.1. Art und Anordnung / *kind and placement* : entfällt / *not applicable*

- 9.4.2. Anzahl der Plätze / *number of places*

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Fahrzeugtyp / *vehicle type* : NKT2214-B20Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

9.4.2.1.	Sitzplätze / <i>seats available</i>	:	entfällt / <i>not applicable</i>
9.4.2.2.	Stehplätze / <i>standing place available</i>	:	1
9.9.	Rückspiegel / <i>rearview mirror</i>		
9.9.2.1.	Art / <i>kind</i>	:	entfällt / <i>not applicable</i>
9.9.2.2.	Anzahl / <i>quantity</i>	:	entfällt / <i>not applicable</i>
9.9.2.3.	Ort und Art der Anbringung / <i>location and method of mounting</i>	:	entfällt / <i>not applicable</i>
9.9.2.4.	Weitere Angaben / <i>further informations</i>	:	keine / <i>none</i>
9.11.	Kennzeichen, Abmessungen / <i>licence plate, dimensions</i>		
9.11.0.	Genehmigung oder Prüfung / <i>approval or test</i>	:	Prüfung gem. / <i>test acc. to</i> § 2 (1) Nr. 2 eKFV i.V.m. § 29a (3) FZV Anforderungen erfüllt / <i>requirements fulfilled</i>
9.11.3.	Abmessungen hinten / <i>rear plate dimensions</i>	:	54 x 67 mm
9.11.4.	Höhe des oberen bzw. unteren Randes hinten / <i>height of the upper or lower edge in the rear</i>	:	102 mm
9.11.5.	Anbringungswinkel / <i>mounting angle</i>	:	14° vertikal in Fahrtrichtung / <i>vertical in direction of travel</i>
9.14.	Zentralständer, Seitenständer / <i>central stand, side stand</i>	:	Zentralständer / <i>central stand</i> : nein / <i>no</i> Seitenständer / <i>side stand</i> : ja / <i>yes</i>

Fahrzeugtyp / *vehicle type* : NKT2214-B20Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

10. Lichttechnische Einrichtungen, Abmessungen / *lighting devices, dimensions*

10.0. Genehmigung oder Prüfung hinsichtlich. Anbau / *approval or test regarding mounting* : Prüfung gem. / *test acc. to* § 5 eKFV i.V.m. § 67 StVZO u. UNECE-R 74
 Anforderungen erfüllt / *requirements fulfilled*

10.1. Scheinwerfer für Abblendlicht und Fernlicht / *headlamps for dipped beam and main beam*

10.1.1. Anzahl / *quantity* : 1

10.1.2. Scheinwerfer für Abblend- und Fernlicht / *headlamps for dipped and main beam*

10.1.2.0 Prüfzeichen / *approval mark* : C-AS PL E32 030028

10.1.2.4. Leistungsaufnahme der Glühlampe / *power consumption of light bulb* : 2,5 W

10.2. Begrenzungsleuchten / *clearance lamps*

10.2.0. Prüfzeichen / *approval mark* : entfällt / *not applicable*

10.2.1. Anzahl / *quantity* : entfällt / *not applicable*

10.3. Schlussleuchten / *rear lamps*

10.3.0. Prüfzeichen / *approval mark* : K 2247/ MR 148R00 E9 6761

10.3.1. Anzahl / *quantity* : 1

10.4. Bremsleuchten / *stop lights*

10.4.0. Prüfzeichen / *approval mark* : K 2247/ MS 148R00 E9 6761

10.4.1. Anzahl / *quantity* : 1

10.5. Rote Rückstrahler / *red retro reflectors*

10.5.0. Prüfzeichen / *approval mark* : K 2247/ IA 150R00 E9 6761

10.5.1. Anzahl / *quantity* : 1

Fahrzeugtyp / *vehicle type* : NKT2214-B20Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

- 10.6. Fahrtrichtungsanzeiger / direction indicators**
- 10.6.0. Prüfzeichen / approval mark
- 10.6.0.1. Vorn / front : 11 12 E32 148R00 0380
- 10.6.0.2. Seitlich / lateral : entfällt / *not applicable*
- 10.6.0.3. Hinten / rear : 11 12 E32 148R00 0380
- 10.7. Kennzeichenbeleuchtung / licence plate illumination**
- 10.7.0. Prüfzeichen / *approval mark* : entfällt / *not applicable*
- 10.11. Lichttechnische Einrichtungen zur seitlichen Kenntlichmachung / light-technicals devices for side marking**
- 10.11.1. Seitliche rückstrahlende Mittel / *side reflector devices*
- 10.11.1.0. Prüfzeichen / *approval mark* : IA E24 150R 00 0036
- 10.11.1.1. Anzahl / *quantity* : 2 (einer je Seite) / (*one on each side*)
- 10.22. Weiße Rückstrahler / white retro reflectors**
- 10.22.1. Prüfzeichen / *approval mark* : IA E24 150R 00 0023
- 10.22.2. Anzahl / *quantity* : 1
- 12. Verschiedenes / miscellaneous**
- 12.1. Schallzeichen / audible warning device**
- 12.1.0. Genehmigung oder Prüfung und Prüfzeichen / *approval or test and approval mark* : Prüfung gem. / *test acc. to* § 6 eKFV
Anforderungen erfüllt / *requirements fulfilled*
- 12.1.1. Bauart / *construction* : helltönende Glocke gem. / *bright sounding bell acc. to* § 64a StVZO

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Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

- 12.4. **Sicherungseinrichtung gegen unbefugte Benutzung / protection against unauthorized use** : entfällt / *not applicable*

- 12.8. **Akustische Kontrolle der Fahrtrichtungsanzeiger / acoustic check of direction indicators** : entfällt / *not applicable*

- 12.9 **Weitere Angaben / further information**

 - 12.9.1. Prüfung der Fahrdynamik / *testing of driving dynamics* : Prüfung gem. / *test acc. to* § 7 Nr. 1 eKFV i.V.m. Anlage (zu § 7 Nummer 1) Nr. 2.3 eKFV

Anforderungen erfüllt / *requirements fulfilled*

 - 12.9.2. Schutz gegen Berühren spannungsführender Teile / *protection against contact to electrical parts* : Prüfung gem. / *test acc. to* § 7 Nr. 4 eKFV

Anforderungen erfüllt / *requirements fulfilled*

 - 12.9.3. Funktionsschnittstellen / *interface features* : Bluetooth

 - 12.9.3.1. Verschlüsselung / *encryption* : AES 128 Bit
 - 12.9.3.2. Funktionen / *features*

 - 12.9.3.2.1. Übersicht / *overview*

 - Eingabe / *input* : - Anti-theft
- Energy recovery
- Unit settings
- Restore scooter settings
- Manage device name
- Firmware update
- Security settings

 - Ausgabe / *output* : - Current battery level (%)
- Remaining mileage
- Riding mode
- Current mileage
- Average speed
- Battery information
- Scooter information
- Scooter QR code
- Legal information

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Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

- 12.9.3.2.2. Eingabe Beschreibung/ *input description* : Pictures see 13.3./12.9.1., description of Bluetooth interface
- Anti-theft : Slide to lock the scooter for anti-theft.
Note: this function only can be activated when vehicle is in static status.
If the smartphone is lost, user can log on the account by other smartphone to unlock the vehicle.
If user forget the account, the contact the aftersales of Xiaomi will be the only method.
- Energy recovery : There are 3 levels in this function: Low, Medium and High.

Low as default setup means the vehicle has a weak deceleration when release the throttle, meanwhile a small amount of energy produced by motor charge into battery.

Medium means the vehicle has a medium deceleration when release the throttle, meanwhile a medium amount of energy produced by motor charge into battery.

High means the vehicle has a strong deceleration when release the throttle, meanwhile a large amount of energy produced by motor charge into battery.

The deceleration caused by recuperation is in a range between 0.32 m/s² - 0.62 m/s².

The requirements acc. to § 4 and § 7 no. 6 eKFV will not be affected.
- Unit settings : Select the speed unit on display, km/h and mph.
Note: This function does not touch any approval relevant requirements
- Restore factory settings : Restore the scooter to factory settings.
Unit restore to metric system, Energy recovery intensity restore to weak, Drive mode restore to D mode.
- Manage device name : Change the vehicle name by users
Note: This function does not touch any approval relevant requirements
- Firmware update : Firmware update is a software program that can be used to update the firmware for this vehicle, which could repair functional defects.
1. Fixing the compatibility of APP for different smartphone.
2. According to the complaint data, fixing the problem on vehicle, but it will not affect the key functions which specified in eKFV regulation, such as speed/ motor power/ brake performance etc.

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Security settings : Security settings has two sub-functions as below.
 The first one can be used to manage the password function on and off, for example, if user turn it on, user need to enter the password every time when they connect the scooter by APP.
 The second function is change the passcode by user.
 Note: After active the function, there is no braking torque when moving vehicle, it is just a password to enter the APP.
 If user forget the password, it will not affect the vehicle function, the only influence is that the user can not connect the vehicle by APP, vehicle also can be driven as usual.
 If the user forgot the password, the contact the aftersales of Xiaomi will be the only method.
 Note: This function does not touch any approval relevant requirements.

- 12.9.3.2.3. *Ausgabe Beschreibung / output description* : Pictures see 13.3./12.9.1., description of Bluetooth interface
- Current battery level (%) : Indicate the current battery level.
- Remaining mileage : Indicate the estimated remaining mileage
- Riding mode : It displays the riding mode, there are three modes, and with a maximum speed as below:
 walking mode: 6 km/h
 standard mode: 15 km/h
 sport mode: 20 km/h
 Users can switch the mode by press the power button on the control panel twice.
- Current mileage : The scooter travel range
- Average speed : Average speed during riding.
- Battery information : Show the information as below:
 Percentage remaining
 Remaining battery
 Battery status
 Voltage
 Current
 Power
 Battery temperature
 Production date
 Battery serial number
 BMS firmware version
- Scooter information : Show the information as below:
 Scooter serial number
 Firmware version
 Scooter temperature.

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Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

- Scooter QR code : Displays the scooter QR code, the user has to scan it by APP when first connect to the vehicle with the smartphone.
- Legal information : It displays the user agreement and privacy policy user agreement shows the software license and service agreement, the privacy policy provides privacy details on how the user manage his personal information for this scooter software and services provided by xiaomi.

- 12.9.3.3. Manipulationssicherheit / Rückwirkungsfreiheit / *anti-tampering / feedback protection* : Der Hersteller bescheinigt die Manipulationssicherheit, sowie Rückwirkungsfreiheit der beschriebenen Schnittstellen. / *The manufacturer confirms that the mentioned interface is tamper-proof and feedback protected.*

Das Rückwirkungsverhalten und die Manipulationssicherheit wurde durch den technischen Dienst im Rahmen der technischen Möglichkeiten empirisch überprüft, bspw. durch Betätigen verschiedener Tasten-/Schaltflächenkombinationen am Fahrzeug, sowie der mitgelieferten Smartphone-App (z.B. EIN-AUS-Taster am Fahrzeug für 3-5 Sekunden halten und/oder Betätigen vorhandener Schaltflächen der Smartphone-App für eine Dauer von >1-5 Sekunden) um eine Erhöhung der Höchstgeschwindigkeit und/oder das Aktivieren einer ggf. vorhandenen Geschwindigkeitsregelanlage zu provozieren./

The feedback behaviour and the manipulation safety as well was tested by the technical service empirically within the scope of the technical possibilities, for example by operating different key or button combinations at the vehicle and the provided smartphone-app (e.g. operate the ON-OFF-switch at the vehicle for a period of 3-5 seconds and/or operate available buttons in the smartphone-app for a period of >1-5 seconds) to provoke an increase of maximum speed and/or the activation of a cruise control if applicable.

Es konnte keine negative Beeinflussung festgestellt werden./ *No negative influence could be detected*

- 12.9.3.4. Softwarestand der Schnittstelle nach Herstellerangabe / *firmware version of the interface according to manufacturer* : 2.5.0_0006

- 12.9.3.5. Bemerkung / *remark* : Der Hersteller bestätigt, dass ein Zugriff durch Drittanbieter-Apps nicht vorgesehen ist. / *The manufacturer confirms that access by third-party apps is not intended*

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Hersteller / *manufacturer* : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

13. Abweichungen, Auflagen, Anlagen / *deviations, additional requirements, enclosures*

- 13.1. Abweichungen / *deviations*** : entfällt / *not applicable*
- 13.2. Auflagen / *additional requirements*** : *Das Bedienen des Smartphones während der Fahrt ist nicht gestattet.
*Der Fahrzeugführer hat sich vor Fahrtantritt mithilfe der Betriebsanleitung mit dem Fahrzeug vertraut zu machen. Dies gilt insbesondere für erschwerte Fahrsituationen (beispielsweise Bordsteine, steile Rampen, Quer- und Längsrillen etc.). /
* *Operating the mobile phone while driving is not permitted.*
**Before driving, the driver must familiarise himself with the vehicle using the operating instructions. This applies in particular to difficult driving situations (e.g. curbs, steep ramps, transverse and longitudinal grooves, etc.).*

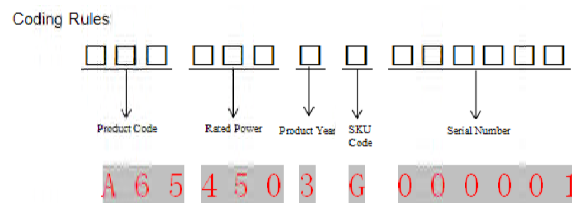
Anlage Nr. / Encls. no.	Zeichnungs-/ Berichtsnr. / Drawing or report no.	Bezeichnung / Description	Seiten / pages
13.3./2.1.	13.3./2.1.	Zeichnung des gesamten Fahrzeugs / <i>drawing of the whole vehicle</i>	2
13.3./3.	13.3./3.	Zeichnung der Antriebsmaschine / <i>drawing of propulsion engine</i>	1
13.3./8.	13.3./8.	Schematische Darstellung der Bremsanlage / <i>schematic diagram of the brake system</i>	1
13.3./9.1.	13.3./9.1.	Fotos einer repräsentativen Fahrzeugausführung / <i>photos of a representative vehicle</i>	2
13.3./10.	13.3./10.	Schematische Darstellung des gesamten Fahrzeugs mit Angaben zur Beleuchtung / <i>drawing of the whole vehicle with details of lighting devices</i>	1

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13.3./12.1.	CN23FQ81 001	Nachweis der Batteriesicherheit / <i>confirmation of battery safety</i>	41
13.3./12.2.	87-R85-0333/23-00	Nachweis der Nenndauerleistung / <i>confirmation of continuous rated power</i>	9
13.3./12.3.	87-R10-0332/23-00	Nachweis der elektromagnetischen Verträglichkeit / <i>confirmation of electromagnetic compatibility</i>	13
13.3./12.9.1.	-	Beschreibung der Bluetooth-Schnittstelle / <i>description of Bluetooth interface</i>	17
13.3./12.4.	-	Erklärung des Genehmigungsinhabers über Maßnahmen zur Verhinderung unbefugter Eingriffe in den Antriebsstrang und andere genehmigungsrel- evante Bauteile oder Systeme / <i>Approval holder's declaration on measures to prevent tampering on powertrain and other approval relevant components or systems</i>	2
13.3./12.9.	-	Erklärung des Genehmigungsinhabers hinsichtlich Manipulationssicherheit und Rückwirkungsverhalten der integrierten Bluetooth-Schnittstelle / <i>approval holder's declaration regarding tampering protection and feedback behavior of the integrated Bluetooth interface</i>	1
13.3./12.5.	-	Datenbestätigung gem. Muster 2d § 20 StVZO / <i>data conformity sheet acc. to sample 2d § 20 StVZO</i>	1

ELEKTROKLEINSTFAHRZEUG TYP:NKT2214-B20 BAUJAHR:2023 HÖCHSTGESCHW: 20km/h
FIN: ☆ × × × × × × × × × × × × × × × × ☆
 BRIGHTWAY INNOVATION INTELLIGENT TECHNOLOGY(SUZHOU)CO.,LTD. ABE: P390



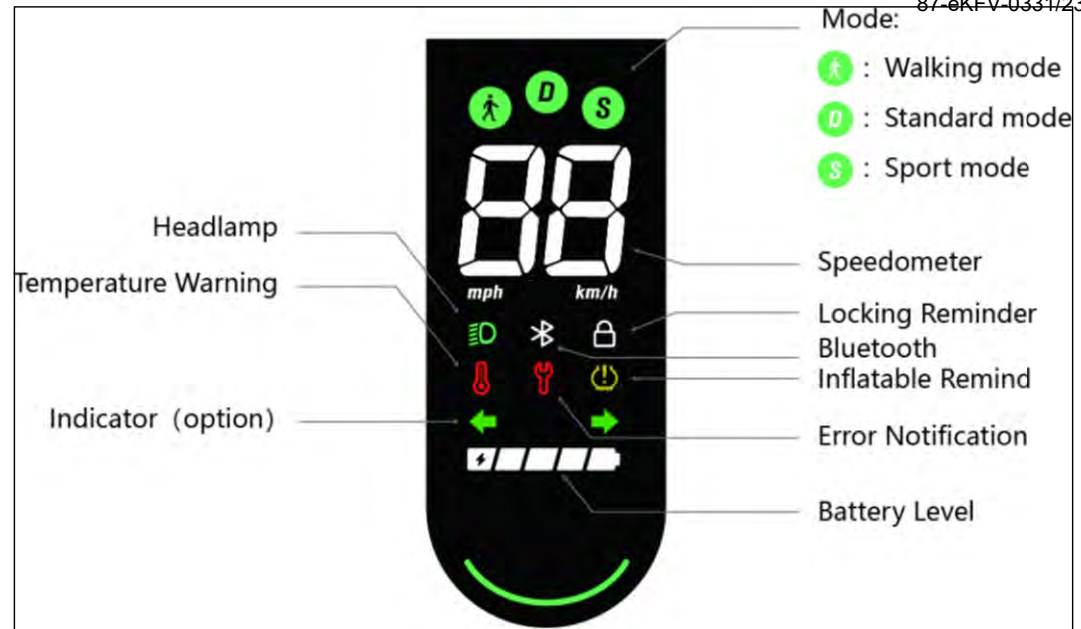
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 2. Product Code : A65
 3. Rated Power (W) : 450
 4. Product Year:

Product Year	Corresponding Code	Product Year	Corresponding Code	Product Year	Corresponding Code
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2022	2	2032	C	2042	N
2023	3	2033	D	2043	P
2024	4	2034	E	2044	R
2025	5	2035	F	2045	S
2026	6	2036	G	2046	T
2027	7	2037	H	2047	V
2028	8	2038	J	2048	W
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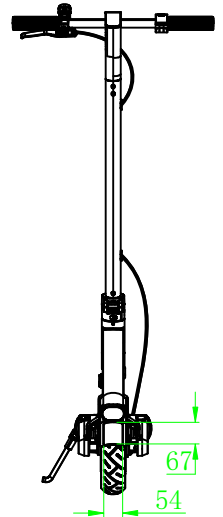
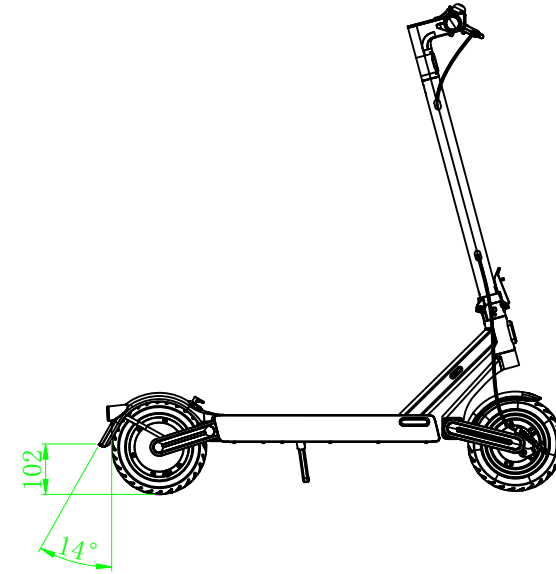
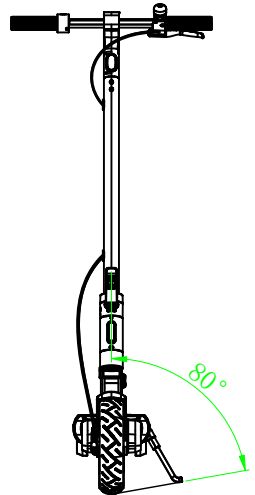
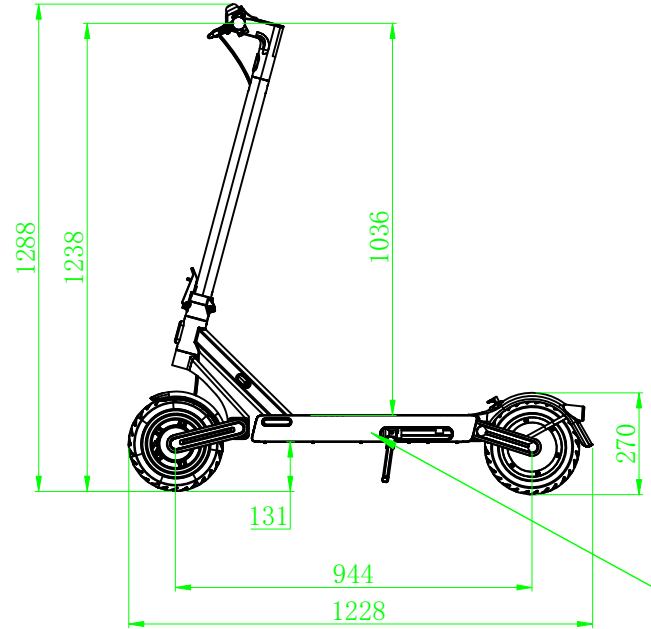
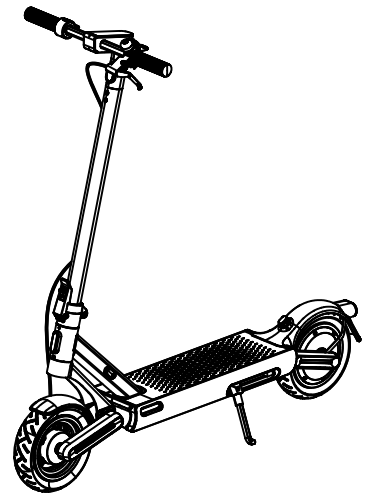
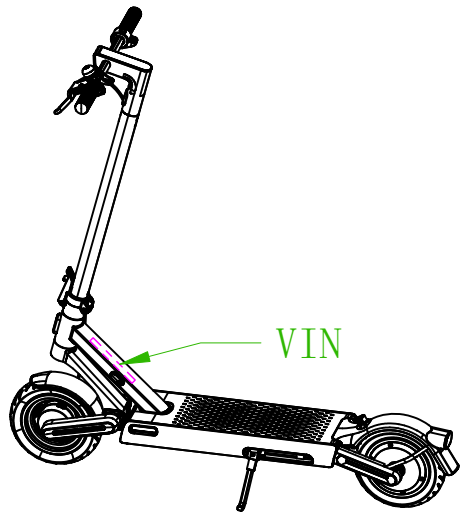
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SKU	Code
Germany	G
Nordic	N
Poland	P

6. Serial Number : 000001-999999



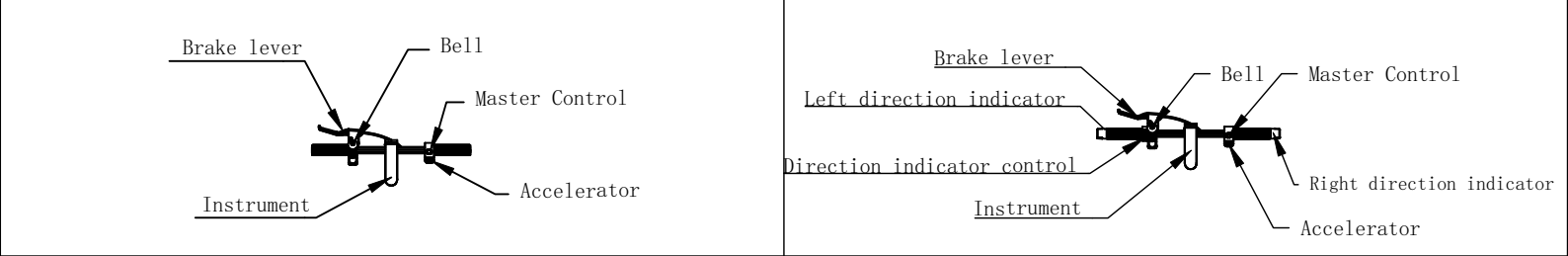
Type:T2214_Display_V1.3
 Manufacturer:Suzhou City Huilisheng Electron Technique Co., Ltd



Battery Position
 Manufacture:Fujian SCUD Power Technology Co., Ltd.
 Type:T2214-BA3A
 Capacity:15Ah

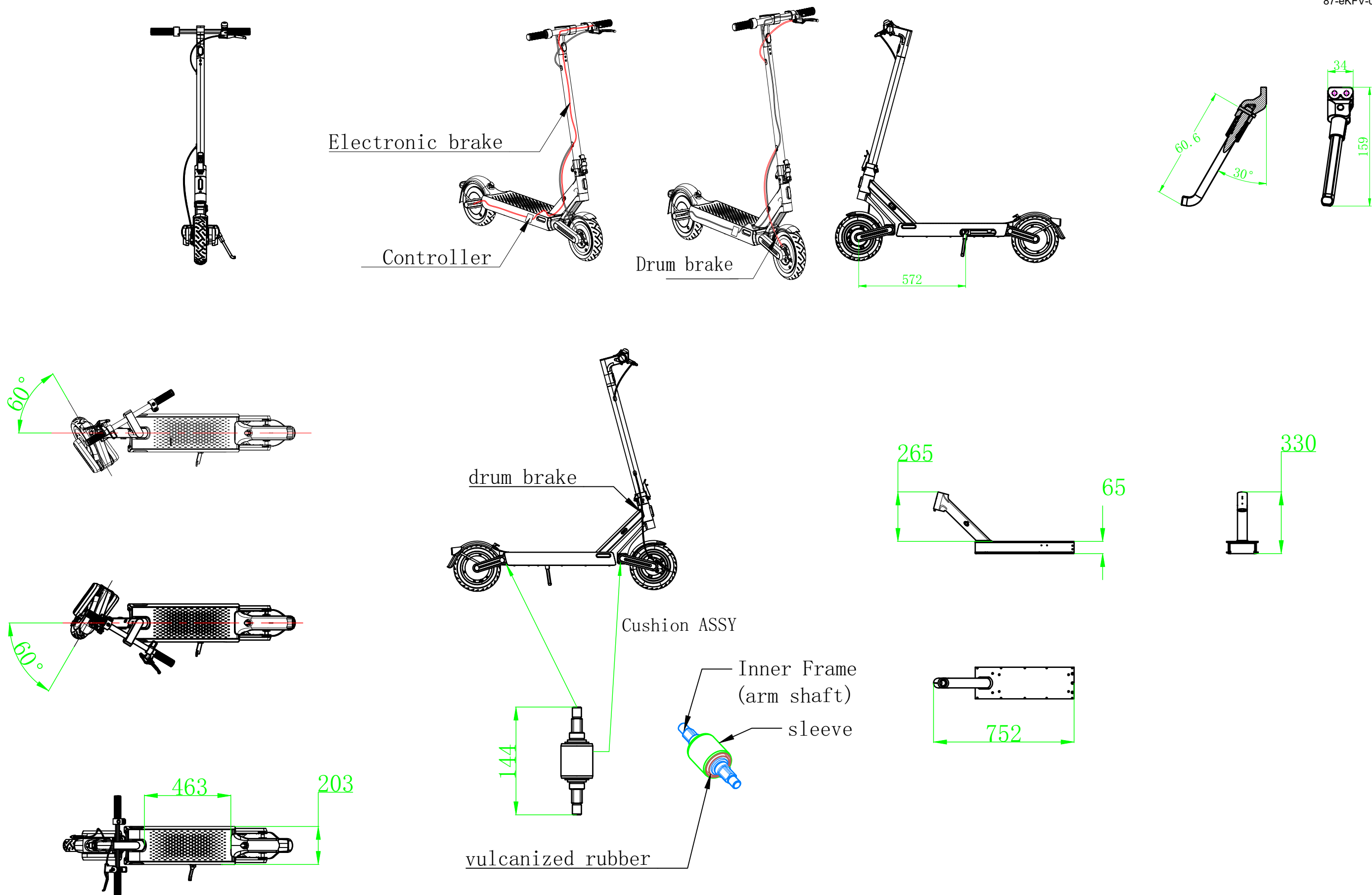
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Version 01	Version 02 All other structures are the same as Version 01



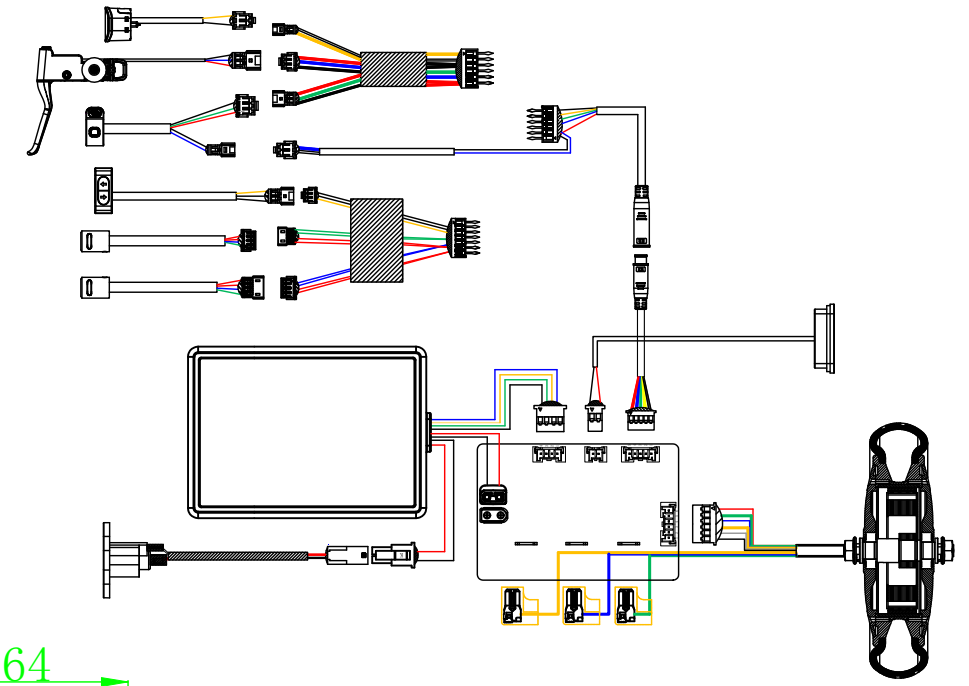
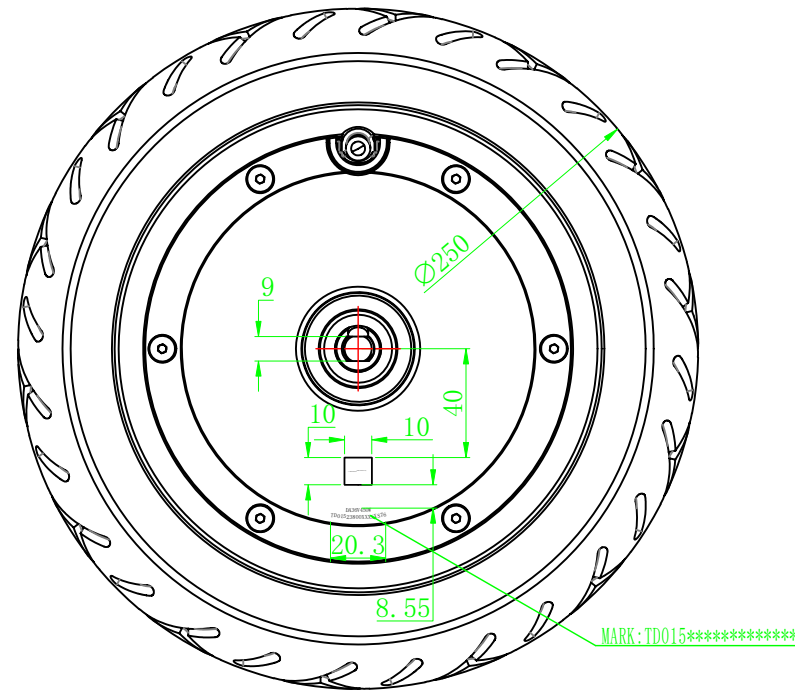
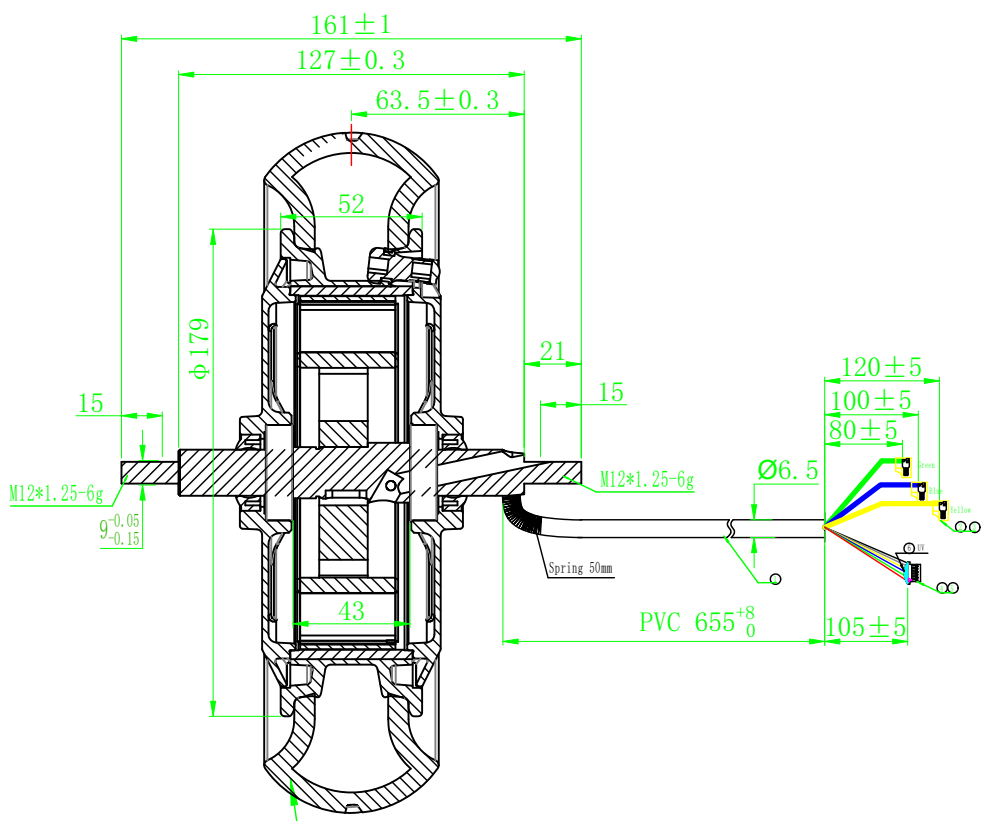
Hersteller/manufacturer: Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.	Verantwortlicher/responsible: Shawn	Zeichnungsnr./drawing no.: 13.3./2.1.
Titel/title: 13.3./2.1. Zeichnung des gesamten Fahrzeugs / drawing of the whole vehicle		Material / material:
		Mafstab / scale: 1:20
		Blatt / page: 1/2

S20_P390*00

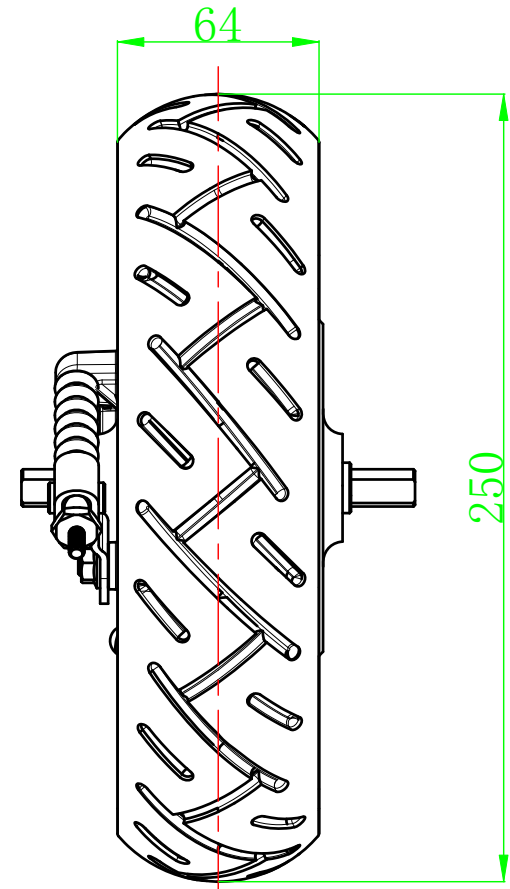
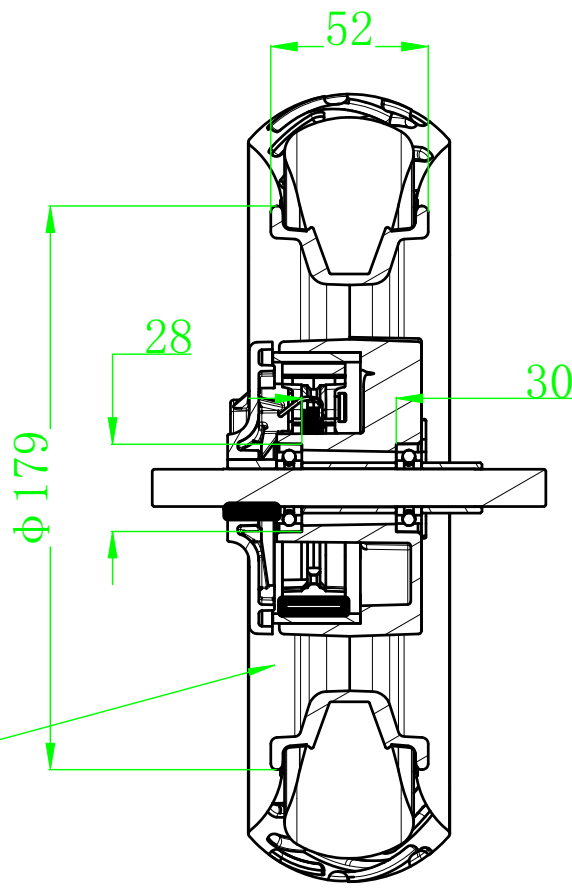
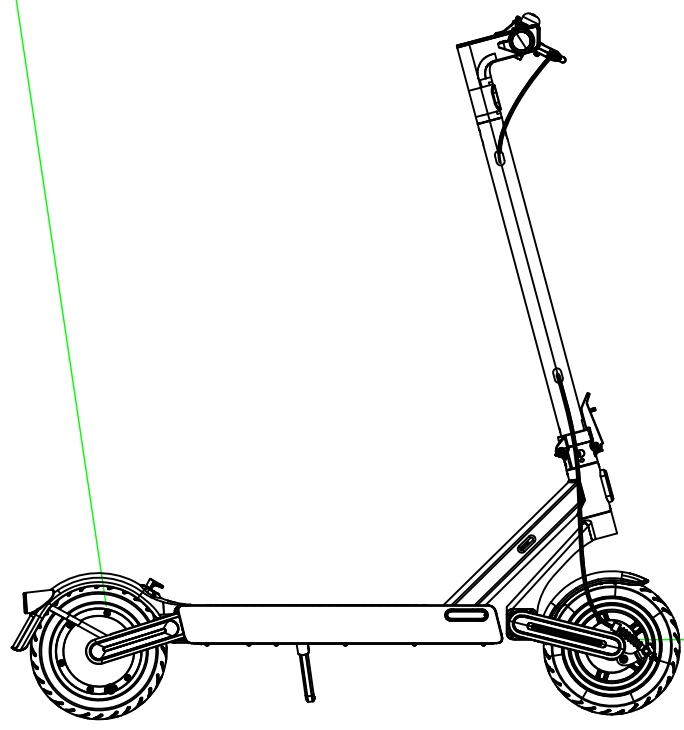


<p><i>Hersteller/manufacturer:</i> Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.</p>	<p><i>Verantwortlicher/responsible:</i> Shawn</p>	<p><i>Zeichnungsnr./drawing no.:</i> 13.3./2.1.</p>	
	<p><i>Titel/title:</i> 13.3./2.1. Zeichnung des gesamten Fahrzeugs / drawing of the whole vehicle</p>	<p><i>Material / material:</i></p>	
		<p><i>Maßstab / scale:</i> 1:20</p>	<p><i>Blatt / page:</i> 2/2</p>

Controller:
Type: T2214
Manufacture: Tianjin Songzheng Electric Technology Co., Ltd
Motor:
Type: DA36V450W
Manufacture: DAAO ELECTRIC(JIANGSU)CO.,LTD.



B-B

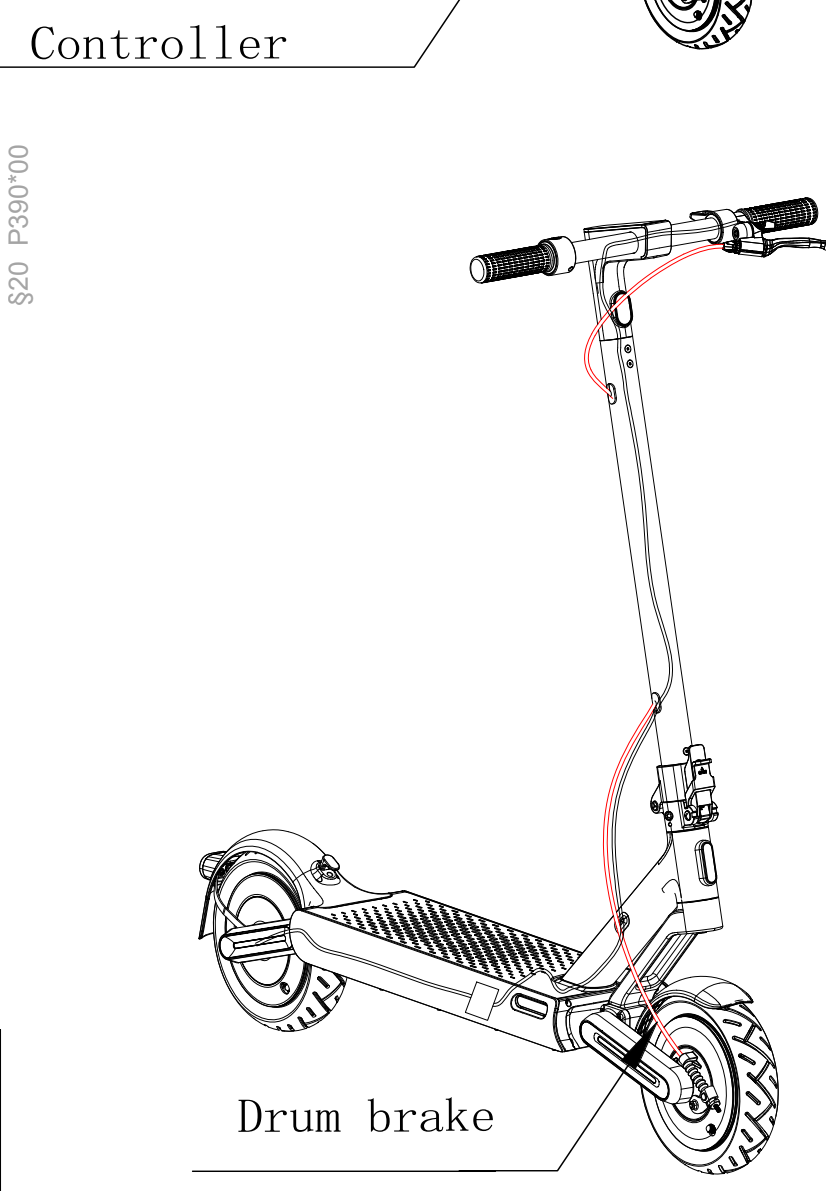
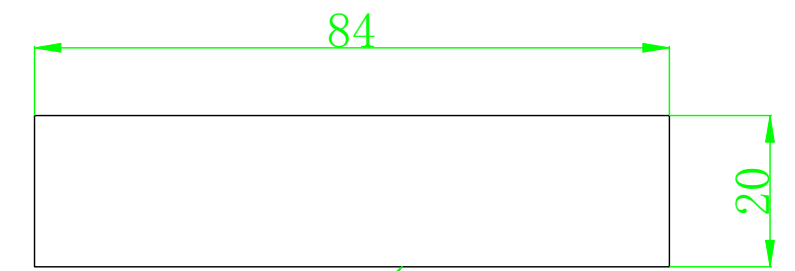
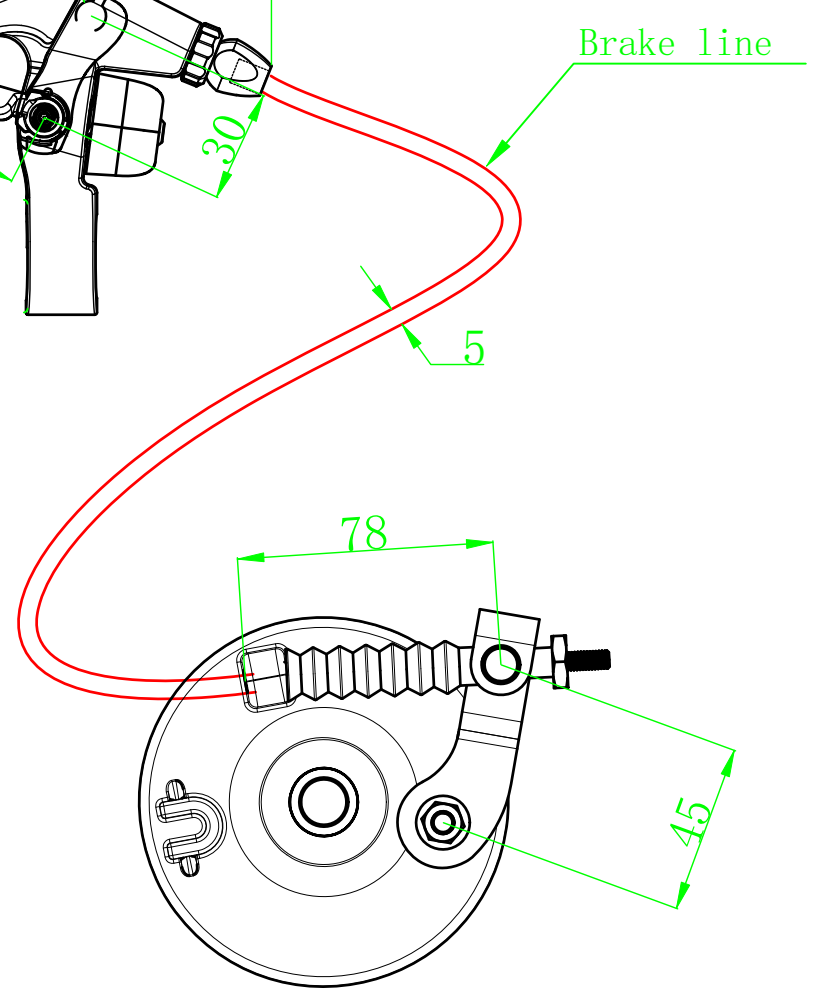
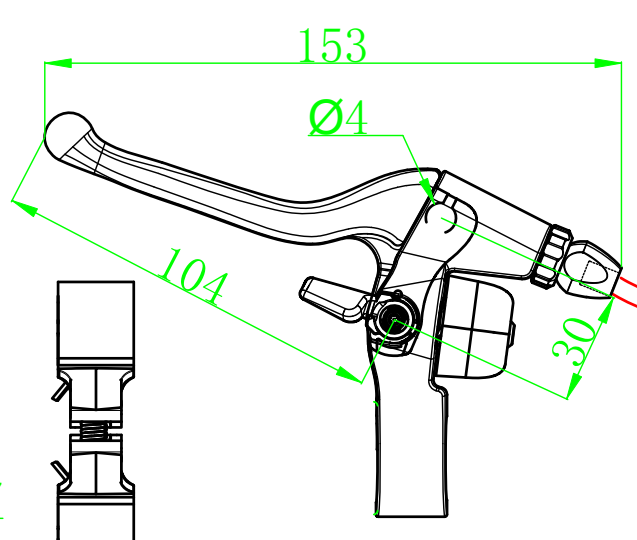
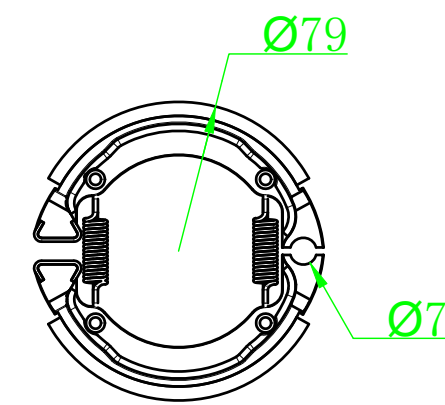
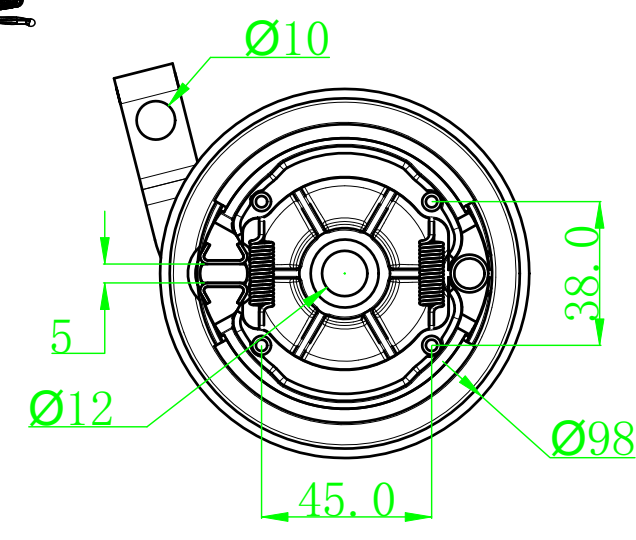
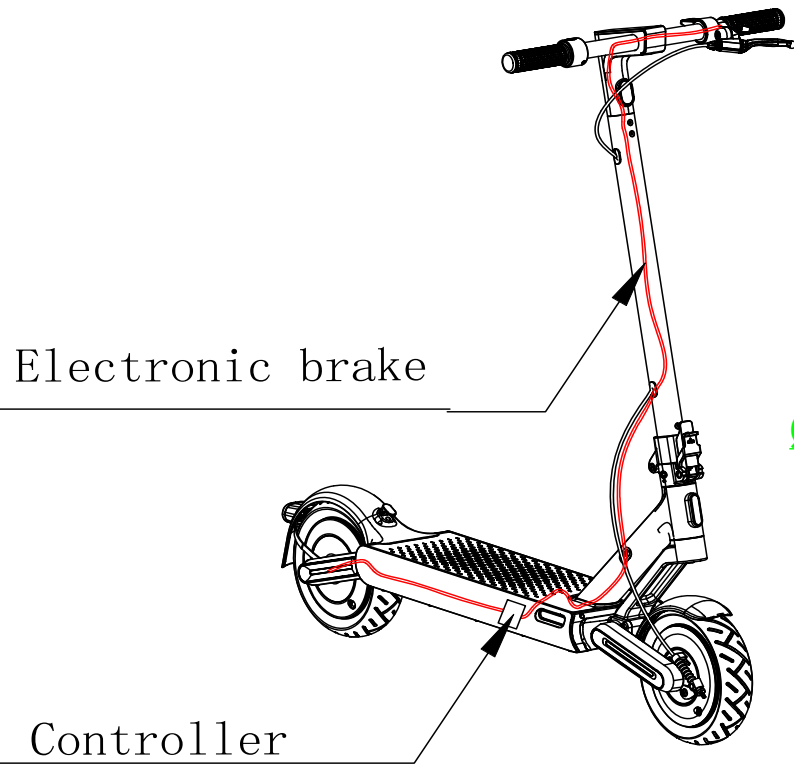


Tire:
Type: 250×64
Manufacture: XIAMEN CHENG SHIN ENTERPRISE CO.,LTD.

FR Wheel:
Type: YL-A1
Manufacture: Jiangsu Yilin Lida New Energy Technology Co. LTD

Hersteller/manufacture:r:v <i>Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.</i>	Verantwortlicher/responsible: <i>Shawn</i>	Zeichnungsnr./drawing no.: 13.3/3.	
	Titel/title: 13.3/3. drawings of propulsion engine (longitudinal / cross section)	Material / material: <i>Aluminium copper</i>	Mafßtab / scale: 1:6 Blatt / page: 1/1

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Drum brake
 Type: KGZ080SXII-TT1
 Manufacturer: KARASAWA TRAFFIC EQUIPMENT (TAIZHOU) CO.,LTD
 Material: Reinforcing fiber+Modified resin+Friction powder+Zirconium silicate
 Drum mass:0.24Kg
 Brake shoe area:1680mm² x 2

<i>Hersteller/manufacturer:</i> Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.	<i>Verantwortlicher/responsible:</i> Shawn	<i>Zeichnungsnr./drawing no.:</i> 13.3/8.	
	<i>Titel/title:</i> 13.3/8. schematic diagram of the brake system	<i>Material / material:</i>	
		<i>Maßstab / scale:</i> 1:10	<i>Blatt / page:</i> 1/1

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Version 01 without the direction indicator



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<p><i>Hersteller/manufacturer:</i> Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.</p>	<p><i>Verantwortlicher/responsible:</i> Shawn</p>	<p><i>Zeichnungsnr./drawing no.:</i> 13.3./9.1.</p>	
	<p><i>Titel/title:</i> 13.3./9.1. photos of a representative vehicle</p>	<p><i>Material / material:</i></p>	
		<p><i>Mafstab / scale:</i></p>	<p><i>Blatt / page:</i> 1/2</p>

Version 02 with the direction indicator



S20 P390*00

<p><i>Hersteller/manufacturer:</i> <i>Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.</i></p>	<p><i>Verantwortlicher/responsible:</i> <i>Shawn</i></p>	<p><i>Zeichnungsnr./drawing no.:</i> <i>13.3./9.1.</i></p>	
	<p><i>Titel/title:</i> <i>13.3./9.1. photos of a representative vehicle</i></p>	<p><i>Material / material:</i></p>	
		<p><i>Mafstab / scale:</i></p>	<p><i>Blatt / page:</i> <i>2/2</i></p>

Head lamp
Make: Zhejiang SITIS Technology Co.,Ltd.
Type: DS21021H; Approval No. : E32*149R00/03*0028*01

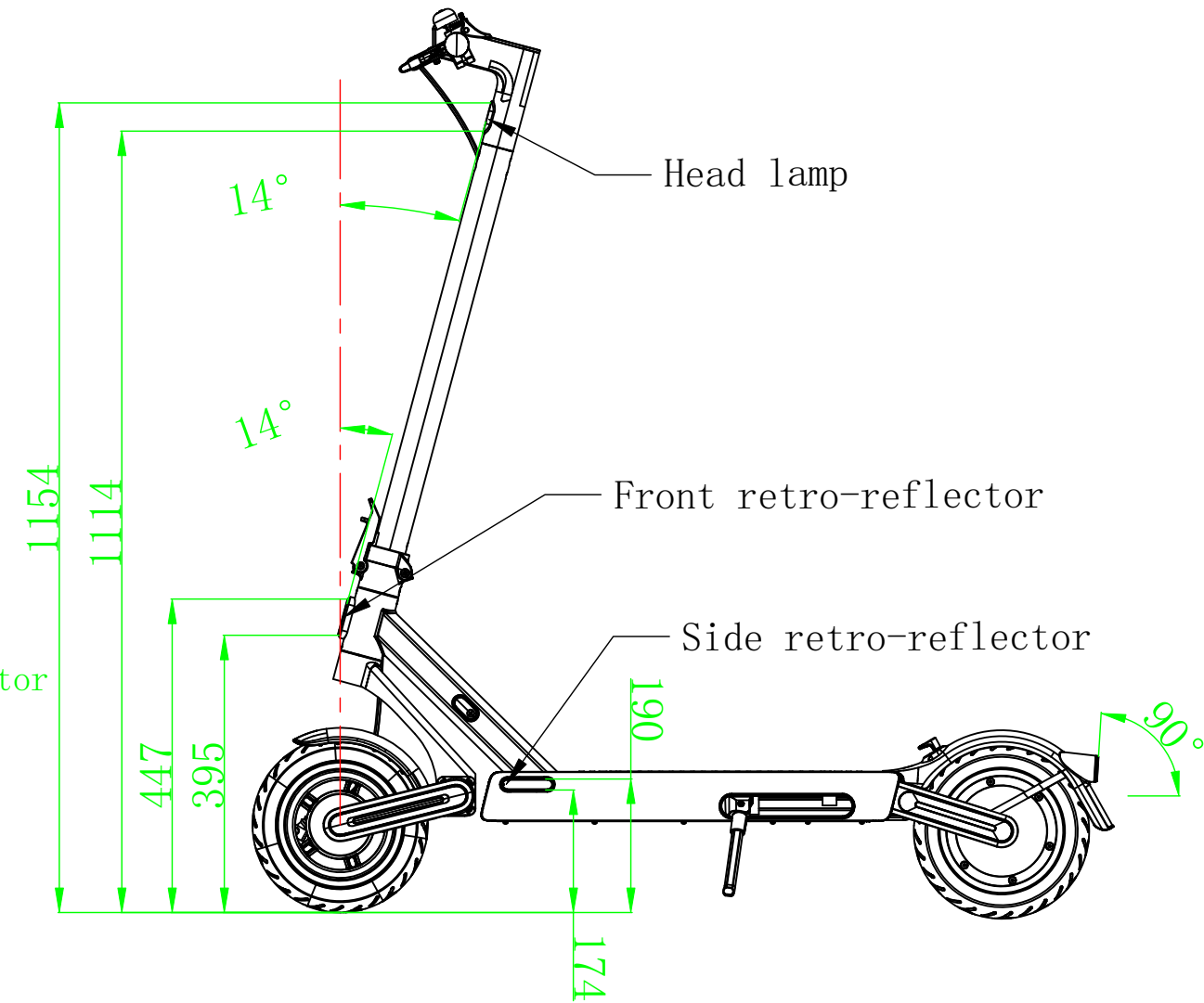
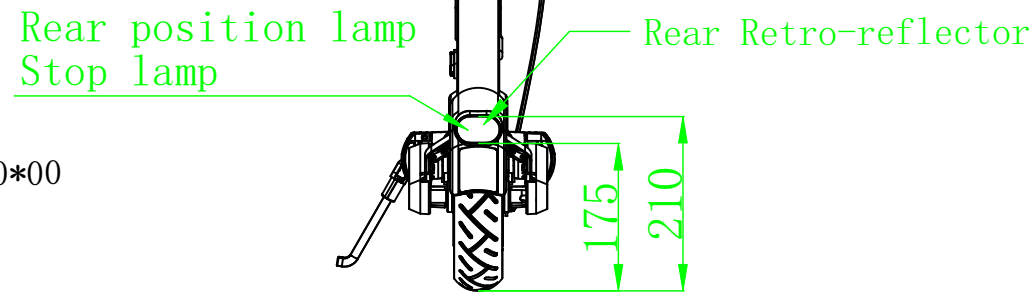
Rear position lamp / Stop lamp
Make: Foshan City Shunde District Chengdi Electronic Technology Co.,Ltd
Type: DI001; Approval No. : K2247/ E9*148R00/04*6761*01

Front retro-reflector
Make:Sate-lite (Foshan) Plastics Co.,Ltd.
Type: SL-QF; Approval No. : E24*150R00/02*0023*01

Side retro-reflector
Make:Sate-lite (Foshan) Plastics Co.,Ltd.
Type: SL-CF; Approval No. : E24*150R00/03*0036*00

Rear retro-reflector
Make:Foshan City Shunde District Chengdi Electronic Technology Co.,Ltd
Type: DRT10; Approval No. : K 2247/ E9*150R00/04*6761*01

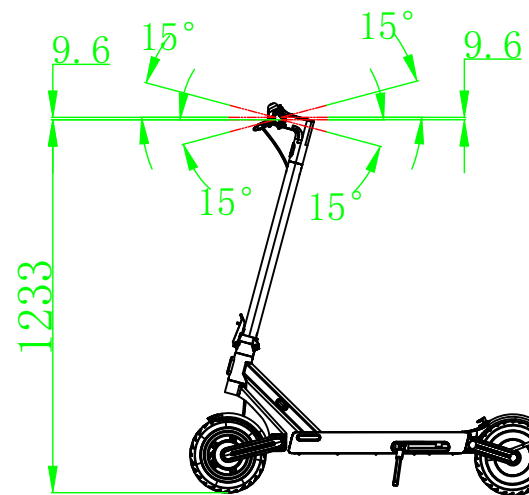
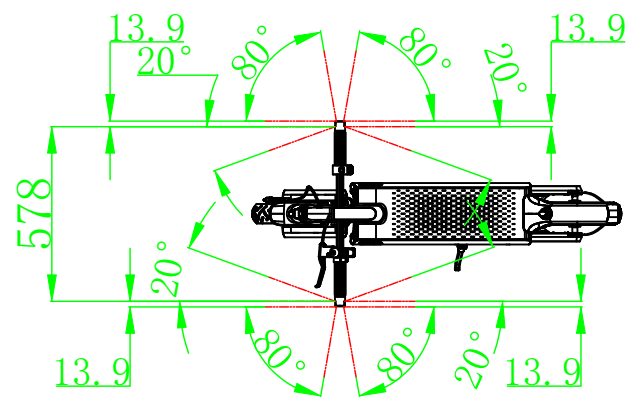
Front/Rear direction indicator
Make: Chengdi Electronic Technology Co.,Ltd
Type: DI001; Approval No. : E32*148R00/04*0380*00



S20 F690*00

Version 02

All other structures are the same as Version 01



Hersteller/manufacture: Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.	Verantwortlicher/responsible: Shawn	Zeichnungsnr./drawing no.: 13.3./10 .	
	Titel/title: 13.3./10. drawing of the whole vehicle with dimension of the vehicle and the lighting devices	Material / material:	Blatt / page: 1:1
		Maßstab / scale: 1:10	



Test Report issued under the responsibility of:



**TEST REPORT
IEC 62133-2**

Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications – Part 2: Lithium systems

Report Number..... : CN23FQ81 001

Date of issue..... : 2023-03-14

Total number of pages : 31 pages

Name of Testing Laboratory
preparing the Report : TÜV Rheinland (Shenzhen) Co., Ltd.

Applicant's name : Fujian SCUD Power Technology Co., Ltd.

Address : 6/F, No.98 Jiangbin East Avenue, Mawei District, Fuzhou, Fujian,
P.R. China

Test specification:

Standard : IEC 62133-2:2017, IEC 62133-2:2017/AMD1:2021

Test procedure : CB Scheme

Non-standard test method : N/A

TRF template used..... : IECEE OD-2020-F1:2021, Ed.1.4

Test Report Form No. : IEC62133_2C

Test Report Form(s) Originator : DEKRA Certification B.V.

Master TRF : Dated 2022-07-01

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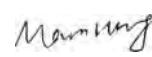
If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

This report is not valid as a CB Test Report unless signed by an approved IECEE Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing NCB. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Test item description	Rechargeable Li-ion Battery Pack	
Trade Mark(s)	N/A	
Manufacturer	Fujian SCUD Power Technology Co., Ltd. No.135, Rujiang East Road, Mawei District, Fuzhou, Fujian, P.R. China	
Model/Type reference	T2214-BA3A	
Ratings	36.5VDC, 15000mAh, 547.5Wh	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
<input checked="" type="checkbox"/>	CB Testing Laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.
	Testing location/ address	1F East & 3F West -4F, Cybio Technology Building No.1, No.16 Kejibei 2nd Road, High-Tech Industrial Park North Nanshan District, 518057, Shenzhen, China
	Tested by (name, function, signature)	
	Approved by (name, function, signature) ...	
<input type="checkbox"/>	Testing procedure: CTF Stage 1:	
	Testing location/ address	
	Tested by (name, function, signature)	
	Approved by (name, function, signature) ...	
<input checked="" type="checkbox"/>	Testing procedure: CTF Stage 2:	Fujian SCUD Power Technology Co., Ltd
	Testing location/ address	No.135, Rujing East Road, Mawei District, Fuzhou, Fujian, P.R. China
	Tested by (name + signature)	Li Ruxiang (Engineer) 
	Witnessed by (name, function, signature) . :	Kaman Qiu (Engineer) 
	Approved by (name, function, signature) ...	Marco Huang (Reviewer) 
<input type="checkbox"/>	Testing procedure: CTF Stage 3:	
<input type="checkbox"/>	Testing procedure: CTF Stage 4:	
	Testing location/ address	
	Tested by (name, function, signature)	
	Witnessed by (name, function, signature) . :	
	Approved by (name, function, signature) ...	
	Supervised by (name, function, signature) :	

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<p>List of Attachments (including a total number of pages in each attachment):</p> <p>-Attachment 1: National Difference (3 pages). -Attachment 2: Photo documentation (7 pages).</p>	
<p>Summary of testing:</p>	
<p>Tests performed (name of test and test clause):</p> <p>cl.5.6.2 Design recommendation; cl.7.1 Charging procedure for test purposes (for Cells and Batteries); cl.7.2.2 Case stress at high ambient temperature (batteries); cl.7.3.2 External short circuit (batteries); cl.7.3.3 Free fall (batteries); cl.7.3.6 Over-charging of battery; cl.7.3.8 Mechanical tests (batteries); cl.8.2 Small cell and battery safety information.</p> <p>The component cell (INR21700/50E) has been evaluated according to IEC 62133-2:2017, IEC 62133-2:2017/AMD1:2021 by TÜV (certificate No.: JPTUV-131671, report No.: CN21CLEX 001).</p> <p>Tests are made with the number of batteries specified in IEC 62133-2:2017, IEC 62133-2:2017/AMD1:2021 Table 1.</p>	<p>Testing location:</p> <p>Fujian SCUD Power Technology Co., Ltd. No.135, Rujiang East Road, Mawei District, Fuzhou, Fujian, P.R. China</p>
<p>Summary of compliance with National Differences (List of countries addressed):</p> <p>KR</p> <p>KR=Republic of Korea</p> <p><input checked="" type="checkbox"/> The product fulfils the requirements of <u>BS EN 62133-2:2017, BS EN 62133-2:2017+A1:2021, EN 62133-2:2017, EN 62133-2:2017/A1:2021.</u></p>	

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Use of uncertainty of measurement for decisions on conformity (decision rule) :

No decision rule is specified by the IEC standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule, previously known as "accuracy method").

Other:... (to be specified, for example when required by the standard or client, or if national accreditation requirements apply)

Information on uncertainty of measurement:

The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

IEC Guide 115 provides guidance on the application of measurement uncertainty principles and applying the decision rule when reporting test results within IECEE scheme, noting that the reporting of the measurement uncertainty for measurements is not necessary unless required by the test standard or customer.

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.



Remark:

Date code: "TB071***0100001S03", for example, "TB0712BW0100001S03"

"2" represents the year of production: "0" represents the year of 2020; "1" represents the year of 2021; "2" represents the year of 2022; "3" represents the year of 2023, etc.

"B" represents the month of production: "1" represents the month of January; "2" represents the month of February; "3" represents the month of March; "4" represents the month of April; "5" represents the month of May; "6" represents the month of June; "7" represents the month of July; "8" represents the month of August; "9" represents the month of September; "A" represents the month of October; "B" represents the month of November; "C" represents the month of December.

"W" represents the day of production: "1 to 9" represents the day of "1st to 9th"; "A to X" represents the day of "10th to 31st"; "I" and "O" are not used.

Test item particulars:	
Classification of installation and use:	N/A
Supply Connection	DC Connector
Recommend charging method declared by the manufacturer	Charging the battery with 2000mA constant current and 41.8V constant voltage until current reduces to 280mA at ambient 20°C±5°C.
Discharge current (0,2 It A)	3000mA
Specified final voltage:	25.2V
Upper limit charging voltage per cell:	4.25V
Maximum charging current	2000mA
Charging temperature upper limit	45°C
Charging temperature lower limit:	0°C
Polymer cell electrolyte type:	<input type="checkbox"/> gel polymer <input type="checkbox"/> solid polymer <input checked="" type="checkbox"/> N/A
Possible test case verdicts:	
- test case does not apply to the test object.....:	N/A
- test object does meet the requirement.....:	P (Pass)
- test object does not meet the requirement.....:	F (Fail)
Testing:	
Date of receipt of test item	2023-02-06
Date (s) of performance of tests	2023-02-06 to 2023-03-01
General remarks:	
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.	
Throughout this report a <input type="checkbox"/> comma / <input checked="" type="checkbox"/> point is used as the decimal separator.	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC62133 02:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies)	
: Same as manufacturer	

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General product information and other remarks:

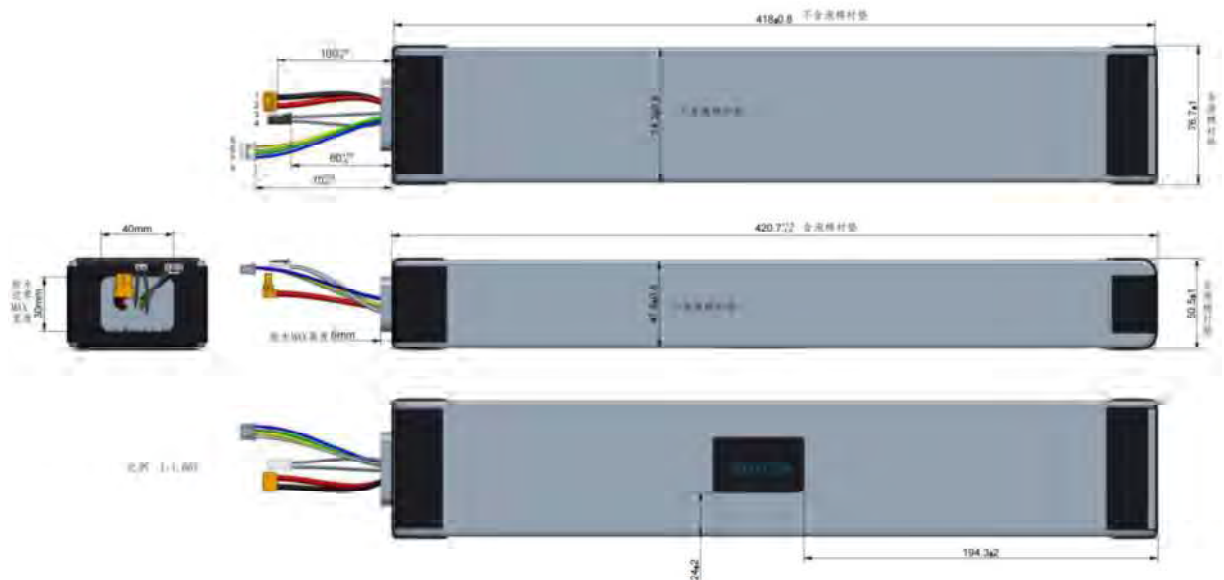
This battery is constructed with thirty Lithium-ion cells (10S3P), and has overcharge, over-discharge, over current and short-circuits proof circuit.

The component cell (INR21700/50E) has been evaluated according to IEC 62133-2:2017, IEC 62133-2:2017/AMD1:2021 by TÜV (certificate No.: JPTUV-131671, report No.: CN21CLEX 001).

The main features of the battery are shown as below (clause 7.1.1):

Model	Rated capacity	Nominal voltage	Nominal Charge Current	Nominal Discharge Current	Maximum Charge Current	Maximum Discharge Current	Maximum Charge Voltage	Cut-off Voltage
T2214-BA3A	15000mAh	36.5V	2000mA	4000mA	2000mA	21000mA	41.8V	25.2V

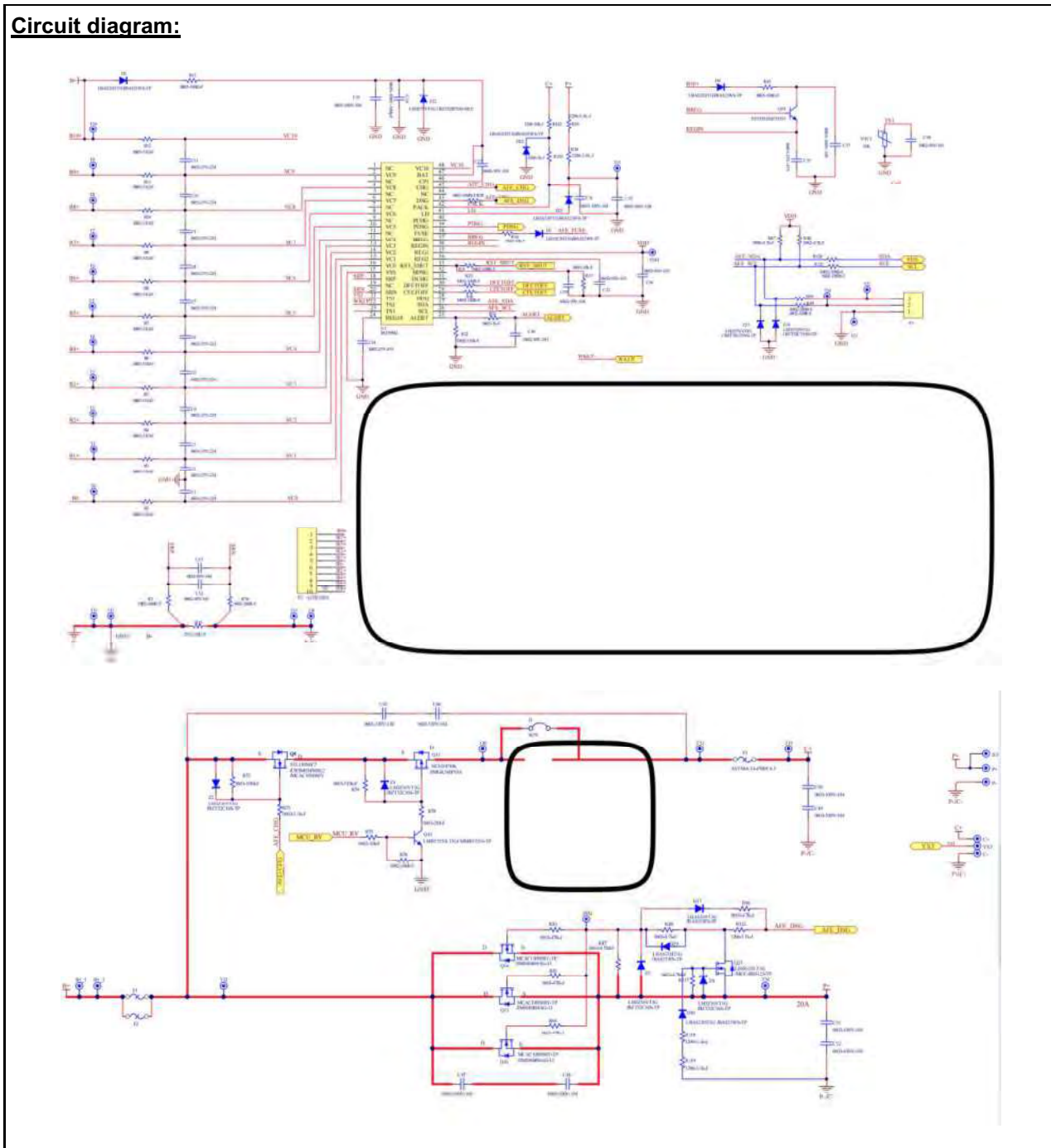
Construction:



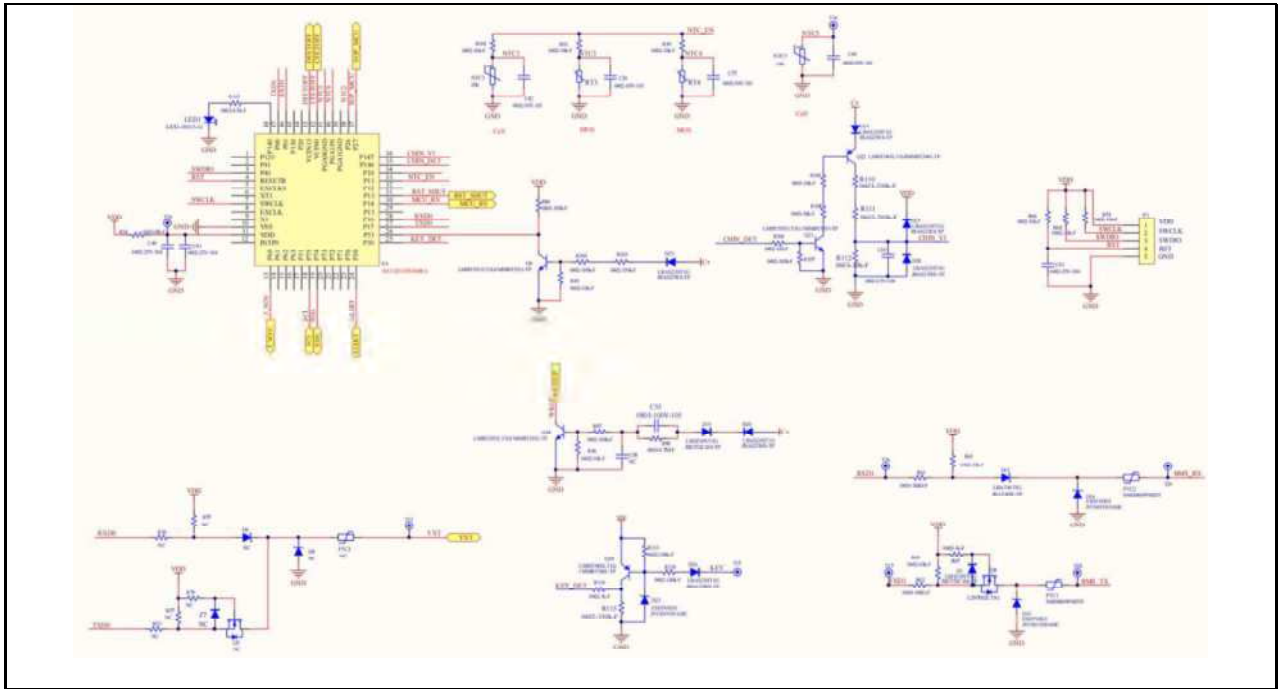
Battery (Unit: mm)

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Circuit diagram:



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IEC 62133-2			
Clause	Requirement + Test	Result - Remark	Verdict
4	PARAMETER MEASUREMENT TOLERANCES		P
	Parameter measurement tolerances		P
5	GENERAL SAFETY CONSIDERATIONS		P
5.1	General		P
	Cells and batteries so designed and constructed that they are safe under conditions of both intended use and reasonably foreseeable misuse		P
5.2	Insulation and wiring		P
	The insulation resistance between the positive terminal and externally exposed metal surfaces of the battery (excluding electrical contact surfaces) is not less than 5 MΩ	No metal case exists.	N/A
	Insulation resistance (MΩ) :	N/A	—
	Internal wiring and insulation are sufficient to withstand maximum anticipated current, voltage and temperature requirements		P
	Orientation of wiring maintains adequate clearances and creepage distances between conductors		P
	Mechanical integrity of internal connections accommodates reasonably foreseeable misuse		P
5.3	Venting		P
	Battery cases and cells incorporate a pressure relief mechanism or are constructed so that they relieve excessive internal pressure at a value and rate that will preclude rupture, explosion and self-ignition	Venting mechanism exists on the top of the cylindrical cell.	P
	Encapsulation used to support cells within an outer casing does not cause the battery to overheat during normal operation nor inhibit pressure relief		P
5.4	Temperature, voltage and current management		P
	Batteries are designed such that abnormal temperature rise conditions are prevented	Overcharge, over discharge, over current and short-circuit proof circuit used in this battery. See tests of clause 7.	P
	Batteries are designed to be within temperature, voltage and current limits specified by the cell manufacturer	See above.	P
	Batteries are provided with specifications and charging instructions for equipment manufacturers so that specified chargers are designed to maintain charging within the temperature, voltage and current limits specified	The charging limits specified in the manufacturer's specification.	P

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IEC 62133-2			
Clause	Requirement + Test	Result - Remark	Verdict
5.5	Terminal contacts		P
	The size and shape of the terminal contacts ensure that they can carry the maximum anticipated current		P
	External terminal contact surfaces are formed from conductive materials with good mechanical strength and corrosion resistance		P
	Terminal contacts are arranged to minimize the risk of short circuits		P
5.6	Assembly of cells into batteries		P
5.6.1	General		P
	Each battery has an independent control and protection for current, voltage, temperature and any other parameter required for safety and to maintain the cells within their operating region	Protective circuit equipped on battery.	P
	This protection may be provided external to the battery such as within the charger or the end devices		N/A
	If protection is external to the battery, the manufacturer of the battery provide this safety relevant information to the external device manufacturer for implementation		N/A
	If there is more than one battery housed in a single battery case, each battery has protective circuitry that can maintain the cells within their operating regions	10S3P	P
	Manufacturers of cells specify current, voltage and temperature limits so that the battery manufacturer/designer may ensure proper design and assembly	Current, voltage and temperature limits specified by cell manufacturer.	P
	Batteries that are designed for the selective discharge of a portion of their series connected cells incorporate circuitry to prevent operation of cells outside the limits specified by the cell manufacturer		N/A
	Protective circuit components are added as appropriate and consideration given to the end-device application		P
	The manufacturer of the battery provide a safety analysis of the battery safety circuitry with a test report including a fault analysis of the protection circuit under both charging and discharging conditions confirming the compliance	Safety analysis report provided by manufacturer.	P
5.6.2	Design recommendation		P

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IEC 62133-2			
Clause	Requirement + Test	Result - Remark	Verdict
	For the battery consisting of a single cell or a single cellblock, it is recommended that the charging voltage of the cell does not exceed the upper limit of the charging voltage specified in Table 2		N/A
	For the battery consisting of series-connected plural single cells or series-connected plural cellblocks, it is recommended that the voltages of any one of the single cells or single cellblocks does not exceed the upper limit of the charging voltage, specified in Table 2, by monitoring the voltage of every single cell or the single cellblocks	10S3P Max. charging voltage of each cell: 4.18V, not exceed 4.25V specified in Cell CB report.	P
	For the battery consisting of series-connected plural single cells or series-connected plural cellblocks, it is recommended that charging is stopped when the upper limit of the charging voltage is exceeded for any one of the single cells or single cellblocks by measuring the voltage of every single cell or the single cellblocks		N/A
	For batteries consisting of series-connected cells or cell blocks, nominal charge voltage are not counted as an overcharge protection		P
	For batteries consisting of series-connected cells or cell blocks, cells have closely matched capacities, be of the same design, be of the same chemistry and be from the same manufacturer		P
	It is recommended that the cells and cell blocks are not discharged beyond the cell manufacturer's specified final voltage	Final voltage of battery per cell: 2.52V, not exceed the final voltage specified by cell manufacturer.	P
	For batteries consisting of series-connected cells or cell blocks, cell balancing circuitry are incorporated into the battery management system		P
5.6.3	Mechanical protection for cells and components of batteries		P
	Mechanical protection for cells, cell connections and control circuits within the battery are provided to prevent damage as a result of intended use and reasonably foreseeable misuse	Mechanical protection for cell connections and control circuit provided.	P
	The mechanical protection can be provided by the battery case or it can be provided by the end product enclosure for those batteries intended for building into an end product	Build-in battery, mechanical protection for cells should be provided by end product.	N/A
	The battery case and compartments housing cells are designed to accommodate cell dimensional tolerances during charging and discharging as recommended by the cell manufacturer	To be evaluated in final system.	N/A

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IEC 62133-2			
Clause	Requirement + Test	Result - Remark	Verdict
	For batteries intended for building into a portable end product, testing with the battery installed within the end product is considered when conducting mechanical tests		N/A
5.7	Quality plan		P
	The manufacturer prepares and implements a quality plan that defines procedures for the inspection of materials, components, cells and batteries and which covers the whole process of producing each type of cell or battery	Complied. ISO 9001: 2015 certificate provided.	P
5.8	Battery safety components		P
6	TYPE TEST AND SAMPLE SIZE		P
	Tests are made with the number of cells or batteries specified in Table 1 using cells or batteries that are not more than six months old		P
	The internal resistance of coin cells are measured in accordance with Annex D. Coin cells with internal resistance less than or equal to 3 Ω are tested in accordance with Table 1	Not coin cells	N/A
	Unless otherwise specified, tests are carried out in an ambient temperature of 20 °C ± 5 °C		P
	The safety analysis of 5.6.1 identify those components of the protection circuit that are critical for short-circuit, overcharge and over discharge protection		P
	When conducting the short-circuit test, consideration is given to the simulation of any single fault condition that is likely to occur in the protecting circuit that would affect the short-circuit test	See clause 7.3.2.	P
7	SPECIFIC REQUIREMENTS AND TESTS		P
7.1	Charging procedure for test purposes		P
7.1.1	First procedure		P
	This charging procedure applies to subclauses other than those specified in 7.1.2		P
	Unless otherwise stated in this document, the charging procedure for test purposes is carried out in an ambient temperature of 20 °C ± 5 °C, using the method declared by the manufacturer	See page 6	P
	Prior to charging, the battery has been discharged at 20 °C ± 5 °C at a constant current of 0,2 It A down to a specified final voltage	See page 6	P
7.1.2	Second procedure	CB approved cell used.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	This charging procedure applies only to 7.3.1, 7.3.4, 7.3.5, and 7.3.9		N/A
	After stabilization for 1 h to 4 h, at an ambient temperature of the highest test temperature and the lowest test temperature, respectively, as specified in Table 2, cells are charged by using the upper limit charging voltage and maximum charging current, until the charging current is reduced to 0,05 It A, using a constant current to constant voltage charging method		N/A
7.2	Intended use		P
7.2.1	Continuous charging at constant voltage (cells)	CB approved cell used.	N/A
	Fully charged cells are subjected for 7 days to a charge using the charging method for current and standard voltage specified by the cell manufacturer		N/A
	Results: no fire, no explosion, no leakage..... :	(See appended table 7.2.1)	N/A
7.2.2	Case stress at high ambient temperature (battery)	Tested as client requested.	P
	Oven temperature (°C)..... :	70°C	—
	Results: no physical distortion of the battery case resulting in exposure of internal protective components and cells	No physical distortion of the battery case.	P
7.3	Reasonably foreseeable misuse		P
7.3.1	External short-circuit (cell)	CB approved cell used.	N/A
	The cells were tested until one of the following occurred:		N/A
	- 24 hours elapsed; or		N/A
	- The case temperature declined by 20 % of the maximum temperature rise		N/A
	Results: no fire, no explosion..... :	(See appended table 7.3.1)	N/A
7.3.2	External short-circuit (battery)	Tested complied.	P
	The batteries were tested until one of the following occurred:		P
	- 24 hours elapsed; or		N/A
	- The case temperature declined by 20 % of the maximum temperature rise		P
	In case of rapid decline in short circuit current, the battery pack remained on test for an additional one hour after the current reached a low end steady state condition		P

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Clause	Requirement + Test	Result - Remark	Verdict
	A single fault in the discharge protection circuit is conducted on one to four (depending upon the protection circuit) of the five samples before conducting the short-circuit test	Single failure conducted on four samples.	P
	A single fault applies to protective component parts such as MOSFET (metal oxide semiconductor field-effect transistor), fuse, thermostat or positive temperature coefficient (PTC) thermistor	Single fault applies on MOSFET Q14 (Pin S-D).	P
	Results: no fire, no explosion..... :	(See appended table 7.3.2)	P
7.3.3	Free fall	Tested complied.	P
	Results: no fire, no explosion	No fire. No explosion.	P
7.3.4	Thermal abuse (cells)	CB approved cell used.	N/A
	Oven temperature (°C)..... :	N/A	—
	Results: no fire, no explosion	No fire. No explosion	N/A
7.3.5	Crush (cells)	CB approved cell used.	N/A
	The crushing force was released upon:		N/A
	- The maximum force of 13 kN ± 0,78 kN has been applied; or		N/A
	- An abrupt voltage drop of one-third of the original voltage has been obtained		N/A
	Results: no fire, no explosion..... :	(See appended table 7.3.5)	N/A
7.3.6	Over-charging of battery	Tested complied.	P
	The supply voltage which is:		P
	- 1,4 times the upper limit charging voltage presented in Table A.1 (but not to exceed 6,0 V) for single cell/cell block batteries or		N/A
	- 1,2 times the upper limit charging voltage resented in Table A.1 per cell for series connected multi-cell batteries, and	10S3P	P
	- Sufficient to maintain a current of 2,0 It A throughout the duration of the test or until the supply voltage is reached		P
	Test was continued until the temperature of the outer casing:		P
	- Reached steady state conditions (less than 10 °C change in 30-minute period); or		P
	- Returned to ambient		N/A
	Results: no fire, no explosion..... :	(See appended table 7.3.6)	P
7.3.7	Forced discharge (cells)	CB approved cell used.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Discharge a single cell to the lower limit discharge voltage specified by the cell manufacturer		N/A
	The discharged cell is then subjected to a forced discharge at 1 It A to the negative value of the upper limit charging voltage		N/A
	- The discharge voltage reaches the negative value of upper limit charging voltage within the testing duration. The voltage is maintained at the negative value of the upper limit charging voltage by reducing the current for the remainder of the testing duration		N/A
	- The discharge voltage does not reach the negative value of upper limit charging voltage within the testing duration. The test is terminated at the end of the testing duration		N/A
	Results: no fire, no explosion..... :	(See appended table 7.3.7)	N/A
7.3.8	Mechanical tests (batteries)		P
7.3.8.1	Vibration	Tested complied.	P
	Results: no fire, no explosion, no rupture, no leakage or venting. :	(See appended table 7.3.8.1)	P
7.3.8.2	Mechanical shock	Tested complied.	P
	Results: no leakage, no venting, no rupture, no explosion and no fire :	(See appended table 7.3.8.2)	P
7.3.9	Design evaluation – Forced internal short-circuit (cells)	CB approved cell used.	N/A
	The cells complied with national requirement for :	France, Japan, Korea, Switzerland	—
	The pressing was stopped upon:		N/A
	- A voltage drop of 50 mV has been detected; or		N/A
	- The pressing force of 800 N (cylindrical cells) or 400 N (prismatic cells) has been reached		N/A
	Results: no fire :	(See appended table 7.3.9)	N/A
8	INFORMATION FOR SAFETY		P
8.1	General		P
	Manufacturers of secondary cells provides information about current, voltage and temperature limits of their products	Cell CB report provided.	P
	Manufacturers of batteries provides information regarding how to minimize and mitigate hazards to equipment manufacturers or end-users	Information for safety mentioned in manufacturer's specifications	P

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Clause	Requirement + Test	Result - Remark	Verdict
	Systems analyses are performed by device manufacturers to ensure that a particular battery design prevents hazards from occurring during use of a product		N/A
	As appropriate, any information relating to hazard avoidance resulting from a system analysis is provided to the end user		N/A
	Do not allow children to replace batteries without adult supervision		N/A
8.2	Small cell and battery safety information	Not small battery	N/A
	The following warning language is to be provided with the information packaged with the small cells and batteries or equipment using them:		N/A
	- Keep small cells and batteries which are considered swallowable out of the reach of children		N/A
	- Swallowing may lead to burns, perforation of soft tissue, and death. Severe burns can occur within 2 h of ingestion		N/A
	- In case of ingestion of a cell or battery, seek medical assistance promptly		N/A
9	MARKING		P
9.1	Cell marking	The final product is battery	N/A
	Cells are marked as specified in IEC 61960, except coin cells		N/A
	Coin cells whose external surface area is too small to accommodate the markings on the cells show the designation and polarity		N/A
	By agreement between the cell manufacturer and the battery and/or end product manufacturer, component cells used in the manufacture of a battery need not be marked		N/A
9.2	Battery marking		P
	Batteries are marked as specified in IEC 61960, except for coin batteries	The battery is marked in accordance with IEC 61960-3, also see page 5.	P
	Coin batteries whose external surface area is too small to accommodate the markings on the batteries show the designation and polarity		N/A
	Batteries are marked with an appropriate caution statement		P
	- Terminals have clear polarity marking on the external surface of the battery, or		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- Not be marked with polarity markings if the design of the external connector prevents reverse polarity connections	Keyed external connectors used to prevent reverse polarity connections.	P
9.3	Caution for ingestion of small cells and batteries	Not small battery	N/A
	Coin cells and batteries identified as small batteries include a caution statement regarding the hazards of ingestion in accordance with 8.2		N/A
	Small cells and batteries are intended for direct sale in consumer-replaceable applications, caution for ingestion is given on the immediate package		N/A
9.4	Other information		P
	The following information are marked on or supplied with the battery:		P
	- Storage and disposal instructions	Information for storage and disposal instructions mentioned in manufacturer's specifications.	P
	- Recommended charging instructions	Information for recommended charging instructions mentioned in manufacturer's specifications.	P
10	PACKAGING AND TRANSPORT		N/A
	Packaging for coin cells are not be small enough to fit within the limits of the ingestion gauge of Figure 3	Not coin cells	N/A
ANNEX A	CHARGING AND DISCHARGING RANGE OF SECONDARY LITHIUM ION CELLS FOR SAFE USE		N/A
A.1	General	CB approved cell used.	N/A
A.2	Safety of lithium ion secondary battery		N/A
A.3	Consideration on charging voltage		N/A
A.3.1	General		N/A
A.3.2	Upper limit charging voltage		N/A
A.3.2.1	General		N/A
A.3.2.2	Explanation of safety viewpoint		N/A
A.3.2.3	Safety requirements, when different upper limit charging voltage is applied		N/A
A.4	Consideration of temperature and charging current		N/A
A.4.1	General		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
A.4.2	Recommended temperature range		N/A
A.4.2.1	General		N/A
A.4.2.2	Safety consideration when a different recommended temperature range is applied		N/A
A.4.3	High temperature range		N/A
A.4.3.1	General		N/A
A.4.3.2	Explanation of safety viewpoint		N/A
A.4.3.3	Safety considerations when specifying charging conditions in the high temperature range		N/A
A.4.3.4	Safety considerations when specifying a new upper limit in the high temperature range		N/A
A.4.4	Low temperature range		N/A
A.4.4.1	General		N/A
A.4.4.2	Explanation of safety viewpoint		N/A
A.4.4.3	Safety considerations, when specifying charging conditions in the low temperature range		N/A
A.4.4.4	Safety considerations when specifying a new lower limit in the low temperature range		N/A
A.4.5	Scope of the application of charging current		N/A
A.4.6	Consideration of discharge		N/A
A.4.6.1	General		N/A
A.4.6.2	Final discharge voltage and explanation of safety viewpoint		N/A
A.4.6.3	Discharge current and temperature range		N/A
A.4.6.4	Scope of application of the discharging current		N/A
A.5	Sample preparation		N/A
A.5.1	General		N/A
A.5.2	Insertion procedure for nickel particle to generate internal short		N/A
A.5.3	Disassembly of charged cell		N/A
A.5.4	Shape of nickel particle		N/A
A.5.5	Insertion of nickel particle in cylindrical cell		N/A
A.5.5.1	Insertion of nickel particle in winding core		N/A
A.5.5.2	Marking the position of the nickel particle on both ends of the winding core of the separator		N/A
A.5.6	Insertion of nickel particle in prismatic cell		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
A.6	Experimental procedure of the forced internal short-circuit test		N/A
A.6.1	Material and tools for preparation of nickel particle		N/A
A.6.2	Example of a nickel particle preparation procedure		N/A
A.6.3	Positioning (or placement) of a nickel particle		N/A
A.6.4	Damaged separator precaution		N/A
A.6.5	Caution for rewinding separator and electrode		N/A
A.6.6	Insulation film for preventing short-circuit		N/A
A.6.7	Caution when disassembling a cell		N/A
A.6.8	Protective equipment for safety		N/A
A.6.9	Caution in the case of fire during disassembling		N/A
A.6.10	Caution for the disassembling process and pressing the electrode core		N/A
A.6.11	Recommended specifications for the pressing device		N/A
ANNEX B	RECOMMENDATIONS TO EQUIPMENT MANUFACTURERS AND BATTERY ASSEMBLERS		N/A
ANNEX C	RECOMMENDATIONS TO THE END-USERS		N/A
ANNEX D	MEASUREMENT OF THE INTERNAL AC RESISTANCE FOR COIN CELLS		N/A
D.1	General		N/A
D.2	Method		N/A
	A sample size of three coin cells is required for this measurement	(See appended table D.2)	N/A
	Coin cells with an internal resistance greater than 3 Ω require no further testing		N/A
	Coin cells with an internal resistance less than or equal to 3 Ω are subjected to the testing according to Clause 6 and Table 1		N/A
ANNEX E	PACKAGING AND TRANSPORT		N/A
ANNEX F	COMPONENT STANDARDS REFERENCES		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

7.2.1	TABLE: Continuous charging at constant voltage (cells)				N/A
Sample No.	Recommended charging voltage V _c (Vdc)	Recommended charging current I _{rec} (A)	OCV before test (Vdc)	Results	
Supplementary information:					
- No fire or explosion					
- No leakage					
- Others (please explain)					

7.3.1	TABLE: External short circuit (cell)					N/A
Sample No.	Ambient (°C)	OCV at start of test (Vdc)	Resistance of circuit (mΩ)	Maximum case temperature rise ΔT (°C)	Results	
Samples charged at charging temperature upper limit						
Samples charged at charging temperature lower limit						
Supplementary information:						
- No fire or explosion						
- Others (please explain)						

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Clause	Requirement + Test	Result - Remark	Verdict

7.3.2	TABLE: External short circuit (battery)					P
Sample No.	Ambient T (°C)	OCV before test (Vdc)	Resistance of circuit (mΩ)	Maximum case temperature rise ΔT (°C)	Component single fault condition	Results
RZ230002-004*	18.2	41.37	69.6	20.1	--	P
RZ230002-005*	18.2	40.25	69.7	20.3	MOSFET Q14 (Pin S-D) SC***	P
RZ230002-006*	18.2	40.55	70.2	20.4	MOSFET Q14 (Pin S-D) SC***	P
RZ230002-007*	18.0	40.75	70.1	18.4	MOSFET Q14 (Pin S-D) SC***	P
RZ230002-008*	18.0	40.77	70.0	18.5	MOSFET Q14 (Pin S-D) SC***	P
RZ230002-023**	17.9	41.29	70.0	18.2	--	P
RZ230002-024**	17.9	40.22	69.9	18.2	MOSFET Q14 (Pin S-D) SC***	P
RZ230002-025**	17.9	40.53	71.3	18.1	MOSFET Q14 (Pin S-D) SC***	P
RZ230002-026**	17.9	40.78	73.7	18.1	MOSFET Q14 (Pin S-D) SC***	P
RZ230002-027**	17.9	40.81	72.6	18.1	MOSFET Q14 (Pin S-D) SC***	P
Supplementary information:						
- No fire or explosion						
Remark:						
*: Test performed at the batteries with critical main components.						
**: Test performed at the batteries with critical alternative components.						
***SC: short circuit						

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Clause	Requirement + Test			Result - Remark	Verdict
7.3.5	TABLE: Crush (cells)			N/A	
Sample No.	OCV before test (Vdc)	OCV at removal of crushing force (Vdc)	Maximum force applied to the cell during crush (kN)	Results	
Samples charged at charging temperature upper limit					
Samples charged at charging temperature lower limit					
Supplementary information:					
- No fire or explosion					
- Others (please explain)					

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Clause	Requirement + Test	Result - Remark	Verdict

7.3.6	TABLE: Over-charging of battery				P
Constant charging current (A)		30		—	
Supply voltage (Vdc)		51		—	
Sample No.	OCV before charging (Vdc)	Total charging time (minute)	Maximum outer case temperature (°C)	Results	
RZ230002-012*	28.13	70	20.8	P	
RZ230002-013*	28.22	70	20.8	P	
RZ230002-014*	28.34	70	20.9	P	
RZ230002-015*	28.15	70	20.9	P	
RZ230002-016*	28.27	70	20.9	P	
RZ230002-028**	28.15	70	21.0	P	
RZ230002-029**	28.17	70	21.2	P	
RZ230002-030**	28.22	70	21.8	P	
RZ230002-031**	28.29	70	21.3	P	
RZ230002-032**	28.23	70	21.2	P	
Supplementary information:					
- No fire or explosion					
Remark:					
*: Test performed at the batteries with critical main components.					
**: Test performed at the batteries with critical alternative components.					

7.3.7	TABLE: Forced discharge (cells)				N/A
Sample No.	OCV before application of reverse charge (Vdc)	Measured reverse charge I _t (A)	Lower limit discharge voltage (Vdc)	Results	
Supplementary information:					
- No fire or explosion					
- Others (please explain)					

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Clause	Requirement + Test	Result - Remark	Verdict

7.3.8.1	TABLE: Vibration					P
Sample No.	OCV before test (Vdc)	OCV after test (Vdc)	Mass before test (g)	Mass after test (g)	Results	
RZ230002-017*	41.44	41.40	2522.51	2522.60	P	
RZ230002-018*	41.48	41.44	2510.44	2510.57	P	
RZ230002-019*	41.51	41.48	2553.49	2554.12	P	

Supplementary information:
- No fire or explosion
- No rupture
- No leakage
- No venting
Remark:
*: Test performed at the batteries with critical main components.

7.3.8.2	TABLE: Mechanical shock					P
Sample No.	OCV before test (Vdc)	OCV after test (Vdc)	Mass before test (g)	Mass after test (g)	Results	
RZ230002-020*	41.45	41.44	2542.15	2542.74	P	
RZ230002-021*	41.52	41.51	2535.27	2535.30	P	
RZ230002-022*	41.47	41.47	2537.42	2537.51	P	

Supplementary information:
- No fire or explosion
- No rupture
- No leakage
- No venting
Remark:
*: Test performed at the batteries with critical main components.

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Clause	Requirement + Test	Result - Remark	Verdict

7.3.9	TABLE: Forced internal short circuit (cells)					N/A
Sample No.	Chamber ambient T (°C)	OCV before test (Vdc)	Particle location ¹⁾	Maximum applied pressure (N)	Results	
Samples charged at charging temperature upper limit						
Samples charged at charging temperature lower limit						
Supplementary information:						
¹⁾ Identify one of the following: 1: Nickel particle inserted between positive and negative (active material) coated area. 2: Nickel particle inserted between positive aluminium foil and negative active material coated area. - No fire - Others (please explain)						

D.2	TABLE: Internal AC resistance for coin cells				N/A
Sample no.	Ambient T (°C)	Store time (h)	Resistance Rac (Ω)	Results ¹⁾	
Supplementary information:					
¹⁾ Coin cells with an internal resistance less than or equal to 3 Ω, see test result on corresponding tables according to Clause 6 and Table 1.					

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Clause	Requirement + Test	Result - Remark	Verdict

TABLE: Critical components information					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
Cell	EVE Energy Co., Ltd.	INR21700/50 E	3.65V, 5.0Ah	IEC 62133-2:2017, IEC 62133-2:2017/AMD1:2021	TÜV Rheinland Certificate No.: JPTUV-131671
PCB	VICTORY GIANT TECHNOLOGY (HUIZHOU) CO LTD	SH1	V-0, 130°C	UL 94 UL 796	UL E248779
PCB (Alternative)	Interchangeable	Interchangeable	V-0, 130°C	UL 94 UL 796	UL approved
Protection IC (U1)	Texas Instruments	BQ76942	Overcharge Detection Voltage: 4.215V±0.015V, Over-discharge Detection Voltage: 2.75V±0.015V, Operating temperature range: -40°C to 85°C	--	Tested with appliance
IC (U4)	Cmsemicon	BAT32G137G H48FA	Power voltage range: 2.0V to 5.5V, Operating temperature range: -40°C to 105°C	--	Tested with appliance
MOSFET (Q9)	CRMICRO	CRSM034N06 L2	I _d : 117A, V _{ds} : 60V, Operating temperature range: -55°C to 175°C	--	Tested with appliance
MOSFET (Q9) (Alternative)	MCC	MCAC95N065 Y	I _d : 95A, V _{ds} : 65V, Operating temperature range: -55°C to 150°C	--	Tested with appliance
MOSFET (Q11)	NCEPOWER	NCE01P30K	I _d : 30A, V _{ds} : 100V, Operating temperature range: -55°C to 175°C	--	Tested with appliance

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Clause	Requirement + Test			Result - Remark	Verdict
MOSFET (Q11) (Alternative)	JJW	JMGK540P10 A	I _d : 30A, V _{ds} : 100V, Operating temperature range: -55°C to 175°C	--	Tested with appliance
MOSFET (Q13, Q14, Q16)	MCC	MCAC100N08 Y-TP	I _d : 100A, V _{ds} : 80V, Operating temperature range: -55°C to 150°C	--	Tested with appliance
MOSFET (Q13, Q14, Q16) (Alternative)	JJW	JMSH0804AG -13	I _d : 126A, V _{ds} : 80V Operating temperature range: -55°C to 150°C	--	Tested with appliance
FUSE (F1, F2)	ADVANCED SURGETECH MATERIALS LTD	24 148.20	Voltage: 72V, Current: 20A	UL 248-1 UL 248-14	UL E355868
FUSE (F3)	ADVANCED SURGETECH MATERIALS LTD	PB05.6.3	Voltage: 125V, Current: 6.3A	UL 248-1 UL 248-14	UL E355868
NTC (NTC1, NTC2, NTC5)	GUANGZHOU NEWLIFE NEW MATERIAL CO LTD	NL103F3435	Resistance at 25°C: 10KΩ±1% T _{moa} : 150°C	UL 1434	UL E505719
PTC (PTC1, PTC2)	POLYTRONICS TECHNOLOGY CORP	SMD0805P00 2TF(\$)	I _h : 0.02A, I _t : 0.06A, V _{max} : 63V, T _{moa} : 85°C	UL 1434	UL E201431
Cell Holder	Covestro Deutschland AG [PC Resins]	FR3010 +	Fire rating: V-0, Min thickness: 1.5mm, T _{max} : 85°C	UL 94 UL 746C	UL E41613
Lead wires (discharge)	DONGGUAN ZHONGZHEN ENERGY TECHNOLOGY CO., LTD	3135	Min. 16AWG, Min. 200°C, Min. 600V	UL 758	UL E355578
Lead wires (discharge) (Alternative)	Interchangeable	Interchangeable	Min. 16AWG, Min. 200°C, Min. 600V	UL 758	UL approved
Lead wires (charge)	DONGGUAN ZHONGZHEN ENERGY TECHNOLOGY CO., LTD	1007	Min. 20AWG, Min. 80°C, Min. 300V	UL 758	UL E355578



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Clause	Requirement + Test			Result - Remark	Verdict
Signal wires	DONGGUAN ZHONGZHEN ENERGY TECHNOLOGY CO., LTD	1007	Min. 24AWG, Min. 80°C, Min. 300V	UL 758	UL E355578
Connector (discharge)	CHANGZHOU AMASS ELECTRONICS CO., LTD.	XT30ULW- F(B)	Material: PA, Fire rating: V-0, 20A, DC 500V	UL 1977	UL E482722
Connector (charge)	DongGuan Konra Electronics Co Ltd	A3000	Material: Nylon66, Fire rating: V-0, 5A, DC 250V	UL 1977	UL E482543
Connector (signal wires)	CELANESE INTERNATIONAL CORP	A3 RV0 (a)(b)(f2)	Material: PA66, Fire rating: V-0 3A, DC 250V	UL 94	UL E86034
Supplementary information: 1) Provided evidence ensures the agreed level of compliance. See OD-CB2039.					

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List of test equipment used:

Clause	Measurement / testing	Testing / measuring equipment / material used, (Equipment ID)	Range used	Last Calibration date	Calibration due date
7.1.1	First procedure	Charge discharge equipment (W-TC-068)	0V to 100V, 0.05A to 30A	2022-04-08	2023-04-07
7.2.2	Case stress at high ambient temperature (battery)	Temperature box (W-TC-086)	0°C to 100°C	2022-12-01	2023-11-31
		Handheld digital multimeter (W-TC-039)	0V to 100V	2023-01-03	2024-01-02
7.3.2	External short-circuit (battery)	Short-circuit test machine (W-TC-123)	0V to 100V, 0A to 300A	2022-09-07	2023-09-06
		Internal resistance tester (For measuring resistance of circuit) (W-TC-029)	1mΩ to 3Ω	2023-01-03	2024-01-02
		Handheld digital multimeter (W-TC-039)	0V to 100V	2023-01-03	2024-01-02
		Data collector/temperature recorder (W-TC-073)	0°C to 500°C	2022-04-23	2023-04-22
7.3.3	Free fall	Controlled drop platform (W-TC-021)	300mm to 1500mm	2022-04-09	2023-04-08
		Handheld digital multimeter (W-TC-039)	0V to 100V	2023-01-03	2024-01-02
		Electronic balance (W-TC-060)	0g to 30000g	2022-09-15	2023-09-14
7.3.6	Over-charging of battery	Charge discharge equipment (W-TC-068)	0V to 100V, 0.05A to 30A	2022-04-08	2023-04-07
		Handheld digital multimeter (W-TC-039)	0V to 100V	2023-01-03	2024-01-02
		Data collector/temperature recorder (W-TC-073)	0°C to 500°C	2022-04-23	2023-04-22
7.3.8.1	Mechanical-Vibration	Electric vibration system (W-TC-062)	0 to 200Hz; Acceleration 0g to 50g; 0mm to 20mm	2022-09-16	2023-09-15



		Handheld digital multimeter (W-TC-039)	0V to 100V	2023-01-03	2024-01-02
		Electronic balance (W-TC-060)	0g to 30000g	2022-09-15	2023-09-14
		Electric vibration system (W-TC-058)	0 to 200Hz; Acceleration 0g to 50g; 0mm to 20mm	2022-04-08	2023-04-07
7.3.8.2	Mechanical shock	Acceleration impact testing machine (W-TC-022)	Acceleration 1g to 590g; Pulse Width 1.5ms to 24ms	2022-06-22	2023-06-21
		Handheld digital multimeter (W-TC-039)	0V to 100V	2023-01-03	2024-01-02
		Electronic balance (W-TC-060)	0g to 30000g	2022-09-15	2023-09-14
8.2	Small cell and battery safety information	Food intake gauge (W-BZ-014)	A: 25.43 B: 57.15 C: Φ 31.75	2022-09-15	2023-09-14

\$20 P390*00

Attachment 1

Report No.: **CN23FQ81 001**

IEC62133_2B ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
ATTACHMENT TO TEST REPORT IEC 62133-2 (Republic of Korea) NATIONAL DIFFERENCES (Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary lithium cells, and for batteries made from them, for use in portable applications - Part 2: Lithium systems)			
Differences according to : National standard KC62133-2(2020-07)			
TRF template used: : IECEE OD-2020-F3, Ed. 1.1			
Attachment Form No. : KR_ND_IEC62133_2B			
Attachment Originator : KTR			
Master Attachment : Dated 2022-05-27			
Copyright © 2020 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.			
	National Differences		
7.3.6	Over-charging of battery		P
(Revision)	<p>[Add the bolded text]</p> <p>b) Test</p> <p>The test shall be carried out in an ambient temperature of 20 °C ± 5 °C. Each test battery shall be discharged at a constant current of 0,2 It A, to a final discharge voltage specified by the manufacturer. Sample batteries shall then be charged at a constant current of 2,0 It A, using a supply voltage which is:</p> <ul style="list-style-type: none"> • 1,4 times the upper limit charging voltage presented in Table A.1 (but not to exceed 6,0 V) for single cell/cell block batteries or • 1,2 times the upper limit charging voltage presented in Table A.1 per cell for series connected multi-cell batteries, and • sufficient to maintain a current of 2,0 It A throughout the duration of the test or until the supply voltage is reached. <p><u>• In case the charging voltage specified by the manufacturer is higher than the overcharge test voltage, the maximum charging voltage specified by manufacturer should be applied with 2.0 ItA, (e.g., quick charging power bank, etc.)</u></p>	<p>See appended Table 7.3.6 of test report.</p>	P

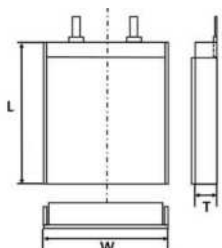
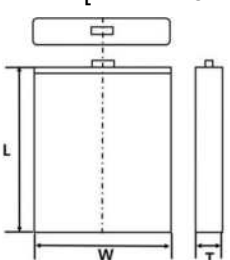
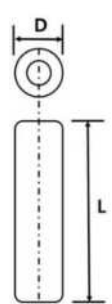
S20 P390*00

Attachment 1

Report No.: **CN23FQ81 001**

IEC62133_2B ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	<p>[Replace to the following statement]</p> <p>c) Acceptance criteria</p> <p>Filling beyond the manufacturer's specified limits should not result in ignition or explosion</p>	No ignition. No explosion	P
Annex G	Definition for shape and materials of outer case for cell		—
(Addition)	<p>G.1 General</p> <p>Annex G provides definitions for shape and materials of outer case for cell</p> <p>G.2 Shape of outer case for cell</p> <p>G 2.1 Cylindrical cell</p> <p>Cell with a cylindrical shape in which the overall height is equal to or greater than diameter.</p> <p>G 2.2 Prismatic cell</p> <p>Cell having the shape of a parallelepiped whose faces are rectangular</p> <p>G.3 Materials of outer case for cell</p> <p>G.3.1 Soft case</p> <p>Non-metallic outer case or container for cell</p> <p>G.3.2 Hard case</p> <p>Metallic outer case or container for cell.</p>	<p>(Shape of outer cases)</p> <p><input checked="" type="checkbox"/> Cylindrical</p> <p><input type="checkbox"/> Prismatic</p> <p>(Materials of outer cases)</p> <p><input checked="" type="checkbox"/> Hard</p> <p><input type="checkbox"/> Soft</p>	—
Annex H	Calculation method of the volumetric energy density for cell		—
(Addition)	<p>Annex H provide a calculation method of the volumetric energy density for cell in use of smart phone, tablet, notebook.</p> <p>H.1 General</p> <p>Unless otherwise stated in the Annex E, the dimensions for calculation are based on these for cell before shipment and the volumetric energy density shall be calculated with a maximum values specified by manufacturer. If the specification for cell can't be provided a dimension for calculation, the manufacturer's other documentation shall be provided to demonstrate compliance for its calculation.</p>	732.0Wh / L	—

\$20 P390*00

IEC62133_2B ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	<p>H.2 Calculation Method</p>  <p>L : Length (max.) of cell (including terrace) W : Width (max.) of cell T : Thickness (max.) when shipping charge (For reference, Please Exclude the dimension of any tape that is attached to cell)</p> $\text{Volumetric energy density (Wh/L)} = \frac{\text{Nominal voltage (V)} \times \text{Rated capacity (Ah)}}{\text{Length (L)} \times \text{Width (W)} \times \text{Thickness (T)}}$ <p>[H.1 – Prismatic cell using soft case]</p>  <p>L : Length (max.) of cell W : Width (max.) of cell T : Thickness when shipping charge (For reference, Please Exclude the dimension of any tape that is attached to cell)</p> $\text{Volumetric energy density (Wh/L)} = \frac{\text{Nominal voltage (V)} \times \text{Rated capacity (Ah)}}{\text{Length (L)} \times \text{Width (W)} \times \text{Thickness (T)}}$ <p>[H.2 – Prismatic cell using hard case]</p>  <p>D : Diameter (max.) of cell L : Length (max.) of cell (According to shape of cell at shipping, The dimension of tube for cell may be included in overall dimension of cell)</p> $\text{Volumetric energy density (Wh/L)} = \frac{\text{Nominal voltage (V)} \times \text{Rated capacity (Ah)}}{3.14159 \times \frac{\text{Diameter (D)}^2}{4} \times \text{Length(L)}}$ <p>[H.3 – Cylindrical cell using hard case]</p>		—

S20 P390*00

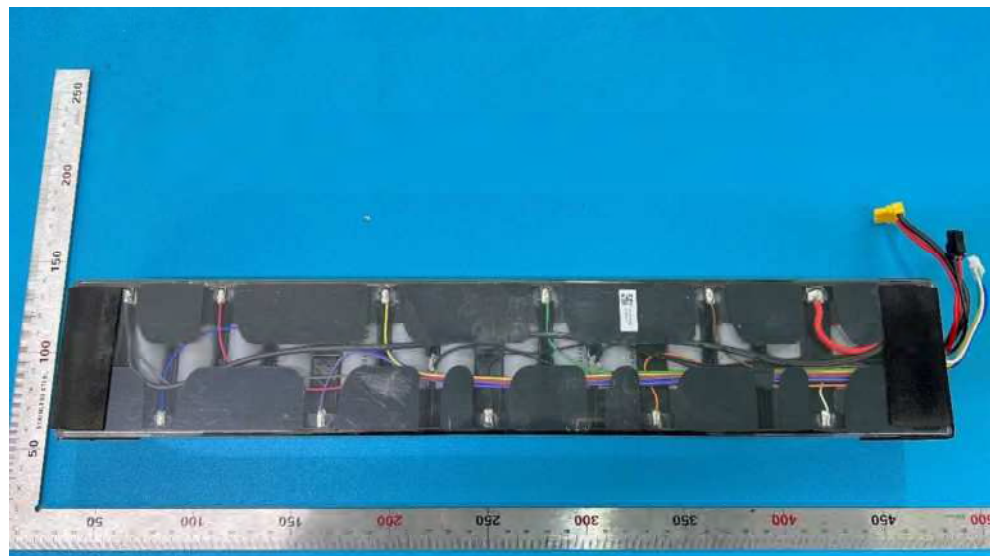


Product: Rechargeable Li-ion Battery Pack

Type Designation: T2214-BA3A



Picture 1. Front view of battery

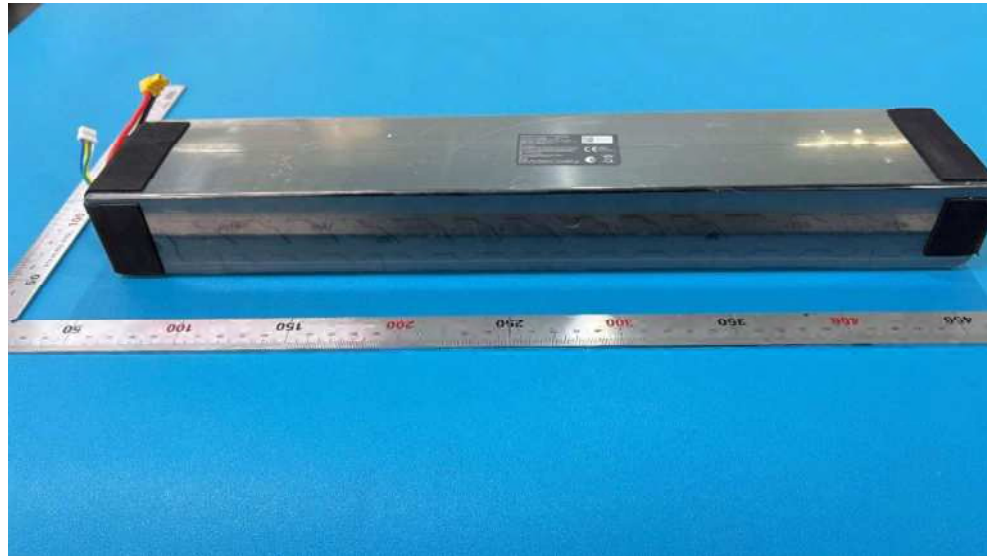


Picture 2. Rear view of battery

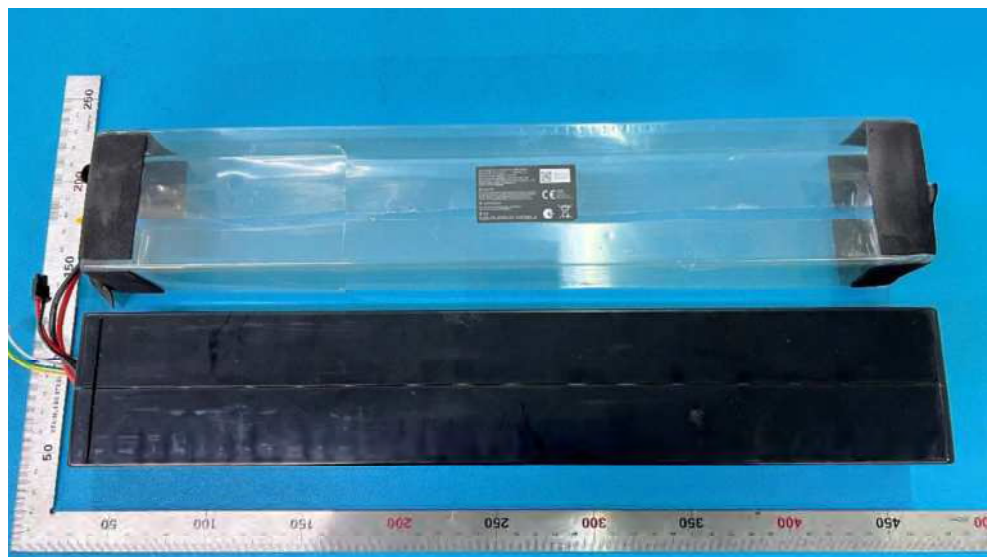
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Product: Rechargeable Li-ion Battery Pack

Type Designation: T2214-BA3A



Picture 3. Top view of battery



Picture 4. Internal view 1 of Battery



Product: Rechargeable Li-ion Battery Pack

Type Designation: T2214-BA3A



Picture 5. Internal view 2 of Battery



Picture 6. Internal view 3 of Battery

\$20 P390*00

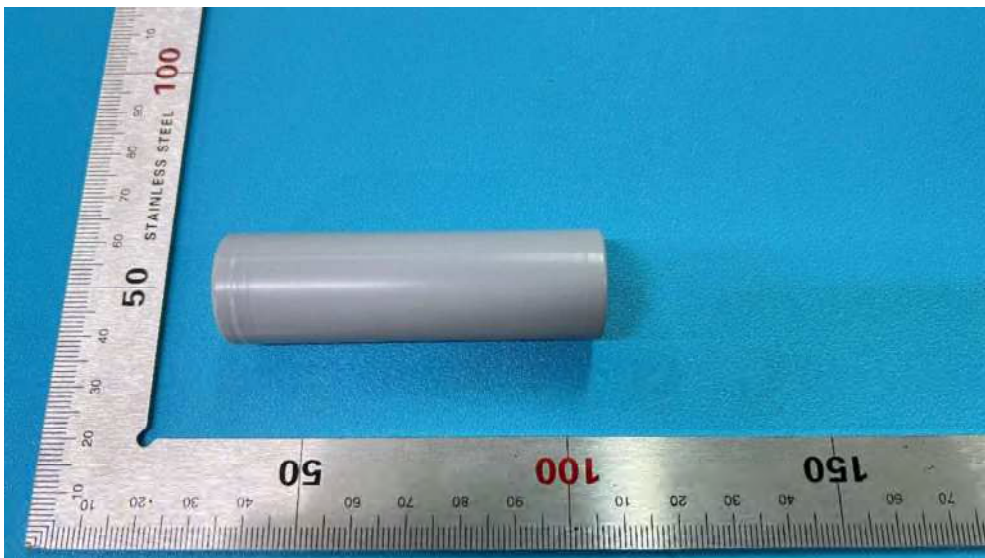


Product: Rechargeable Li-ion Battery Pack

Type Designation: T2214-BA3A



Picture 7. Front view of the component cell

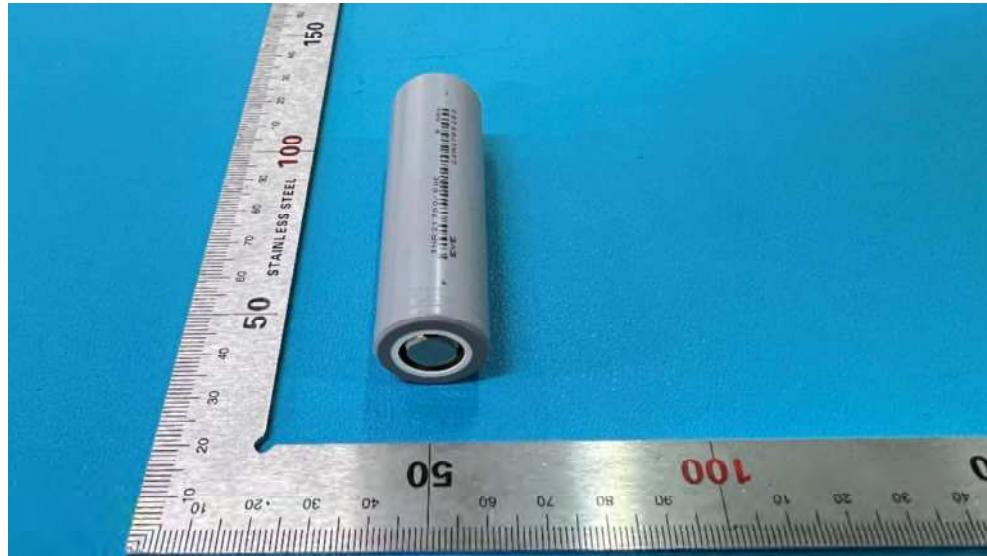


Picture 8. Rear view of the component cell

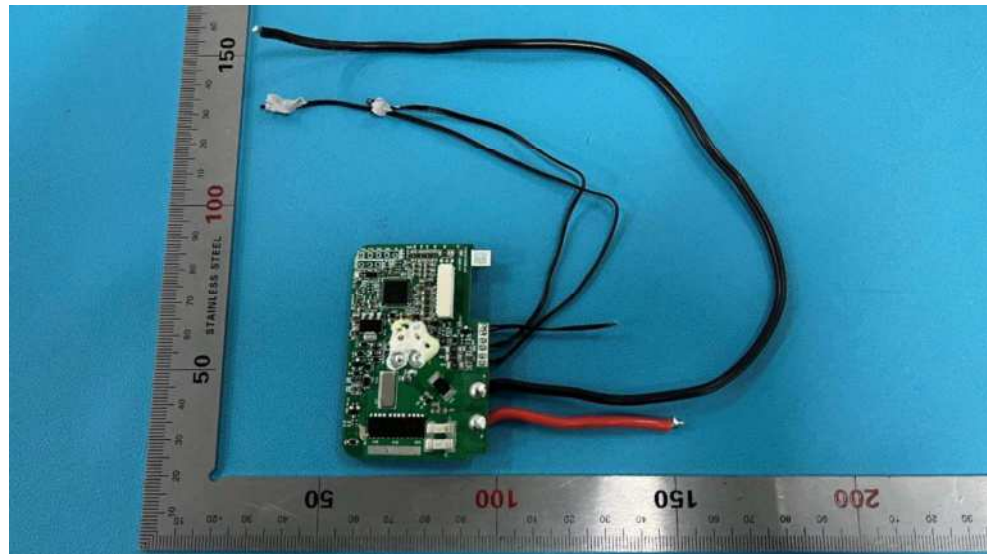
\$20 P390*00

Product: Rechargeable Li-ion Battery Pack

Type Designation: T2214-BA3A



Picture 9. Top view of the component cell



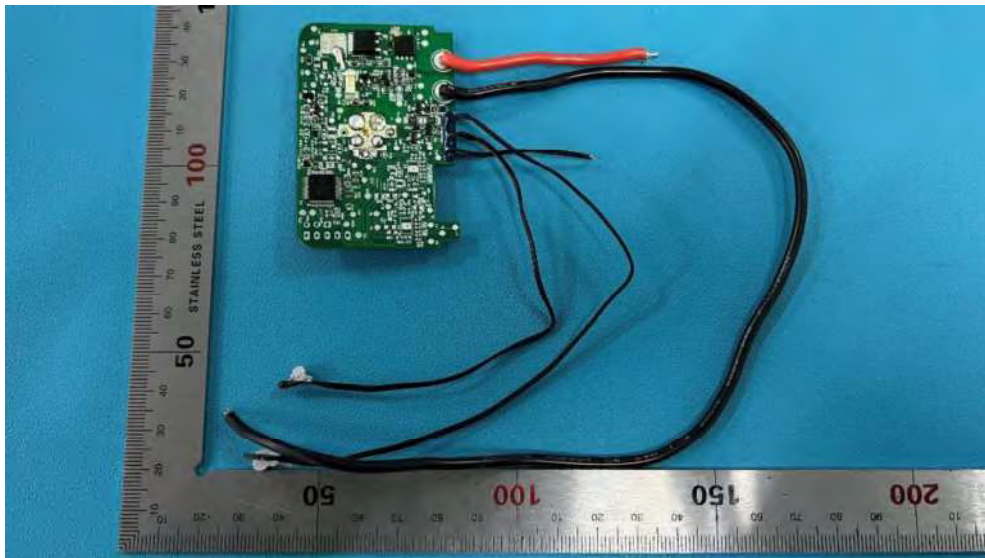
Picture 10. Front view of PCM (Main components)

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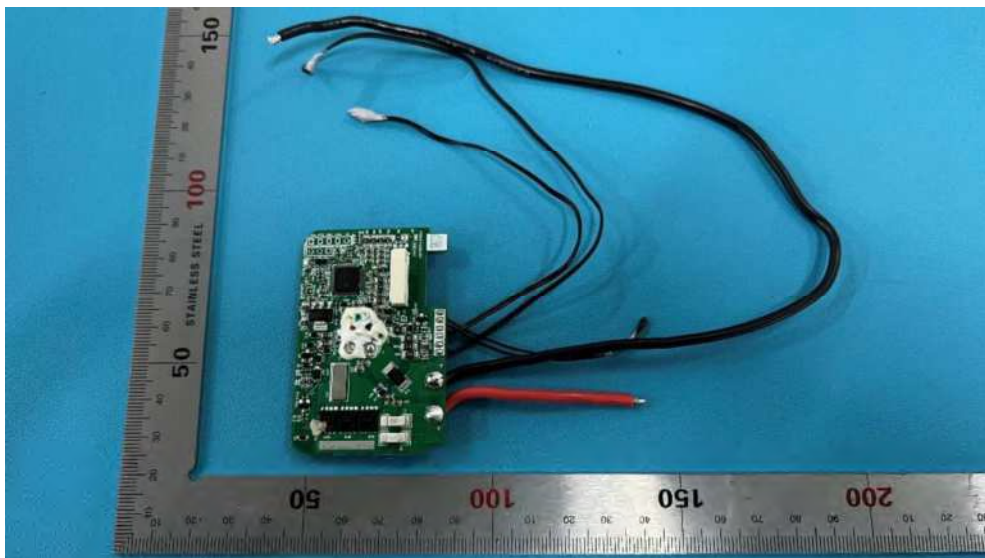


Product: Rechargeable Li-ion Battery Pack

Type Designation: T2214-BA3A



Picture 11. Rear view of PCM (Main components)



Picture 12. Front view of PCM (Alternative components)

\$20 P390*00

Attachment 2

Photo Documentation

Page 7 of 7

Report No. CN23FQ81 001

Product: Rechargeable Li-ion Battery Pack

Type Designation: T2214-BA3A



Picture 13. Rear view of PCM (Alternative components)

\$20 P390*00

Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

TEST REPORT

according to UN-Regulation

**UNIFORM PROVISIONS CONCERNING THE APPROVAL OF INTERNAL
COMBUSTION ENGINES OR ELECTRIC DRIVE TRAINS INTENDED FOR
THE PROPULSION OF MOTOR VEHICLES OF CATEGORIES M AND N
WITH REGARD TO THE MEASUREMENT OF THE NET POWER AND THE
MAXIMUM 30 MINUTES POWER OF ELECTRIC DRIVE TRAINS**

UN R85

including all amendments until

Series of Amendments: 00

Supplement: 07

Structure of the Test Report	Item No.
	0. General information
	1. Tested vehicle(s) / object(s)
	2. Test record
	3. List of appendices
	4. Statement

The Test Report shall be reproduced and published only in its entirety by the client. It may however be reproduced and published partially, but only with the written permission of the Testing Laboratory.

Vehicle Type : NKT2214-B20
Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

0. General information

- 0.1. Make (trade name of the manufacturer) : NAVEE
- 0.2. Type : NKT2214-B20
- 0.3. Category of vehicle : Elektrokleinstfahrzeug
- 0.4. Name and address of the manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.
Building A2, Shangjinwan Headquarters Economic Park, No.2288, Wuzhong Avenue, Wuzhong Economic Development Zone, Suzhou Jiangsu
- 0.5. No. of the information document : ---
 -Date of issue : ---
 -Date of last change : ---

1. Tested vehicle(s)

- 1.1. Description
- 1.1.1. ~~Vehicle~~/Object(s) : Motor
- Commercial description : ---
- Type / variant(s) / version(s) : TD015/---/ ---
- Identification number : TD0152CR0000050S76(Prototype)
- 1.1.2. Condition of vehicle(s) : ---
- 1.2. Worst case selection : No variant/ version, so no worst case to be selected.
- 1.3. Remark : n.a.

Vehicle Type : NKT2214-B20
Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

2. Test record

- 2.1. Equipment for measuring and testing : The test facilities / measurement equipment used were in compliance with the test requirements.
- 2.1.1. Specifications for the test site : Not applicable
- 2.1.2. Subcontracting : Not applicable
- 2.2. Test results : See Appendix 1
- 2.2.1. Test results referring to measurements : All measurement results are listed and referred to the respective limit(s) with judgment.
- 2.2.2. Attributive tests : Not applicable
- 2.2.3. Alternative test provisions : Not applicable
- 2.3. Additional information : The results of the test refer exclusively to the object(s) mentioned under point 1. Of this report.
- Test site : TÜV Rheinland (Shanghai) Co., Ltd. Kunshan Branch
Kunshan, P.R.China
- Test date : March 16, 2023
- 2.4. Remarks : ---

Vehicle Type : NKT2214-B20
Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

3. List of Appendices

- 0 List of modifications : Page 5
1 Test minutes : Pages 6 - 9

4. Statement of conformity

The Information Document listed in section 0.5., and the type described therein, comply with the requirements stated on page 1. The test results in this report refer to the vehicle(s)/object(s) described under section 1.1. With regards to the required level of performance to be achieved, the tested samples were representative for the type to be approved (see section 1.2).

Engineering Center, Shanghai, April 12, 2023
LJZ/LS



Liangjun Zhang
Expert Technical Service

Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

List of modifications

Appendix 0

Correction of : - --

Modification of : - --

Addition of : - --

Deletion of : - --

\$20 P390*00

Vehicle Type : NKT2214-B20
Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

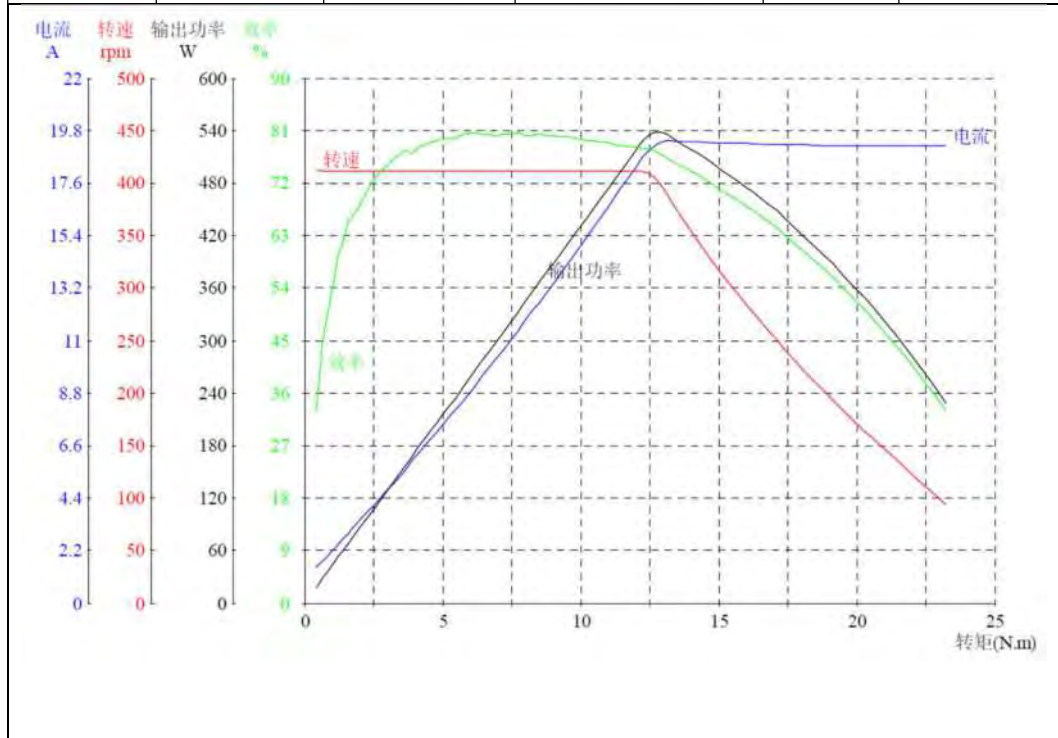
Test minutes of Motor measuring**Appendix 1**

0. Test condition
- 0.1. Test date : March 16, 2023
- 0.2. Test site : Kunshan, P.R. China
1. Test facilities : The test equipment used was in compliance with the requirements of the regulation.
2. Test vehicle(s)
- 2.1. Type : NKT2214-B20
- variant : ---
- version : ---
3. Motor
- 3.1. Motor make : Daa Electric (Jiangsu) Co., Ltd.
- 3.2. Motor type : TD015
- 3.3. Motor number : TD0152CR0000050S76(Prototype)
- 3.4. Test voltage : 36V
4. Power controller
- 4.1. Power controller make : Tianjin Songzheng Electric Technology Co., Ltd.
- 4.2. Power controller type : T2214
5. Characteristics of the dynamometer
- 5.1. Make : KONZON
- 5.2. Type : ZFZ100

Vehicle Type : NKT2214-B20
Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

- 6. Detailed results of measurement
- 6.1. Net torque and power :

Measured				Corrected	
Motor Speed	Torque	Power	Power to be added for auxiliary equipment	Net Torque	Net Power
r/min	Nm	W	W	Nm	W
412.3	0.41	17.8	0	0.41	17.8
411.7	2.27	97.8	0	2.27	97.8
411.5	4.56	196.5	0	4.56	196.5
411.5	6.90	297.1	0	6.90	297.1
411.5	9.40	405.2	0	9.40	405.2
411.4	10.63	458.0	0	10.63	458.0
411.5	11.26	485.0	0	11.26	485.0
404.2	12.78	541.0	0	12.78	541.0
350.6	14.09	517.3	0	14.09	517.3
303.6	15.38	488.8	0	15.38	488.8
250.7	17.09	448.6	0	17.09	448.6
201.8	18.79	397.0	0	18.79	397.0
147.8	20.94	324.0	0	20.94	324.0
102.5	22.87	245.5	0	22.87	245.5



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Vehicle Type : NKT2214-B20
Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

6.2. Maximum 30 minutes power :

Time [min]	P [W]	rpm	Difference [%]
0	448.6	412.0	0.00
5	448.0	412.9	-0.13
10	448.2	412.1	-0.09
15	446.5	412.0	-0.47
20	447.8	412.0	-0.18
25	447.4	412.0	-0.27
30	449.1	412.0	0.11
Average	447.9	412.1	

6.2.1. Motor speed : 415 rpm
 (Declared by the manufacturer)

6.2.2. Maximum 30 minutes power : 450 W
 (Declared by the manufacturer)

6.2.3. Maximum 30 minutes power : 447.9 W (99.53% of the declared power)
 (Test result)

Vehicle Type : NKT2214-B20
Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

Test photos:



\$20 P390*00

Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

TEST REPORT

according to UN-Regulation
**UNIFORM PROVISIONS CONCERNING THE APPROVAL OF VEHICLES
WITH REGARD TO
ELECTROMAGNETIC COMPATIBILITY**

UN R10

including all amendments until

Series of Amendments: 06

Supplement: 01

applicable for vehicles according to
Elektrokleinstfahrzeuge-Verordnung (eKFV)
(§ 7 No. 2)

Structure of the Test Report

Item No.

0. General information
1. Tested vehicle(s) / ~~object(s)~~
2. Test record
3. List of appendices
4. Statement of conformity

The Test Report shall be reproduced and published only in it's entirety by the client. It may however be reproduced and published partially, but only with the written permission of the Testing Service.

Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

0. General information

- 0.1. Make (trade name of the manufacturer) : NAVEE
- 0.2. Type : NKT2214-B20
- 0.3. Category of vehicle : Elektrokleinstfahrzeug
- 0.4. Name and address of the manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.
Building A2, Shangjinwan Headquarters Economic Park, No.2288, Wuzhong Avenue, Wuzhong Economic Development Zone, Suzhou Jiangsu P.R. China
- 0.5. No. of the information document : ---
-Date of issue : ---
-Date of last change : ---

1. Tested vehicle(s)

1.1. Description

- 1.1.1. Vehicle : Elektrokleinstfahrzeug
- Commercial description : ---
- Type / variant(s) / version(s) : NKT2214-B20/ --- / ---
- Identification number : A654503G000001(Prototype)
- 1.1.2. Condition of vehicle(s) : new
- 1.2. Worst case selection : Version 02 with the direction indicator, so it was selected as worst case.
- 1.3. Remark : The Bluetooth interface was active and checked during the measurement.

Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

2. Test record

- 2.1. Equipment for measuring and testing : The test facilities / measurement equipment used were in compliance with the test requirements.
- 2.1.1. Specifications for the test site : Not applicable
- 2.1.2. Subcontracting : Not applicable
- 2.2. Test results : See Appendix 1
- 2.2.1. Test results referring to measurements : All measurement results are listed and referred to the respective limit(s) with judgment.
- 2.2.2. Attributive tests : Not applicable
- 2.2.3. Alternative test provisions : Not applicable
- 2.3. Additional information : The results of the test refer exclusively to the object(s) mentioned under point 1. of this report.
- Test site : Shanghai Inspection and Testing Institute of Instruments and Automatic Systems Co., Ltd.
Shanghai, P.R. China
- Test date : January 31, 2023
- 2.4. Remarks : ---

Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

3. List of Appendices

- 0 List of modifications : Page 5
1 Test minutes : Pages 6 - 13

4. Statement of conformity

The Information Document listed in section 0.5., and the type described therein, comply with the requirements stated on page 1. The test results in this report refer to the vehicle(s)/object(s) described under section 1.1. With regards to the required level of performance to be achieved, the tested samples were representative for the type to be approved (see section 1.2).

Engineering Center, Shanghai, April 12, 2023
LJZ/LS



Liangjun Zhang
Expert Technical Service

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Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

List of modifications

Appendix 0

Correction of : - ---

Modification of : - ---

Addition of : - ---

Deletion of : - ---

§20 P390*00

Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

Test minutes of EMC measuring

Appendix 1

- 0. Test condition
 - 0.1. Test date : January 31, 2023
 - 0.2. Test site : Shanghai, P.R. China
- 1. Test facilities : The test equipment used was in compliance with the requirements of the regulation.
- 2. Test vehicle(s)
 - 2.1. Type : NKT2214-B20
 - variant : ---
 - version : 02
 - 2.2. Identification number : A654503G000001(Prototype)
 - 2.3. Motor
 - 2.3.1 Motor maker : Daa Electric (Jiangsu) Co., Ltd.
 - 2.3.2. Motor type : TD015
 - 2.3.3. Motor number : TD0152CR0000026S76(Prototype)
 - 2.4. Controller
 - 2.4.1. Controller maker : Tianjin Songzheng Electric Technology Co., Ltd.
 - 2.4.2. Controller type : T2214
 - 2.5. Battery
 - 2.5.1. Battery maker : Fujian SCUD Power Technology Co., Ltd.
 - 2.5.2. Battery type : T2214-BA3A
36.5VDC, 15 Ah

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Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

2.6. Headlamp

2.6.1. Headlamp maker : Zhejiang SITIS Technology Co., Ltd.

2.6.2. Headlamp type : DS21038H

2.6.3. Approval number : E32*113R03/01*0028*00

2.7. Rear position/ Stop lamp

2.7.1. Rear position/ Stop lamp maker : Foshan City Shunde District ChengDi Electronic
Technology Co., Ltd.

2.7.2. Rear position/ Stop lamp type : DRT10

2.7.3. Approval number : E9*148R00/04*6761*01

2.8. Front/Rear direction indicator

2.8.1. Front/Rear direction indicator maker : Foshan City Shunde District Chengdi Electronic
Technology Co., Ltd.

2.8.2. Front/Rear direction indicator type : DI001

2.8.3. Approval number : E32*148R00/04*0380*00

2.9. Charger

2.9.1. Charger maker : Shenzhen Fuyuandian Power Co., Ltd.

2.9.2. Charger type : FY-4202000
Input 100-240VAC, 50/60Hz, 2.5A; Output: 42
VDC 2.0A

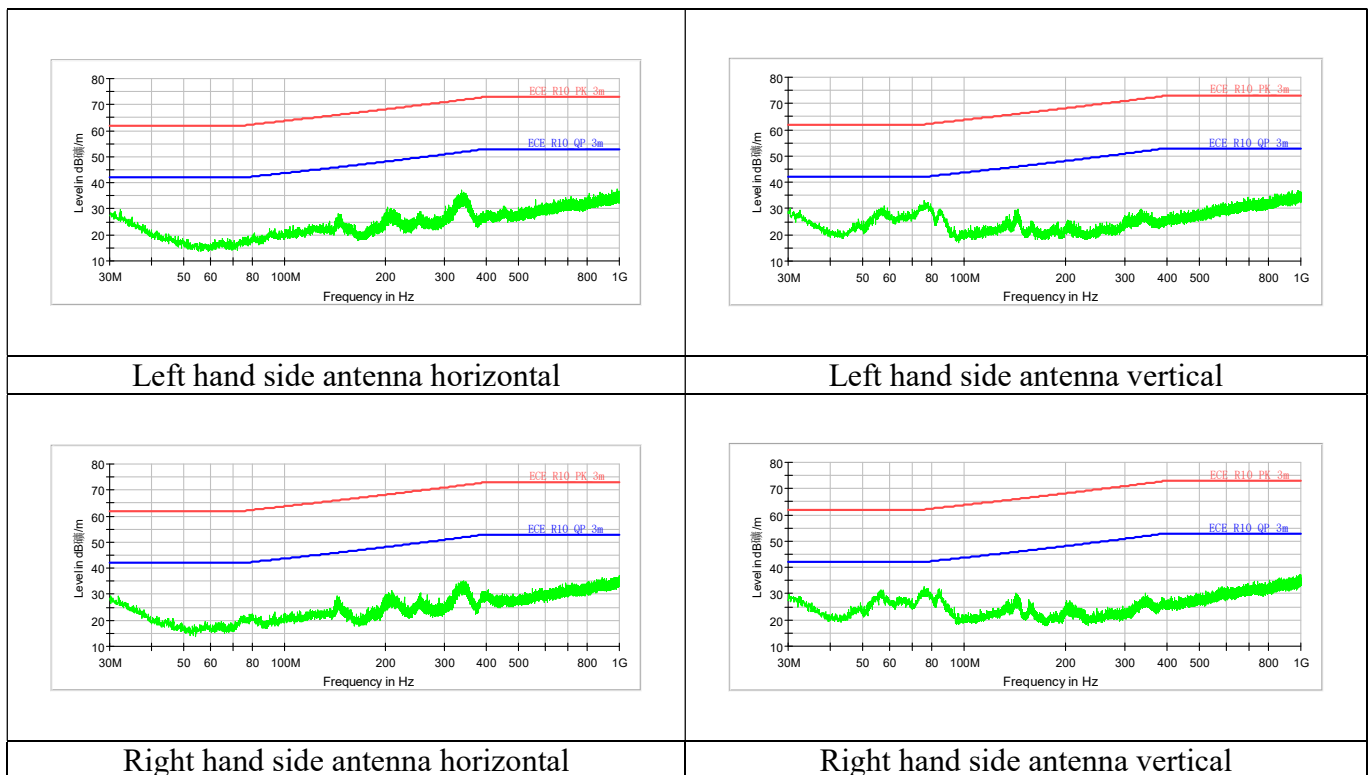
S20 P390*00

Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

3. Test results of broadband electromagnetic emissions from vehicle(Annex 4)
(Other than REESS in charging mode coupled to the power grid)

- 3.1. Test condition : Closed installation (Peak detector)
- 3.2. Distance of the antenna (m) : 3
- 3.3. Height of the antenna (m) : 1.8
- 3.4. Engine / Motor revolution for radiated broadband emissions : 20 km/h (Maximum speed)



The measurement has been taken over the range of frequencies from 30 to 1000 MHz

Vehicle Type : NKT2214-B20

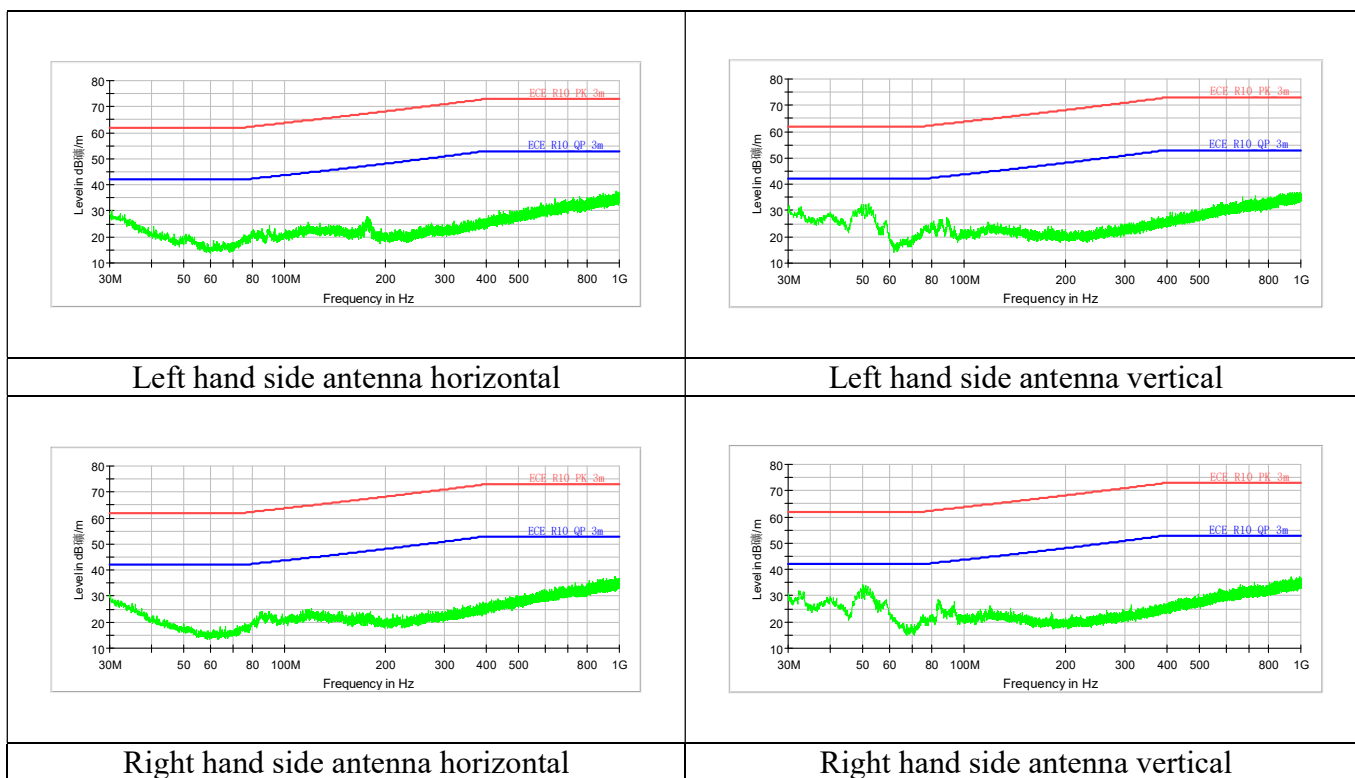
Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

4. Test results of broadband electromagnetic emissions from vehicle (Annex 4)
(REESS in charging mode coupled to the power grid)

4.1. Test condition : Closed installation (Peak detector)

4.2. Distance of the antenna (m) : 3

4.3. Height of the antenna (m) : 1.8



The measurement has been taken over the range of frequencies from 30 to 1000 MHz

Vehicle Type : NKT2214-B20

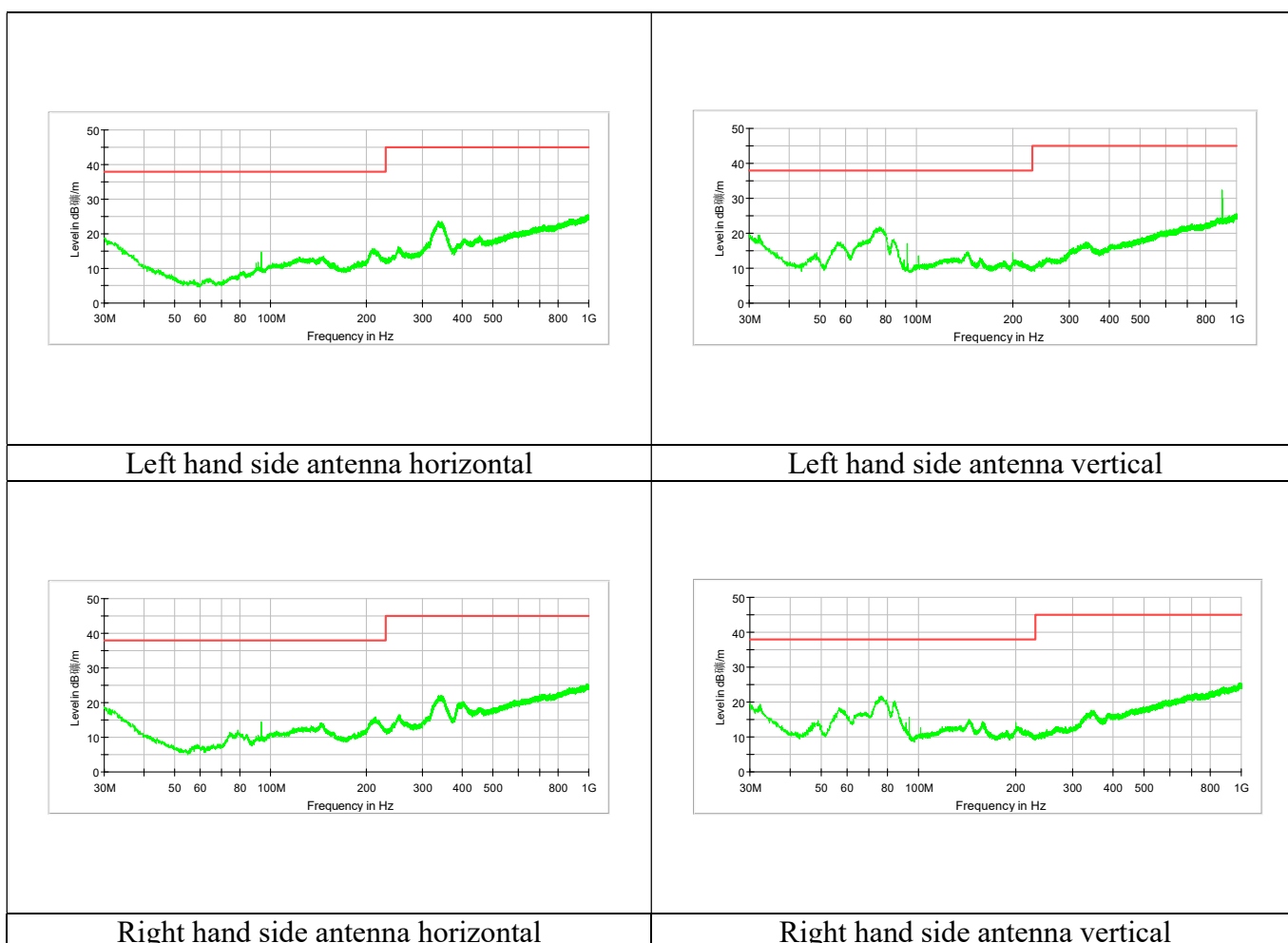
Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

5. Test results of narrowband electromagnetic emissions from vehicle (Annex 5)

5.1. Test condition : Closed installation (Average detector)

5.2. Distance of the antenna (m) : 3

5.3. Height of the antenna (m) : 1.8



The measurement has been taken over the range of frequencies from 30 to 1000 MHz

Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

6. Test results of immunity to electromagnetic radiation (Annex 6)

(Other than REESS in charging mode coupled to the power grid)

- 6.1. Test method : Free field
- 6.2. Specified frequency range : 20 ~ 2000 MHz in vertical polarization
- 6.3. Alternatively spot frequencies : ~~27, 45, 65, 90, 120, 150, 190, 230, 280, 380, 450, 600, 750, 900, 1300 and 1800 MHz~~
- 6.4. Field strength : 30 V/m rms (over 90% of 20~2000 MHz)
- 6.5. Vehicle speed : 20 km/h (Maximum speed)

During the tests performed in accordance with Annex 6, there was no any degradation of performance of “immunity related functions” listed below.

<i>"50 km/h cycle" vehicle test conditions</i>	<i>Failure criteria</i>
Vehicle speed 50 km/h (respectively 25 km/h for L ₁ , L ₂ vehicles) ±20 per cent (vehicle driving the rollers). If the vehicle is equipped with a cruise control system, it shall be operational.	Speed variation greater than ±10 per cent of the nominal speed. In case of automatic gearbox: change of gear ratio inducing a speed variation greater than ±10 per cent of the nominal speed.
Dipped beams ON (manual mode)	Lighting OFF
Direction indicator on driver's side ON	Frequency change (lower than 0.75 Hz or greater than 2.25 Hz). Duty cycle change (lower than 25 per cent or greater than 75 per cent).
Horn OFF	Unexpected activation of horn

<i>"Brake cycle" vehicle test conditions</i>	<i>Failure criteria</i>
To be defined in brake cycle test plan. This must include operation of the brake pedal (unless there are technical reasons not to do so) but not necessarily an anti-lock brake system action	Stop lights inactivated during cycle Brake warning light ON with loss of function. Unexpected activation

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Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

7. Test results of immunity to electromagnetic radiation (Annex 6)
(REESS in charging mode coupled to the power grid)

All other equipment which can be switched on permanently by the driver or passenger should be OFF. : Pass

Only non-perturbing equipment shall be used while monitoring the vehicle. The vehicle exterior and the passenger compartment shall be monitored to determine whether the requirements of this annex are met (e.g. by using (a) video camera(s), a microphone, etc.) : Pass

There was no any degradation of performance of “immunity related functions” listed below

“REESS in charging mode” vehicle test conditions	Failure criteria
The REESS shall be in charging mode (engine OFF). The REESS state of charge shall be agreed in between the manufacturer and the Technical Service.	Vehicle sets in motion

8. Test result : All pass

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Vehicle Type : NKT2214-B20

Manufacturer : Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

Test photos:



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13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle /
description of Bluetooth interface

Übersicht / overview

Eingabe / *input*

:

1. Anti-theft
2. Energy recovery
3. Unit settings
4. Restore scooter settings
5. Manage device name
6. Firmware update
7. Security settings

Ausgabe / *output*

:

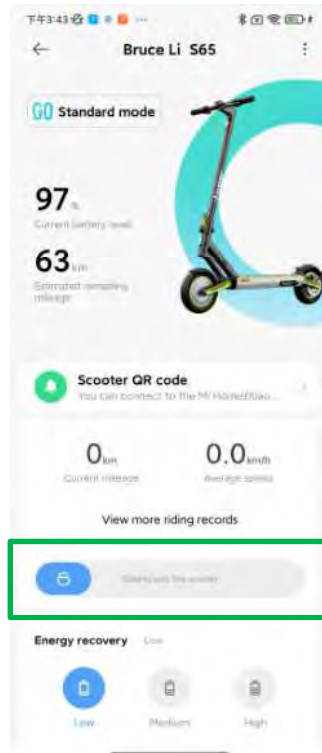
1. Current battery level (%)
2. Remaining mileage
3. Riding mode
4. Current mileage
5. Average speed
6. Battery information
7. Scooter information
8. Scooter QR code
9. Legal information

13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle / description of Bluetooth interface

Beschreibung / description

Eingabe / input

: **anti-theft**



Slide to lock the scooter for anti-theft.

When this function is on, the scooter will have rolling resistance to lock the vehicle.

Note: this function only can be activated when vehicle is in static status.

If the smartphone is lost, user can log on the account by other smartphone to unlock the vehicle.

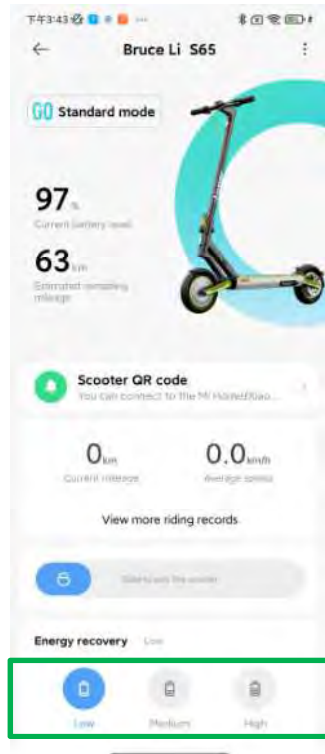
If user forget the account, the contact the aftersales of Xiaomi will be the only method.

13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle /
description of Bluetooth interface

Beschreibung / description

Eingabe / input

: Energy recovery



There are 3 levels in this function: Low, Medium and High.

Low as default setup means the vehicle has a weak deceleration when release the throttle, meanwhile a small amount of energy produced by motor charge into battery.

Medium means the vehicle has a medium deceleration when release the throttle, meanwhile a medium amount of energy produced by motor charge into battery.

High means the vehicle has a strong deceleration when release the throttle, meanwhile a large amount of energy produced by motor charge into battery.

The requirements acc. to § 4 and § 7 no. 6 eKFV will not be affected.

13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle / *description of Bluetooth interface*

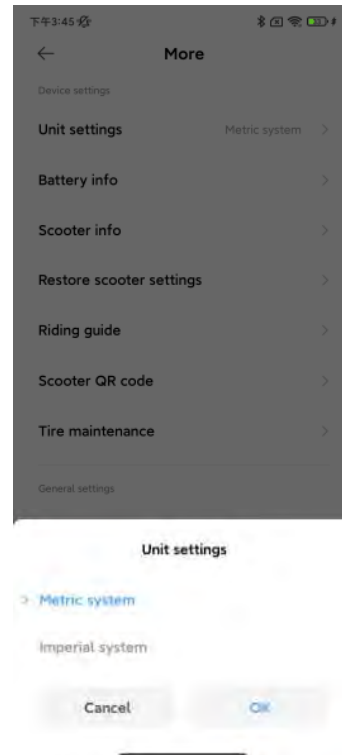
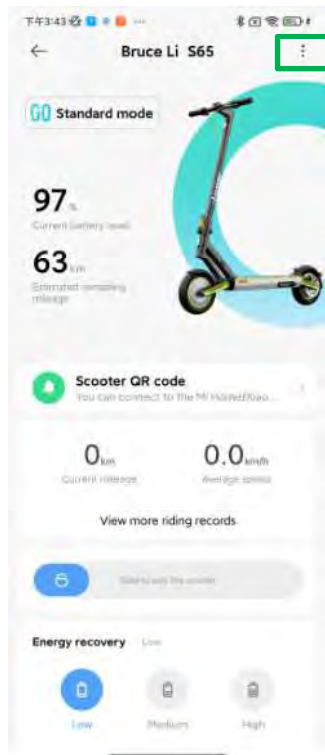
Beschreibung / *description*

Eingabe / *input*

: **Unit settings**

Select the speed unit on display, km/h and mph.

Note: This function does not touch any approval relevant requirements



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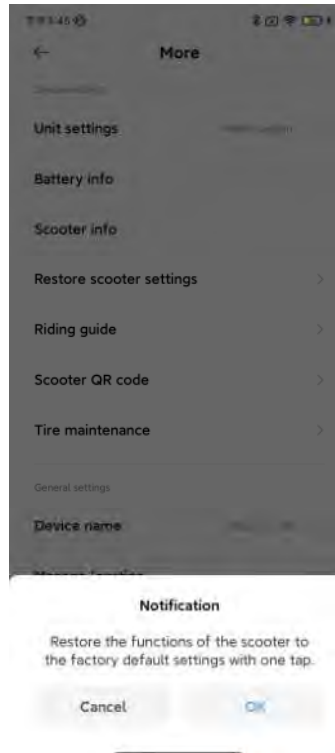
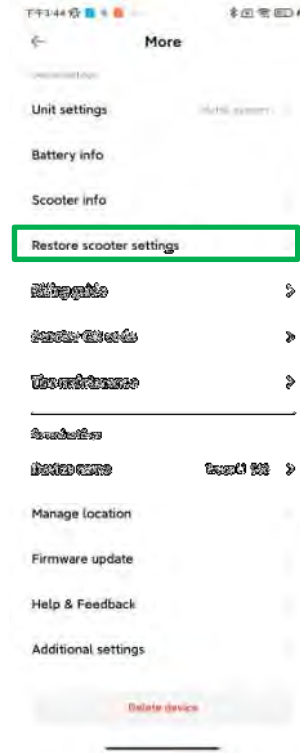
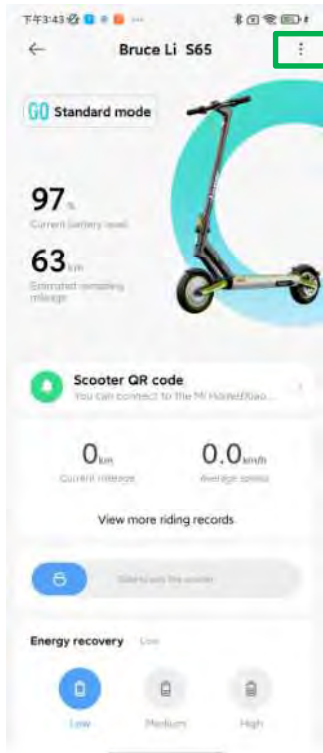
13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle / *description of Bluetooth interface*

Beschreibung / *description*

Eingabe / *input*

: **Restore scooter settings**

Restore the scooter to factory settings.
Unit restore to km/h, Energy recovery intensity restore
to weak, Drive mode restore to D mode.



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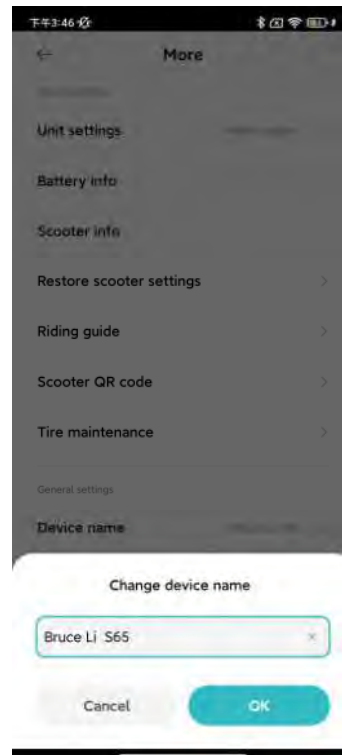
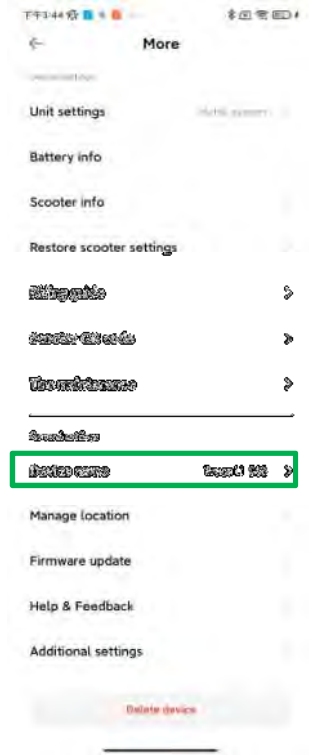
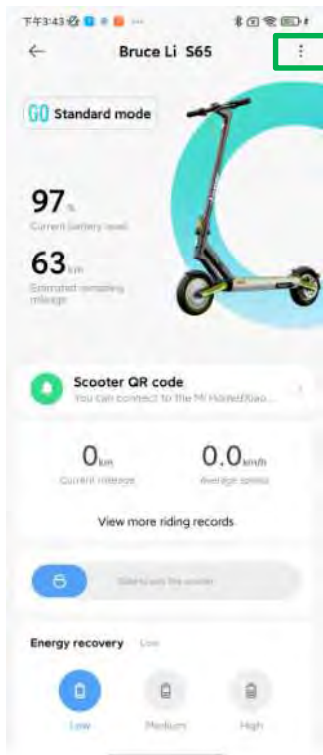
13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle / *description of Bluetooth interface*

Beschreibung / *description*

Eingabe / *input*

: Manage device name

This function can change the vehicle name by users.
Note: This function does not touch any approval relevant requirements



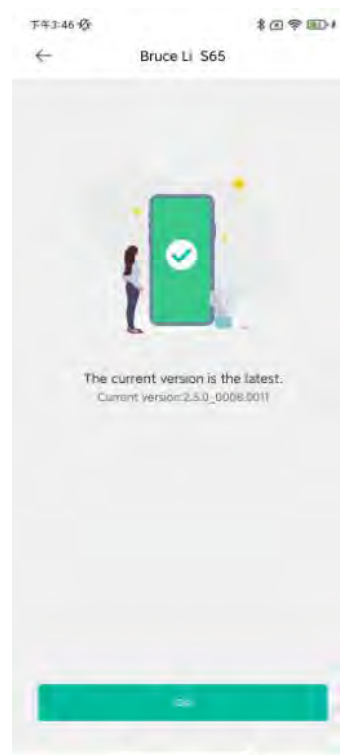
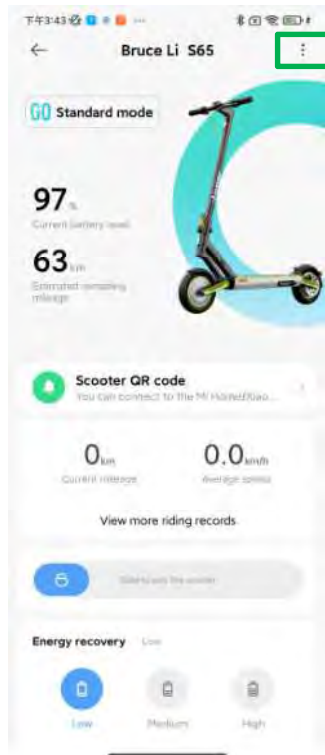
\$20 P390*00

13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle /
description of Bluetooth interface

Beschreibung / description

Eingabe / input

: Firmware update



Firmware update is a software program that can be used to update the firmware for this vehicle, which could repair functional defects.

1. Fixing the compatibility of APP for different smartphone.
2. According to the complaint data, fixing the problem on vehicle, but it will not affect the key functions which specified in eKFV regulation, such as speed/ motor power/ brake performance etc.

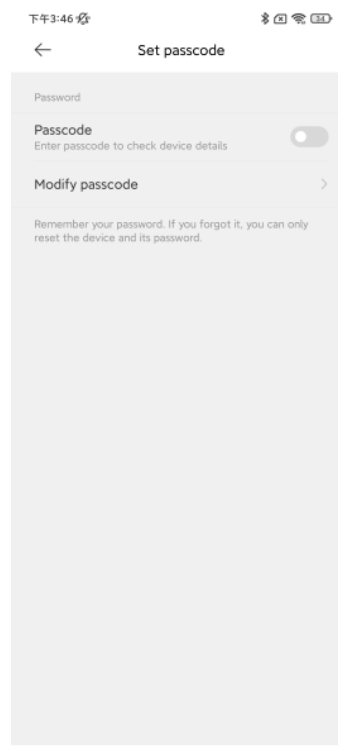
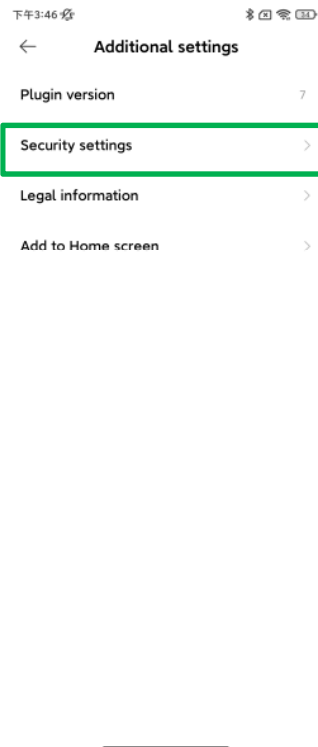
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13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle / description of Bluetooth interface

Beschreibung / description

Eingabe / input

: Security settings



Security settings Security settings has two sub-functions as below.

The first one can be used to manage the password function on and off, for example, if user turn it on, user need to enter the password every time when they connect the scooter by APP.

The second function is change the passcode by user. Note: After active the function, there is no braking torque when moving vehicle, it is just a password to enter the APP.

If user forget the password, it will not affect the vehicle function, the only influence is that the user can not connect the vehicle by APP, vehicle also can be driven as usual.

If the user forgot the password, the contact the aftersales of Xiaomi will be the only method.

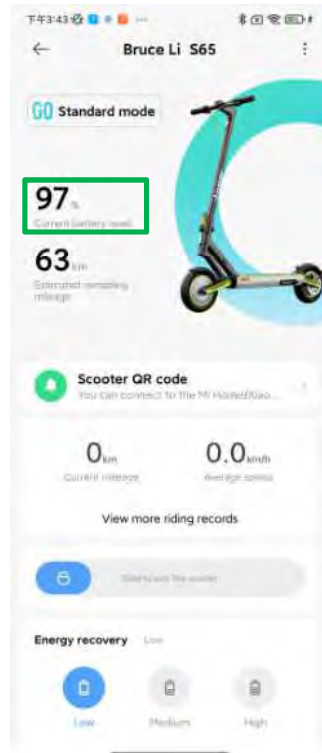
13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle /
description of Bluetooth interface

Beschreibung / description

Ausgabe / output

: Current battery level (%)

It shows the current battery percentage.



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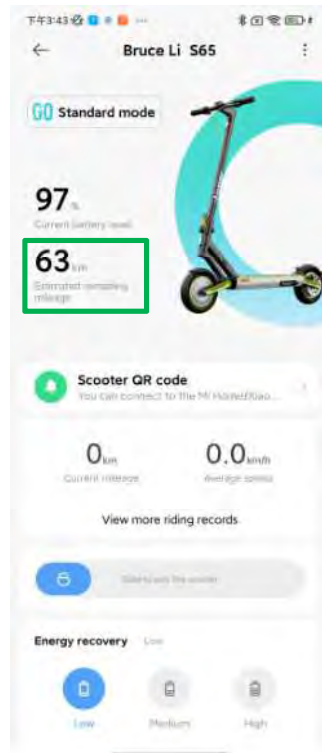
13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle /
description of Bluetooth interface

Beschreibung / description

Ausgabe / output

: Remaining mileage

It shows the estimated remaining mileage.



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13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle /
description of Bluetooth interface

Beschreibung / description

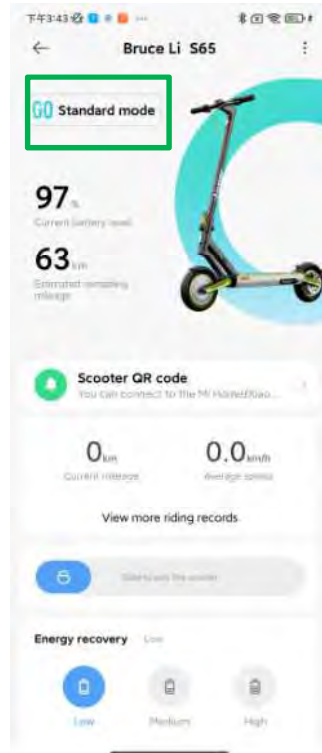
Ausgabe / output

: Riding mode

It displays the riding mode, there are three modes
walking mode
standard mode
sport mode.

Users can switch the mode by press the power button
on the control panel twice.

It only can be controlled by power key on
speedometer, APP only can show the mode status.



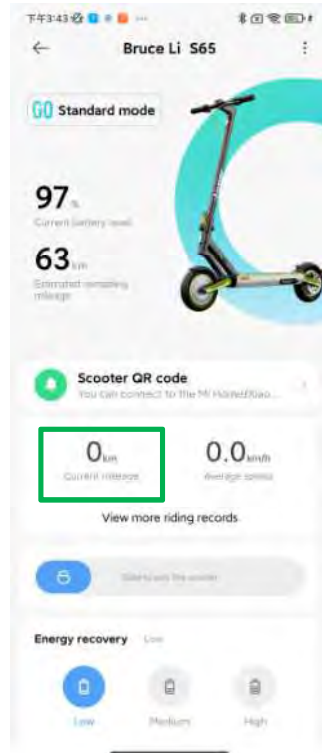
13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle /
description of Bluetooth interface

Beschreibung / description

Ausgabe / output

: Current mileage

It displays the scooter travel range.



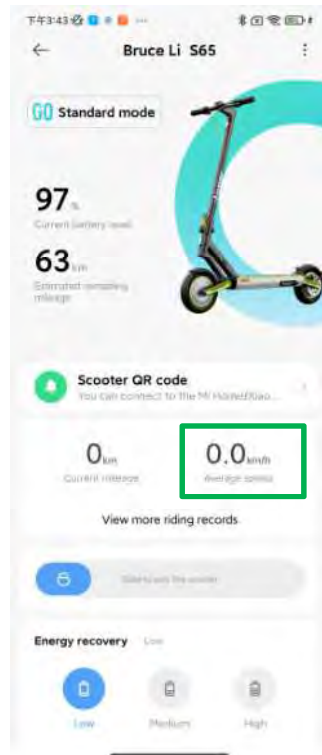
13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle /
description of Bluetooth interface

Beschreibung / description

Ausgabe / output

: Average speed

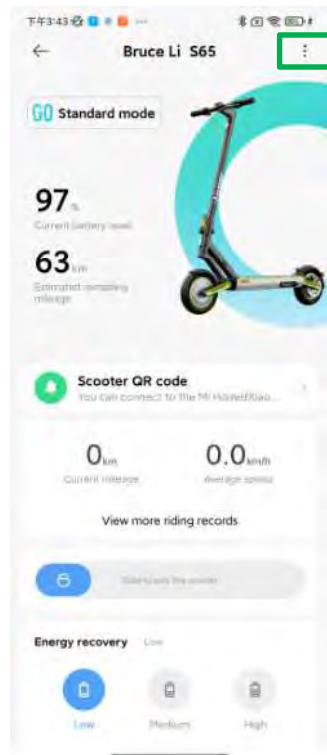
It shows the average speed during riding.



13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle / *description of Bluetooth interface*

Ausgabe / output

: Battery information



Battery info	
Percentage remaining	97%
Remaining battery	12368mAh
Battery status	Normal
Voltage	53.18V
Current	0A
Power	0W
Battery temperature	23°C
Production date	06/25/2022
Battery serial number	TB01226R0001420 557
BMS firmware version	0103

It displays the current battery information:
percentage remaining
Remaining battery
Battery status
Voltage
Current
Power
Battery temperature
Production date
Battery serial number
BMS firmware version.

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13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle / *description of Bluetooth interface*

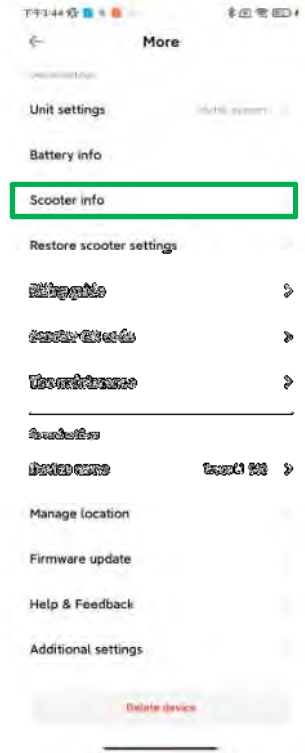
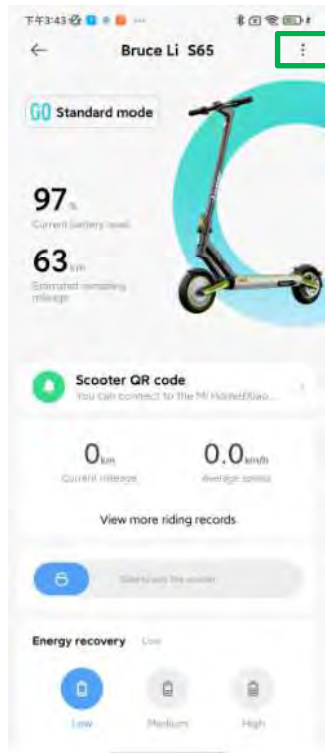
Beschreibung / *description*

Ausgabe / *output*

:

Scooter information

It displays the followed:
Scooter serial number
Firmware version
Scooter temperature.

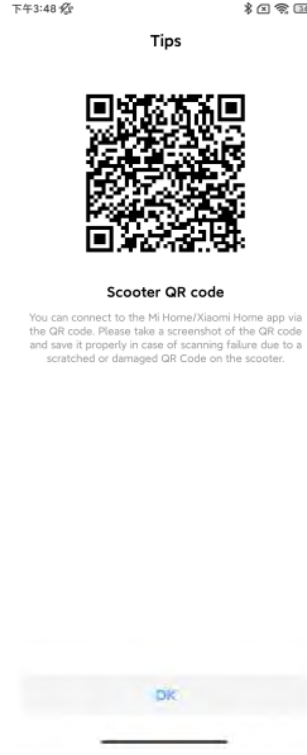
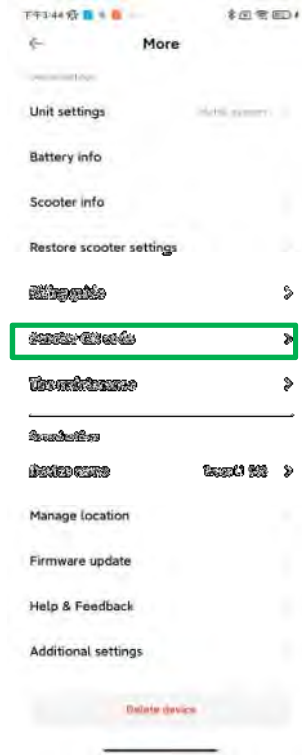
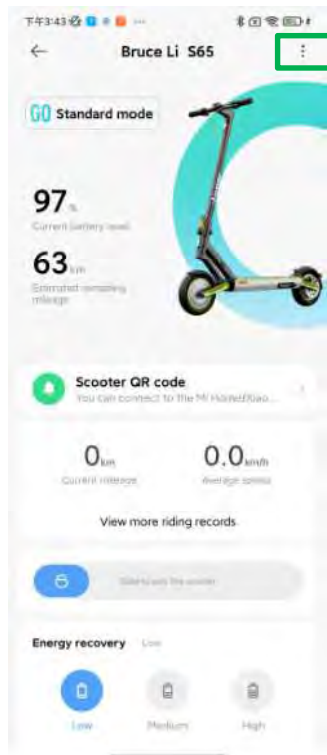


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13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle / description of Bluetooth interface

Beschreibung / description

Ausgabe / output



: Scooter QR code

It displays the scooter QR code, the user has to scan it when first connect the vehicle, after scan it by APP, when you need to connect to vehicle later, you will not need to scan it.

The QR code functions as a password to connect with the vehicle. The QR code is on a sticker on the speedometer, when the vehicle is new.

After connecting the vehicle, the QR code is shown in the App in case the sticker attached to the vehicle is lost.

Note: this vehicle only can connect one account, if another account want to connect this vehicle, the user has to reset the vehicle by pressing the throttle and fast clicking 5 times power key.

13.3./12.9.1. Beschreibung der Bluetooth-Schnittstelle / description of Bluetooth interface

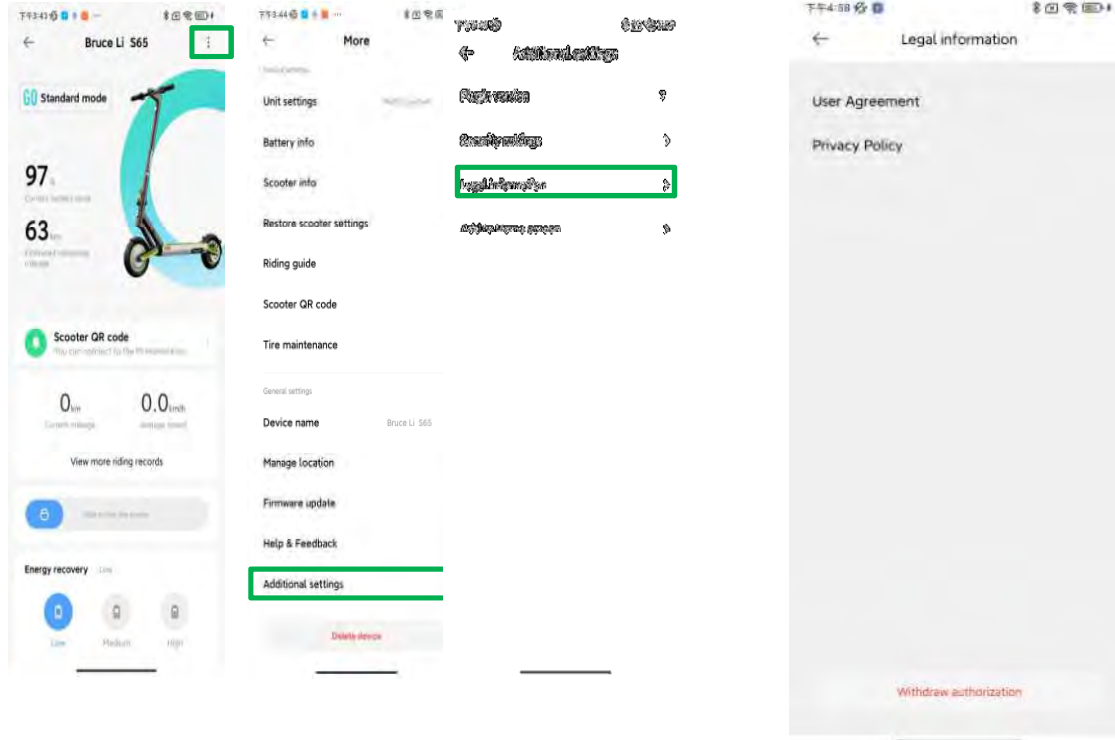
Beschreibung / description

Ausgabe / output

:

Legal information

It displays the user agreement and privacy policy user agreement shows the software license and service agreement, the privacy policy provides privacy details on how the user manage his personal information for this scooter software and services provided by xiaomi.



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Erklärung des Genehmigungsinhabers über Maßnahmen zur Verhinderung unbefugter Eingriffe in den Antriebsstrang und andere genehmigungsrelevante Bauteile oder Systeme
Approval holder's declaration on measures to prevent tampering on powertrain and other approval relevant components or systems

Der Unterzeichner : Shi Wentao
The undersigned : *Certificate Director*

(vollständiger Name und Position)
(full name and position)

Firmenname und Anschrift des Genehmigungsinhabers : AXDIA International GmbH
Company and address of the approval holder : Hanns-Martin-Schleyer-Str. 36-38
47877 Willich, Deutschland

Name und Anschrift des Bevollmächtigten des Genehmigungsinhabers (sofern vorhanden) : --
Name and address of the approval holder's representative (if any)

erklärt hiermit, dass er
hereby certifies that

für das nachfolgend bezeichnete Fahrzeug:
for the below mentioned vehicle:

- 0.1. **Fabrikmarke** : NAVEE
make
- 0.2. **Typ** ⁽¹⁷⁾ : NKT2214-B20
Type ⁽¹⁷⁾
- 0.2.1. Variante(n) ⁽¹⁷⁾ : --
Variant(s) ⁽¹⁷⁾
- 0.2.2. Version(en) ⁽¹⁷⁾ : --
Version(s) ⁽¹⁷⁾
- 0.2.3. Handelsname(n) (sofern vorhanden) : NAVEE Electric Scooter S65C
Commercial name(s) (if available)
- 0.3. **Klasse des Fahrzeugs** : Elektrokleinstfahrzeug
Class of the vehicle

keine austauschbaren Bauteile in Verkehr bringen wird, die eine Erhöhung der Antriebsleistung oder Höchstgeschwindigkeit, die für die jeweilige Klasse gilt, ermöglichen könnten,
he will not market interchangeable components, which could enable propulsion unit performance or maximum design speed to exceed levels applicable to the relevant category

keine Schnittstellen (z.B. USB oder Bluetooth) implementieren wird, über welche genehmigungsrelevante Bauteilfunktionen oder Systeme (z.B. Bremse oder Motorbedieneinrichtung) unzulässig durch den Anwender beeinflusst werden können
he will not implement any interfaces (e.g. USB or Bluetooth) which allow the consumer to

influence approval relevant component functions or systems (e.g. brake or engine control unit) in an impermissible way

**und
and**

**dass die vom Hersteller erleichterten Änderungen der folgenden Merkmale:
that the manufacturer-facilitated modifications of the following characteristics:**

- (a) gegebenenfalls der Funkenerzeugung durch die Zündanlage;
(a) spark delivery of the ignition system if applicable;
- (b) der Kraftstoffversorgungsanlage und Förderanlage;
(b) fuel feed and delivery system;
- (c) des Luftansaugsystems einschließlich Luftfilter (Änderung oder Entfernung);
(c) air intake system including air filter(s) (modification or removal);
- (d) gegebenenfalls der Ausführung der Antriebsbatterie oder der Stromversorgung des/der Elektromotors/en;
(d) propulsion battery configuration or electric power to the electric motor(s) if applicable;
- (e) des Kraftübertragungsstrangs;
(e) drive-train;
- (f) der Steuereinheit(en) für die Antriebsleistung des Antriebsstrangs
(f) the control unit(s) that controls the propulsion unit performance of the powertrain.

**mit den Anforderungen aus Kapitel 4.2.17 der DIN EN 15194:2018-11 übereinstimmen.
comply with the requirements set out in Chapter 4.2.17 of DIN EN 15194:2018-11.**

Ort:
Place:

Suzhou

Datum:
Date:

2023. 03. 24

Unterschrift:
Signature:

Wen-tao Shi

Name und Stellung im Unternehmen:
Name and position in the company:

Shi Wentao/ Certificate Director

Erklärung des Genehmigungsinhabers hinsichtlich Manipulationssicherheit und Rückwirkungsverhalten der integrierten Bluetooth-Schnittstelle
Approval holder's declaration regarding tampering protection and feedback behavior of the integrated Bluetooth interface

Der Unterzeichner : *Shi Wentao*
The undersigned : *Certificate Director*
(vollständiger Name und Position)
(full name and position)

Firmenname und Anschrift des Genehmigungsinhabers : *AXDIA International GmbH*
Hanns-Martin-Schleyer-Str. 36-38
47877 Willich, Deutschland
company and address of the approval holder

Name und Anschrift des Bevollmächtigten des Genehmigungsinhabers : --
name and address of the approval holder's representative

erklärt hiermit, dass für das nachfolgend bezeichnete Fahrzeug
hereby certifies, that for the below mentioned vehicle

- 0.1. Fabrikmarke** : NAVEE
make
- 0.2. Typ** : NKT2214-B20
type
- 0.2.1. Variante / Version : --
variant / version
- 0.2.2. Handelsname : NAVEE Electric Scooter S65C
commercial name
- 0.3. Klasse des Fahrzeugs** : Elektrokleinstfahrzeug
class of the vehicle
- 0.4. Verschlüsselungsmethode der Schnittstelle** :
encryption method of interface

die integrierte Bluetooth-Schnittstelle keine Gefährdung ermöglicht, welche durch unbefugte Zugriffe Dritter, die Unterbrechung der Verbindung oder eine Fehlfunktion hervorgerufen werden könnte
the integrated Bluetooth interface doesn't enable danger by unauthorized access of third, interruption of connection or failure

und
and

mit den Anforderungen aus Kapitel 4.2.17 der DIN EN 15194:2018-11 übereinstimmt.
comply with the requirements set out in Chapter 4.2.17 of DIN EN 15194:2018-11.

Ort, Datum : Suzhou 2023. 03. 24
place, date: _____

Unterschrift: *Shi Wentao/ Certificate Director*
Wentao shi
signature: _____

**Datenbestätigung
für das nachfolgend beschriebene Fahrzeug zum Zwecke der Vorlage**

bei der Zulassungsbehörde für die Zulassung des Fahrzeugs, soweit ein Gutachten/Zusatzgutachten für die Zulassung nicht erforderlich ist

Feld	Teil II	Bezeichnung	Daten	
D.1	X	Marke	NAVEE	
D.2	X	Typ	NKT2214-B20	
		Variante	-	
		Version	01	
D.3	X	Handelsbezeichnung(en)	NAVEE Electric Scooter S65C	
E	X	Fahrzeug-Identifizierungsnummer	A654503G000001	
F.1		Technisch zulässige Gesamtmasse in kg	145,8	
F.2		Im Zulassungsmitgliedstaat zulässige Gesamtmasse in kg	145,8	
G		Masse des in Betrieb befindlichen Fahrzeugs in kg (Leermasse)	25,8	
J	X	Fahrzeugklasse	27	
K	X	Nummer der EG-Typgenehmigung oder ABE	P390	
L		Anzahl der Achsen	2	
O		Technisch zulässige Anhängelast in kg	O.1 gebremst in kg O.2 ungebremst in kg	
			- -	
P.1	X	Hubraum in cm ³	-	
P.2	X	Nennleistung in kW	0,45 / -	
P.4		Nenndrehzahl bei min ⁻¹	-	
P.3	X	Kraftstoffart oder Energiequelle	Elektro	
Q		Leistungsgewicht in kW/kg (nur bei Krädern)	-	
R	X	Farbe des Fahrzeugs	-	
S.1		Sitzplätze einschließlich Fahrersitz	-	
S.2		Stehplätze	1	
T		Höchstgeschwindigkeit in km/h	20	
U.1		Standgeräusch in dB (A)	-	
U.2		Drehzahl in min ⁻¹ zu U.1	-	
U.3		Fahrgeräusch in dB (A)	-	
V.7		CO ₂ (in g/km)	-	
V.9		Für die EG-Typgenehmigung maßgebliche Schadstoffklasse	-	
(2)	X	Hersteller-Kurzbezeichnung		
(2.1)	X	Code zu (2)		
(2.2)	X	Code zu (D.2) mit Prüfziffer	Typ/Variante/Variation Prüfziffer	
(3)	X	Prüfziffer zur Fahrzeug-Identifizierungsnummer		
(4)	X	Art des Aufbaus	0003	
(5)	X	Bezeichnung der Fahrzeugklasse und des Aufbaus	Elektrokleinstfz. m. Lenk- o. Haltestange	
(6)	X	Datum zu K		
(7.1)		Technisch zulässige maximale Achslast/Masse je Achsgruppe in kg:	Achse 1	95
(7.2)			Achse 2	95
(7.3)			Achse 3	-
(8.1)		Zulässige maximale Achslast im Zulassungsmitgliedstaat in kg	Achse 1	95
(8.2)			Achse 2	95
(8.3)			Achse 3	-
(9)		Anzahl der Antriebsachsen	1	
(10)	X	Code zu P.3	0004	
(11)	X	Code zu R	-	
(12)		Rauminhalt des Tanks bei Tankfahrzeugen in m ³	-	
(13)		Stützlast in kg	-	
(14)		Bezeichnung der nationalen Emissionsklasse	-	
(14.1)		Code zu V.9 oder (14)	-	
(15.1)		Bereifung – Achse 1	250 x 64	
(15.2)		Bereifung – Achse 2	250 x 64	
(15.3)		Bereifung – Achse 3	-	
(18)		Länge in mm	1228	
(19)		Breite in mm	532	
(20)		Höhe in mm	1288	
(22)		Bemerkungen und Ausnahmen * Der Fahrzeugführer hat sich vor Fahrtantritt mithilfe der Betriebsanleitung mit dem Fahrzeug vertraut zu machen. Dies gilt insbesondere für erschwerte Fahrsituationen (beispielsweise Bordsteine, steile Rampen, Quer- und Längsrillen etc.). * Das Bedienen des Smartphones während der Fahrt ist nicht gestattet.		
(22a)		-		
(23)	X	Raum für interne Vermerke des Herstellers	-	

Bescheinigung der Angaben durch den Ausstellungsberechtigten:

- Die Richtigkeit der vorstehenden Angaben wird heute bescheinigt.
- Die Übereinstimmung mit der unter Feld K und (6) angegebenen ABE und dem gleichnamigen Typ ggf. nebst Variante/Version bzw. Ausführung wird bestätigt.
- Für die Zulassung ist ein Gutachten/Teilgutachten erforderlich.

Datum

23.03.2023

Firma

Brightway Innovation Intelligent Technology(Suzhou) Co., Ltd.

Unterschrift

Wen-tao Shi

i.V. (Shi Wentao/ Certificate Director)