

VEICHI

EV Controller Solutions



VEICHI

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Official Website

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Stock code : 688698

About Us



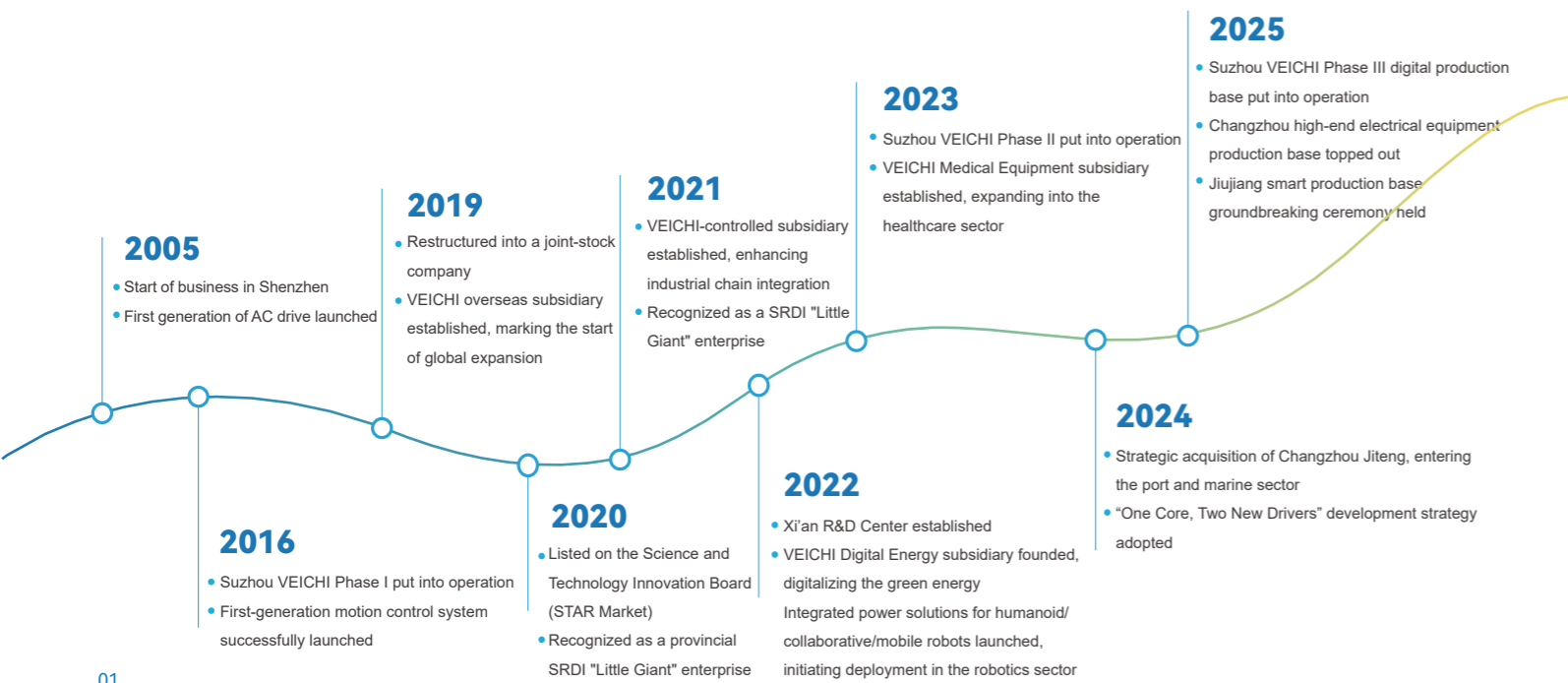
Veichi Electric (Stock Code: 688698) specializes in electrical transmission and industrial control, operating as an integrated high-tech enterprise in R&D, production, and sales of industrial automation products. With a vision to lead in smart industry and green energy solutions, the company leverages its R&D and manufacturing hubs in Suzhou, additional R&D centers in Shenzhen and Xi'an, and wholly-owned subsidiaries overseas, consistently serving customers worldwide with competitive and reliable solutions.

Under the "One Core, Two New Drivers" strategy, Veichi focuses on industrial automation, offering AC drives, servo systems, and control systems widely applied across heavy and light industries, as well as high-end equipment sectors, supporting the digital and intelligent transformation of manufacturing with its tailored solutions. Simultaneously, in two emerging fields, it provides one-stop solutions for humanoid, collaborative, and mobile robots in embodied intelligence, while in green energy, it delves into segments like photovoltaic, energy storage, and hydrogen energy, to "connect every device with green power," fostering a synergistic growth between core operations and new ventures.

Sustained R&D has yielded a portfolio of proprietary patented technologies including silicon carbide application, HF injection, motor controls and protections (auto-tuning, flying-start, high-speed flux-weakening, V/F control, vector control), high-density water-cooling layout, and IGBT drive protection. As of September 30, 2025, Veichi holds 234 patents, with 66 for invention.

Over two decades of steady growth, Veichi has earned numerous certifications and accolades from national and regulatory authorities, including "High-Tech Enterprise," "Postdoctoral Research Workstation," and provincial honors like "Engineering Technology Research Center," "Enterprise Technology Center," and "Industrial Internet Development Demonstration Enterprise (Benchmark Factory Category)."

Guided by its mission to "Drive Smart Industry, Co-create a Green Future," Veichi will continue to intensify R&D and advance into high-performance, high-reliability fields to propel global progress.



EV Controller Features

Universal Motor & Encoder Compatibility

Compatible with PMSM, induction motors, and BLDC motors, and supports A/B photoelectric encoders, magnetic encoders, and resolver encoders for highly flexible configuration.

Intelligent Bus Control

Enables system control and data communication via CAN, RS485, and optional Bluetooth connectivity.

4WD and Safety Enhancement

Features built-in electronic differential algorithms, allowing easy implementation of four-wheel drive without an external VCU. Integrated anti-rollback and hill descent control significantly improve driving safety in complex road conditions.

Exclusive High-Speed E-Motorcycle Feature

Includes a unique jump mode for high-speed electric motorcycles, enhancing off-road driving fun and dynamic performance.

Customization and Expansion Support

Supports CAN protocol customization to adapt to third-party communication systems, and offers hardware/software function tailoring to meet differentiated needs.

Remote Maintenance and Updates

Optional GPRS module enables remote debugging and OTA upgrades, providing users with a more convenient ongoing maintenance experience.

Power Response & Smoothness

Excellent throttle sensitivity with smooth acceleration and deceleration for superior driving feel

Intelligent Chassis Control

Electronic differential system with auto torque distribution and all-terrain mode switching

Comprehensive Safety & Protection

Anti-slip, hill hold, hill descent control, and TCS for enhanced driving safety

Advanced System Safeguards

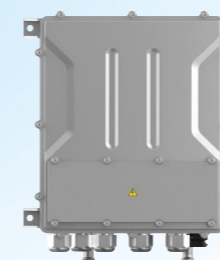
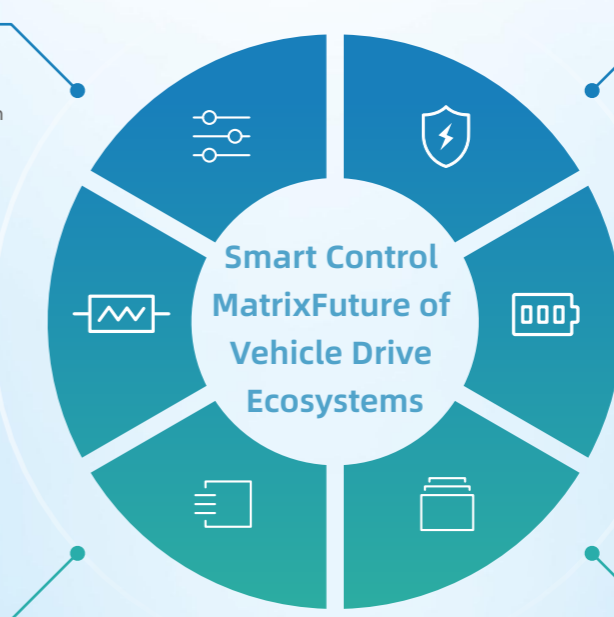
Multi-level protection against input over/under-voltage, charging faults, high pedal, overheating, overcurrent, reverse polarity, phase loss, and stall & IP6K rating

Braking & Energy Recovery

Regenerative braking for extended driving range

High-Efficiency Flux Weakening Control

Extended range, unrestricted performance — drive farther, explore more



EV100 Series



EV200 Series



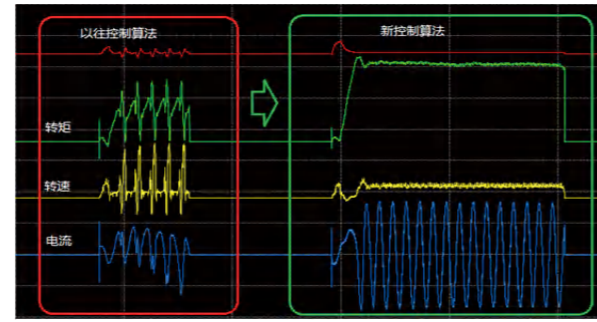
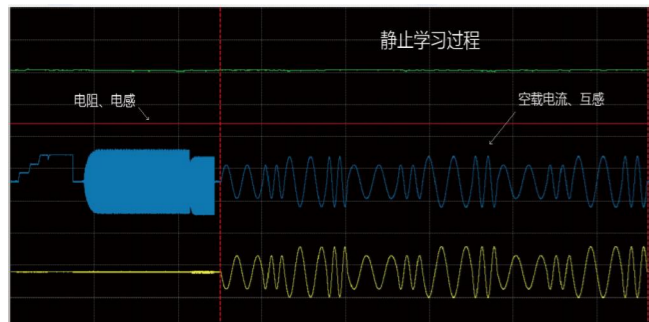
EV500 Series



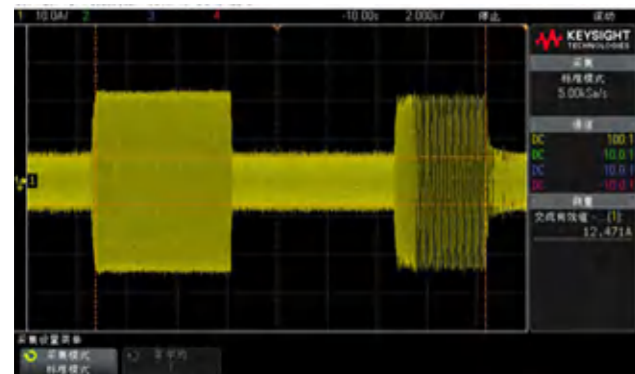
EDOOR Silicon Carbide Series

01 Drive Performance

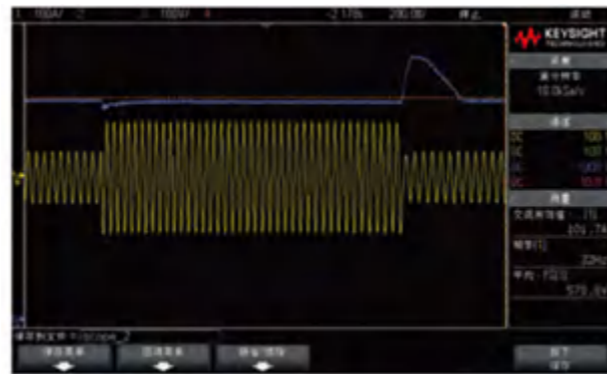
Advanced motor auto-tuning via HF injection for universal PMSM compatibility and enhanced robustness.



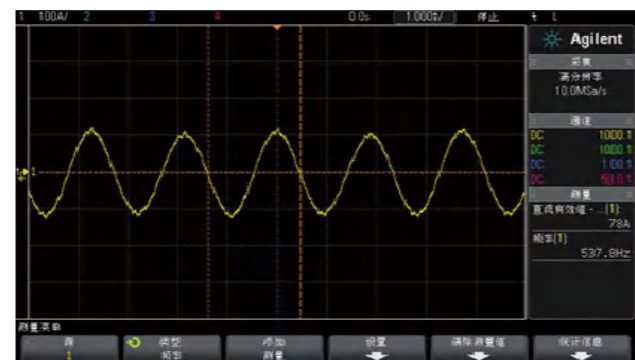
Next-generation FOC strategy with seamless torque-speed mode integration for all driving scenarios.



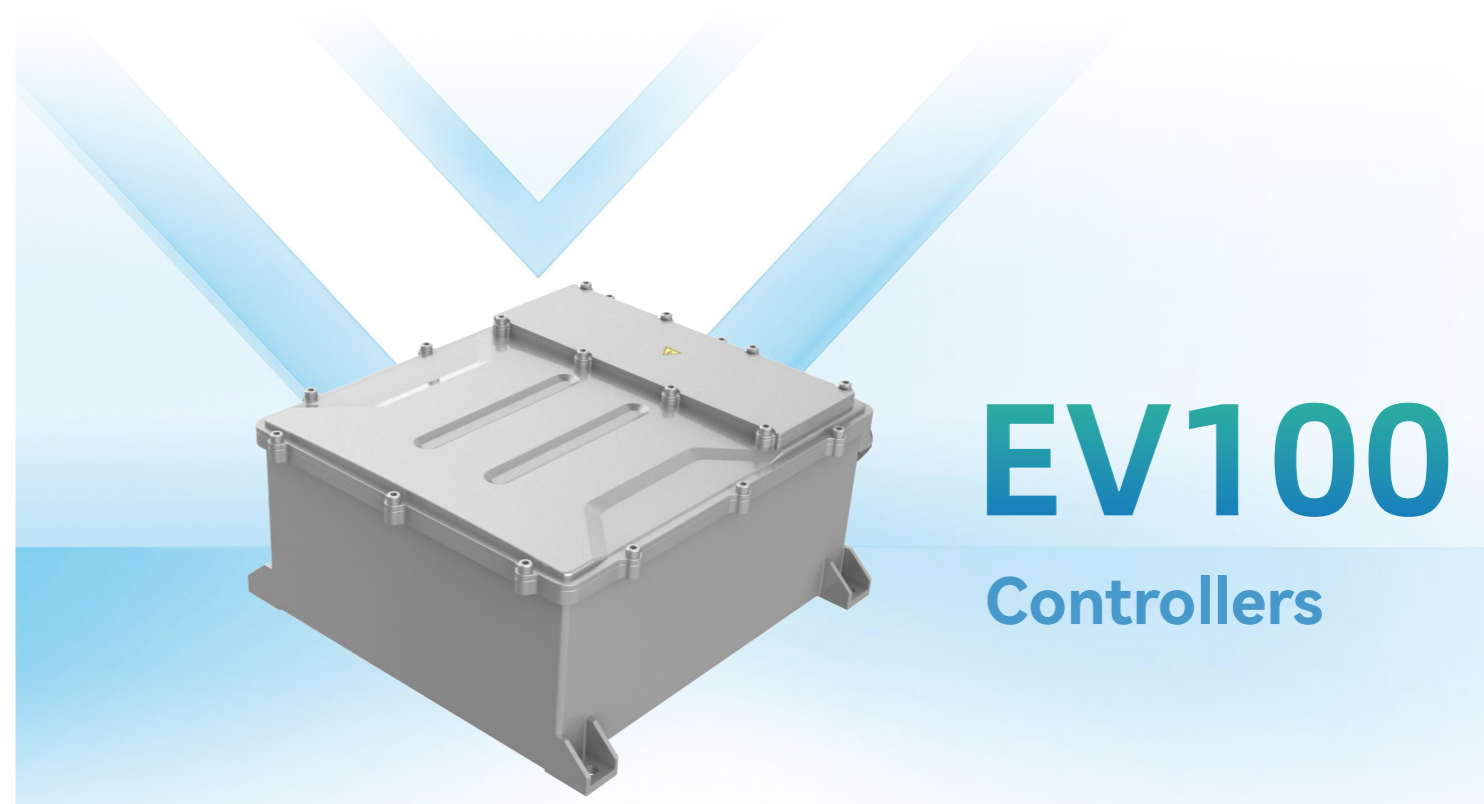
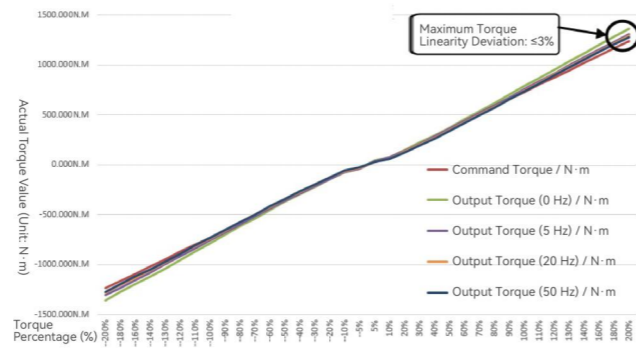
Precise torque-excitation decoupling for exceptional dynamic response.



Superior low-speed and field-weakening control performance.



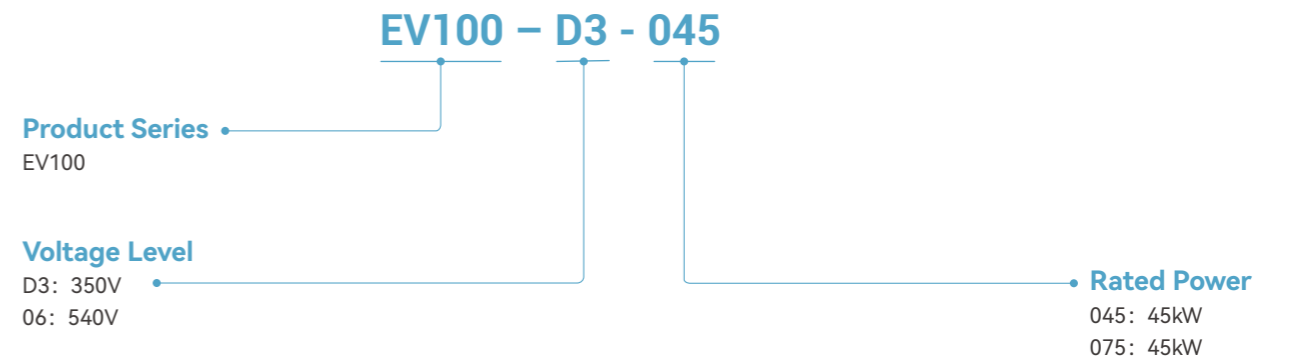
±3% torque control accuracy for maximized acceleration smoothness and driving comfort.



EV100

Controllers

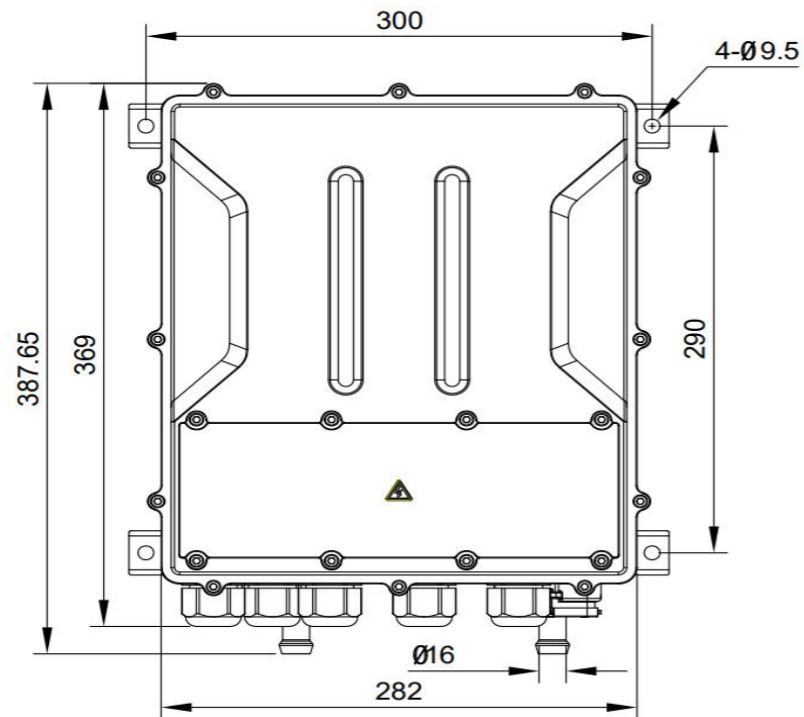
EV100 Series Naming Rules



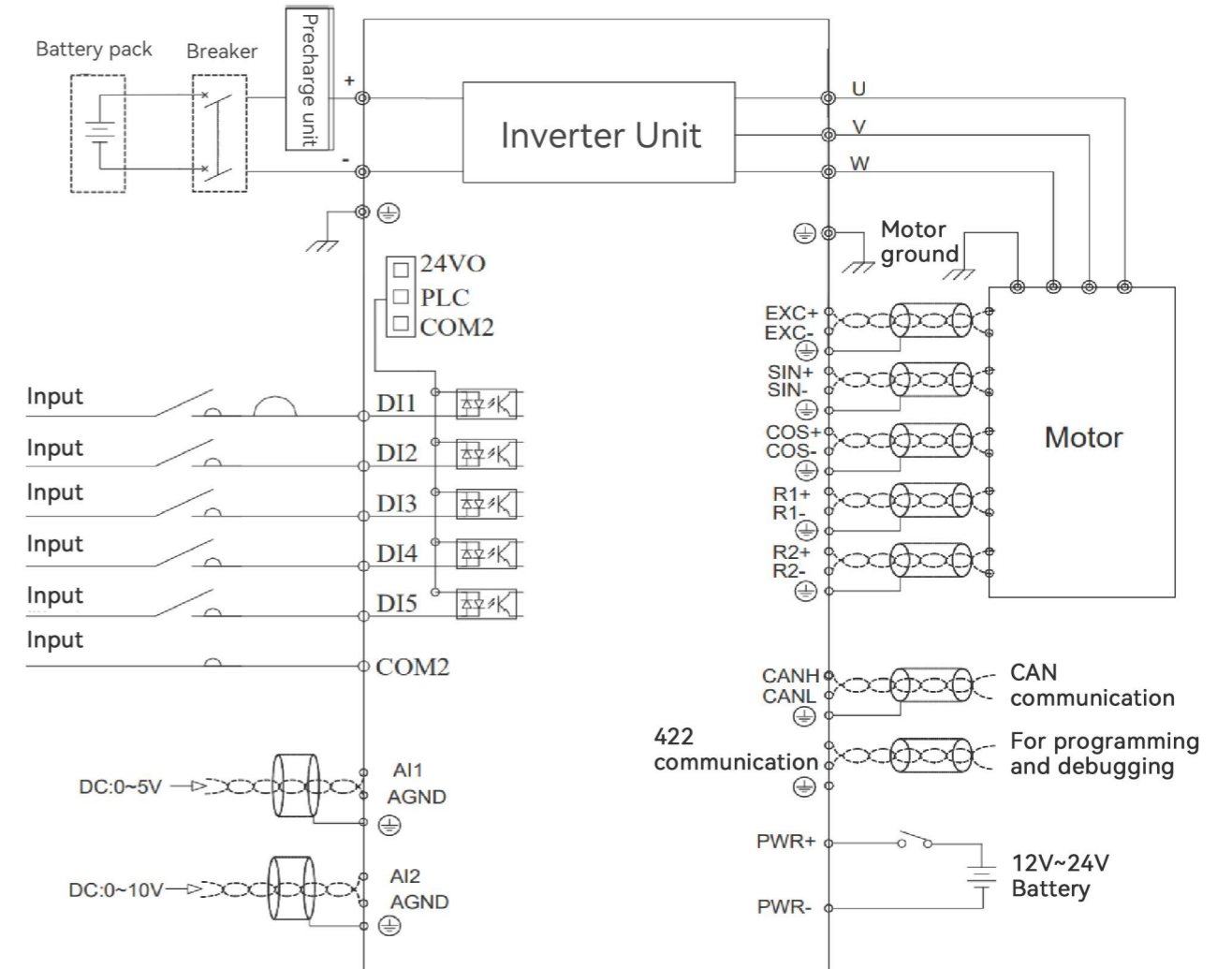
EV100 Series Product Specification

Model	Rated Voltage	Input Voltage Range	Output Current	
			1min	S2-60min
EV100-D3-045	350V	200V-400V	320A	160A
EV100-D3-075	350V	200V-400V	410A	260A
EV100-D6-090	540V	300V-750V	320A	160A
EV100-D6-132	540V	300V-750V	410A	260A

EV100 Installation Dimensions



EV100 Series Product Wiring



Main Terminal Functions

- ◎ 7×DI (NPN/PNP Switchable)
- ◎ 1×DO (Open Collector)
- ◎ 2×AI (0V~5V, 0V~10V)
- ◎ 1×CANopen, 1×RS-422 (For Host Debugging)
- ◎ 2×Temperature Sensor Input (NTC/KTY84/PT100/PT1000)
- ◎ Resolver Encoder Supported
- ◎ IP67, Liquid-Cooled



EV200 Controllers

EV200 Series Product Specification

Model	Rated Voltage	Input Voltage Range	Output Current	
			1min	S2-60min
EV200-0430-A	48V	20V-60V	300A	150A
EV200-0435-A	48V	20V-60V	350A	175A
EV200-0440-A	48V	20V-60V	400A	200A
EV200-0445-A	48V	20V-60V	450A	225A
EV200-0825-A	80V	56V-96V	250A	125A
EV200-0830-A	80V	56V-96V	300A	150A
EV200-0835-A	80V	56V-96V	350A	175A
EV200-0840-A	80V	56V-96V	400A	200A
EV200-0845-C	80V	56V-96V	450A	225A
EV200-0850-C	80V	56V-96V	500A	250A
EV200-0855-C	80V	56V-96V	550A	275A

EV200 Series Naming Rules

EV200 - 04 35 - A - M - F

Product Series

EV200

Voltage Level

04: 48V
08: 80V

Peak Current

35: 350A
45: 450A

Cooling Method

H: With extra radiator
F: With fan

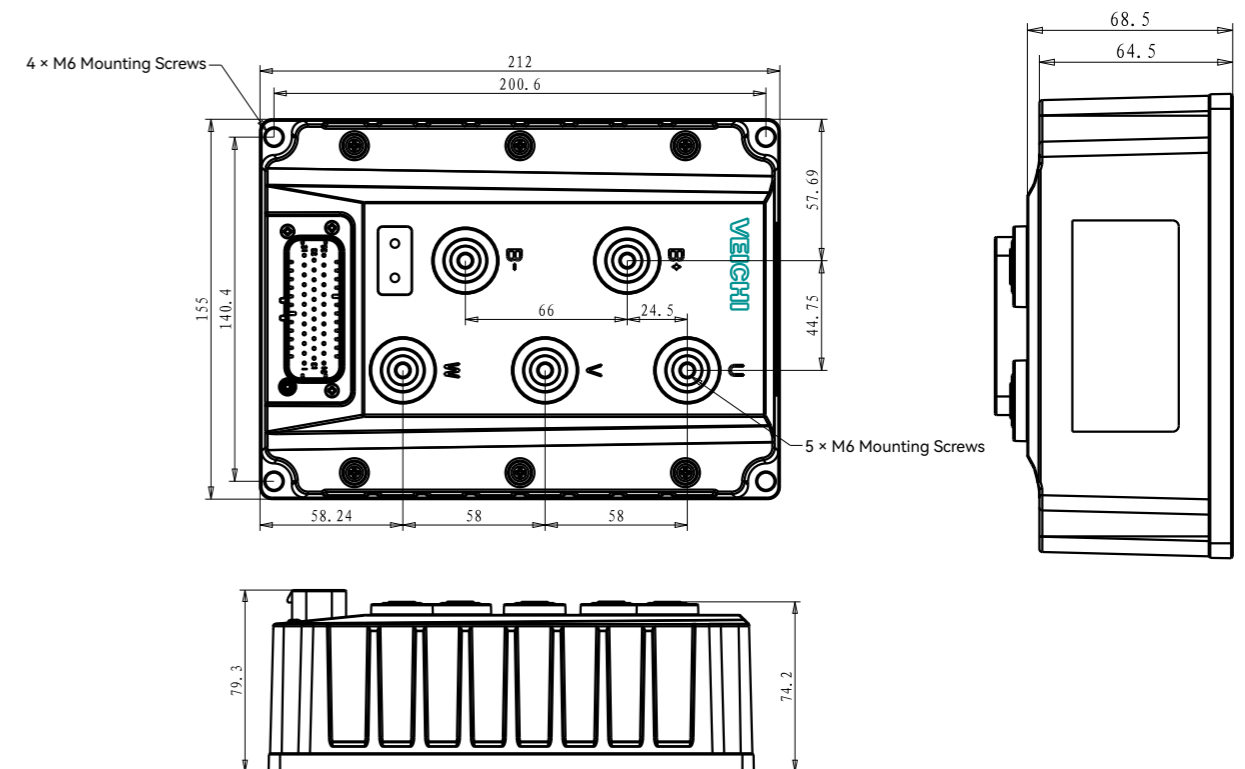
Encoder Type

M: OC incremental encoder
D: Differential incremental encoder
X: Resolver

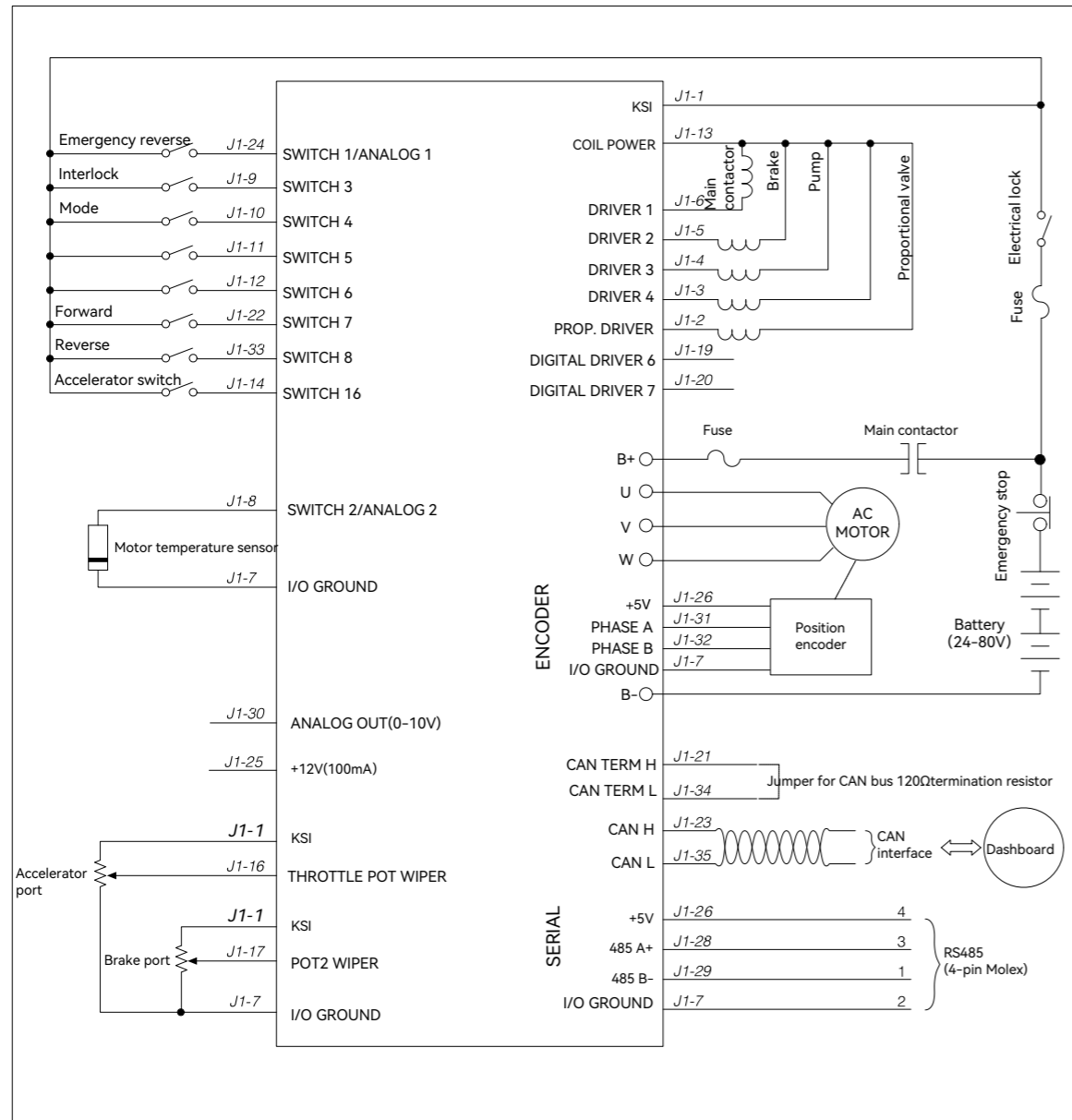
Base Structure

A: A structure
B: B structure

EV200 Installation Dimensions



EV200 Series Product Wiring



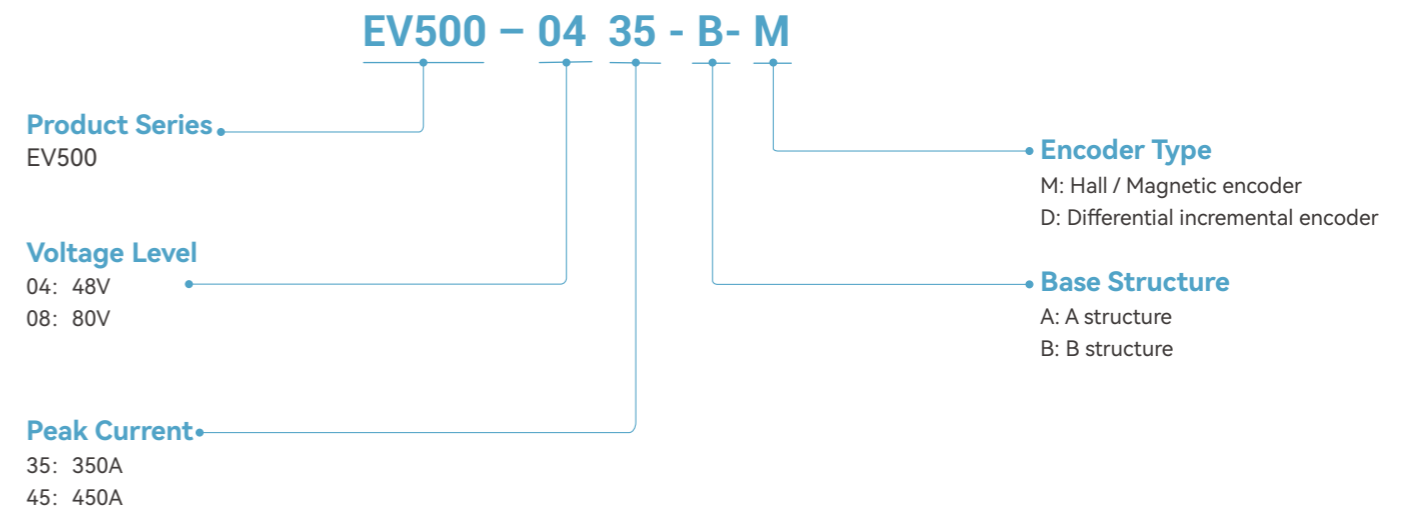
Main Terminal Functions

- © 8×DI (High-Level Active)
- © 7×Power Drive Output (200Hz, 2A)
- © 2×AI (0V~5V)
- © 1×CANopen, 1×RS-485
- © 2×Temperature Sensor Input (NTC/KTY84/PT100/PT1000)
- © Encoder Support: Resolver, AB Phase Photoelectric Encoder
- © IP65, Self-Cooling / Forced-Air Cooling Optional



EV500 Controllers

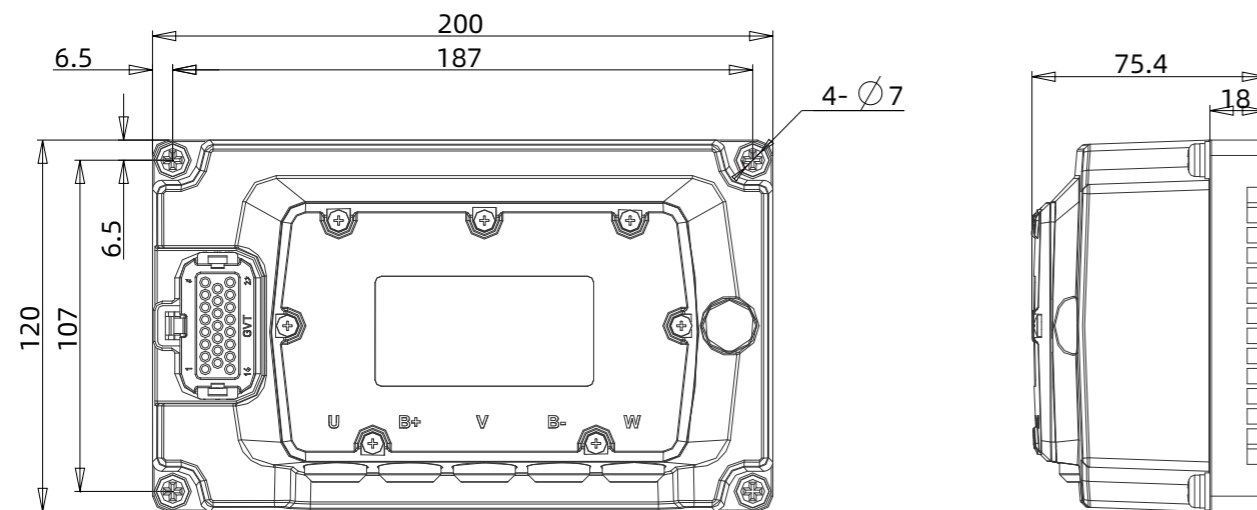
EV500 Series Naming Rules



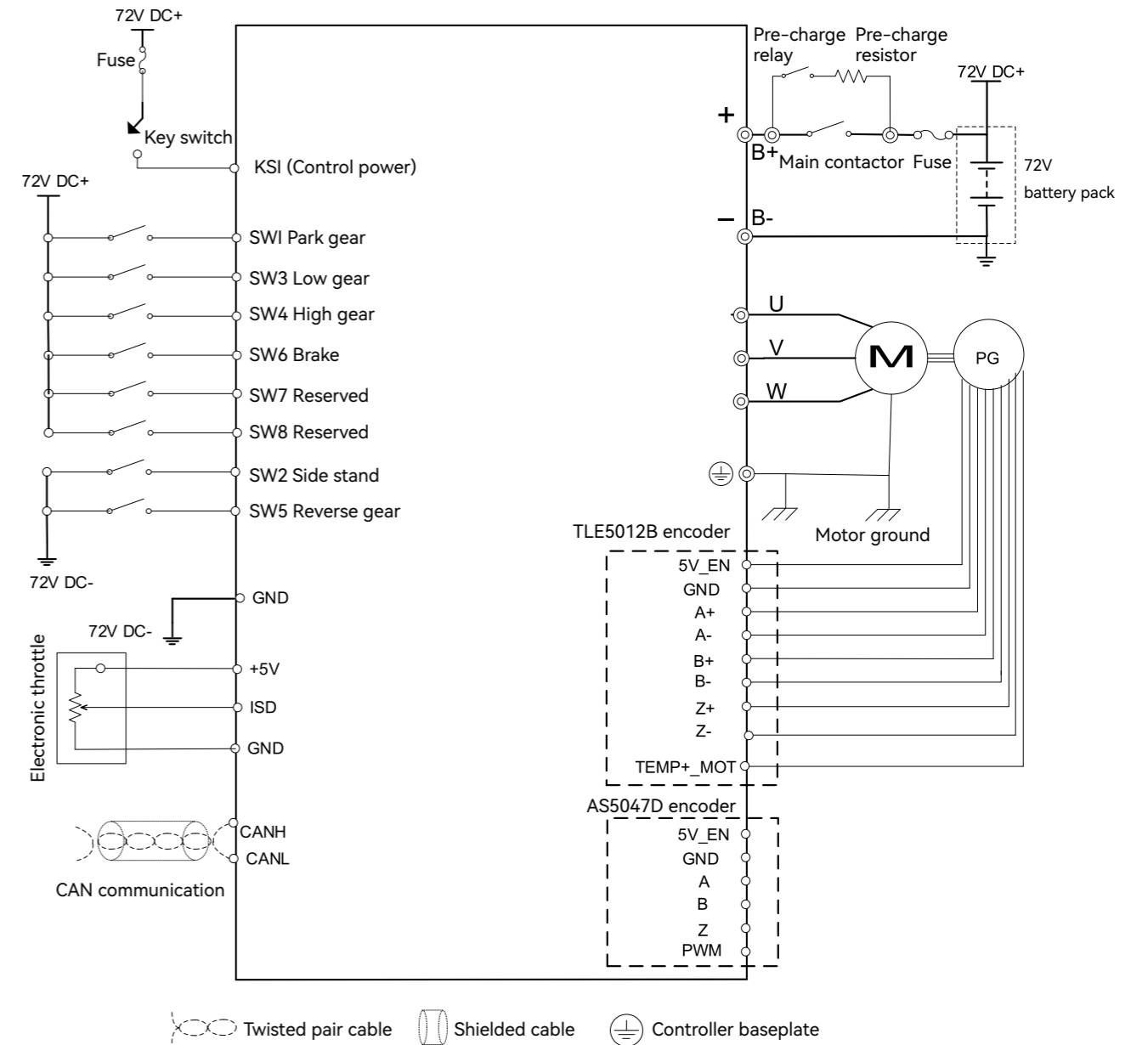
EV500 Series Product Specification

Model	Rated Voltage	Input Voltage Range	Output Current	
			1min	S2-60min
EV500-0435-B	48V	33V-60V	350A	90A
EV500-0450-B	48V	33V-60V	500A	110A
EV500-0735-B	72V	48V-90V	350A	90A
EV500-0750-B	72V	48V-90V	500A	110A
EV500-0935-B	96V	72V-120V	350A	80A
EV500-0945-B	96V	72V-120V	450A	100A

EV500 Installation Dimensions

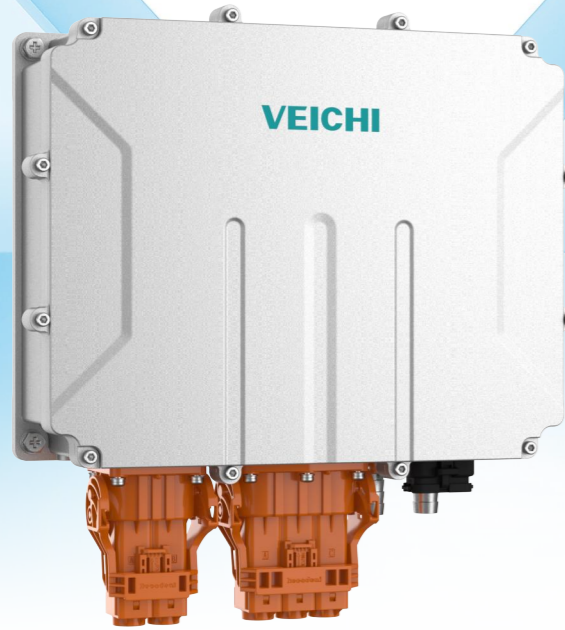


EV500 Series Product Wiring



Main Terminal Functions

- ⊙ 8×DI (High-Level Active)
- ⊙ Bluetooth Module (Optional)
- ⊙ 1×AI (0V~5V)
- ⊙ 1×CANopen, 1×RS-485
- ⊙ 1×Temperature Sensor Input (NTC/KTY84/PT100/PT1000)
- ⊙ Encoder Support: ABZ+PWM Magnetic, Hall
- ⊙ IP67, Self-Cooling / Forced-Air Cooling Optional



EDOOR

-Silicon Carbide Series

EDOOR Series Naming Rules

EDOOR - EV - M - D8 - 075 P L

Product Series.

EDOOR: New energy-powered motor module

EV: New energy vehicle main drive
 UAV: Unmanned aerial vehicle motor drive
 HYDRO: Hydrogen fuel cell series

Module Type

M: Master drive module
 A: Ancilla drive module
 C: Combined drive module

Cooling Method

L: Liquid cooling
 A: Air cooling

Power Level

075: 75kW

AC/DC & Voltage Level

D: DC input
 T: Three-phase AC input
 D6: 400V~750V DC
 D8: 750V~900V DC

EDOOR Series Product Specification



EDOOR-EV-M-D8-075PL	
Input Voltage Range	450~850Vdc
Rated Power	75kW
Rated Output Current	150Arms
Peak Output Current	300Arms
Output Frequency	0.0Hz~3000.0Hz
Efficiency	≥98%
Communication	CAN 2.0B
Protection Level	IP67
Cooling Method	Liquid-cooling
Working Environment Temperature	-40 ~ 85°C
Storage Environment Temperature	-40 ~ 105°C
Cooling Liquid Temperature	-40 ~ 65°C
Weight	≤6.5kg
Dimension	313mm*260mm*107mm
Water Pipe Diameter	Φ16mm(Inner Diameter)
Rated Water Flow	15L/min

Application Scenarios

EV100 Series



Mini vehicles



Logistics vehicles



Municipal sanitation vehicle



Electric boat



Counterbalance forklifts



Tourist sightseeing vehicle



Aerial work platforms



Electric bamboo raft

EV200 Series

Application

EV500 Series



E-motorcycle - Commuter



E-motorcycle - Utility Vehicle

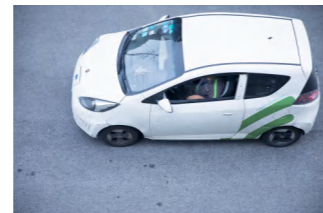


E-motorcycle - Motorcycle



Electric three-wheeler

Silicon Carbide Series



Passenger vehicle



Hydrogen fuel cell



Rail transportation



Unmanned aerial vehicle (UAV)

EV Series Controllers

Range Extender Application

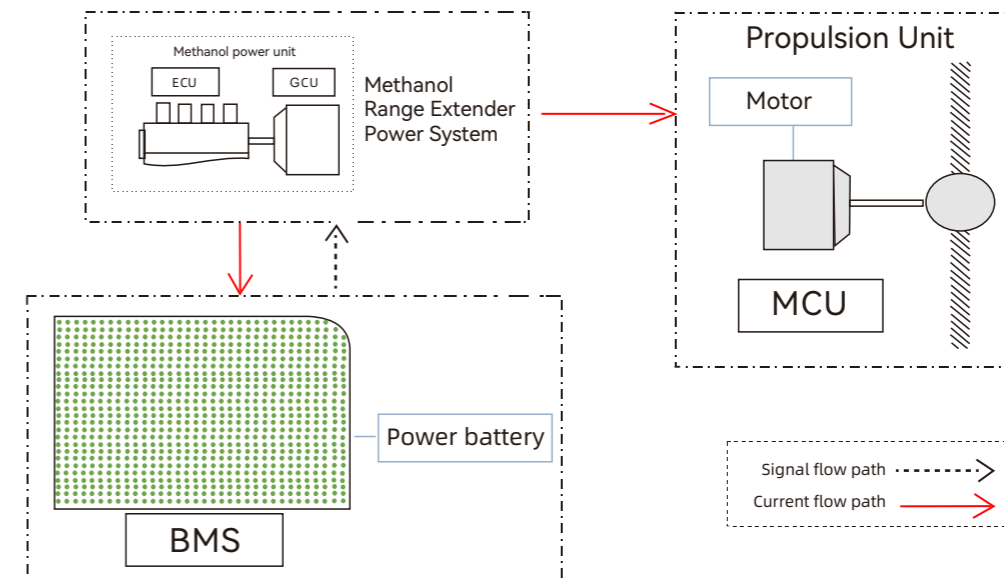
System Configuration

Methanol Range Extender Performance			
Specification	LMDOI0AZ	Weight	95kg
Voltage Range	40V~540V	Comm. Port	CAN 2.0B
Rated Power	10kW(10-90kW)	Length/Width/Height	711mm/560mn/660mm (10kW models)
Fuel Type	M100 methanol	Range Extender Control Unit	Implements system control strategy, thermal management, fault management, and operational modes
Cooling Method	Water cooling	Display	Fuel level, battery level, faults, operating status, etc.
Start Mode	Button switch + RECU intelligent management		

Solution Advantages

Methanol Power System Range Extender – Dual Fuel/Electric Operation to Eliminate Range Anxiety

The built-in SOC curve control algorithm optimizes efficiency between the range extender and battery, enhancing load capacity and delaying battery aging



High-Speed E-Motorcycle Applications

System Configuration

Vehicle Type	Voltage	Power	Speed
Commuter	48V~96V	4kW~10kW	80km~130km
Off-road vehicle	72V~96V	10kW~15kW	60km~90km
ATV	350V	25kW~30kW	70km~80km

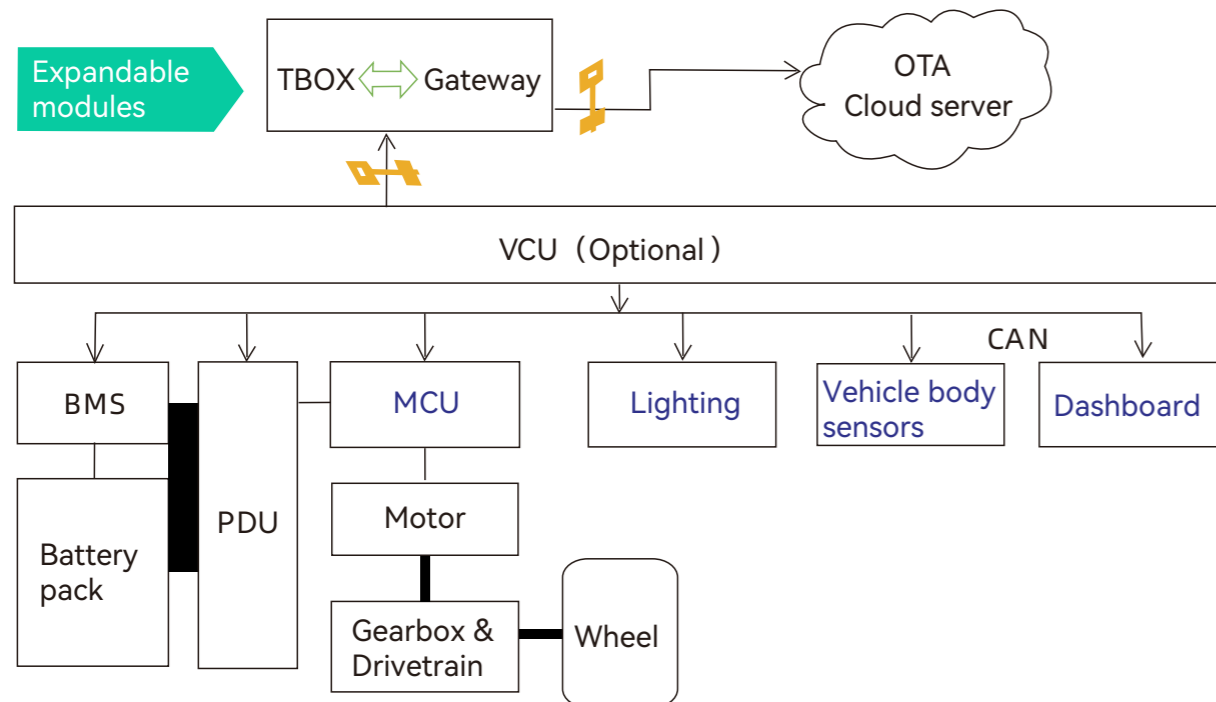


Solution Advantages

- © Latest FOC control strategy — enables efficient, smooth, and wide-speed-range operation with regenerative braking and stable deceleration to extend range
- © Multi-mode scenario switching — flexibly adapts to commuting, off-road, and competitive riding



Overall Vehicle System Diagram



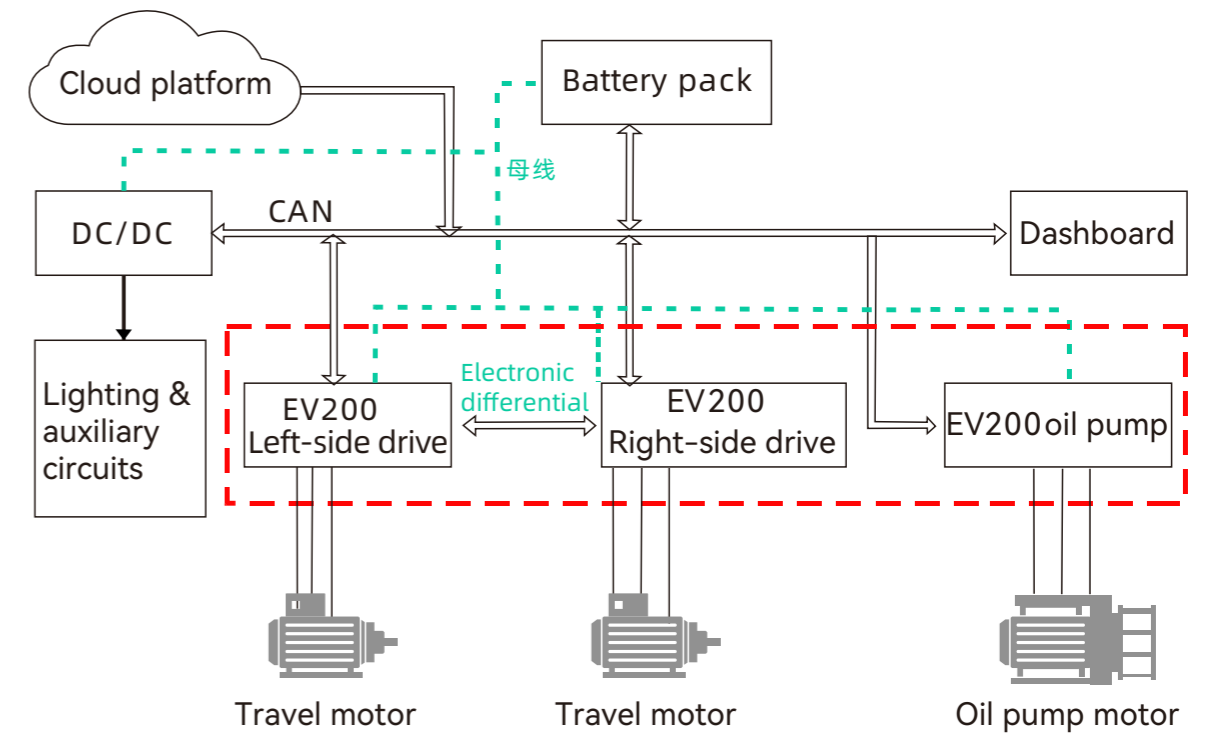
Industrial Vehicle Applications

Specification

Voltage: 48V~540V DC
Power: 50kW~90kW

Solution Advantages

- © Integrated forklift VCU control functionality — reduces cost and improves efficiency
- © Customizable software — adaptable for specialized application scenarios
- © Dual-drive control with electronic differential — eliminates the need for a mechanical differential
- © Turning speed limiting and braking energy recovery — extends vehicle range



Research and Production

R&D and Technology Platform

- Consolidating a dynamic force of top-tier professionals and technical experts in domestic industrial control, our R&D team represents 37.16% of our workforce, with 74.62% of our technical staff boasting bachelor's degrees or higher.
- Guided by philosophy of "Innovate with technology and strive for excellence," VEICHI is deeply customer-centric by providing stable and reliable products and technologies designed to the evolving needs of our clients.
- Investing 10% of our revenue into R&D, VEICHI has crafted advanced labs for EMC, safety, reliability, and performance testing to ensure product quality.
- In-depth cooperation with many famous universities and research institutions in China has been established and "Jiangsu Postdoctoral Innovation Practice Base" and "Jiangsu Postgraduate Workstation" are set up successively.

Intelligent Automation

- Digitally driven from inception to production, VEICHI boasts an annual capacity of 914,600 units with streamlined efficiency.
- 5 imported SMT placement lines, 5 automated coating lines, 4 DIP test lines, a robotic arm-equipped automated line, and 12 production lines are equipped with the latest intelligent manufacturing tools.
- All of the product checks are carried out automatically by the management mode of 3 (tri-inspection system)+ 1 (proportional inspection) during the whole process for standard performance.
- Three major production management system WMS, MES and ERP together ensure that the unique code of each product is traceable in the system to manage product quality.



Service Scope

Pioneering Technology , Unmatched Service

VEICHI Electric has established an integrated global service network through its innovative "Region + Industry" marketing strategy, which synergizes cross-sector resources and distribution channels to deliver comprehensive solutions. With permanent business and technical support teams strategically located across 22 major Chinese cities and overseas operations including Indian subsidiaries, the company is supported by an extensive network of 334 domestic and international distributors that ensure seamless market coverage. By consistently delivering superior product quality backed by professional technical support and service excellence, VEICHI Electric continues to enhance its global brand reputation while driving sustainable international growth through reliable, customer-centric solutions.



International Presence

Offices/service centers in South-East Asia, South Asia, CIS, Middle East, Europe, Africa and the Americas

China Coverage

21 local service centers nationwide, 22 provinces/municipalities and Hong Kong/Macau/Taiwan covered distribution network



22 domestic stations



6 overseas offices



300+ dealers