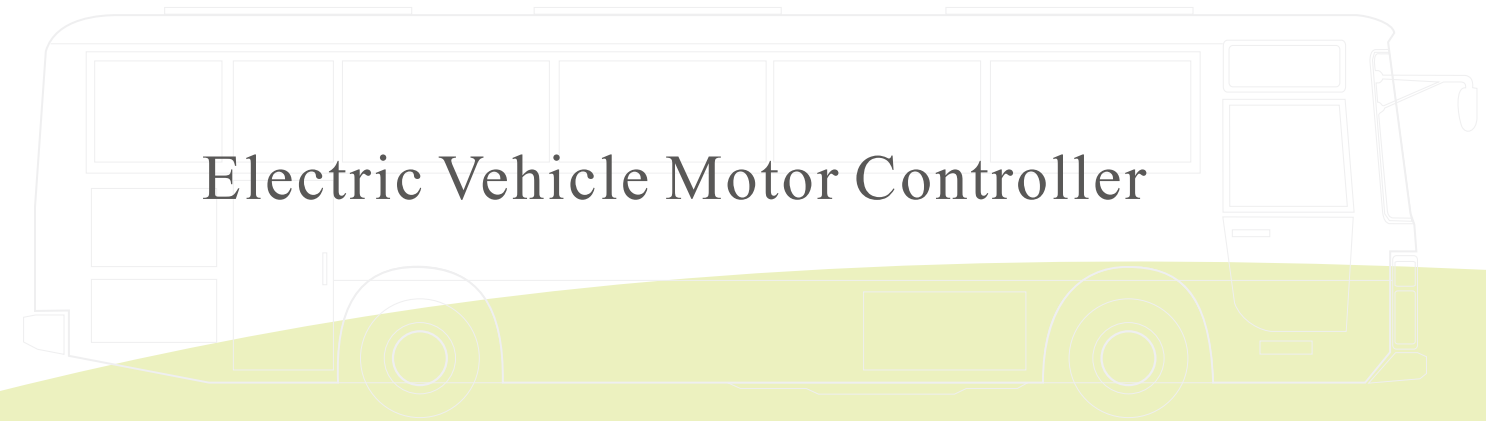


**Shenzhen V&T Technologies Co.,Ltd.**

Listed Company, Stock Code: 300484

Booming with accumulated strength and world leading-edge technology,  
making superior products in the industry

Electric Vehicle Motor Controller



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Shenzhen, China





Shenzhen V&T Technologies Co., Ltd. is a well-known supplier of industrial automation and electric vehicle electronic control products. We devote to the R&D, manufacturing, sales and service for electric vehicle motor controller, frequency converter and servo drive.

V&T has won the "Electric Vehicle Technology Excellence Award" jointly issued by the Electric Vehicle Professional Committee of China Electrotechnical Society (CES) and Electric Vehicles Branch of China Society of Automotive Engineers (CSAE). V&T also has won the "Technical Innovation" prize awarded by Inverter Industry Association (IIA), "Most Competitive Independent Brand" and "30 Years Contribution Enterprise of China Electric Power Energy Conservation" prize awarded by China Electrotechnical Society. V&T is a listed company, was successfully listed on the ChiNext stock market in 2016 (stock code: 300484).

V&T has two R&D centers in Shenzhen and Wuxi, as well as Guangdong Province New Energy Vehicle Drive and Control Engineering Technology Research Center, Postdoctoral Innovation Practice Base and BYD Semiconductor Joint Innovation Laboratory. V&T has more than ten years of platform technology accumulation and rich experiences in electric vehicles industry application, applied products such as: Main Motor Control Unit, Auxiliary Motor Control Unit and Multi-in-one Integrated Electronic Control Unit. Product powers range from 1kW to 355kW. We can provide various electronic control systems, such as battery electric vehicles, hybrid electric vehicles, fuel cell vehicles, etc. Our products cover the requirements of commercial cars, passenger cars, special vehicles and other vehicles.

V&T company respectively set up offices and after-sales service agency around the China. V&T company upholds to the quality policy of "Technology is the foundation; Quality is our destiny; Continuous innovation, Continuous improvement, and providing customers with high quality products and satisfying services".





# PRODUCT STRENGTH

## Full Series Product

- We offer a range of products which are suitable for electric vehicles, such as the 6-in-1 electronic control unit integrated MCU, 5-in-1 electronic control unit integrated MCU, 4-in-1 electronic control unit integrated MCU and auxiliary motor control unit, 3-in-1 electronic control unit integrated MCU and auxiliary motor control unit, 2-in-1 integrated MCU electronic control unit for Hybrid EVs, 2-in-1 integrated electronic control unit for auxiliary motor control, Motor + Motor controller 2-in-1 integrated system, Motor + Gearbox + Motor controller integrated system;
- Our products are designed to meet the requirements of customers;
- Applicable for permanent magnet synchronous motor (PMSM), asynchronous motor etc;
- Power range from 3kW to 355kW;  
Adapted for permanent magnet synchronous motor (PMSM), asynchronous motor, etc.;
- Power range covers from 3kW to 355kW.

## Long-term Safe and Reliable Work

From 2009 to 2021, there were more than 6000 buses equipped with V&T MCU, which had been safely and reliably operated in nearly 20 cities for 8-10 years, such as Hangzhou city, Qingdao city, Nanjing city, Suzhou city, Nantong city, Xiamen city, Haikou city, Urumqi city, Tianjin city, etc., with a total of 500,000 to 700,000 kilometers per bus.

## Meet Various Vehicles Applications

- By the end of December 2021, we have more than 600,000 units/sets are used in various electric vehicles;
- Passenger vehicle (bus/commuter): small sea lion, Coster, 8.5m-12m passenger bus, 18m dual source trolleybus;
- Trucks: mini van and mini truck less than 2.5 tons, 3.5-7.5 tons light trucks, 18-55 tons heavy trucks;
- Special-purposed vehicles: sanitation truck, sprinkler truck, dust suppression truck, dock tractor, tunnel engineering tractor;
- Ship and power system unit: passenger ship, tourist ship, cargo ship, engineering machine on board.

## Long-term Cooperation with Many Well-known Vehicle Manufacturers and System Integrator

- V&T has more than ten years of platform technology accumulation and rich experience in electric vehicles and industry application, we will share our experience with our partners to achieve a win-win situation;
- We can provide customized product design to achieve the best match between motor, MCU and vehicle system;
- V&T have a high degree of customer trust and a high level of industry reputation.

The product  
power range covers  
3kW  
~  
355kW

Mass  
Operation of  
Products for the electric bus  
**8~10years**  
Running mileage of  
**500,000~700,000**  
kilometers per unit

Products have been  
applied to multiple  
vehicles types  
**More than 600,000**  
units / set

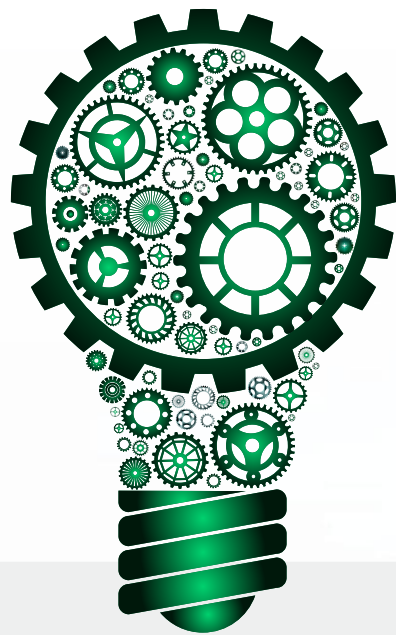
**More than 40**  
vehicle manufacturers  
applications



# COOPERATIVE PARTNER

## Safty, Reliability, Smoothness, Eco-friendness, Efficiency

It is used by many domestic mainstream vehicle manufacturers and intergrators. Company is the mainstream supplier of E-vehicle motor controller manufactuers;  
We cooperate with many system intergrators, vehicle component manufacturers and vehicle factories in industrial chain. We shall cooperate with you with complementary advantages to build more wins.





# 6-in-1 Integrated Motor Controller

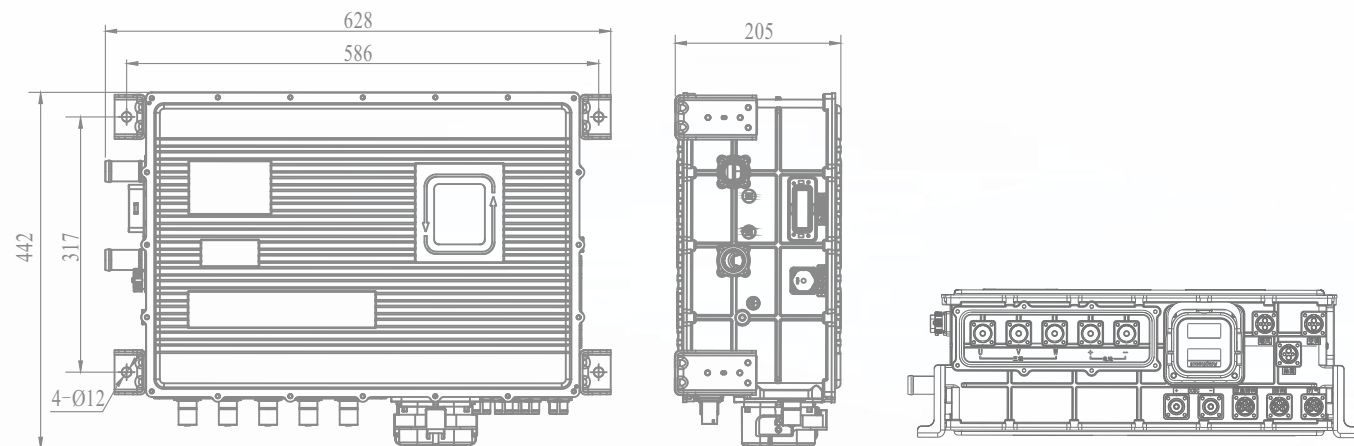
## V6-H-4D185G

6-in-1 Integrated motor controller (main motor controller + air pump + oil pump + emergency assistance + DC/DC + power distribution unit)

Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor
Applicable vehicle	Large bus, heavy truck
Product model	V6-H-4D185G
Rated input voltage	DC 540V
Rated power	185kW&5.5kW&5.5kW&3kW&3kW
Input voltage range	350V~750V
Rated output current	304A&13A&13A&60A&110A
Maximum output current	525A&19.5A &19.5A&120A&130A
Output frequency range	0~1000Hz
Protection level	IP67
Cooling type	Water cooling
Outline dimension	628*442*205(mm)
Weight	36kg



## Outline Dimension



# Integrated Main Motor Controller

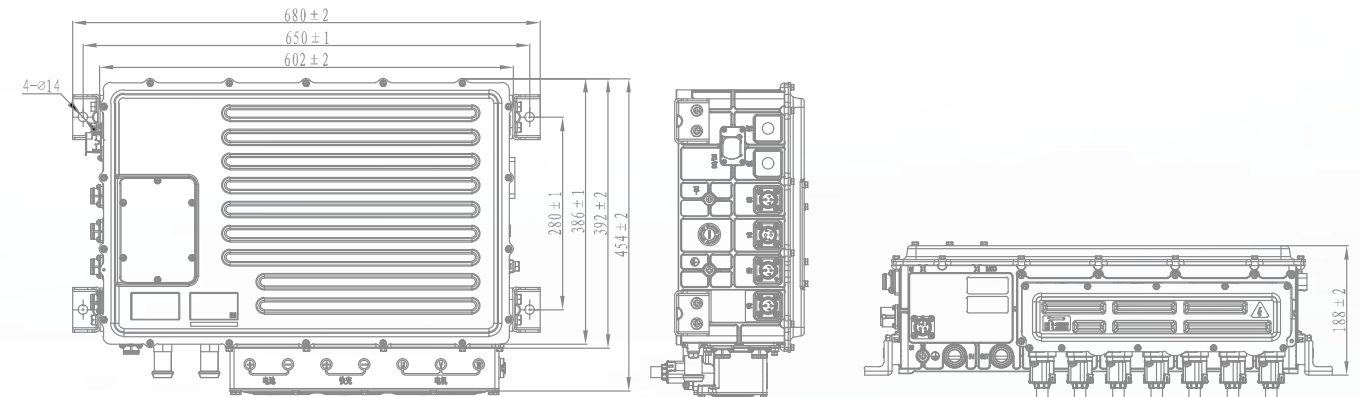
## V6-H-4D160G/V6-H-2D75G

5-in-1 Integrated motor controller (main motor controller + air pump + oil pump + DC/DC + power distribution unit)

Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Medium bus, large bus, logistics vehicle	
Product model	V6-H-4D160G	V6-H-2D75G
Rated input voltage	DC 540V	DC 336V
Rated power	160kW&5.5kW&5.5kW&3kW	75kW&3.7kW&3.7kW&1.5kW
Input voltage range	DC 350V~750V	DC 200V~500V
Rated output current	253A&13A&13A&110A	253A&13A&13A&110A
Maximum output current	456A&19.5A&19.5A&130A	456A&19.5A&19.5A&130A
Output frequency range	0~800Hz	
Protection level	IP67	
Cooling type	Water cooling	
Outline dimension	680*485*180(mm)	
Weight	35kg	



## Outline Dimension



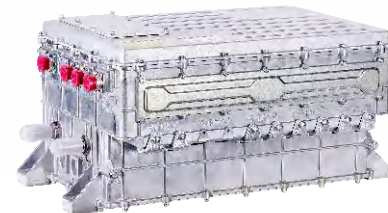
# Integrated Auxiliary Motor Controller

## V6-H-4D5.5G & V6-H-4D7.5G

### Technical Parameters

4-in-1 Auxiliary motor controller (air pump + oil pump+DC/DC+ power distribution unit)

Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Tractors, mixers, dump trucks, tipper trucks, mine trucks	
Product model	V6-H-4D5.5G	V6-H-4D7.5G
Rated input voltage	DC 540V	DC 540V
Rated power	5.5kW & 5.5kW & 3kW	7.5kW & 7.5kW & 6kW
Input voltage range	DC 350V~750V	DC 350V~750V
Rated output current	13A & 13A, DC 27.5V/110A	17A & 17A, DC 27.5V/220A
Maximum output current	19.5A & 19.5A, DC 130A	26A & 26A, DC 260A
Output frequency range	0~300Hz	
Protection level	IP67	
Cooling type	Water cooling	
Outline dimension	608*382*283(mm)	
Weight	≤40kg	



# Integrated Main Motor Controller

## V6-H-4D90G/V6-H-2D45G

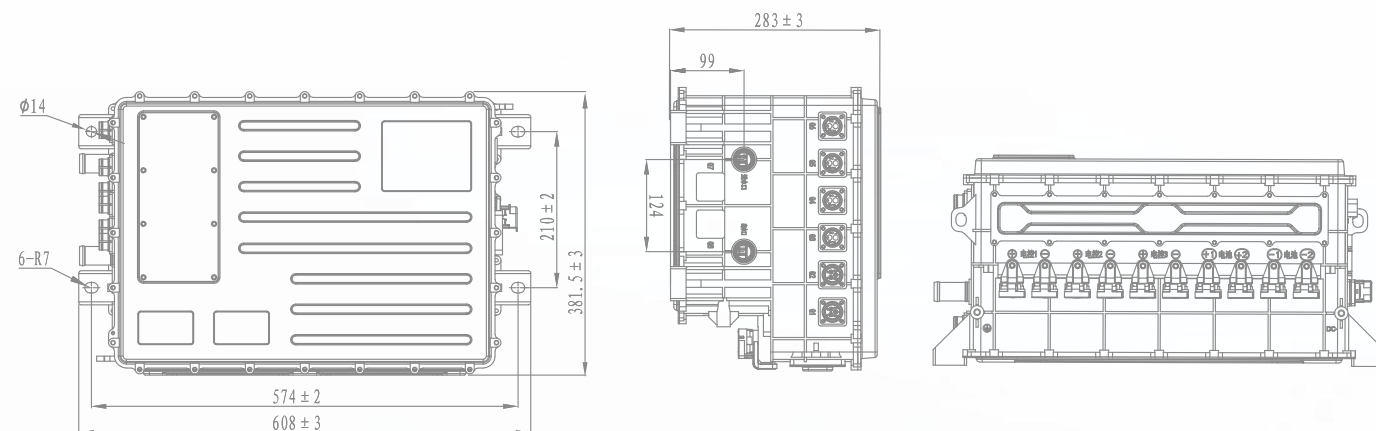
### Technical Parameters

3-in-1 Main motor controller (main motor controller + DC/DC + power distribution unit)

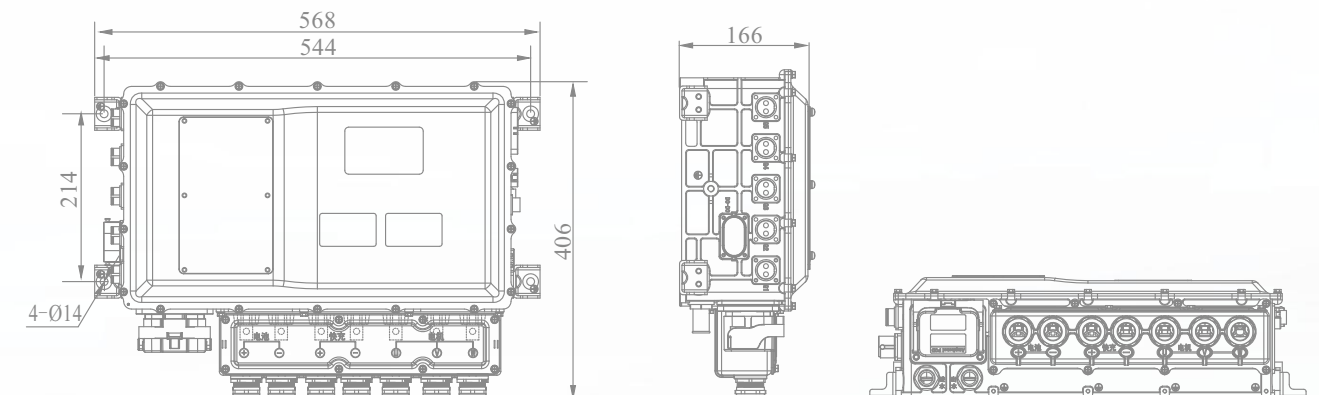
Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Logistics vehicles, medium buses, passenger cars	
Product model	V6-H-4D90G	V6-H-2D45G
Rated input voltage	DC 540V	DC 336V
Rated power	90kW&3kW	45kW&1.5kW
Input voltage range	DC 350V~750V	DC 200V~500V
Rated output current	200A&110A	200A&110A
Maximum output current	300A&130A	300A&130A
Output frequency range	0~1000Hz	
Protection level	IP67	
Cooling type	Water cooling	
Outline dimension	568*406*166(mm)	
Weight	25kg	



### Outline Dimension



### Outline Dimension



# Integrated Auxiliary Motor Controller

## V6-H-4D5.5G & V6-H-4D5.5G

### Technical Parameters

3-in-1 Auxiliary motor controller (air pump + oil pump +DC/DC)

Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor
Applicable vehicle	Medium bus, large bus, logistics vehicle
Product model	V6-H-4D5.5G & V6-H-4D5.5G
Rated input voltage	DC 540V
Rated power	5.5kW & 5.5kW & 3kW
Input voltage range	DC 350V~750V
Rated output current	13A & 13A , DC 27.5V/110A
Maximum output current	19.5A & 19.5A , DC 132A
Output frequency range	0~300Hz
Protection level	IP68
Cooling type	Water cooling
Outline dimension	359*290*165(mm)
Weight	9.5kg



# Hybrid EV Motor Controller

## V6-H-4D185G & V6-H-4D185G/ V6-H-2D90G & V6-H-2D90G

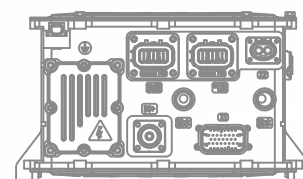
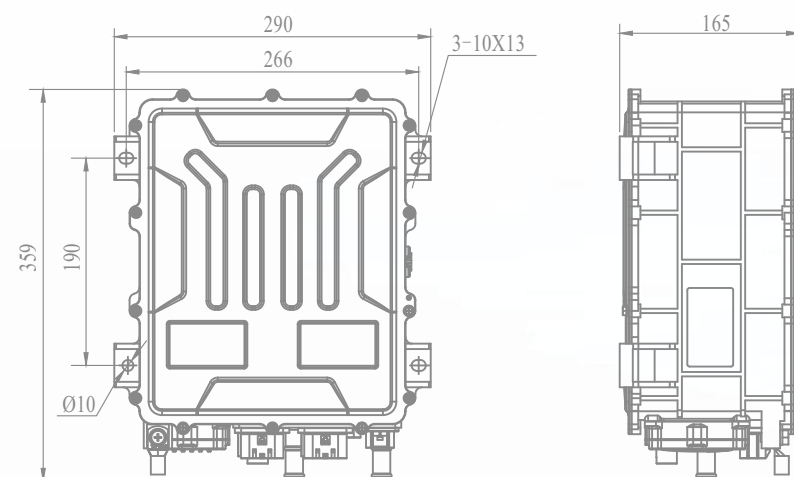
### Technical Parameters

2-in-1 Hybrid Main Motor & ISG Motor Controller

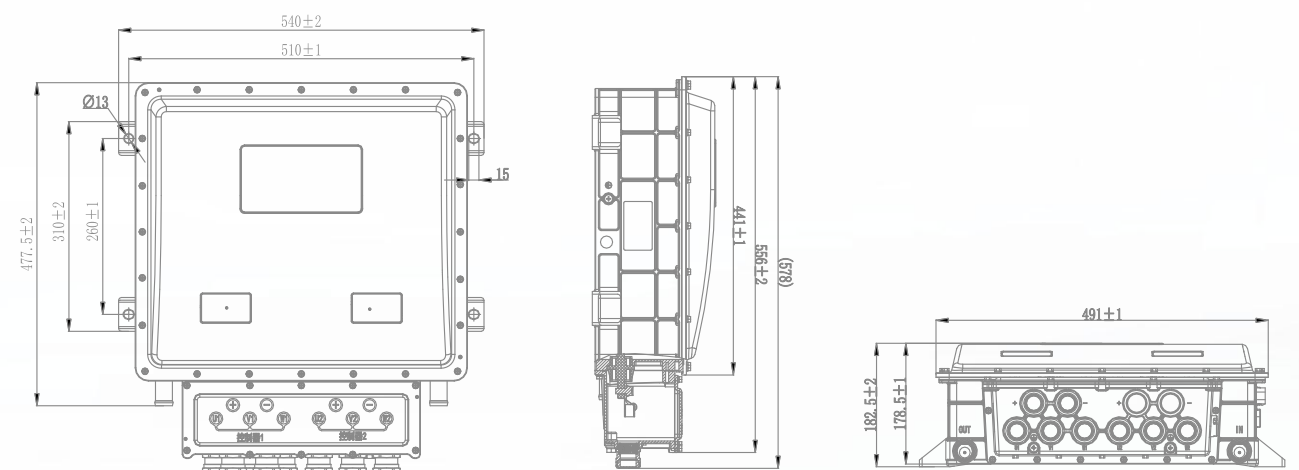
Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Hybrid buses, dual motor buses	
Product model	V6-H-4D185G & V6-H-4D185G	V6-H-2D90G & V6-H-2D90G
Rated input voltage	DC 540V	DC 336V
Rated power	180kW & 180kW	90kW & 90kW
Input voltage range	DC 350V~750V	DC 200V~500V
Rated output current	350A & 350A	350A & 350A
Maximum output current	525A&525A	525A&525A
Output frequency range	0~800Hz	
Protection level	IP67	
Cooling type	Water cooling	
Outline dimension	333*308*159(mm)	
Weight	13.5kg	



### Outline Dimension



### Outline Dimension





# Main Motor Controller

## V6-H-4D355G/V6-H-2D160G

### Technical Parameters

#### Main Motor Controller

Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	9-18 meters passenger car, rail car, logistics car, heavy truck	
Product model	V6-H-4D355G	V6-H-2D160G
Rated input voltage	DC 540V	DC 336V
Rated power	355kW	160kW
Input voltage range	DC 350~750V	DC 200~500V
Rated output current	600A	600A
Maximum output current	900A	900A
Output frequency range	0~800Hz	
Protection level	IP67	
Cooling type	Water cooling	
Outline dimension	556*540*183(mm)	
Weight	28kg	



# Main Motor Controller

## V6-H-4D185G/V6-H-2D90G

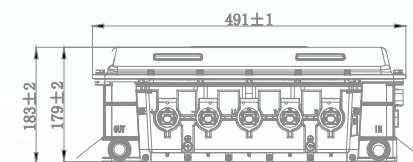
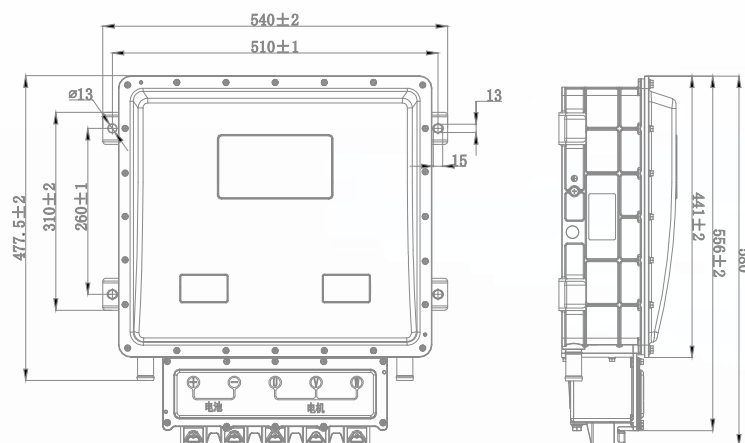
### Technical Parameters

#### Main Motor Controller

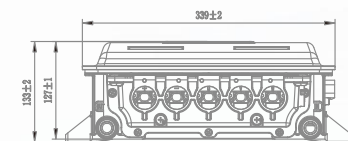
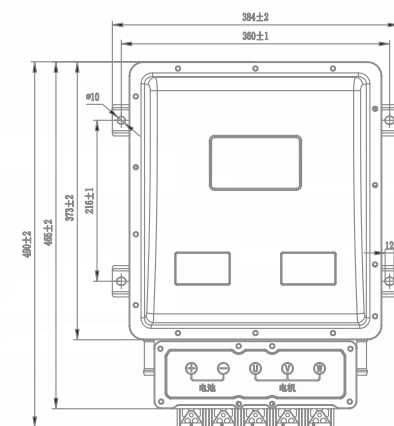
Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Logistics truck, large bus, passenger car	
Product model	V6-H-4D185G	V6-H-2D90G
Rated input voltage	DC 540V	DC 336V
Rated power	185kW	90kW
Input voltage range	DC 350V~750V	DC 200V~500V
Rated output current	350A	350A
Maximum output current	525A	525A
Output frequency range	0~800Hz	
Protection level	IP67	
Cooling type	Water cooling	
Outline dimension	489*384*133(mm)	
Weight	16.5kg	



### Outline Dimension



### Outline Dimension





# Main Motor Controller

## V6-H-4D110G/V6-H-2D60G

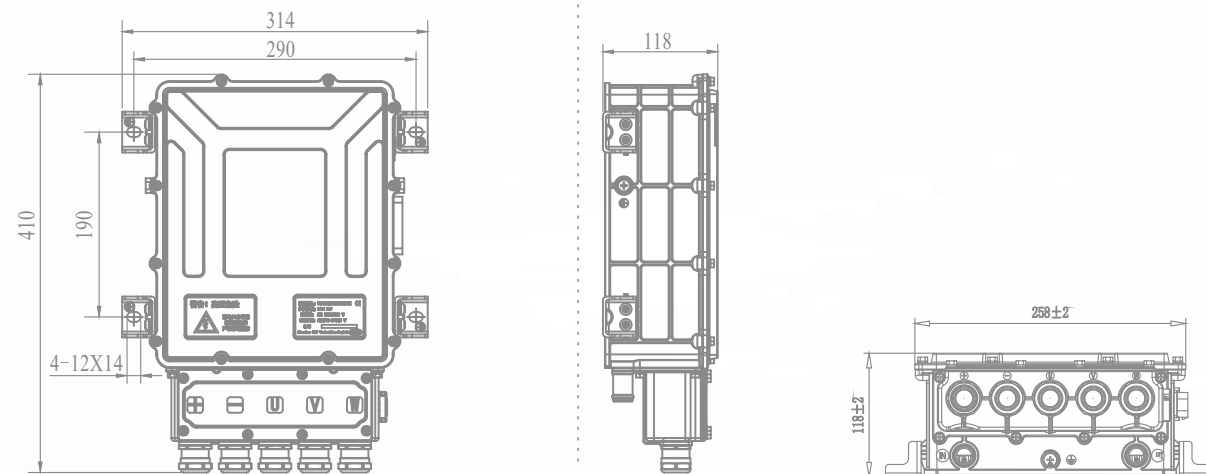
### Technical Parameters

#### Main Motor Controller

Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Medium bus, logistics vehicle, passenger car	
Product model	V6-H-4D110G	V6-H-2D60G
Rated input voltage	DC 540V	DC 336V
Rated power	110kW	60kW
Input voltage range	DC 350V~750V	DC 200V~500V
Rated output current	210A	210A
Maximum output current	350A	350A
Output frequency range	0~800Hz	
Protection level	IP67	
Cooling type	Water cooling	
Outline dimension	410*314*118(mm)、336*314*118(mm)	
Weight	9.5kg、8.5kg	



### Outline Dimension



# Main Motor Controller

## V6-H-2D30G

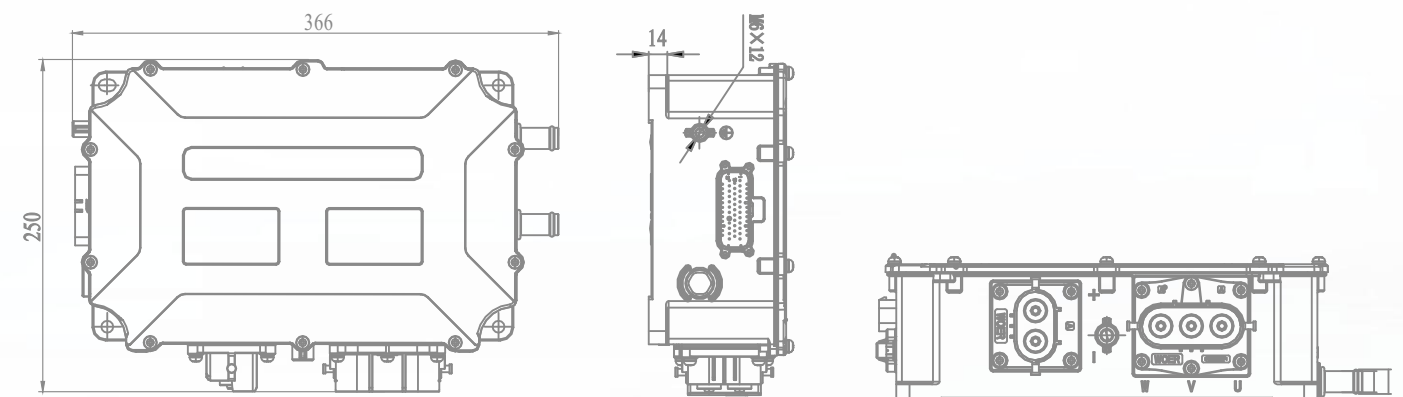
### Technical Parameters

#### Main Motor Controller

Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor
Applicable vehicle	A-class sedan, Hydrogen fuel air compressor controller
Product model	V6-H-2D30G
Rated input voltage	DC 336V
Rated power	30kW
Input voltage range	200V~500V
Rated output current	115A
Maximum output current	230A
Output frequency range	0~1000Hz
Protection level	IP68
Cooling type	Water cooling
Outline dimension	366*250*110(mm)
Weight	5kg



### Outline Dimension



## Auxiliary Motor Controller

### V6-H-4D60G / V6-H-2D30G

#### Technical Parameters

Auxiliary Motor Controller

Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Sanitation vehicles	
Product model	V6-H-4D60G	V6-H-2D30G
Rated input voltage	DC 540V	DC 336V
Rated power	60kW	30kW
Input voltage range	DC 350V~750V	DC 200V~500V
Rated output current	110A	110A
Maximum output current	150A	150A
Output frequency range	0~800Hz	
Protection level	IP67	
Cooling type	Fan cooling	
Outline dimension	358*290*195(mm)	
Weight	9.5kg	



## Auxiliary Motor Controller

### V6-H-4D40G & V6-H-2D20G

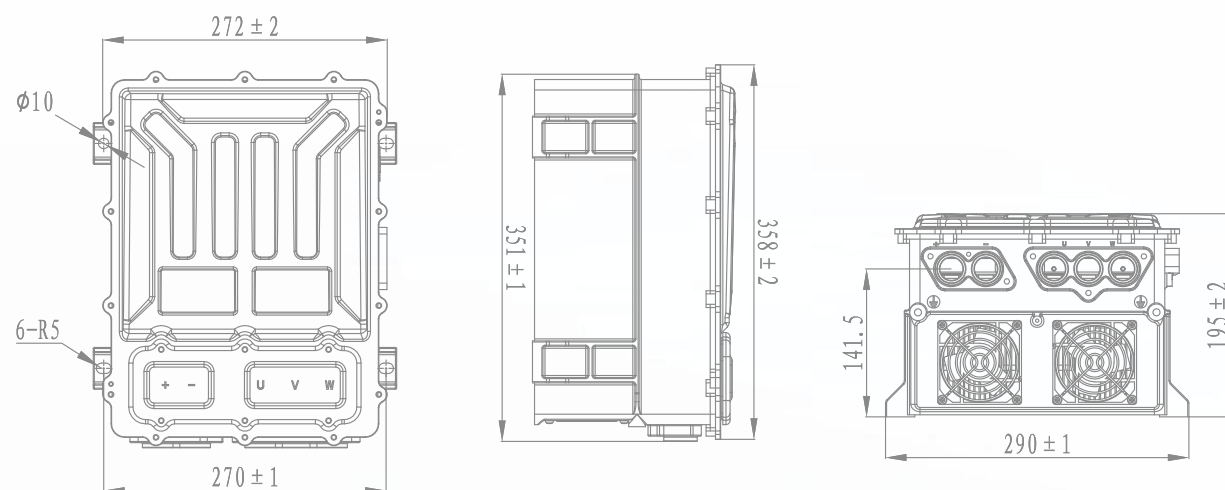
#### Technical Parameters

Auxiliary Motor Controller

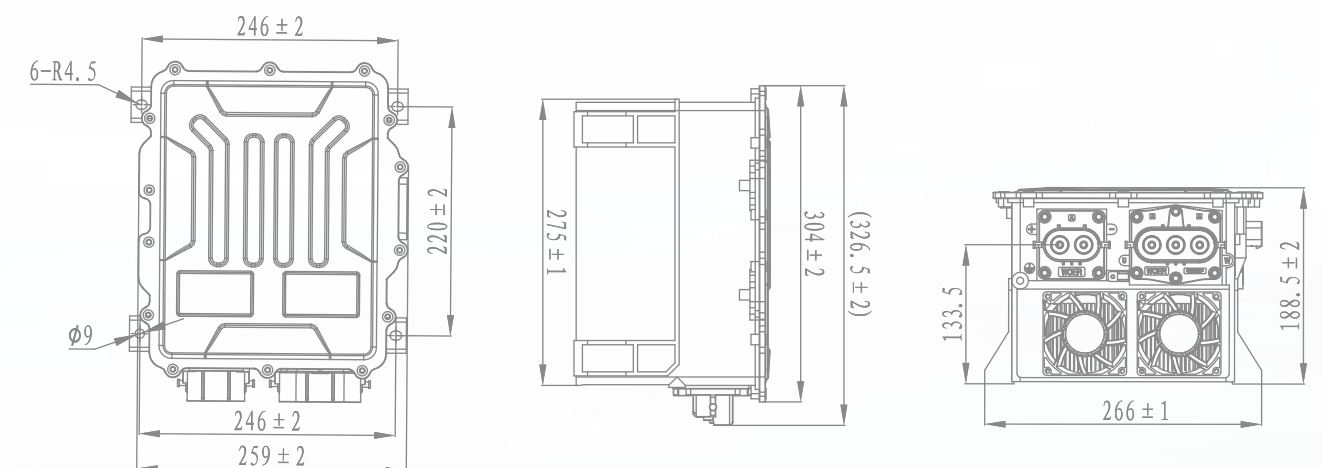
Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Sanitation vehicles	
Product model	V6-H-4D40G	V6-H-2D20G
Rated input voltage	DC 540V	DC 336V
Rated power	40kW	20kW
Input voltage range	DC 350V~750V	DC 200V~500V
Rated output current	80A	80A
Maximum output current	120A	120A
Output frequency range	0~800Hz	
Protection level	IP67	
Cooling type	Fan cooling	
Outline dimension	326.5*266*188.5(mm)	
Weight	9.5kg	



#### Outline Dimension



#### Outline Dimension





# Auxiliary Motor Controller

## V6-H-4D15G/V6-H-2D7.5G

### Technical Parameters

Auxiliary Motor Controller

Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Sanitation vehicles	
Product model	V6-H-4D15G	V6-H-2D7.5G
Rated input voltage	DC 540V	DC 336V
Rated power	15kW	7.5kW
Input voltage range	DC 350V-750V	DC 200V-500V
Rated output current	30A	30A
Maximum output current	45A	45A
Output frequency range	0~300Hz	
Protection level	IP67	
Cooling type	Fan cooling	
Outline dimension	333*240*195(mm)	
Weight	6.9kg	



# Auxiliary Motor Controller

## V6-H-4D5.5G/V6-H-4D7.5G

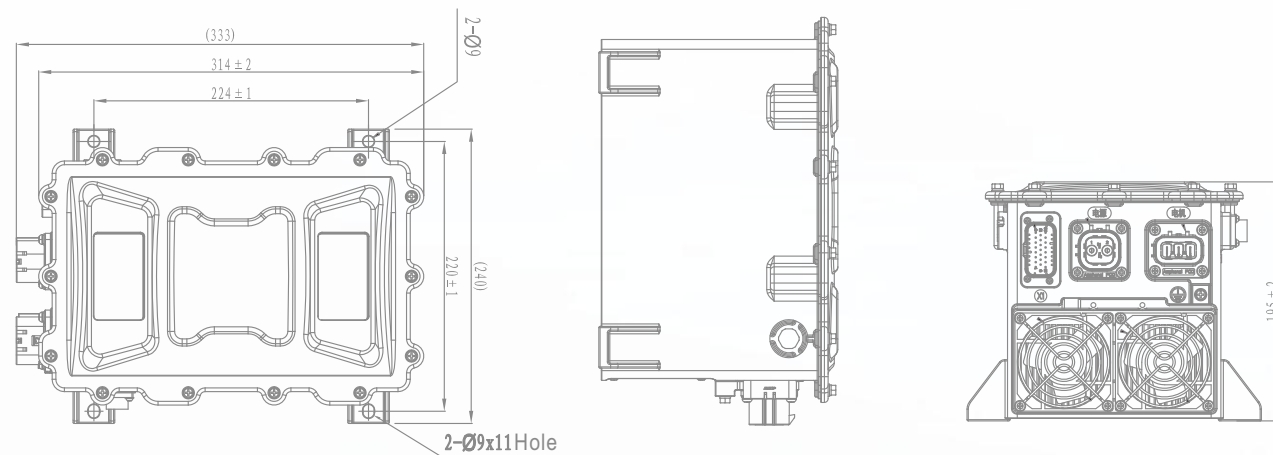
### Technical Parameters

Auxiliary Motor Controller

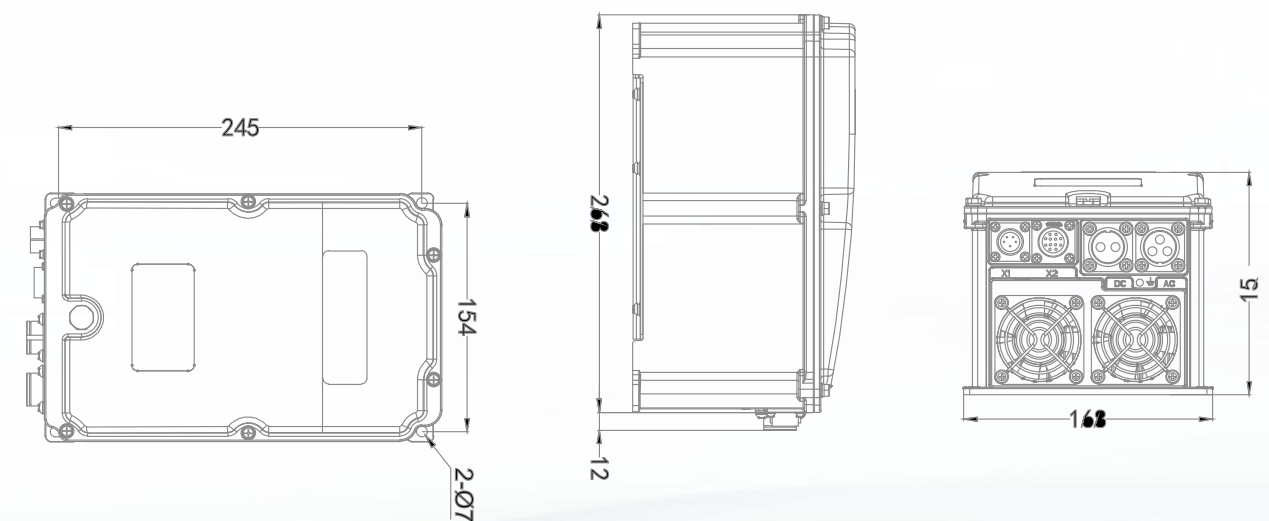
Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Commercial vehicles, passenger cars, special vehicles, etc.	
Product model	V6-H-4D5.5G	V6-H-4D7.5G
Rated input voltage	DC 540V	DC 540V
Rated power	5.5kW	7.5kW
Input voltage range	DC 250V-750V	DC 200V-750V
Rated output current	13A	17A
Maximum output current	19.5A	26A
Output frequency range	0~300Hz	
Protection level	IP67	
Cooling type	Fan cooling	
Outline dimension	268*168*150(mm)	
Weight	5.3kg	



### Outline Dimension



### Outline Dimension



# Auxiliary Motor Controller

## V6-H-4D2.2G/V6-H-4D3.7G

### Technical Parameters

#### Auxiliary Motor Controller

Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Commercial vehicles, passenger cars, special vehicles, etc.	
Product model	V6-H-4D2.2G	V6-H-4D3.7G
Rated input voltage	DC 540V	DC 540V
Rated power	2.2kW	3.7kW
Input voltage range	DC 250V~750V	DC 250V~750V
Rated output current	5.5A	9A
Maximum output current	8.3A	13.5A
Output frequency range	0~300Hz	
Protection level	IP67	
Cooling type	Natural cooling	
Outline dimension	218*175*80(mm)	
Weight	2.0kg	



# Auxiliary Motor Controller

## V6-H-4D5.5G/V6-H-4D7.5G

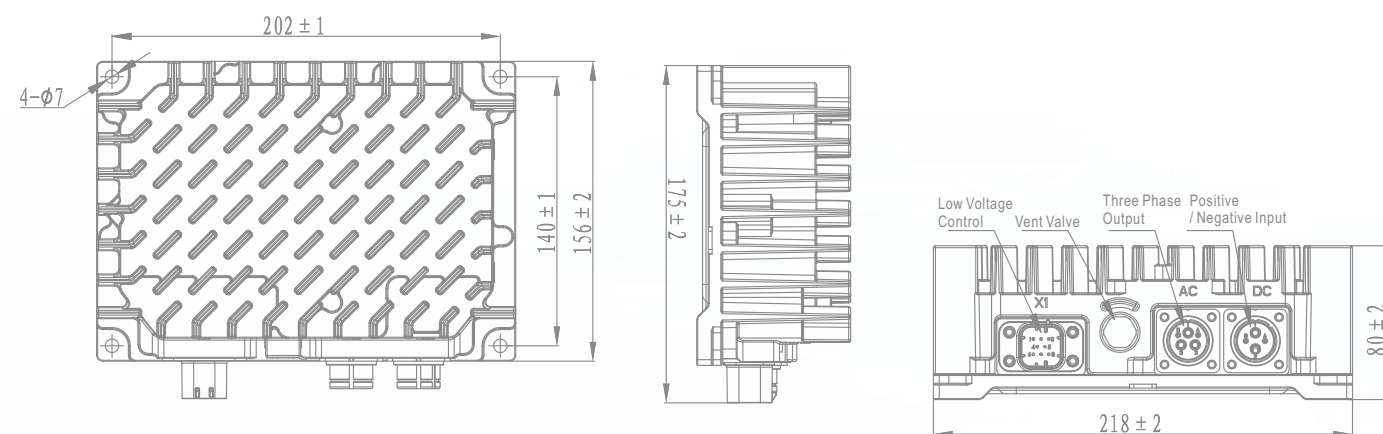
### Technical Parameters

#### Auxiliary Motor Controller

Applicable motor	Permanent-magnet synchronous motor, 3-phase asynchronous motor	
Applicable vehicle	Commercial vehicles, passenger cars, special vehicles, etc.	
Product model	V6-H-4D5.5G	V6-H-4D7.5G
Rated input voltage	DC 540V	DC 540V
Rated power	5.5kW	7.5kW
Input voltage range	DC 250V-750V	DC 250V-750V
Rated output current	13A	17A
Maximum output current	19.5A	26A
Output frequency range	0~300Hz	
Protection level	IP00	
Cooling type	Not required (external cooling system required)	
Outline dimension	185*132*66(mm)	
Weight	1.1kg	



### Outline Dimension



### Outline Dimension

