

ZHEJIANG TIANYING LOCOMOTIVE CO.,LTD. COMPLETE VEHICLE

EU CERTIFICATE OF CONFORMITY

The undersigned, Q. Luo / Manager

Hereby certifies that the following complete vehicle:

0.1. Make (trade name of the manufacturer):

ALPHAMOTORS

0.2. Type: **TYSOQT-19D**

0.2.1. Variant: **TYSOQT-19D-03**

0.2.2. Version: **02**

0.2.3. Commercial name (if available):

SHARK

0.3. Category, subcategory and sub-subcategory of vehicle: **11e-B**

0.4. Company name and address of manufacturer:

Zhejiang Tianying Locomotive Co., Ltd.
No.211, New Street, Xinqiao Town, Luqiao District, Taizhou City, Zhejiang Province,
China. P.C. 318055

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

Brantech Imp AB

Stromledningsgatan 1, 72137 Vasterås Sweden

0.5.1. Location of the manufacturer's statutory plate(s): R, x:850, y:160, z:330

0.5.2. Method of attachment of the manufacturer's statutory plate(s): By riveted

0.6. Location of the vehicle identification number: R, x:320, y:4, z:505

1. Vehicle identification number: **LM0CBV190N1205250**

conforms in all respects to the type described in EU type-approval e6*168/2013*00016*03 (type-approval number including extension number) issued on (07.06.2021 date of issue) and can be permanently registered in Member States having right/left-hand traffic and using metric/imperial units for the speedometer.

Taizhou City, China

10th July 2022

(place)

(date)

(signature)

General construction characteristics

1.3. Number of axles: 2	and wheels: 2
1.3.1. Axles with twinned wheels:	N.A.
1.3.2. Powered axles:	R
1.3.2. Wheelbase:	N.A.
6.2.4. Advanced braking system: ABS / CBS / Both ABS and CBS / None:	N.A.
Main dimensions	
2.2.1. Length:	1900mm
2.2.2. Width:	760mm
2.2.3. Height:	1100mm
2.2.4. Wheelbase:	1295mm
2.2.4.1. Wheelbase sidecar:	N.A.
2.2.5. Track width:	N.A.
2.2.5.1. Track width front:	N.A.
2.2.5.2. Track width rear:	N.A.
2.2.5.3. Track width sidecar:	N.A.
2.2.10.6. Ground clearance between the axles:	N.A.
2.2.15. Wheelbase to ground clearance ratio:	N.A.
2.2.17. Seat height:	N.A.

Masses

2.1.1. Mass in running order:	102kg
2.1.2. Actual mass:	177kg
2.1.3. Technically permissible maximum laden mass:	242kg
2.1.3.1. Technically permissible maximum mass on front axle:	84kg
2.1.3.2. Technically permissible maximum mass on rear axle:	158kg
2.1.3.3. Technically permissible maximum mass on sidecar axle:	N.A.
2.1.7. Technically permissible maximum towable mass:	N.A.
Braked: N.A.	Unbraked: N.A.
2.1.7.1. Technically permissible maximum laden mass of the combination:	N.A.
2.1.7.2. Technically permissible maximum mass at the coupling point:	N.A.

Powertrain

3.1.1.1. Manufacturer: TAIZHOU XINBA POWER MANUFACTURING CO., LTD.
3.1.1.2. Engine code (as marked on the engine or other means of identification): 1P39QMB; N07C65660
3.2.1.2. Working principle of the combustion engine: internal combustion engine (ICE)/positive ignition/ compression ignition/external combustion engine (ECE)/turbine/compressed air
3.2.1.4.1. Number of cylinders: 1
3.2.1.4.2. Arrangement of cylinders: in-line
3.2.1.5. Engine capacity: 50cm³ (Calculated: 49.5cm³)
1.9. Maximum net power: 2.2kW at 8000 min⁻¹
1.10. Ratio maximum net power/mass of the vehicle in running order: 0.022kW/kg
3.2.3.1. Fuel type: E5
3.2.3.2. Vehicle fuel combination: mono-fuel/bi-fuel/flex-fuel
3.2.3.2.1. Maximum amount of bio-fuel acceptable in fuel: 5%
3.1.2.1. Manufacturer: N.A.
3.1.2.2. Electric motor code (as marked on the engine or other means of identification): N.A.
3.3.3.4. 15/30 minutes power: N.A.
3.1.3.1. Manufacturer: N.A.
3.1.3.2. Application code (as marked on the engine or other means of identification): N.A.
3.3.1. Electric vehicle configuration: pure electric/hybrid electric/manpower — electric N.A.
3.3.5.2. Category of hybrid electric vehicle: off-vehicle charging/not-off-vehicle charging N.A.
3.9.2. Maximum assistance factor: N.A.

Maximum speed

1.8. Maximum speed of vehicle: 45 km/h
3.9.3. Maximum vehicle speed for which the electric motor gives assistance: N.A.

Drive-train and control

3.5.3.9. Transmission (type): C
3.5.4. Gear ratios: Min: 11.980; Max: 27.189
3.5.4.1. Final drive ratio: N.A.
3.5.4.2. Overall gear ratio in highest gear: N.A.

Installation of tyres

6.18.1.1. Tyre size designation: F&R: 120/70-12.56, J, 225kpa; Rim: MT2.50×12, MT2.75×12, F&R: 120/70-12.51, J, 225kpa; Rim: MT2.50×12, MT2.75×12, F&R: 120/60-13.55, P, 225kpa; Rim: MT3.50×13, J13×MT3.50; F&R: 120/70-12.51, P, 225kpa; Rim: MT2.50×12, MT2.75×12, MT3.50×12; F&R: 110/70-12.53, J, 225kpa; Rim: MT3.50×12; F&R: 110/70-12.47, P, 225kpa; Rim: MT3.50×12; F&R: 110/70-12.47, K, 225kpa; Rim: MT3.50×12; F&R: 130/60-13.53, J, 225kpa; Rim: MT3.50×13, J13×MT3.50 Sidecar wheel: N.A.

Bodywork

6.20.2.1. Door configuration and number of doors:	N.A.
6.16.1. Number of seating positions:	2
6.16.1.1. Location and arrangement:	N.A.

Coupling devices

7.2.8. Type-approval number of coupling device:	N.A.
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Environmental performance

4.0.1. Environmental step: Euro (3/4/5/5+)
4.0.6. Sound level measured according to Regulation (EU) No 134/2014 including all amendments up to (EU) 2018/295
4.0.6.1. Stationary: 81 dB(A) at engine speed: 4000 min⁻¹
4.0.6.2. Drive-by: 71 dB(A)
4.0.6.3. Limit value for L _{max} : 71 dB(A)
3.2.15. Exhaust emissions measured according to Regulation (EU) No 134/2014 including all amendments up to (EU) 2018/295
3.2.15.1. Type I test: tailpipe emissions after cold start, including the deterioration factor, if applicable:
CO: 124 mg/km
THC: 56 mg/km
NMHC: 51 mg/km
NOx: 33 mg/km
THC+NOx: 89 mg/km(3)
PM: N.A.
3.2.15.2. Type II test: tailpipe emissions at (increased) idle and free acceleration: HC: 70 ppm at normal idling speed and: 57 ppm at high idle speed CO: 0.06% vol. at normal idling speed and: 0.30% vol. at high idle speed
3.2.15.3. Smoke corrected absorption coefficient: N.A.

Energy efficiency

4.0.2. Fuel consumption: 2.4 l/100km
4.0.3. CO ₂ emissions: 57 g/km
4.0.4. Energy consumption: N.A.
4.0.5. Electric range: N.A.

Conversion of the performance of the vehicle:

8.1. Vehicle appropriate for converting its performance level between subcategories (L3e/L4e)-A2 and (L3e/L4e)-A3 and vice versa: yes/no

Additional information:

9.1. Remarks: N.A.	9.2. Exemptions: N.A.
9.3. CNIT Code:	

