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Brand Guidelines

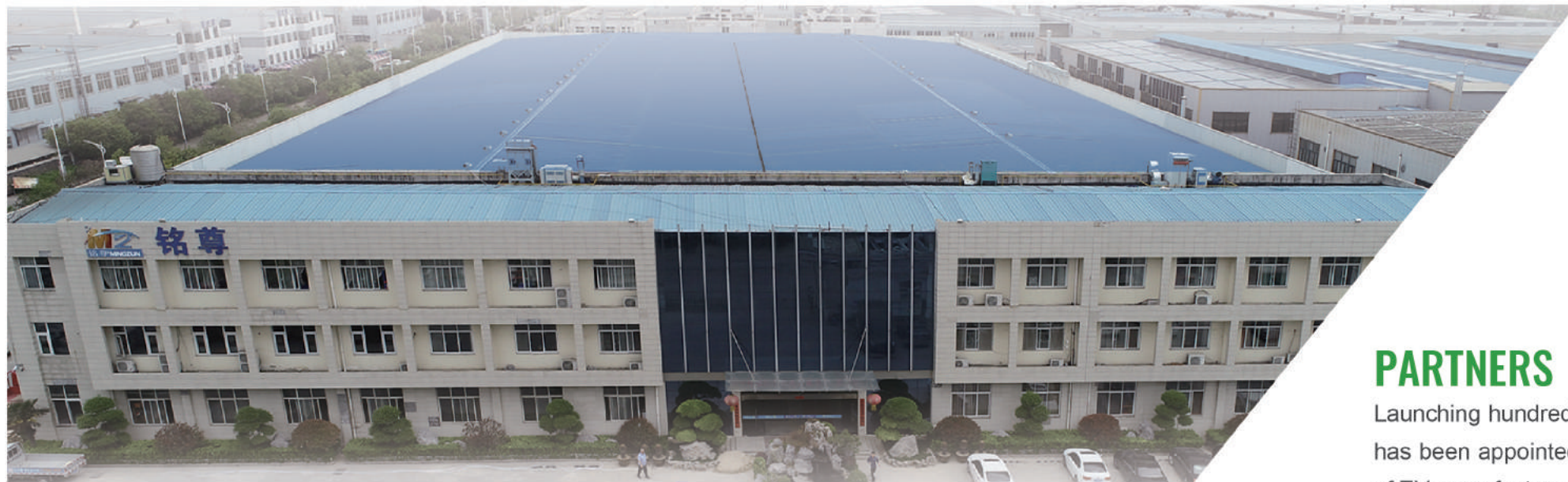
Green MZ, Made in China and made for the world!

The Most Affordable EV Motor Globally



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COMPANY PROFILE

Founded in 2006, MZ maintains a facility of **87,000** square meters with three workshops and a total of **16** modern production lines producing motor, controller, and rear axle. Daily production capacity includes over **15,000** sets of motors, **8,000** controllers, and **8,000** rear axles.

Since 2018, MZ has collaborated with many famous universities, expanding the research and development center and achieving significant breakthroughs in product durability, low-noise, and economic energy consumption.

PARTNERS

Launching hundreds of high-performance products, MZ has been appointed and equipped by many top brands of EV manufacturers, including JINPENG, ZONGSHEN, LILONG and HAIBAO.



DEVELOPMENT HISTORY

IN 2006

MZ established

IN 2011

Invested and built a new factory in the hi-tech industrial park of Xihuan Road, Feng County

IN 2008

Expanded production scale and relocated in Nanhuan Road, Feng County, Jiangsu Province

IN 2012

Launched the high-power motor for E-richshaw

IN 2013

Added the production lines for rear axle

IN 2017

Launched PMSM motors

IN 2018

Started the cooperation with many famous universities. Expanded the research and development center

IN 2019

Added the production line for controller

IN 2023

Established Overseas Department

WHY CHOOSE MZ

Customized Solutions

Customized solutions for motor, controller and rear axle can be offered by MZ according to the target vehicles and the specific requirements.

Supply Capacity & Delivery

-**16** modern production lines-

The daily motor production capacity is more than **15000** sets, while the daily output for controller is around **8000** pcs and **8000** pcs for real axle.



Research & Development

Cooperation with universities and research institutions.

Achieved a significant breakthrough in product durability, low-noise and economic energy consumption.

MZ Team

More than **1500** skilled workers in MZ workshop.

More than **50** technicians, engineers and experts in MZ technical team.

More than **50** quality inspectors.



Quality Assurance

Modern production equipment provide stable product quality experience. Advanced quality control equipment is used to monitor every step of the manufacturing process.

Market experience

In past **20** years, MZ committed to serve hundreds of clients in more than **36** countries with superior products and services.



Serving hundreds of clients in more than **36** countries, Mz has been honored with multiple awards and patents, including **ISO9001**, **IATF16949, CE**, and is a key member of China Association for Science and Technology.

MZ has established a skilled and efficient after-sales team, ensuring a reliable long-term cooperation for all partners, and pushing forward the "Made in China" to the world.

MEET THE TEAM

R&D TEAM

- ◆ More than **50** professional engineers and technicians.
- ◆ R&D Center certified by CNAS Standard.
- ◆ Cooperation with research institutions and universities.
- ◆ Continuous R&D investment ensures industry-leading technology.

QC TEAM

- ◆ More than **50** quality control inspectors.
- ◆ All raw materials must be test to be qualified by lab before entering MZ factory.
- ◆ Strictly implement of DDS AND DPS system ensures the quality control in production process.
- ◆ Professional overseas after-sale team extends our service to the world.



PRODUCTION TEAM

- ◆ More than **1500** staff in MZ workshops.
- ◆ Fully automatic production workshops of independent design leading the industry.
- ◆ Regular Inspection ensures the accuracy of the equipment.
- ◆ Motor production speed: around **35** pcs/min.
- ◆ Rear axle production speed: around **20** pcs/min.

OVERSEAS TEAM

- ◆ **10+** overseas sales and service experts.
- ◆ Serve hundreds of clients in more than **36** countries.
- ◆ Quick response - Quote within **24** hours.
- ◆ Market experience - Visit customers and gather the market information.

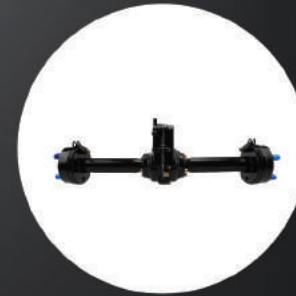
PRODUCT CLASSIFICATION



MZ MOTOR



MZ CONTROLLER



MZ REAR AXLE

LOW-NOISE MOTOR

MZ sets new standards in drive technologies, 10 dB lower than the conventional motors.

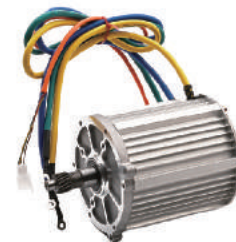




Item	120 Series Motor - Single Wire		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V	Max Current	30-60A
Rated Power	1000W/1200W/1500W/1800W	Isolation Grade	F
Rotating Speed	2400-4800RPM	Protection Grade	IP54/IP65
Working principle	BRUSHLESS/BLDC/PMSM	Available Gear Ratio	1:8/1:10/1:15/1:28/1:30/1:55



Item	120 Series Motor - Double Wires		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V	Max Current	30-60A
Rated Power	350W-1000W	Isolation Grade	F
Rotating Speed	2400-4800RPM	Protection Grade	IP54/IP65
Working principle	BRUSHLESS/BLDC/PMSM	Available Gear Ratio	1:8/1:10/1:15/1:28/1:30/1:55



Item	120 Series Motor - Four Wires		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V	Max Current	50-75A
Rated Power	1500W/1800W	Isolation Grade	F
Rotating Speed	2400-4000RPM	Protection Grade	IP54/IP65
Working principle	BRUSHLESS/BLDC/PMSM	Available Gear Ratio	1:8 1:10 1:8.3/20.8 1:9.3/23.4



Item	120 Series Low-Noise Motor		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V	Max Current	28-60A
Rated Power	350W-1200W	Isolation Grade	F
Rotating Speed	2400-4000RPM	Protection Grade	IP54/IP65
Working principle	BRUSHLESS/BLDC/PMSM	Available Gear Ratio	1:8 1:10 1:8.3/20.8 1:9.3/23.4



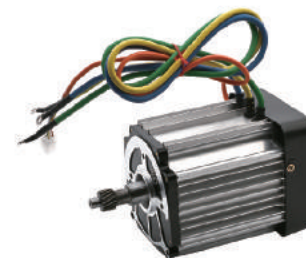
Item	120 Series Low-Noise and Magnetic Encoder Motor		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V	Max Current	28-60A
Rated Power	800W/1000W/1200W/1500W	Isolation Grade	F
Rotating Speed	2400-4000RPM	Protection Grade	IP54/IP65
Working principle	BRUSHLESS/BLDC/PMSM	Available Gear Ratio	1:8 1:10 1:8.3/20.8 1:9.3/23.4



Item	126 Series Motor - Four Wires		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V	Max Current	50-75A
Rated Power	1000W/1200W/1500W/1800W	Isolation Grade	F
Rotating Speed	2400-4800RPM	Protection Grade	IP54/IP65
Working principle	BRUSHLESS/BLDC/PMSM	Available Gear Ratio	1:8 1:10 1:8.3/20.8 1:9.3/23.4



Item	126 Series Motor - Double Wires		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V	Max Current	50-75A
Rated Power	1000W/1200W/1500W/1800W	Isolation Grade	F
Rotating Speed	2400-4800RPM	Protection Grade	IP54/IP65
Working principle	BRUSHLESS/BLDC/PMSM	Available Gear Ratio	1:8 1:10 1:8.3/20.8 1:9.3/23.4



Item	126 Series Motor-Four Wires		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V	Max Current	50-75A
Rated Power	1000W/1200W/1500W/1800W	Isolation Grade	F
Rotating Speed	2400-4800RPM	Protection Grade	IP54/IP65
Working principle	BRUSHLESS/BLDC/PMSM	Available Gear Ratio	1:8 1:10 1:8.3/20.8 1:9.3/23.4



Item	133 Series Motor - Four Wires		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Max Current	50-110A
Rated Power	100W-3000W	Isolation Grade	F
Rotating Speed	3500-4800RPM	Protection Grade	IP54/IP65
Working principle	BRUSHLESS/BLDC/PMSM	Available Gear Ratio	1:8/1:10/1:12/1:15



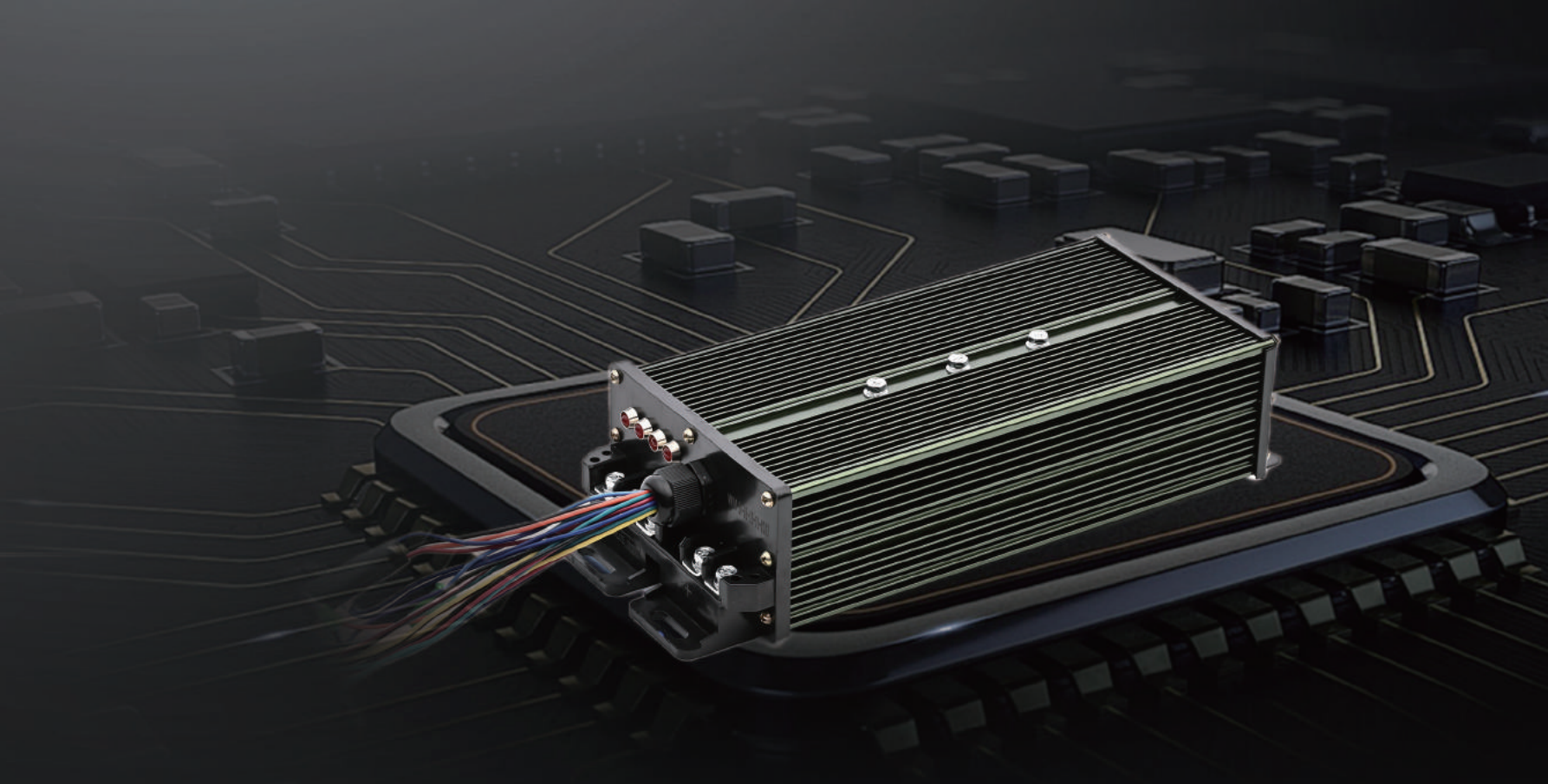
Item	180 Series Motor - Four Wires		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Max Current	200-500A
Rated Power	1000W-3000W	Isolation Grade	F
Rotating Speed	3000-7000RPM	Protection Grade	IP54/IP65
Working principle	BRUSHLESS/BLDC/PMSM		



Item	180 Series Motor - Four Wires		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Max Current	200-500A
Rated Power	1000W-3000W	Isolation Grade	F
Rotating Speed	3000-7000RPM	Protection Grade	IP54/IP65
Working principle	BRUSHLESS/BLDC/PMSM		

INTELLIGENT CONTROLLER

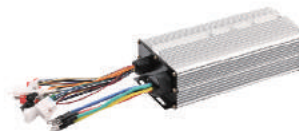
Independent R&D with high-tech innovation



MZ CONTROLLER



Item	12-18 Mosfet Controller - Double PG		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Rated Current	30-42A
Matchable Motor	500W-900W	Tolerable Temperature	180 °C
Tolerable Voltage	More Than 100V	Function	Anti-Theft Alarm, Three-Speed Transmission, Self-Check Voice etc.



Item	18-24 Mosfet Controller - Double PG		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Rated Current	40-70A
Matchable Motor	800W-1500W	Tolerable Temperature	180 °C
Tolerable Voltage	More Than 100V	Function	Anti-Theft Alarm, Three-Speed Transmission, Self-Check Voice etc.

MZ CONTROLLER



Item	18-24 Mosfet Controller - Single PG		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Rated Current	40-70A
Matchable Motor	800W-1500W	Tolerable Temperature	180 °C
Tolerable Voltage	More Than 100V	Function	Anti-Theft Alarm, Three-Speed Transmission, Self-Check Voice etc.

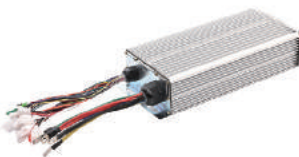


Item	18-24 Mosfet Controller Crimping Structure- Single PG		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Rated Current	40-70A
Matchable Motor	800W-1500W	Tolerable Temperature	180 °C
Tolerable Voltage	More Than 100V	Function	Anti-Theft Alarm, Three-Speed Transmission, Self-Check Voice etc.

MZ CONTROLLER



Item	18-24 Mosfet Controller - Single PG		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Rated Current	40-70A
Matchable Motor	800W-1500W	Tolerable Temperature	180 C
Tolerable Voltage	More Than 100V	Function	Anti-Theft Alarm, Three-Speed Transmission, Self-Check Voice etc.



Item	30-36 Mosfet Controller - Double PG		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Rated Current	70-100A
Matchable Motor	1800W-4500W	Tolerable Temperature	180 C
Tolerable Voltage	More Than 100V	Function	Anti-Theft Alarm, Three-Speed Transmission, Self-Check Voice etc.

MZ CONTROLLER



Item	36-60 Mosfet Controller - Wireless		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Rated Current	35-45A
Matchable Motor	4500W-10000W	Tolerable Temperature	180 C
Tolerable Voltage	More Than 100V	Function	Anti-Theft Alarm, Three-Speed Transmission, Self-Check Voice etc.



Item	12-24 Mosfet Controller - Wireless		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Rated Current	40-100A
Matchable Motor	650W-1500W	Tolerable Temperature	180 C
Tolerable Voltage	More Than 100V	Function	Anti-Theft Alarm, Three-Speed Transmission, Self-Check Voice etc.

MZ CONTROLLER



Item	12-30 Mosfet Controller - Wireless		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Rated Current	40-100A
Matchable Motor	500W-3000W	Tolerable Temperature	180℃
Tolerable Voltage	More Than 100V	Function	Anti-Theft Alarm, Three-Speed Transmission, Self-Check Voice etc.



Item	12-24 Mosfet Controller - Wireless		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Rated Current	30-65A
Matchable Motor	500W-1500W	Tolerable Temperature	180℃
Tolerable Voltage	More Than 100V	Function	Anti-Theft Alarm, Three-Speed Transmission, Self-Check Voice etc.

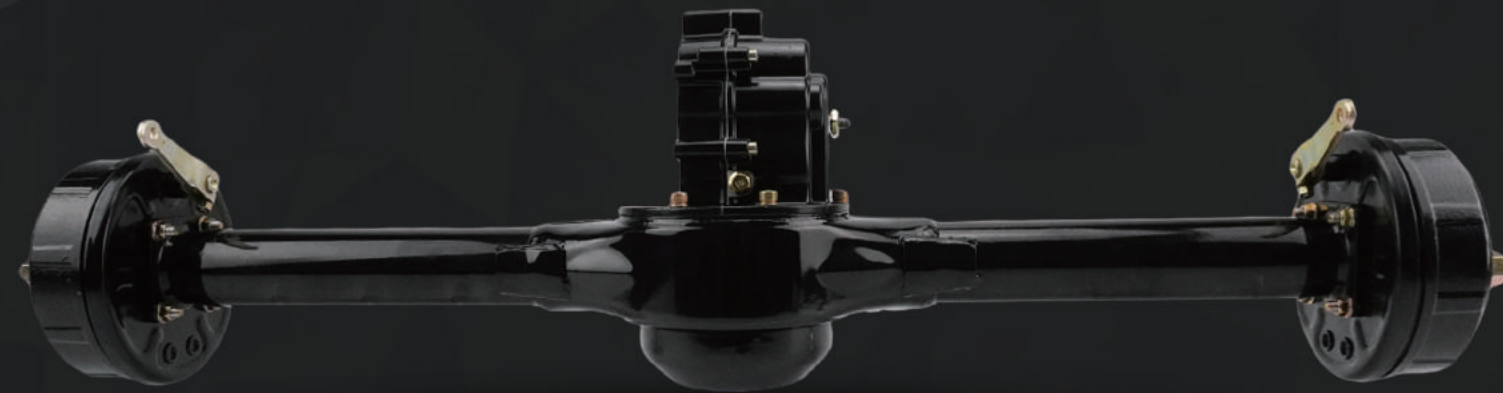
MZ CONTROLLER



Item	24-30 Mosfet Controller - With Light		
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle		
Rated Voltage	48V/60V/72V/84V/96V	Rated Current	55-75A
Matchable Motor	1100W-1800W	Tolerable Temperature	180℃
Tolerable Voltage	More Than 100V	Function	Anti-Theft Alarm, Three-Speed Transmission, Self-Check Voice etc.

RIGID REAR AXLE

Stable running and durable loading



MZ REAR AXLE



Item	Split-Style Rear Axle
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle
Length	33"/ 35"/ CUSTOMIZATION
Brake System	Disc Braking/Drum Braking
Diameter of Drum Braking	2.75MM-3.5MM
Thickness of Pipe	≥Φ60MM
Diameter of Pipe	130MM/160MM/180MM



Item	Differential Gear Box
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle
Variable or Not	Variable
Gear Ratio	1:8.3/20.8 1:9.3/23.4 1:11/28

MZ REAR AXLE



Item	One-Piece Rear Axle
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle
Length	33"/ 35"/ CUSTOMIZATION
Brake System	Disc Braking/Drum Braking
Diameter of Drum Braking	2.75MM-3.5MM
Thickness of Pipe	≥Φ60MM
Diameter of Pipe	130MM/160MM/180MM



Item	Differential Gear Box
Usage	E-Rickshaw/Electric Tricycle/Electric Vehicle
Variable or Not	Variable
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MZ REAR AXLE



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GREEN MZ

Made in China and made for the world