

SiAECOSYS QSMOTOR 17X3.5inch 8000W V3 72V 120kph hub

Motor for electric motorcycle

For 17inch 8000W motor power train kits, it could be used for electric motorcycle, which could be 72V 120KPH.

e.g. Electric Motorcycle

E-motorcycle weight, approx 150kg+2*80kg

Speed: peak 120km/h

Climbing slope: 15 degree@230kg

Tire: 150/70-17

One set including below kits

1. 1pcs X QSMOTOR 17X3.5inch 8000W 273 V3 Electric Motorcycle Hub Motor

Key Features

- 1). Simplify to make a electric-motorcycle. Gearbox, transmission shaft, clutch are no need. Which save space.
- 2). It could be installed in the rear to save more space for battery.
- 3). Support regenerative braking
- 4). High efficiency: 85~92%

Product Description

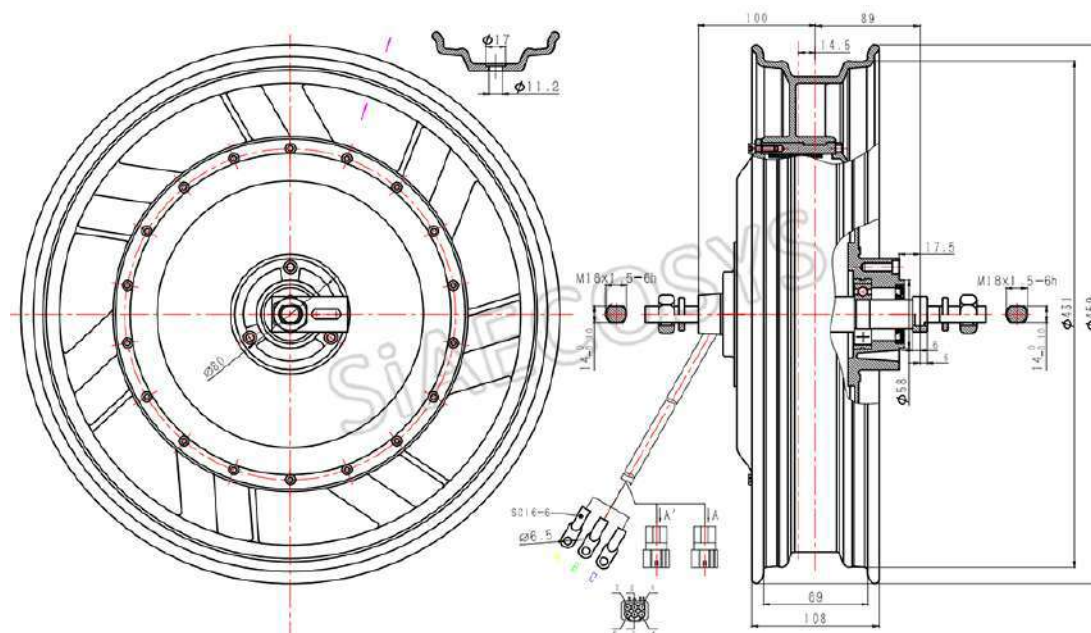
1. QSMOTOR 17X3.5inch 8000W 273 V3 Electric Motorcycle Hub Motor

SPECIFICATION

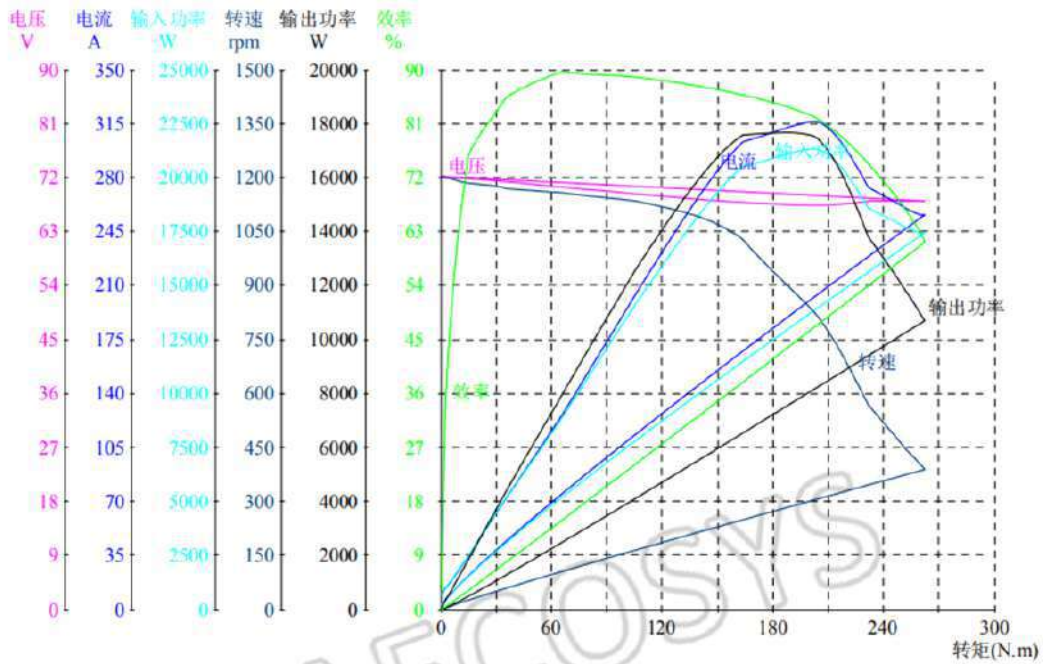
Motor Type:	BLDC In-Wheel Hub Motor
Brand:	QS Motor, QSMOTOR
Motor Design:	Double axle with rim
Matched Tire:	150/70-17
PCD :	3*80mm M8
CB:	58mm
Magnet Height:	50mm, 16 pole pairs
Stator:	Aluminum Core
Rated Power:	8000W
Peak Power:	21000W peak in few seconds
Rated Voltage:	72V
Speed:	1250RPM
Drop-outs:	200mm
Max Torque:	approx 350N.m
Max Efficiency:	approx 88.6%
Thermic Probe:	KTY83/122 (as default)
Working Temperature:	70-120°C , peak 150 °C
Brake type:	Disc brake
Hall Sensor:	Dual Hall Set with waterproof connectors
Phase Wire:	16mm ² Cross Section (not include insulation layer)
Hall Sensor Phasing angle:	120 degree
Waterproof Grade:	IP65
Color: Black	Black
N.W./G.W.:	approx 24.3kgs/26.05kgs
Package Dimension:	50cm*50cm*40cm/piece



Drawing



Test Report



特征点	电压	电流	输入功率	转矩	转速	输出功率	效率	时间
	V	A	W	N. m	rpm	W	%	S
不加载点 (No_Load)	72.15	8.202	591.8	0.2	1205	25.23	4.3	0.000
额定点 (Rated)	70.44	126.6	8919	66.0	1157	8000	89.7	45.22
最高效率点 (Eff_max)	70.44	126.6	8919	66.0	1157	8000	89.7	45.22
最大输出功率点 (Pout_max)	67.47	315.1	21260	190.6	891	17781	83.6	77.00
最大转矩点 (Torque_max)	68.12	255.7	17417	262.2	389	10680	61.3	117.0
结束点 (End)	72.30	2.077	150.1	0.3	0	0	0	125.0

*QSMOTOR 8000W
Motorcycle Hub Motor*



SI AECOSYS



YTK CO.,LTD.
[Http://www.ytk-group.co.jp](http://www.ytk-group.co.jp)

QSMOTOR 2000W Mid Drive Motor With ND72300 Controller And Kits For Electric Motorbike Dirtbike 70KPH 72V From SIAECOSYS

For 120 2000W mid drive motor kit assembly, it could be used for electric scooter.

e.g. CLICK electric scooter

E-scooter weight, approx 115kg+1*80kg

Speed: continuous 85km/h

Gear ratio: 1:4.77

Battery: 72V40Ah NCM lithium battery

Tire: 120/70-14



One set including below kits

Combo 1

1. 1pcs X QSMOTOR 2000W PMSM IPM mid drive motor with belt
2. 1pcs X ND72300 controller with USB Cable
3. 1pcs X DKD LCD speedometer
4. 1pcs X Z6 throttle with combination switch



Combo.2

1. 1pcs X QSMOTOR 2000W PMSM IPM mid drive motor with 428 Sprocket Adapter
2. 1pcs X ND72300 controller with USB Cable
3. 1pcs X DKD LCD speedometer
4. 1pcs X Z6 throttle with combination switch



Combo.3

1. 1pcs X QSMOTOR 2000W PMSM IPM mid drive motor with sprocket design 428 14T sprocket
2. 1pcs X ND72300 controller with USB Cable
3. 1pcs X DKD LCD speedometer
4. 1pcs X Z6 throttle with combination switch



QS120 70H 2000W Mid Drive Motor

Key Features

- 1). Simplify to make a electric-motorcycle. Gearbox, transmission shaft, clutch are no need, which save space.
- 2). It could be installed in the rear to save more space for battery.
- 3). Support regenerative braking
- 4). High efficiency: $\geq 88\%$

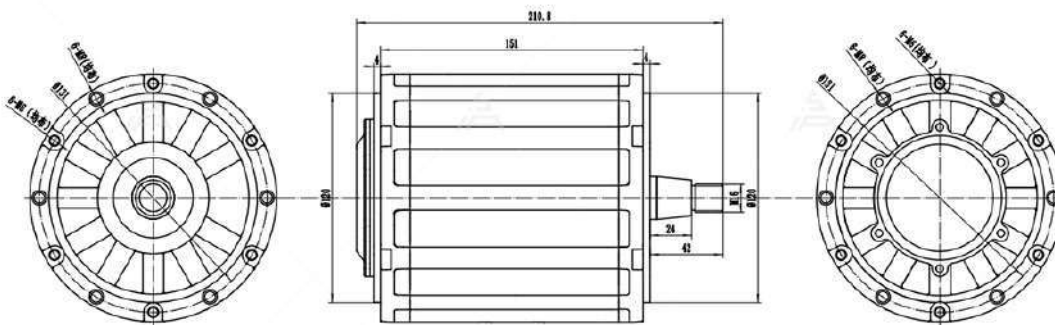
Product Description

SPECIFICATION

Motor Type:	PMSM Inner Rotor Motor
Brand:	QS Motor, QSMOTOR
Motor Design:	Single axle
Matched Tire:	12 inch
Magnet Height:	70mm, 5 pole pairs
Rated Power:	2000W
Rated Voltage:	72V as default
Speed:	2800RPM without flux weakening
Max Torque:	approx 45.4N.m without Reduction ratio
Cooling Method:	Air cooling
Max Efficiency:	88%
Rated Current:	60A
Max bus Current:	250A
Thermic Probe:	KTY83/122
Working Temperature:	70-120°C , peak 140 °C
Hall Sensor:	Single Hall Set with waterproof connectors
Phase Wire:	8mm ² Cross Section (not include insulation layer)
Waterproof Grade:	IP67
Color: Black	Black
N.W./G.W.:	approx 10.8kgs/11.5kgs
Package Dimension:	32cm*32cm*32cm/piece



Drawing



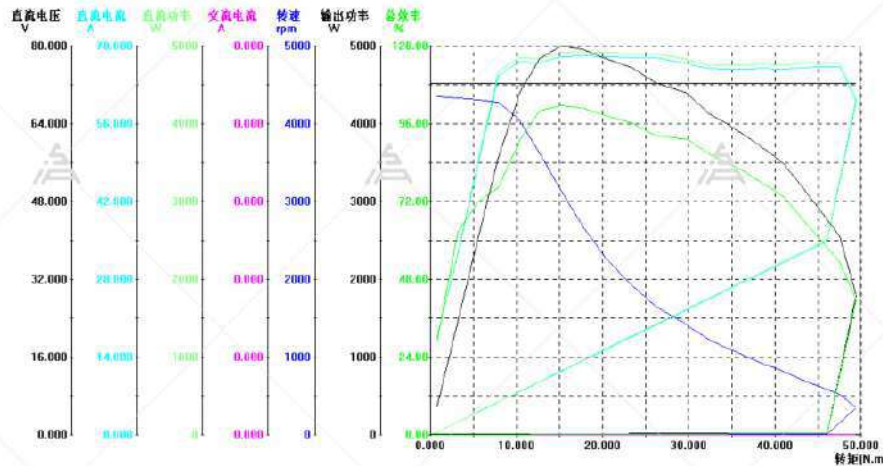
Test Report

QSMOTOR 120 2000W Mid Drive Motor with EM100-4sp Controller For reference only

SiAECOSYS

电机测试报告

客户名称(Customer):	sia	额定电压(Voltage):	72
产品名称(ProductName):		额定功率(Power rated):	
电机型号(Type):	zz120 2kw1707 2995	测试人员(Tester):	Henry
电机编号(Number):	123	测试日期(Test Date):	2022.11.08



特征点	直流电压	直流电流	直流功率	交流电压	交流电流	交流功率	功率因数	频率	转矩	转速	输出功率	控制器效率	电机效率	总效率	时间	
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S	
不加载点	72.246	17.329	1252.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.79	4343.93	58.62	0.0	0.0	28.6	0.0000	
最高效率点	72.225	68.019	4912.70	0.0000	0.0000	0.0000	0.0000	0.0000	15.21	3136.34	993.6	0.0	0.0	101.6	11.981	
最大输出功率点	72.225	68.019	4912.70	0.0000	0.0000	0.0000	0.0000	0.0000	15.21	3136.34	993.6	0.0	0.0	101.6	11.981	
最大转矩点	72.200	59.888	4323.90	0.0000	0.0000	0.0000	0.0000	0.0000	49.46	346.8	1795.7	0.0	0.0	41.5	39.983	
结束点	72.278	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.16	0.1	0.0020	0.0	0.0	0.0	43.977	
负载点 1	72.218	66.756	4820.90	0.0000	0.0000	0.0000	0.0000	0.0000	160.31	10.00	4076.74	262.3	0.0	0.0	88.4	7.6867
负载点 2	72.220	67.951	4907.40	0.0000	0.0000	0.0000	0.0000	0.0000	20.00	2319.34	845.2	0.0	0.0	98.8	15.737	
负载点 3	72.204	66.709	4816.70	0.0000	0.0000	0.0000	0.0000	0.0000	30.00	1392.53	370.8	0.0	0.0	90.7	22.114	
负载点 4	72.192	65.827	4752.20	0.0000	0.0000	0.0000	0.0000	0.0000	40.00	854.4	3572.3	0.0	0.0	75.1	30.941	

ND72300 sine wave motor controller

Key Features

- 1). All the raw materials are imported, using high-performance Moss tube
- 2). With the aluminum substrate scheme, the Moss tube is laid on the aluminum substrate and then placed on the PCB board
- 3). Small in size
- 4). High efficiency, low temperature rise, small running current
- 5). With self-learning function, excellent commonality
- 6). The app compatible with Android and Apple
- 7). With flux weakening function.(The product does not contain magnetism)

Product Description

ND72300 are sine wave controller with waterproofing grade IP67, suit for 3kw motors. It's hall version (as default) which suit with hall motors.

It could also support encoders, please check with sales.



100A

Max DC Current

72V

Rated voltage

1.9KG

Net weight

300A

Protect Phase Current

3KW

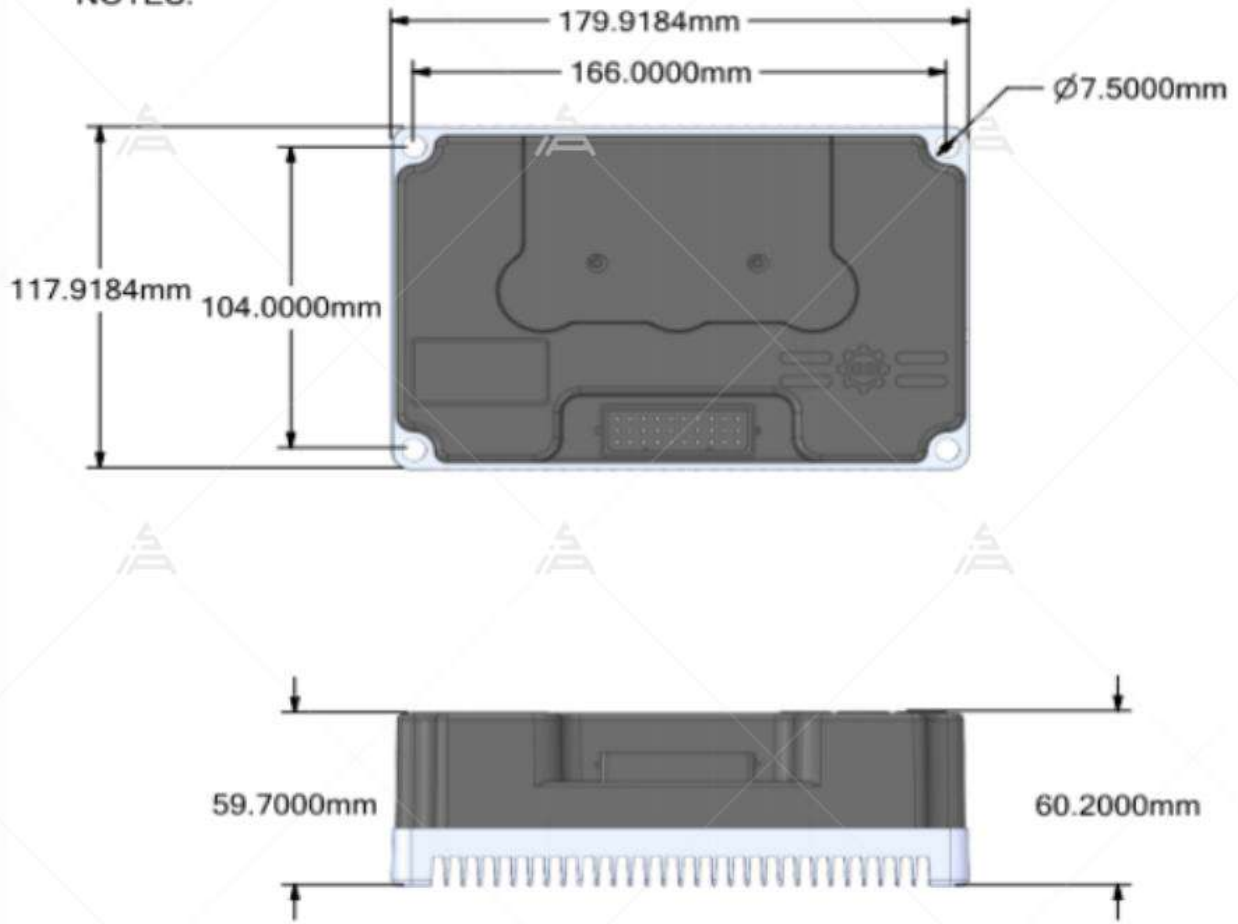
Adapter Motor

IP67

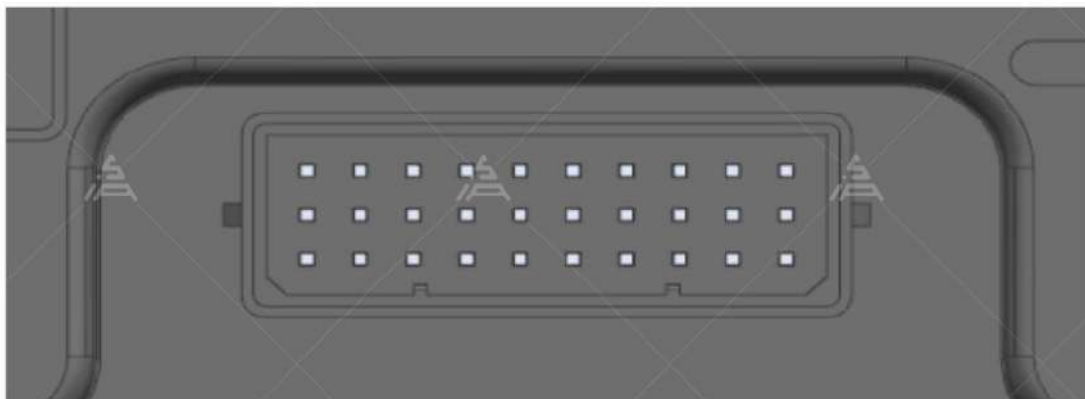
Waterproof

Drawing

NOTES:



Harness Definition



Wiring Definition

21	22	23	24	25	26	27	28	29	30
BL	HALLC	485B/TXD	TEMP	-	GND	SV	ACC+	BW5V	60VC
yellow green	blue	brown blue	white		black	green white	red white	brown green	pink
11	12	13	14	15	16	17	18	19	20
BH	HALLB	485A/RXD	FD	CANH	GND	P	ALARM	W	KEY
gray	green	red black	black white	red yellow	black	blue red	brown	brown red	orange
1	2	3	4	5	6	7	8	9	10
HALLA	FW2	FW	HALL+	CANL	地	地	RE	SPA	KEY
yellow	blue white	yellow white	red	brown yellow	black	black	brown white	purple	orange

Adapter Cable



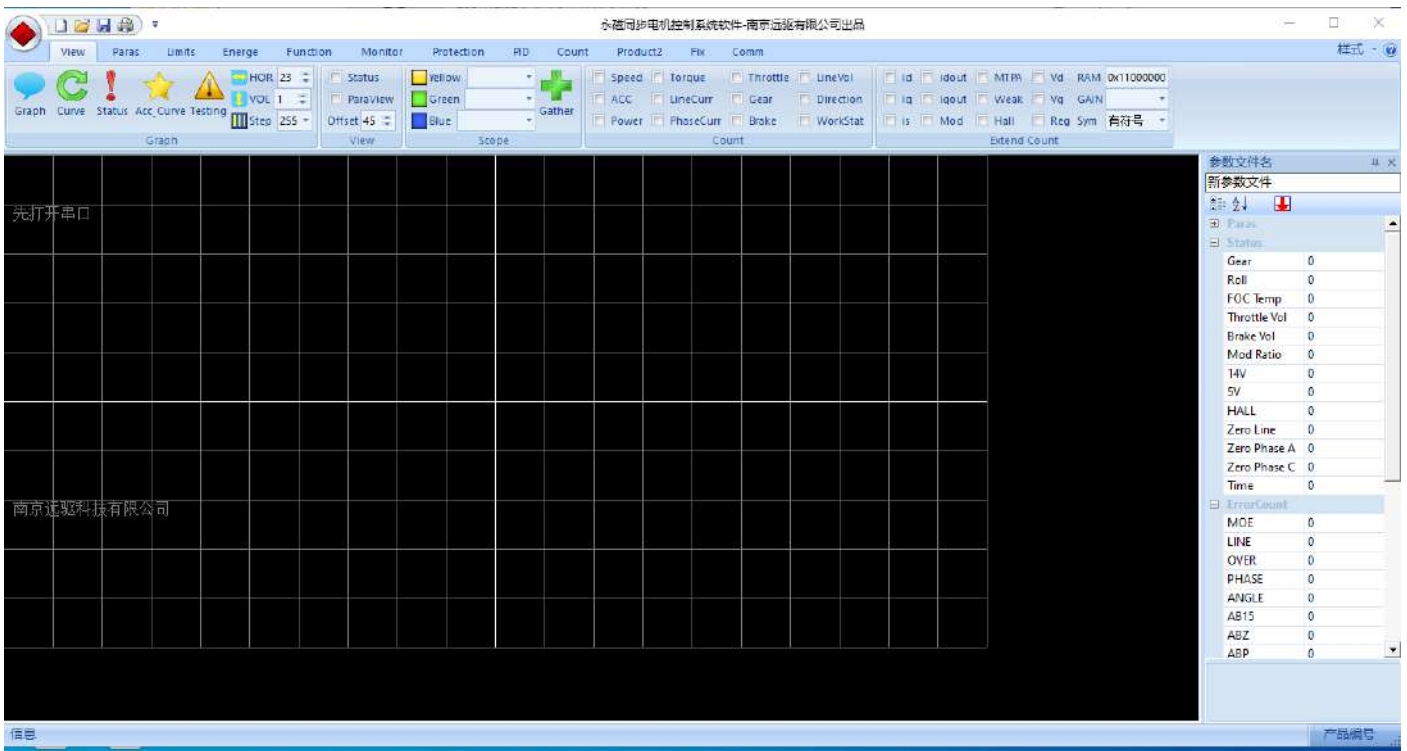
USB Cable



Extend Cord



Software interface (PC)



1. DKD LCD speedometer, can-bus(optional, LIN as default)

Key Features

Both CAN and LIN communication are supported

Product Description

DKD LCD speedometer, Adjustable

It display D N R, P, 1 2 3 S gear, and battery current X10.

For the speed, we recommend to set it as following as default (to match with QS120 2kw 12inch assembly).

·Wheel tire size: 130/70-12

·Pole Pairs: 5

- Gear Ratio: 1: 4.77
- Voltage: 72V (21s Lithium battery)



2. Z6 throttle with combination switch

Basic Parameters

- Color: black
- Rated operating voltage: DC+5V
- Current: DC 10mA
- Main material: ABS PVC
- Right throttle pull force/ left handle pull pull force: $\geq 200\text{N}$ / $\geq 200\text{N}$
- Torsional strength: $\geq 9\text{N.m}$
- Output voltage: 0.8 ~ 4.2V
- Service life: $\geq 100,000$ times
- Waterproof rating: IPX6
- Number of core cable:5
- Type of switch: half twist, with meter and key
- Inner diameter of throttle: 22mm

Function

With Reverse, Parking button(throttle on/off), 3 slide switch gear, s/boost button, Light and Horn.
It match with VOTOL controller well.



Application



SIAECOSYS

QS120 2KW Mid Drive Motor Kits with ND72300 controller



YTK CO.,LTD.
[Http://www.ytk-group.co.jp](http://www.ytk-group.co.jp)

**QSMOTOR QS180 90H 8000W 72V 110KPH Mid Drive Motor For Offroad Dirtbike
Adult Electric Motorcycle**

 **QS MOTOR**



One Set Including Below Kits

Combo 1

1pc X 180 8KW Mid Dirve motor

 **QS MOTOR**



Combo 2

1pc X 180 8KW Mid Drive motor

1pc X 520 13T sprocket

QS MOTOR



Key Features

- 1) Light weight and small dimension compare to hub motor
- 2) High performance benefit from flux weakening
- 3) High efficiency during climbing, and better acceleration
- 4) Support regenerative braking

Product Description

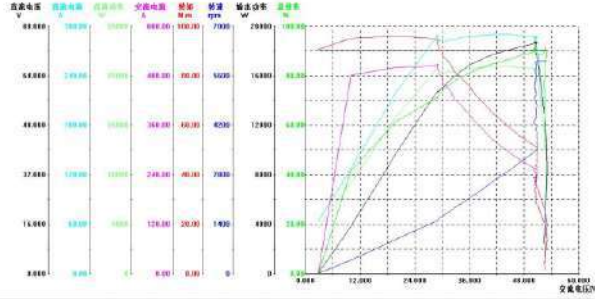
SPECIFICATION

Motor Type:	PMSM Inner Rotor Motor
Brand:	QS Motor, QSMOTOR
Motor Design:	Single axle
Matched Tire:	17 inch
Magnet Height:	90mm, 4 pole pairs
Rated Power:	8000W
Peak Power:	16kW
Rated Voltage:	72V
Speed:	4100RPM
Rated Torque:	14.3N.m
Max Torque:	94N.m
Cooling Method:	Air Cooling
Max Efficiency:	94%
Current(without load):	/ A
Thermic Probe:	KTY83/122 (as default)
Working Temperature:	70-120°C , peak 150 °C
Sensor:	Single Encoder 1 Set with waterproof connectors
Phase Wire:	30mm ² Cross Section (not include insulation layer)
Waterproof Grade:	IP67
Color:	Black
N.W./G.W.:	approx kgs/kgs
Package Dimension:	34cm*34cm*33cm/piece

Test Report

电机测试报告

客户名称(Customer): ZD 额定电压(Voltage): 72V
 产品名称(ProductName): 180 中置 额定功率(Power rated): 8KW
 电机型号(Type): 测试人员(Tester): LEO
 电机编号(Number): 05 测试日期(Test Date): 2022.03.01



特征点	直流电压	直流电流	直流功率	交流电压	交流电流	交流功率	功率因数	频率	转矩	转速	输出功率	控制器效率	电机效率	总效率	时间
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
不加载点	72.172	24.679	1781.252	518.76	6.591	585.70	2274	400.55	1.41	6005.3	888.34	89.0	56.0	49.9	0.0000
最高效率点	72.047	285.25	20551.50	637.22	43.19	2790.98	8356	2.84	5447.4	18731	93.8	97.2	91.1	67.985	
最大输出功率点	72.047	286.41	20635.50	720.22	43.94	19316.0	9819	37.76	35.32	5074.0	18766	93.6	97.1	90.9	73.975
最大转矩点	72.084	218.37	15741.19	838.49	9.66	13004.0	7575	67.47	86.09	956.7	9625.8	82.6	74.0	61.2	207.98
结束点	72.145	63.779	4601.42	845.30	3.59	0.0000	0.0000	0.0000	90.59	0.1	0.8774	0.0	0.0	0.0	211.97
负载点 1	72.134	100.11	7221.35	2.888	101.28	6980.30	7521	400.59	10.00	6006.2	2890.9	96.7	90.1	87.1	17.530
负载点 2	72.078	191.76	13822.52	5.881	54.57	13380.0	9506	400.62	20.00	6007.1	12578	96.8	94.0	91.0	39.184
负载点 3	72.048	285.50	20569.50	708.22	40.19	2590.99	0.593	2930.00	5904.6	18546	93.6	96.3	90.1	61.117	
负载点 4	72.050	286.16	20618.50	759.22	44.19	3339.96	297.72	40.00	4470.1	18719	93.8	96.8	90.8	85.306	
负载点 5	72.053	287.22	20695.50	917.24	48.99	19376.0	8824	237.26	50.00	3561.3	18643	93.6	96.3	90.1	108.46
负载点 6	72.066	290.31	20921.44	216.29	6.65	19055.0	8.831	191.32	60.00	2870.1	18028	91.0	94.6	86.2	131.17
负载点 7	72.062	288.99	20825.38	558.35	2.96	18699.0	7.933	157.16	70.00	2356.7	17273	89.8	92.4	83.0	153.53
负载点 8	72.067	285.62	20583.33	824.11	9.78	18289.0	7.578	129.48	80.00	1941.5	16262	88.8	88.9	79.0	174.72
负载点 9	72.066	283.01	20393.29	843.47	7.80	17842.0	7.225	105.84	90.00	1588.5	14968	87.5	83.9	73.4	194.63

Conversion Kits



QSMOTOR New QS273 12000W 17*6.0inch V4 72V 150kph High Speed

BLDC Hub Motor with ND721200 Controller Kits for Electric Motorcycle

For 17inch 12000W motor power train kits,
it could be used for electric motorcycle, which could be 72V 150KPH.

e.g. Electric Motorcycle

E-motorcycle weight, approx 200kg+90kg

Speed: peak 150km/h

Climbing slope: 15 degree@70kph@1km@290kg

Tire: 190/50-17

One set including below kits

Combo1.

1. 1pcs X QS273 12000W 17*6.0inch V4 BLDC Hub Motor
2. 1pcs X ND721200 Controller
3. 1pcs X Bluetooth for ND721200
4. 1pcs X DKD LCD speedometer
5. 1pcs X YY V3 Throttle with Combination Switch

Combo2.

1. 1pcs X QS273 12000W 17*6.0inch V4 BLDC Hub Motor
2. 1pcs X ND721200 Controller
3. 1pcs X Bluetooth for ND721200
4. 1pcs X DKD LCD speedometer
5. 1pcs X YY V3 Throttle with Combination Switch
6. 1pcs X Vehicle wiring harness for Fardriver(with 1pcs 4p 72V 40A relay, 1pcs flasher, 1pcs 72V to 12V 10A DC converter, 1pcs Electric Lock Ignition)

Combo3.

1. 1pcs X QS273 12000W 17*6.0inch V4 BLDC Hub Motor
2. 1pcs X ND721200 Controller
3. 1pcs X Programmable for ND721200
4. 1pcs X DKD LCD speedometer
5. 1pcs X YY V3 Throttle with Combination Switch

Combo4.

1. 1pcs X QS273 12000W 17*6.0inch V4 BLDC Hub Motor
2. 1pcs X ND721200 Controller
3. 1pcs X Programmable for ND721200
4. 1pcs X DKD LCD speedometer

5. 1pcs X YY V3 Throttle with Combination Switch
6. 1pcs X Vehicle wiring harness for Fardriver(with 1pcs 4p 72V 40A relay, 1pcs flasher, 1pcs 72V to 12V 10A DC converter, 1pcs Electric Lock Ignition)

Key Features

- 1). Simplify to make a electric-scooter. Gearbox, transmission shaft, clutch are no need. Which save space.
- 2). It could be installed in the rear to save more space for battery.
- 3). Support regenerative braking
- 4). High efficiency: 85~92%

Product Description

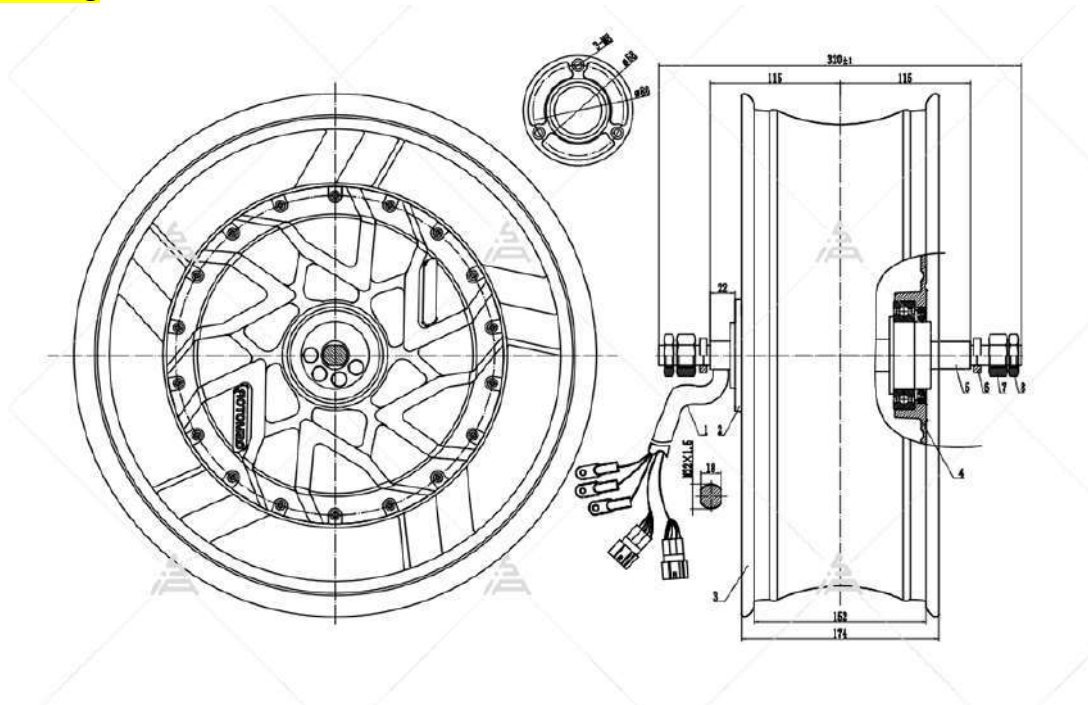
1. QS273 12000W 17*6.0inch 70H V4 BLDC Hub Motor

SPECIFICATION

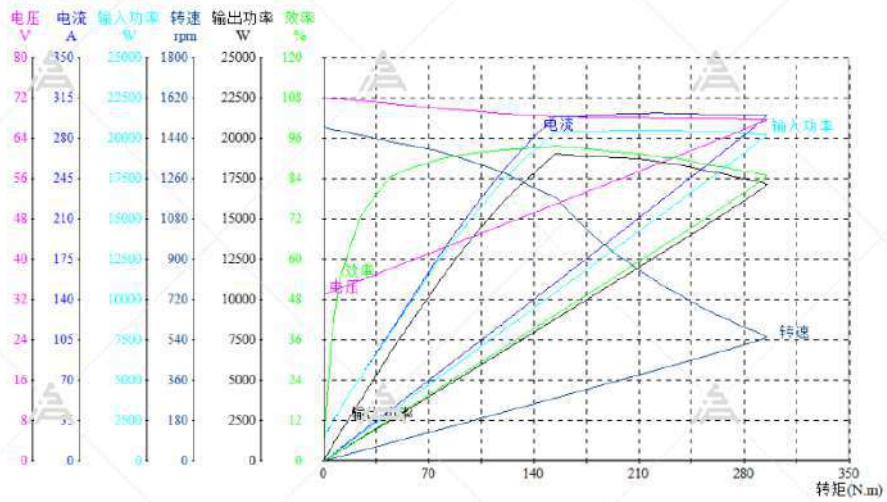
Motor Type:	BLDC In-Wheel Hub Motor
Brand:	QS Motor, QSMOTOR
Motor Design:	Double axle with rim
Matched Tire:	190/50-17
PCD :	3*80mm M8
CB:	58mm
Magnet Height:	70mm, 16 pole pairs
Stator:	Aluminum Core
Rated Power:	12000W
Peak Power:	28000W peak in few seconds
Rated Voltage:	72V
Speed:	1400RPM
Drop-outs:	230mm
Max Torque:	≥ 320N.m
Max Efficiency:	approx 90.3%
Thermic Probe:	KTY83/122 (as default)
Working Temperature:	70-120℃ , peak 150℃
Brake type:	Disc brake
Hall Sensor:	Dual Hall Set with waterproof connectors
Phase Wire:	25mm ² Cross Section (not include insulation layer)
Hall Sensor Phasing angle:	120 degree
Waterproof Grade:	IP65
Color: Black	Black
N.W./G.W.:	approx 30.8kgs/40kgs
Package Dimension:	57cm*54cm*48cm/piece



Drawing



Test Report (Only for reference)



Point	Voltage	Current	Input Power	Torque	Speed	Output Power	Efficiency	Time
	V	A	W	N.m	rpm	W	%	S
不加载点(No_Load)	71.88	23.24	1670	0.7	1484	108.8	6.5	0.000
额定点(Rated)	70.87	103.0	7296	40.1	1429	6000	81.8	51.10
最高效率点(Eff_max)	68.16	298.1	20323	154.5	1173	18975	93.4	79.30
最大输出功率点(Pout_max)	68.16	298.1	20323	154.5	1173	18975	93.4	79.30
最大转矩点(Torque_max)	67.61	299.0	20212	300.8	539	16975	84.0	136.5
结束点(End)	32.81	0.000	0.000	0.3	0	0	0	139.5

2. ND721200 Controller

Generally Spec:



600A
Max DC Current

72/84/96V
Rated voltage

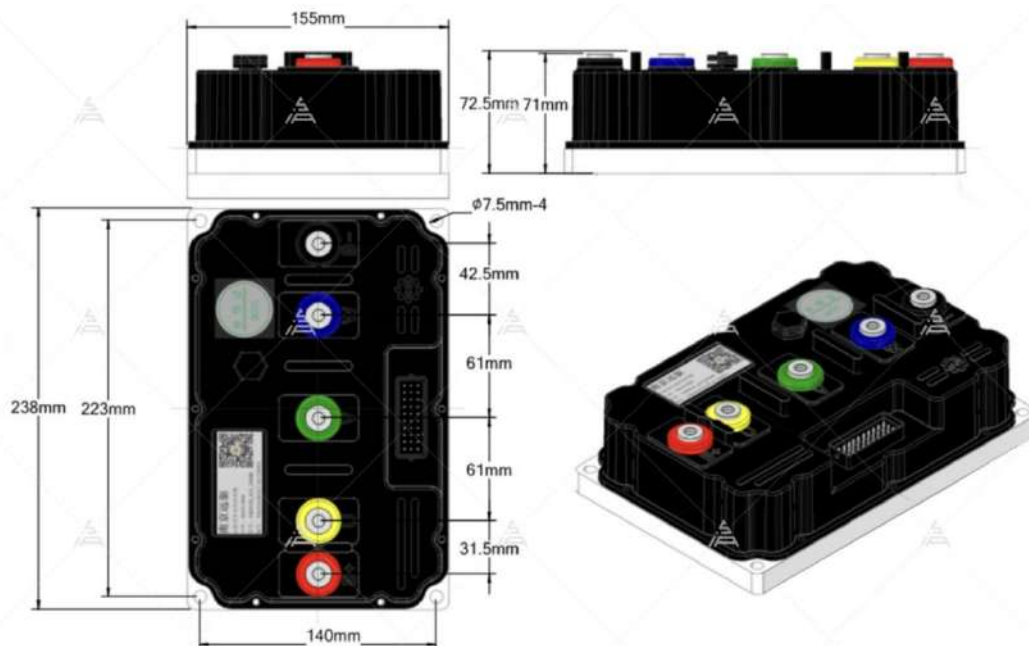
5.1kg
Net weight

1200A
Protect Phase Current

8-12kW
Adaptation motor

IP67
Waterproof

Drawing



Adapter Cable



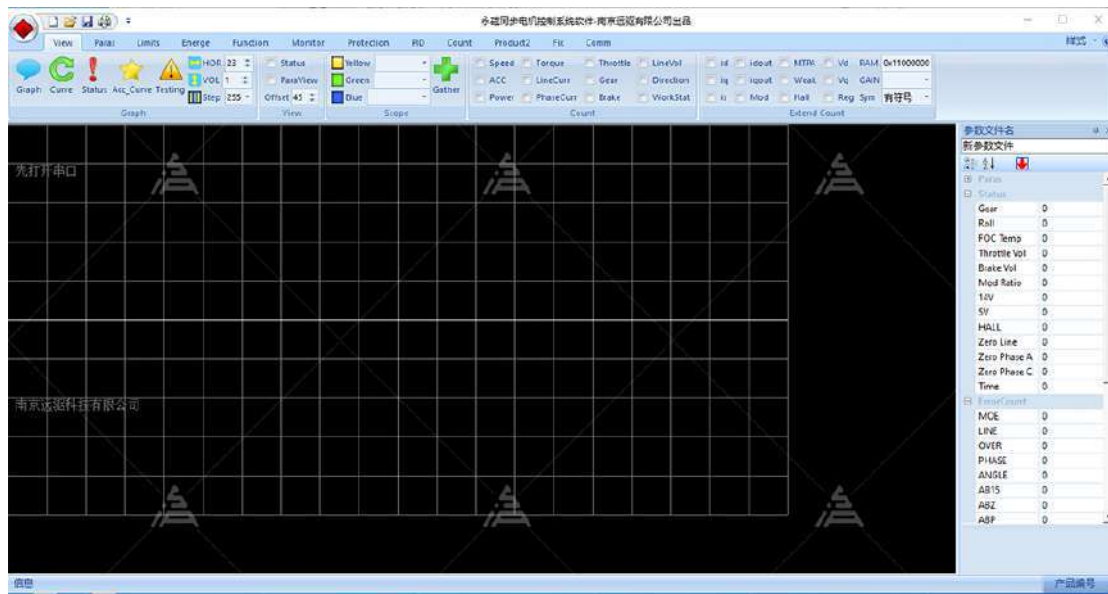
3.1 USB Cable



Extend Cord



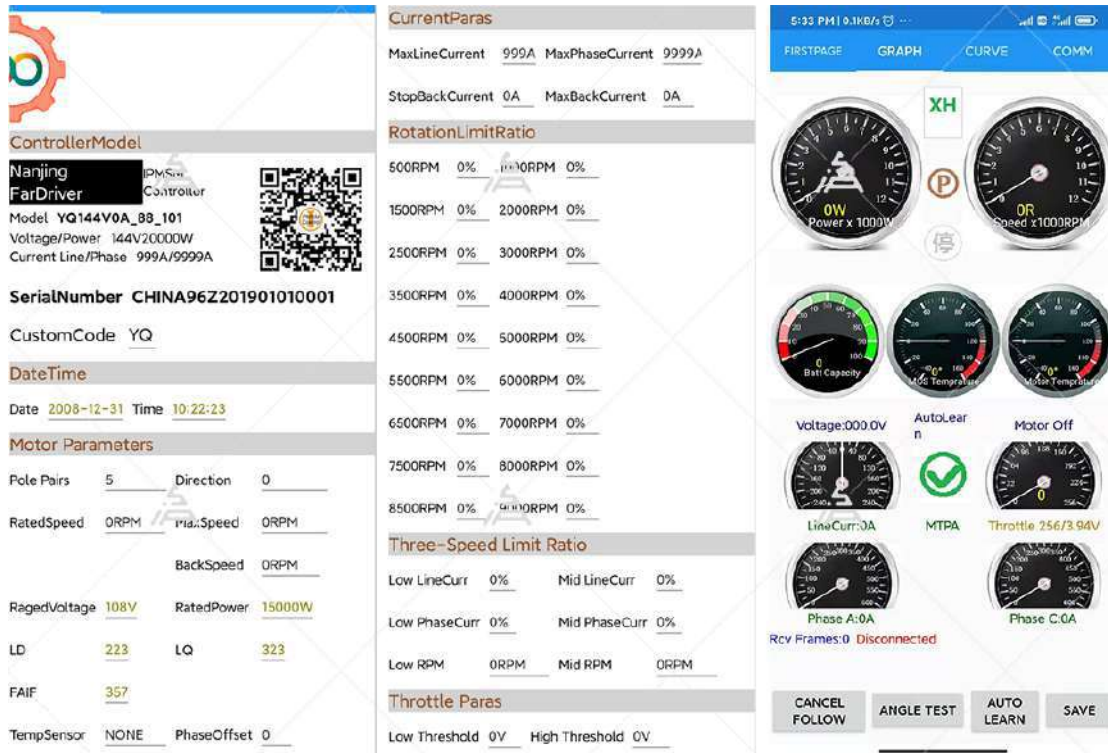
Software interface (PC)



3.2 Bluetooth Adapter



Software interface (APP)



4. DKD LCD speedometer (can-bus optional, LIN as default)

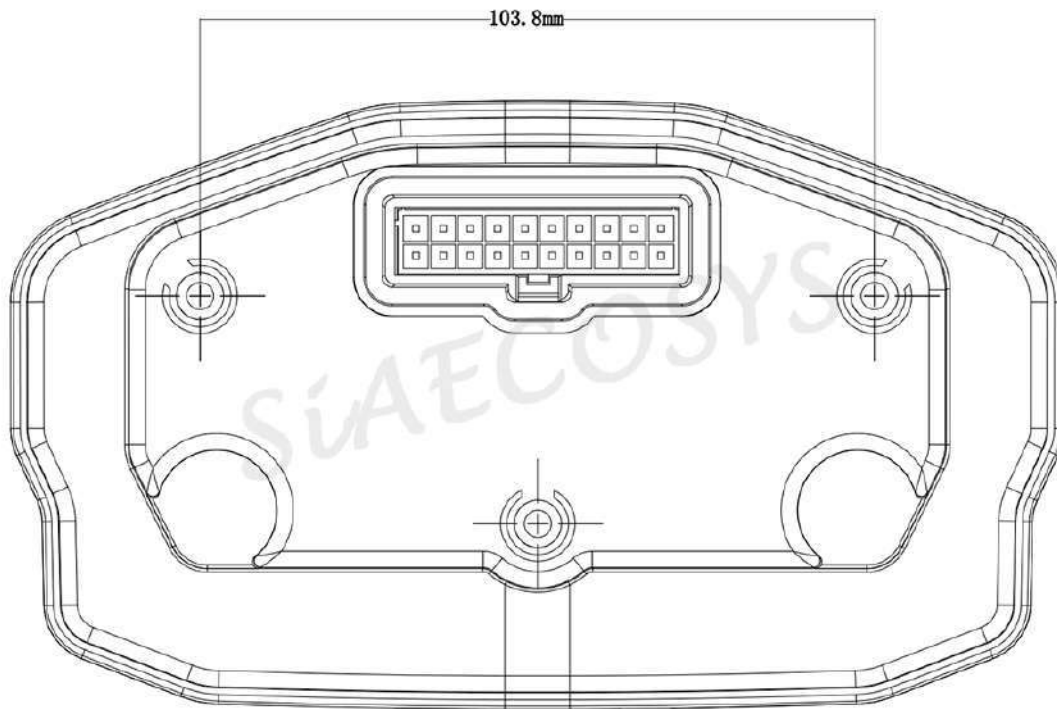
It display D N R, P, S gear, and battery current X5/10.

P.s.: If the working battery doesn't have can-bus communication, then the can-bus speedometer will shows lack of electricity always.

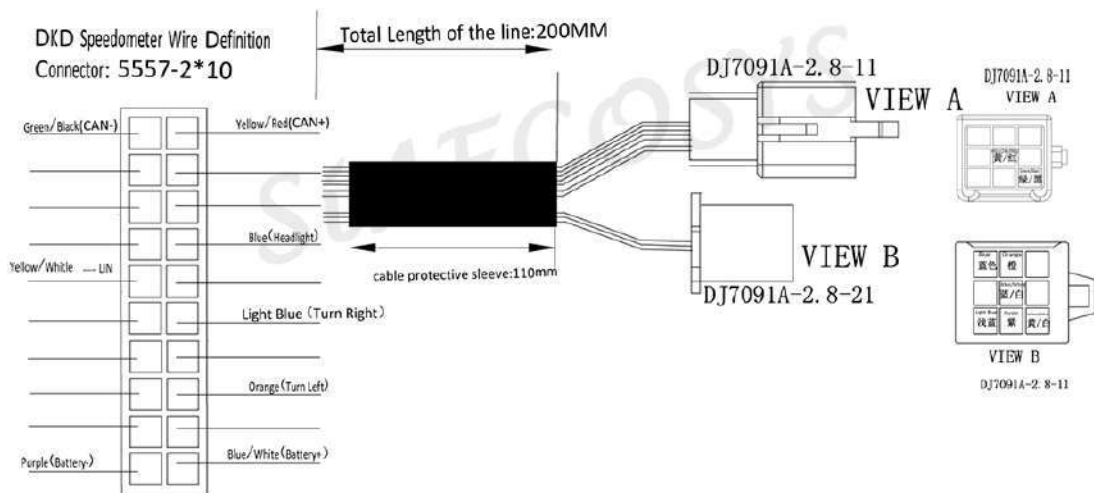
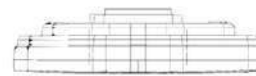
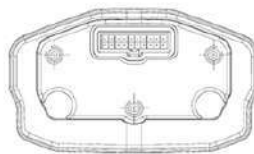
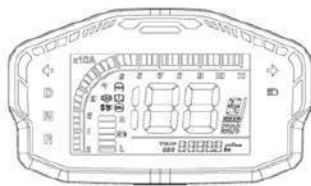
So, we suggest to do the speedometer as Line communication version if client can't get can-bus battery.



Drawing



Cable schematics



5.YY V3 Throttle with combination switch

Color: black

Rated operating voltage: DC+5V

Current: DC 10mA

Main material: ABS PVC

Right throttle pull force/ left handle pull force: $\geq 200\text{N}$ / $\geq 200\text{N}$

Torsional strength: $\geq 9\text{N.m}$

Output voltage: $0.8 \sim 4.2\text{V}$

Service life: $\geq 100,000$ times

Waterproof rating: IP55

Number of core cable:5

Type of switch: full twist

Net weight:0.5kg

Inner diameter of throttle: 22mm

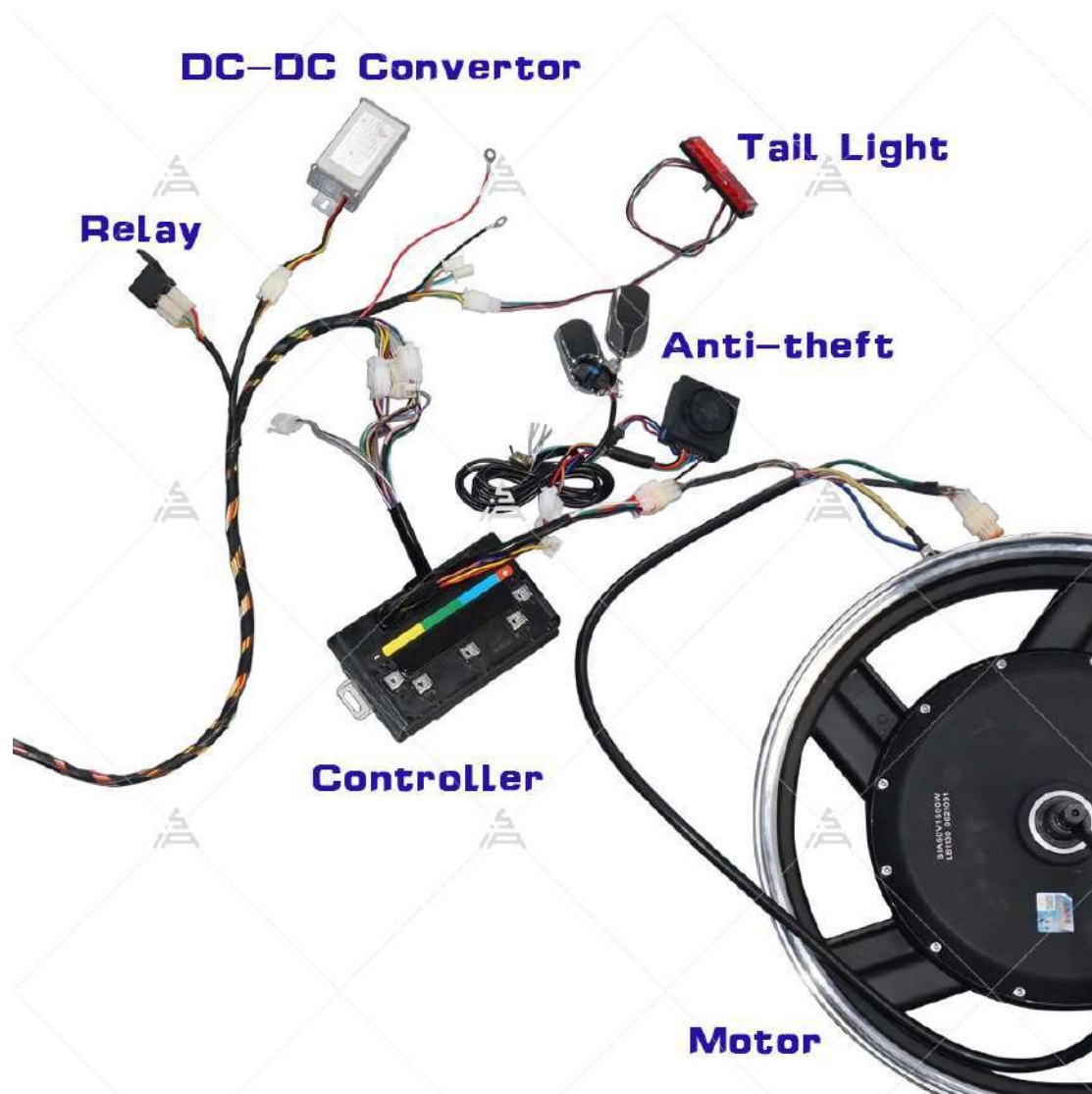
PS. We offer female connectors for samples (less than 10pcs).

It matched with Fardriver controller well.



7. Vehicle Wiring





Programmable Software & User manual (Before you received the controller)

Pls. Contact with sales to get the link and password to download the manuals and software before/when you got the controllers.

**New QS138 90H V3 With 1:2.35 Gear Box 4KW 7.5KW Mid Drive Motor QSMOTOR
From SIAECOSYS**

**Notes:NEW ARRIVAL 138 4KW mid drive motor spline shaft as sprocket type. no
stock, if interest, please contact seller.**

P.S. If you have any confused about the shipping cost, please feel free to contact with us.

Also could place order but don't pay first, then we could adjust the price



One set including below kits:

1pc 138 90H V3 mid drive motor with 1:2.35 gear box

1pc 428 15T sprocket

Product Description

SPECIFICATION

Motor Type:	PMSM Inner Rotor Motor
Brand:	QS Motor, QSMOTOR
Motor Design:	Single axle
Matched Tire:	17 inch
Magnet Height:	90mm, 5 pole pairs
Motor Gear Ratio:	1:2.35
Rated Power:	4000W
Peak Power:	13.5kW
Rated Voltage:	72V
Speed:	4800RPM
With Flux Weakening(RPM):	7000RPM
Rated Torque:	32N.m
Max Torque:	150N.m
Cooling Method:	Air cooling
Max Efficiency:	90%
Rated Current:	60A
Max bus Current:	200A
Thermic Probe:	KTY83/122 (as default)
Working Temperature:	70-120℃ , peak 150 ℃
Hall Sensor:	Single Hall Set with waterproof connectors
Phase Wire:	20mm ² Cross Section (not include insulation layer)
Waterproof Grade:	IP67
Color:	Black
N.W./G.W.:	approx 14.5kgs/15.5kgs
Package Dimension:	34cm*34cm*33cm/piece

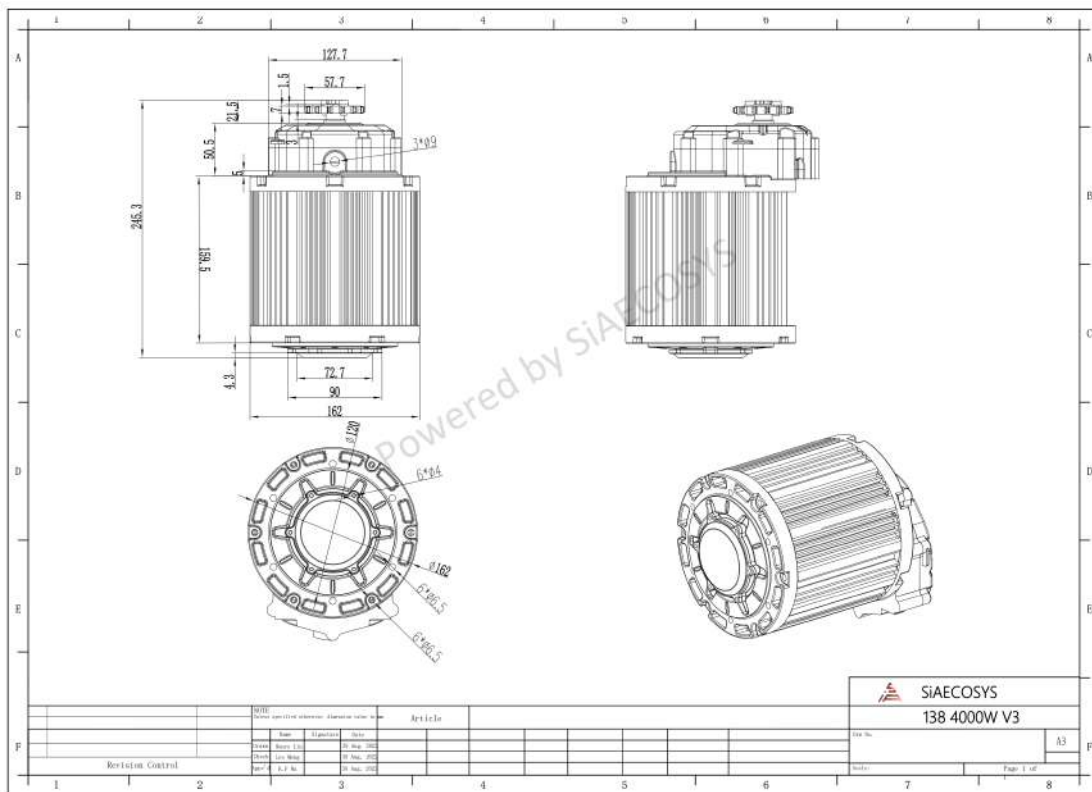


Photo Show



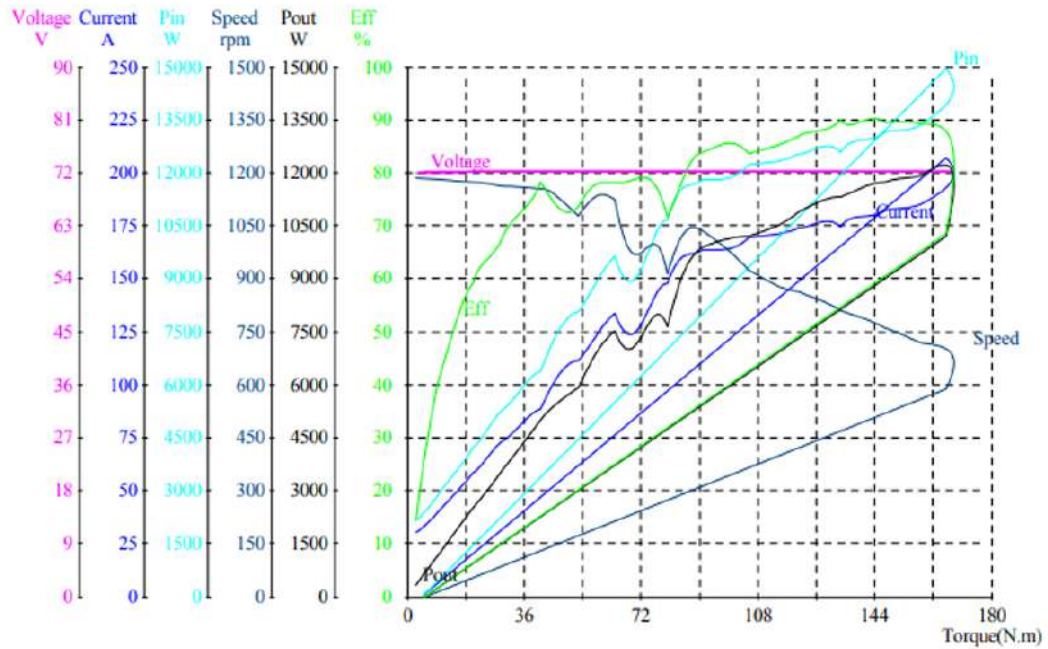


Drawing



Test Report

Only for reference (due to the limitation of test machine, the maximum torque is not reached.)



State	Voltage	Current	Pin	Torque	Speed	Pout	Eff	Time
	V	A	W	N. m	rpm	W	%	S
No_Load	72.04	30.14	2171	2.5	1183	309.7	14.3	0.000
Eff_max	72.11	177.0	12763	142.2	788	11732	91.9	67.63
Pout_max	72.11	198.2	14290	172.1	703	12667	88.6	79.05
Torque_max	72.11	198.2	14290	172.1	703	12667	88.6	79.05
End	72.23	0.956	69.09	5.4	0	0	0	82.85

**New QSMOTOR QS165 35H 5000W V2 72V 100KPH IPM PMSM Mid Drive Motor
For Offroad Dirtbike Lightbike Adult Electric Motorcycle**



Key Features

- 1) Light weight and small dimension compare to hub motor
- 2) High performance benefit from flux weakening
- 3) High efficiency during climbing, and better acceleration
- 4) Support regenerative braking

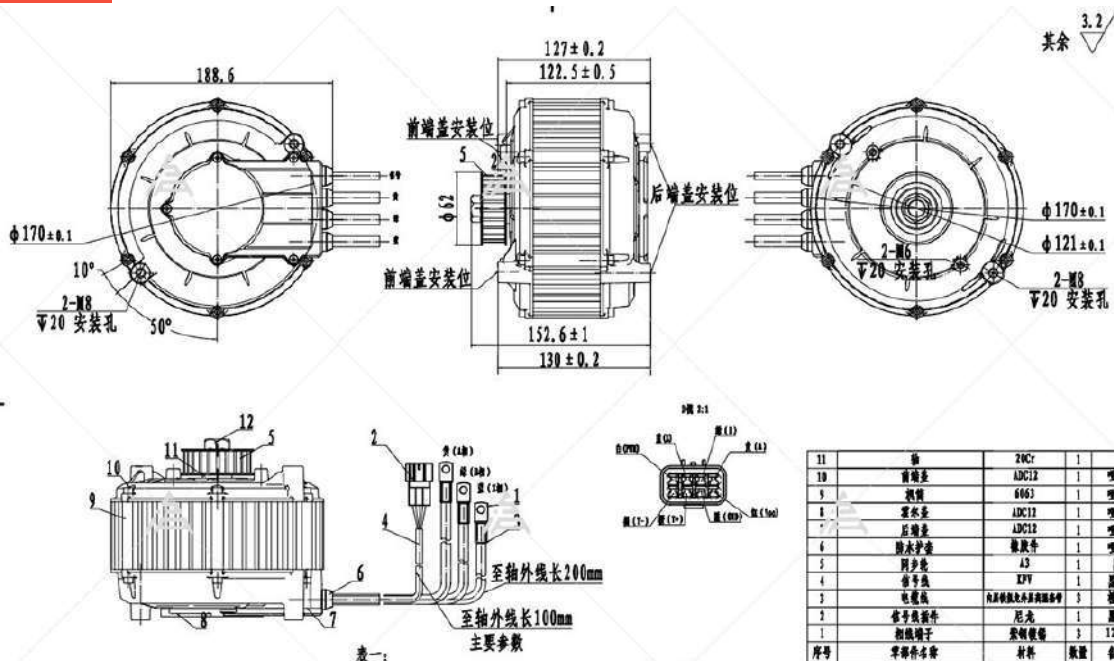
Product Description

SPECIFICATION

Motor Type:	165 PMSM
Magnet :	35H
Working Voltage:	72V
Rated Power:	5000W
Max Power:	10000W
Motor No-load rpm:	5000-6500rpm
Motor Direction Shift:	-60
Version:	Encoder
Efficiency:	≥93%
Max torque:	48N.m / 450A peak
Max Current Limit:	180A
Phase Currnt Peak:	500A
Magnet Pole Pairs:	5
Outgoing Wire Diameter:	16mm ²
Temp sensor:	KTY83/122
Cooling Method:	Air Cooling
Waterproof Grade:	IP67
Max working Temp:	60℃
Max Coil Temp:	180℃
Motor weight:	8.4kg



Drawing



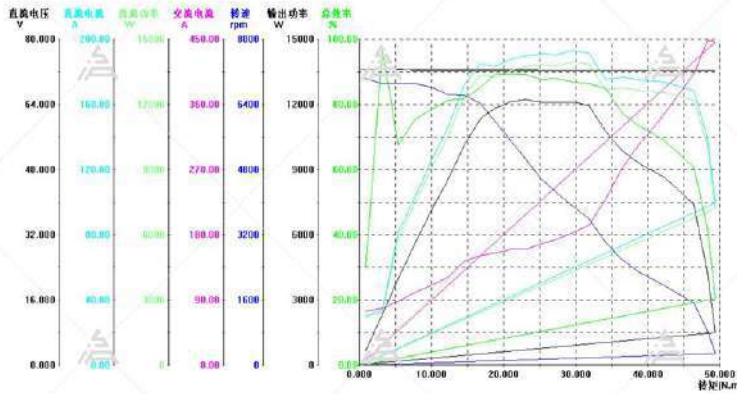
Test Report

Test with ND72680 , DC Current 200A max , Phase current 660A max

SiAECOSYS

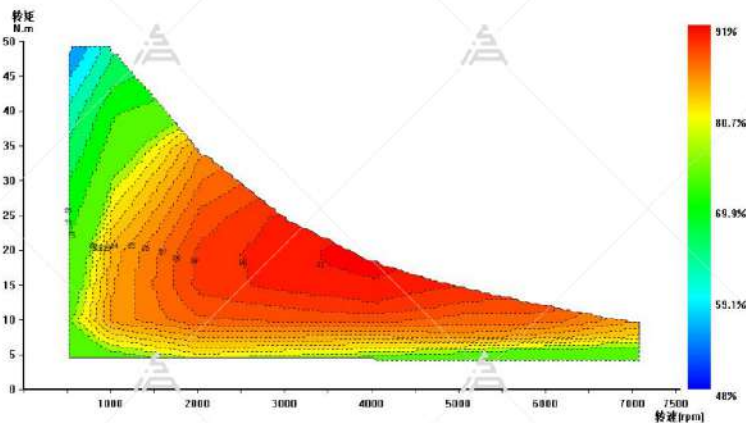
Test Report

Customer:	Sia	Voltage:	72
ProductName:	165	Power rated:	5kw
Type:	Mid drive motor	Tester:	Henry
Number:	0	Test Date:	2022.11.22



feature points	DC voltage V	DC current A	DC power W	AC voltage V	AC current A	AC power W	power factor	frequency Hz	torque N.m	rotate speed rpm	output power W	Efficiency controller %	electric efficiency %	overall efficiency %	time S
point not loaded	72.339	30.482	2204.8	52.248	74.395	1879.00	0.2791	585.30	0.89	7024.6	656.25	85.2	34.9	29.8	0.0000
maximum efficiency point	72.751	33.478	2406.0	51.552	77.851	2337.00	0.3362	569.60	3.21	6900.4	2319.4	97.1	99.2	96.4	3.9780
Max.output power point	72.269	189.56	13700	50.973	159.28	13155.0	0.9355	417.67	23.14	5040.7	12213	96.0	92.8	89.1	30.982
Maximum torque point	72.323	99.507	7196.6	8.4581	446.02	5168.20	0.7910	30.743	49.40	283.9	1468.2	71.8	28.4	20.4	63.976
end point	72.408	0.0000	0.0000	0.0000	0.3169	0.0000	0.0000	0.0000	0.28	0.0	0.0009	0.0	0.0	0.0	66.987
Load point 1	72.299	125.62	9082.4	49.921	110.07	8607.00	0.9044	568.20	10.00	6814.1	7131.6	94.8	82.9	78.5	12.979
Load point 2	72.270	185.41	13400	49.915	156.80	12824.0	0.9461	475.63	20.00	5725.2	11964	95.7	93.3	89.3	26.524
Load point 3	72.266	192.68	13924	50.667	184.17	13235.0	0.8196	319.88	30.00	3843.7	12064	95.0	91.1	86.6	40.442
Load point 4	72.296	174.27	12599	38.882	318.52	11244.0	0.5258	180.34	40.00	2166.1	9048.7	89.2	80.5	71.8	52.835

Performance simulation map:



Application



QS90 1000W 72V 55KPH Mid Drive Motor Kits with EM50-4 Controller Belt/ 428 Sprocket Adapter Type For Electric Scooter SIAECOSYS

For 90 1000W mid drive motor, it could be used for electric scooter, electric motorcycle.

It could be 72V 55KPH, available for 10inch wheel kits.

QS can provide customized 428 sprocket adapter to match with 1kW mid drive motor.



One set including below kits

Combo 1

1. 1pcs X QSMOTOR 1000W PMSM mid drive motor belt
2. 1pcs X Votol EM50-4 sine wave motor controller with CAN-BUS



Combo 2

1. 1pcs X QSMOTOR 1000W PMSM mid drive motor with 428 sprocket adapter
2. 1pcs X Votol EM50-4 sine wave motor controller with CAN-BUS



Key Features

- 1) Light weight and small dimension compare to hub motor
- 2) High performance benefit from flux weakening
- 3) High efficiency during climbing, and better acceleration
- 4) Support regenerative braking

Product Description

1. QSMOTOR 1000W 90 80H Mid Drive Motor

Item: QS Motor 1000W 90 80H Mid Drive Motor

Motor Type: PMSM Permanent Magnet Inner Rotor Motor With Hall Sensor

Brand: QS Motor, QSMOTOR

Motor Design: Single axle

Matched Wheel: 10inch Wheel (as default)

Magnet Height: 80mm, 5 pole pairs

Diameter of stator: 120mm

Rated Power: 1000W

Rated Voltage: 72V(as default)

Speed: 60V@45KPH; 72V@55KPH

Max Torque: approx 25.2N.m without Reduction ratio, approx 134.0N.m with 1:5.3 Reduction ratio

Max Efficiency: 90.5%

Thermal Probe: None as default (KTY83/122 is available, if you need, please let sales man know).

Single Hall Plate with waterproof connectors

6mm² Cross Section of Phase Wire (not include insulation layer)

Hall Sensor Phasing angle: 120 degree

Waterproof Grade: IP54

Color: Black

N.W./G.W.: 7.8kgs/9.1kgs

Package Dimension: 34cm*34cm*33cm

There are two options.

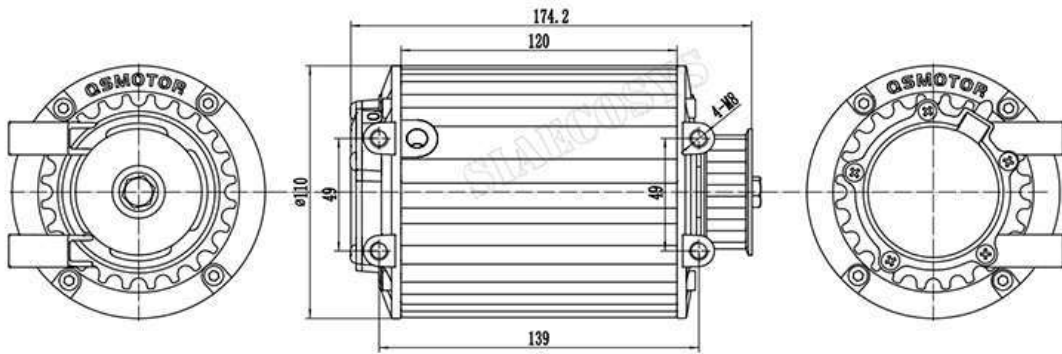
Belt type :



428 sprocket adapter type:

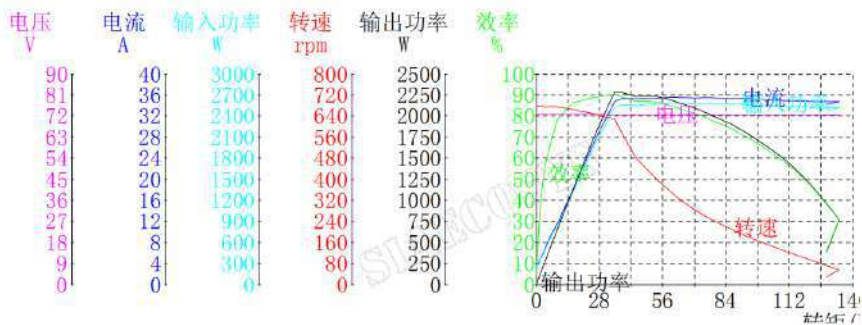


Drawing



Test Report

For reference only



特征点	电压	电流	输入功率	转矩	转速	输出功率	效率
	V	A	W	N.m	rpm	W	%
不加载点(No_Load)	72.81	3.911	284.7	0.2	677.6	14.19	5.0
最高效率点(Eff_max)	72.62	31.81	2310	31.4	636.0	2091	90.5
最大输出功率点(Pout_max)	72.59	35.47	2575	37.9	575.3	2283	88.7
最大转矩点(Torque_max)	72.60	34.72	2521	134.0	55.1	773.0	30.7
结束点(End)	72.61	34.15	2480	128.5	28.7	386.1	15.6

2. EM50-4 sine wave motor controller with CAN BUS

Key Features

- 1). The materials are imported.
- 2). With the aluminum substrate scheme, the Moss tube is laid on the aluminum substrate and then placed on the PCB board
- 3). Small in size
- 4). High efficiency, low temperature rise, small running current
- 5). With flux weakening function

Product Description

EM50-4 is new motor controller. It's cost effective with waterproofing grade IP65, suit for 2000W motors.



50A

Rated DC Current

80A

Peak DC Current

195A

Peak Phase Current

72V

Rated voltage

2KW

Adapt Motor

150%

Flux Weakening

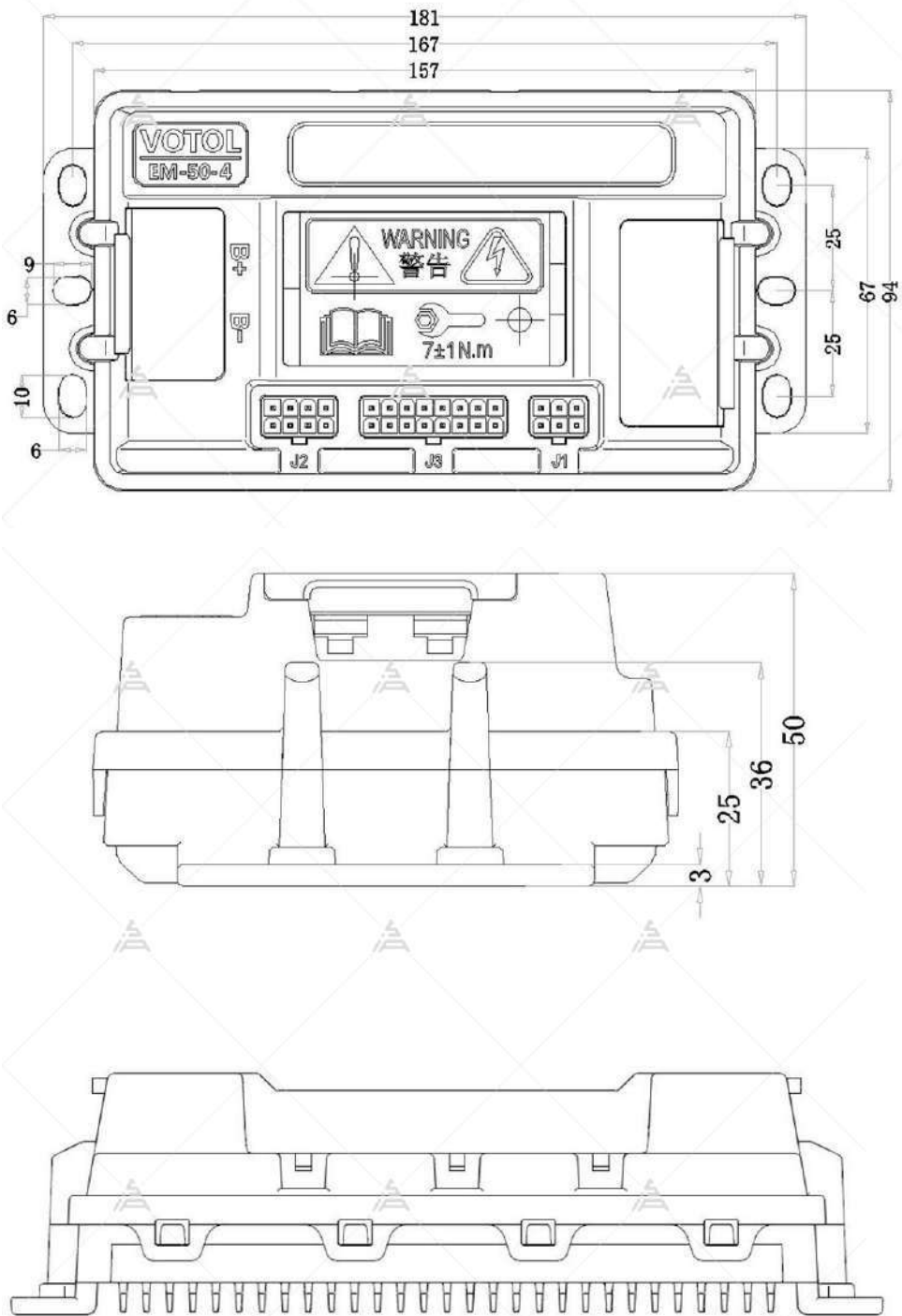
IP65

Waterproof

0.96kg

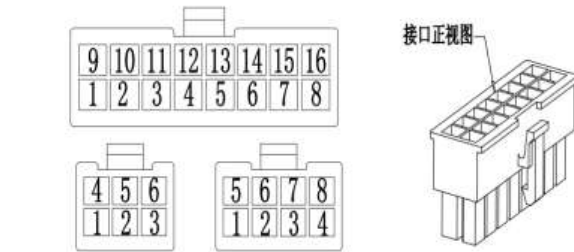
Net Weight

Drawing



Controller Interface Definition

EM50-4 Controller Interface Definition				EM50-4 Controller Interface Definition			
2*8 Connector				2*3 Connector			
Port	Function Definition		Voltage	Port	Function Definition		Voltage
1	Throttle Power /Pink		5V	1	Hall Signal U /Yellow		0-5V
2	Throttle Negative /Black		0V	2	Hall Signal V /Green		0-5V
3	Throttle Signal /Green		0-5V	3	Hall Signal W /Blue		0-5V
4	3 Gear(toggle/jog) /Black/White	SWD	0-5V	4	Hall Power + /Red		5V
5	P Gear /Brown	PC15	0-5V	5	Temp Sensor /Brown		0-5V
6	R Gear /Brown/White	PC14	0-5V	6	Hall GND - /Black		0V
7	ISDN One Line /White	PB9	0-5V	2*4 Connector			
8	High Brake /Purple	PB5	0-12V				
9	Electric Door Lock /Grey/Purple		40V B+	1	Anti-theft Negative /Black		0V
10	CAN H /Blue		0-5V	2	N/A		0-5V
11	CAN L /Orange		0-5V	3	N/A		0-5V
12	N/A	PA11	0-5V	4	N/A		0-5V
13	Low Speed for Switch /Green/White	PB2	0-5V	5	Battery Positive /Red		B+
14	GND /Black		0V	6	Anti-theft Power Input		40V B+
15	S Gear /Yellow/White	PB3	0-5V	7	Anti-theft Motor Wheel Movement Signal /Yellow		0V B+
16	Low Brake /Grey/Black	PB4	0-5V	8	Anti-theft Singal Input /Blue	PA12	0-5V



Software interface (PC)

Adapter Cable



Please noted:

Optional appearance, drawing, performance curve/test report are available.
If you need more technical information, please feel free to contact us.
We will give you reply in 12hours.

Application



**New QS138 90H V3 With 1:2.35 Gear Box 4KW 7.5KW Mid Drive Motor QSMOTOR
From SIAECOSYS**



One set including below kits:

1pc 138 90H V3 mid drive motor with 1:2.35 gear box

1pc 428 15T sprocket

SPECIFICATION

Motor Type:	PMSM Inner Rotor Motor
Brand:	QS Motor, QSMOTOR
Motor Design:	Single axle
Matched Tire:	17 inch so on
Magnet Height:	90mm, 5 pole pairs
Motor Gear ratio:	1:2.35
Rated Power:	4000W
Peak Power:	13.5kW
Rated Voltage:	72V
Speed:	4800RPM
With Flux Weakening(RPM):	7000RPM
Rated Torque:	32N.m.
Max Torque:	150N.m.
Cooling Method:	Air cooling
Max Efficiency:	93%
Rated Current:	60A
Max bus Current:	200A
Thermic Probe:	KTY83/122 (as default)
Working Temperature:	70-120℃ , peak 150 ℃
Hall Sensor:	Single Hall Set with waterproof connectors
Phase Wire:	20mm ² Cross Section (not include insulation layer)
Waterproof Grade:	IP66
Color: Black	Black
N.W./G.W.:	approx 14.5kgs/15.5kgs
Package Dimension:	34cm*34cm*33cm/piece



Photo Show





NEW Released SIAECOSYS/QSMOTOR Liquid Cooled 138 V3 4000W 90H Mid Drive Motor with Gearbox and Better Temperature Resistance

For 138 4000W liquid cooled mid drive motor , it could be used for electric light motorcycle, which could be 72V 110KPH.

One set including below kits

1pc X QS 138 4kW V3Liquid Cooled Mid drive motor with gearbox and belt design



Key Features

- 1) Light weight and small dimension compare to hub motor
- 2) High performance benefit from flux weakening
- 3) High efficiency during climbing, and better acceleration
- 4) Support regenerative braking
- 5) Water Cooler, which would have better temp resistance.

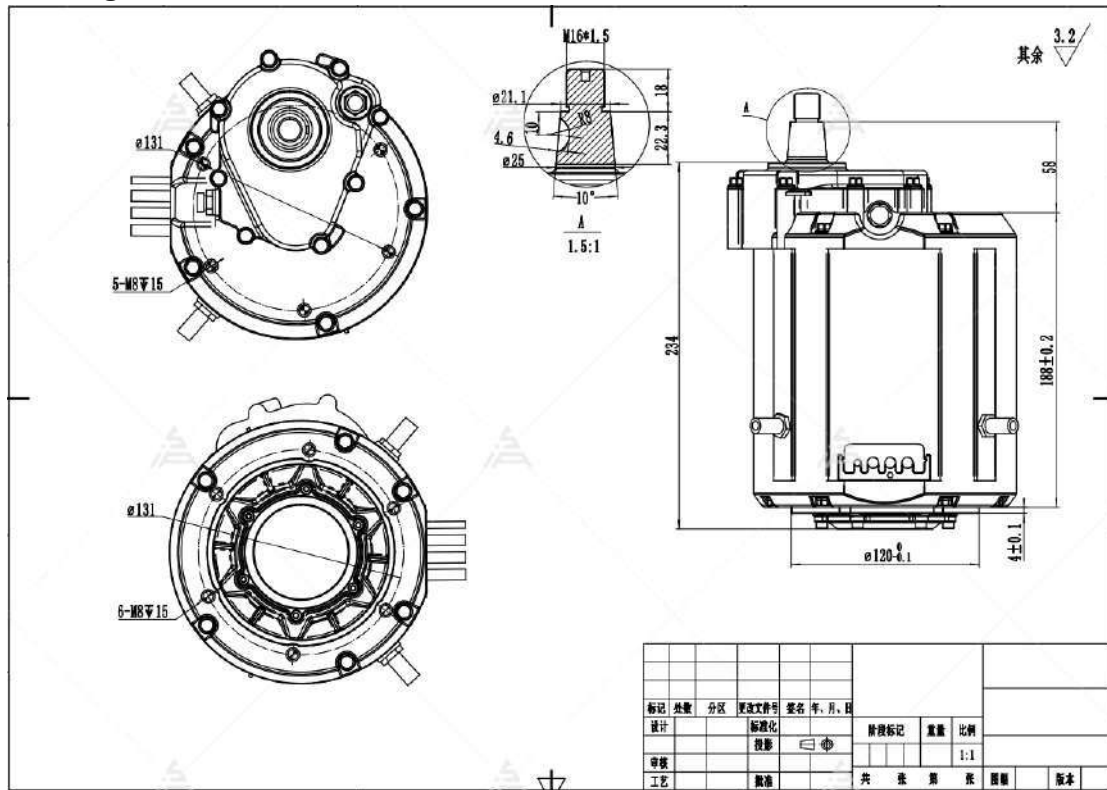
Product Description

SPECIFICATION

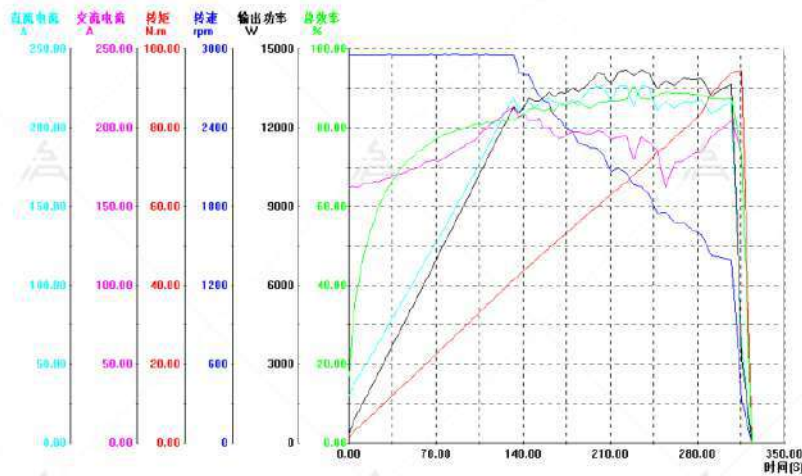
Motor Type:	PMSM Inner Rotor Motor
Brand:	Q5 Motor, QSMOTOR
Motor Design:	Single axle
Matched Tire:	17 inch
Magnet Height:	90mm, 5 pole pairs
Motor Gear Ratio:	1:2.35
Rated Power:	4000W (Max continuous 7500W)
Peak Power:	13.5kW
Rated Voltage:	72V
Speed:	4100RPM
With Flux Weakening(RPM):	7000RPM
Rated Torque:	32N.m
Max Torque:	120N.m
Cooling Method:	Water cooling
Max Efficiency:	93%
Rated Current:	60A
Max bus Current:	200A
Thermic Probe:	KTY83/122 (as default)
Working Temperature:	70-120℃ , peak 150℃
Hall Sensor:	Single Hall Set with waterproof connectors
Phase Wire:	20mm ² Cross Section (not include insulation layer)
Waterproof Grade:	IP67
Color:	Black
N.W./G.W.:	approx 15.6kgs/16kgs
Package Dimension:	34cm*34cm*33cm/piece



Drawing



Test Report



特征点	直流电压	直流电流	直流功率	交流电压	交流电流	交流功率	功率因数	频率	转矩	转速	输出功率	控制效率	电机效率	总效率	时间
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
不加载点	71.795	30.159	2037.6	50.008	161.21	810.80	1297	583.42	1.11	2955.2	344.16	88.9	19.0	16.9	0.0000
额定点	71.626	53.708	3763.1	49.346	164.58	800.90	2475	582.94	6.47	2955.0	2000.0	92.5	57.5	53.1	17.133
最高效率点	72.536	213.74	15400	46.643	179.30	14071	0.9714	365.32	67.96	1961.4	13956	91.4	99.2	90.6	228.98
最大输出功率点	72.248	226.46	16303	47.046	194.64	15441	0.9736	404.74	66.07	2051.6	14193	94.7	91.9	87.1	222.99
最大转矩点	72.948	60.349	4399.4	49.225	182.48	3072.80	0.9798	65.211	94.43	324.0	3203.4	69.8	104.2	72.8	316.00
结束点	72.053	0.0000	0.0000	0.0000	0.5051	0.0000	0.0000	0.0000	0.03	0.0	0.0000	0.0	0.0	0.0	323.98

Accessories

Pagoda-Shape Connectors



Can match 8mm diameter hose

Conversion Kits



Application



YTK CO.,LTD.
[Http://www.ytk-group.co.jp](http://www.ytk-group.co.jp)

QS Motor E-spoke 3000W 205 50H V3 Hub Motor 60-70kph

It's QS electric In-Wheel Bicycle Spoke Hub Motor for Conversion Kits, which power range from 1000w to 3000w rated, drop-outs 150mm with bicycle disc brake.

4T= 48V 560RPM/72V 820RPM Balance Version(Default Winding)

5T= 48V 460RPM/72V 650RPM Higher Torque Version

Notice: Now 205 3000W V3 spoke hub motor all upgrade to V3TI Version ,better cable and add phase cable protector

205 3000W V3TI electric spoke Hub motor



1. Generally SPEC

SPECIFICATION

Motor Type:	BLDC In-Wheel Hub Motor
Brand:	QS Motor, QSMOTOR
Motor Design:	Double axle with rim(integrated)
Matched Tire:	17Inch
PCD :	6*44mm
Stator:	Aluminum Core
Rated Power:	3000W
Peak Power:	6000W in few seconds
Rated Voltage:	72V
Speed:	650RPM or 820RPM
Drop-outs:	150mm
Max Torque:	approx 181N.m
Max Efficiency:	approx 91%
Continues Battery Current:	44A (72V)
Peak Battery Current:	100-150A (72V)
Suggest Peak Phase Current:	N/A
Thermic Probe:	KTY83/122(as default)
Working Temperature:	70-120℃ , peak 150℃
Brake type:	Disc brake
Hall Sensor:	Dual Hall set with waterproof connectors
Phase Wire:	2*5mm ² Cross
Hall Sensor Phasing angle:	120 degree
Waterproof Grade:	IP65
Color:	Black
N.W./G.W.:	approx 13.5kgs/14kgs
Package Dimension:	32.5cm*35.5cm*31.5cm/piece



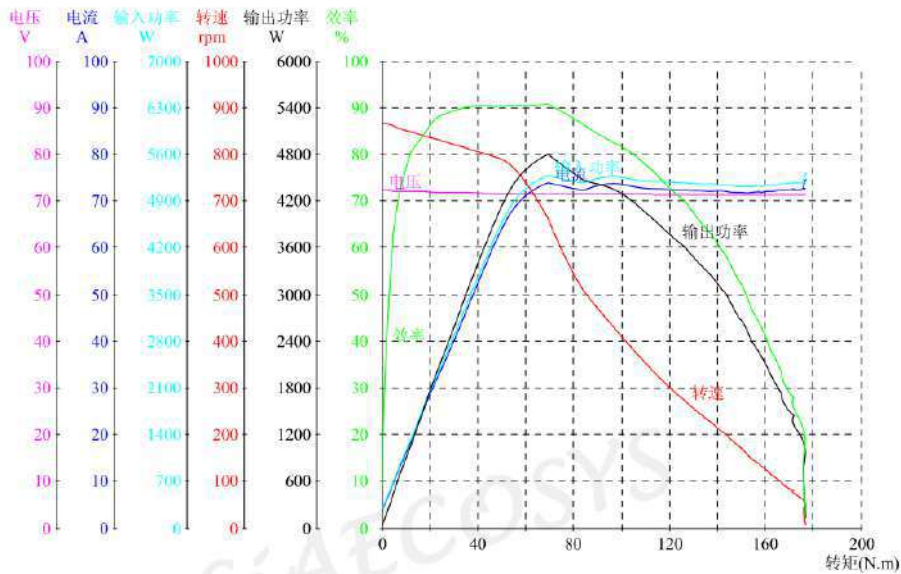
PS. 1. Above quotation base on 205 electric bike spoke hub motor.

2. For 205 motor, the voltage is 48V~96V.

3. Above configuration is suggested for mass production, for EV enthusiast, V2 & V3 motor could be over-voltaged to gain more speed (customizable).

4. There are more powerful e-bike standard hub motor, 3000W & 4000W 273 Spoke Hub Motor, 152mm dropout, PDC6*44mm, 12mm axle flats.

Test Report



特征点	电压	电流	输入功率	转矩	转速	输出功率	效率
	V	A	W	N.m	rpm	W	%
不加载点	72.26	3.824	276.4	0.2	867.4	25.42	9.1
最高效率点	71.54	73.84	5283	69.2	662.1	4801	90.8
最大输出功率点	71.54	73.84	5283	69.2	662.1	4801	90.8

最大转矩点	71.28	72.56	5172	177.3	55.4	1028	19.8
结束点	71.19	74.64	5314	176.7	7.1	131.3	2.4

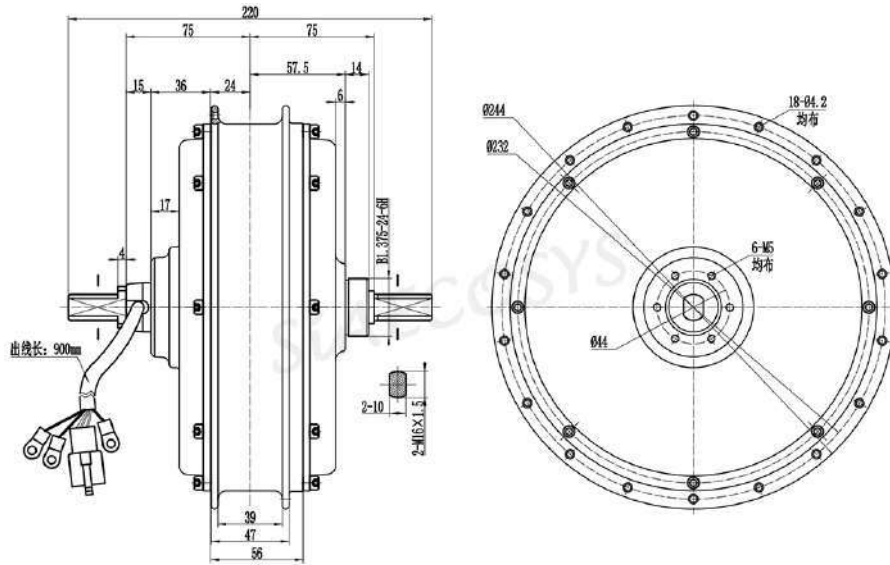
序号	电压	电流	输入功率	转矩	转速	输出功率	效率
	V	A	W	N.m	rpm	W	%
1	72.26	3.824	276.4	0.2	867.4	25.42	9.1
2	72.25	3.789	273.8	0.3	867.2	32.68	11.9
3	72.26	3.997	288.8	0.4	866.7	44.28	15.3
4	72.25	4.509	325.8	0.8	866.4	80.55	24.7
5	72.22	5.729	413.8	1.8	865.6	163.1	39.4
6	72.20	7.466	539.1	3.1	863.0	281.9	52.2
7	72.17	9.581	691.5	4.8	860.4	436.0	63.0
8	72.14	12.06	870.3	6.9	856.4	621.9	71.4
9	72.09	15.25	1099	9.3	852.0	834.2	75.8
10	72.05	18.40	1326	12.0	848.3	1070	80.6
11	72.01	22.22	1600	15.0	843.6	1324	82.7
12	71.97	26.36	1897	18.2	838.6	1605	84.6
13	71.91	30.99	2212	22.2	833.1	1939	87.6
14	71.85	35.36	2540	26.0	826.8	2254	88.7
15	71.80	39.99	2872	29.9	821.0	2571	89.5
16	71.74	45.14	3238	34.1	814.5	2909	89.8
17	71.69	50.07	3590	38.3	807.8	3247	90.4
18	71.63	55.32	3962	42.7	801.6	3584	90.4
19	71.56	60.79	4350	47.2	794.0	3925	90.2

20	71.49	66.18	4731	51.9	787.1	4282	90.5
21	71.42	71.62	5115	56.6	778.2	4614	90.2
22	71.54	73.84	5283	69.2	662.1	4801	90.8
23	71.53	73.23	5238	74.6	599.1	4683	89.4
24	71.52	72.61	5193	79.6	548.1	4573	88.0
25	71.50	72.36	5174	84.5	505.2	4469	86.3
26	71.47	73.40	5246	89.2	473.3	4422	84.2
27	71.48	73.85	5279	94.4	445.7	4405	83.4
28	71.46	73.70	5266	99.3	413.8	4306	81.7
29	71.45	73.10	5223	104.6	384.8	4215	80.6
30	71.44	72.67	5192	109.1	355.2	4059	78.1
31	71.40	72.67	5189	114.0	330.6	3947	76.0
32	71.41	72.65	5188	118.3	308.7	3824	73.7
33	71.40	72.36	5167	122.4	287.7	3689	71.3
34	71.40	72.33	5164	126.6	272.3	3611	69.9
35	71.39	72.17	5152	129.8	256.0	3479	67.5
36	71.37	72.22	5154	133.1	242.5	3379	65.5
37	71.37	72.16	5150	136.1	230.2	3280	63.6
38	71.36	72.16	5149	139.0	219.6	3196	62.0
39	71.37	72.26	5158	141.1	209.1	3090	59.9
40	71.35	72.06	5142	143.4	199.9	3001	58.3
41	71.35	71.92	5132	145.5	190.4	2901	56.5
42	71.33	71.83	5124	146.8	181.7	2793	54.5

43	71.34	71.74	5118	148.9	173.7	2708	52.9
44	71.32	71.81	5122	151.7	165.2	2624	51.2
45	71.33	71.61	5108	152.3	157.9	2517	49.2
46	71.33	71.75	5118	154.0	150.3	2424	47.3
47	71.33	71.70	5115	155.2	144.2	2344	45.8
48	71.32	71.94	5131	157.3	137.8	2270	44.2
49	71.33	71.76	5118	158.7	132.2	2196	42.9
50	71.31	72.02	5137	160.1	126.2	2116	41.2
51	71.30	72.03	5136	161.5	120.0	2029	39.5
52	71.33	72.05	5139	162.3	114.7	1950	37.9
53	71.32	71.98	5134	163.9	109.2	1874	36.5
54	71.30	72.33	5156	165.3	103.4	1790	34.7
55	71.29	72.32	5156	166.8	98.2	1715	33.2
56	71.30	72.12	5142	167.1	91.9	1608	31.2
57	71.29	72.41	5162	169.0	86.0	1522	29.4
58	71.29	72.48	5167	171.8	80.3	1445	27.9
59	71.28	72.40	5161	169.7	74.7	1327	25.7
60	71.31	72.38	5162	174.6	68.6	1254	24.2
61	71.27	72.50	5167	175.5	61.7	1133	21.9
62	71.28	72.56	5172	177.3	55.4	1028	19.8
63	71.26	72.54	5169	176.9	49.2	911.5	17.6
64	71.25	72.85	5191	176.1	40.5	746.7	14.3
65	71.19	74.64	5314	176.7	7.1	131.3	2.4

3. 205 E-Spoke Hub Motor 150mm drop-outs drawing

Here is drawing of our normal 205 e-spoke hub motor with PCD 6*44mm disc brake.



*QSMOTOR 3000W
E-BIKE Hub Motor*



QS 1kW 90 new appearance mid drive motor assemble kits with 10inch rim and EM50SP Controller

For 90 1000W mid drive motor kit assembly, it could be used for electric scooter, electric motorcycle.

It could be 72V 50KPH, available for 10inch wheel kits as default



Key Features

- 1). Simplify to make a electric-motorcycle. Gearbox, transmission shaft, clutch are no need. Which save space.
- 2). It could be installed in the rear to save more space for battery.
- 3). Support regenerative braking
- 4). High efficiency: 85~92%

The kits include as below:

- 1pcs QS 1000W Mid Drive Motor with Left/Right fork
- 1pcs EM50SP Controller, 72V 190A, SINUSOIDAL WAVE BLDC MOTOR CONTROLER(Optional)
- 1pcs Rear synchronous belt wheel
- 2pcs Decoration cover
- 1pcs Rear axle with screws
- 2pcs Adapter
- 1pcs Synchronous belt
- 1pcs 10inch Aluminmun wheel
- 1pcs Fender
- 1pcs Belt shield
- 1pcs Belt side shield

Product description

Genearily Spec:

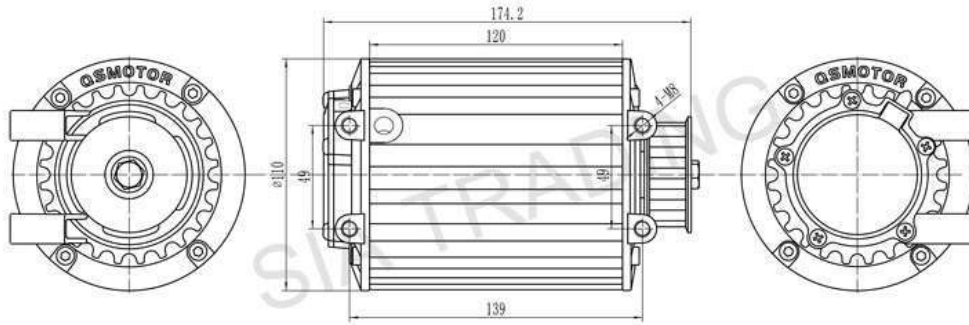
SPECIFICATION

Motor Type:	PMSM Permanent Magnet Inner Rotor Motor With Hall Sensor
Brand:	QS Motor, QSMOTOR
Motor Design:	Single axle
Matched Wheel:	10inch Wheel (as default)
Magnet Height:	80mm, 5 pole pairs
Diameter of stator:	120mm
Stator:	Steel core
Rated Power:	1000W
Rated Voltage:	60V or 72V(as default)
Speed:	60V@45KPH; 72V@55KPH
Thermic Probe:	N/A
Max Efficiency:	90.5%
Hall Sensor Phasing angle:	120 degree
Hall Sensor:	Single Hall Plate with waterproof connectors
Phase Wire:	6mm ² Cross Section
Waterproof Grade:	IP54
Color:	Black
N.W./G.W.:	7.8kgs/9.1kgs
Package Dimension:	34cm*34cm*33cm



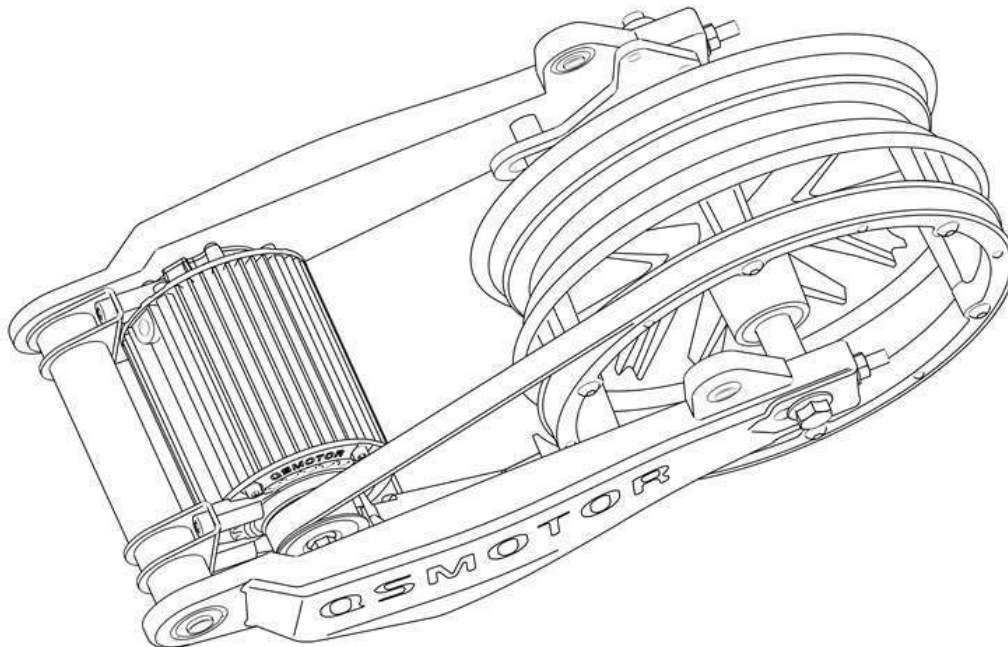
Dimension Drawing:

QS 1kW 90 mid drive motor(old appearance)

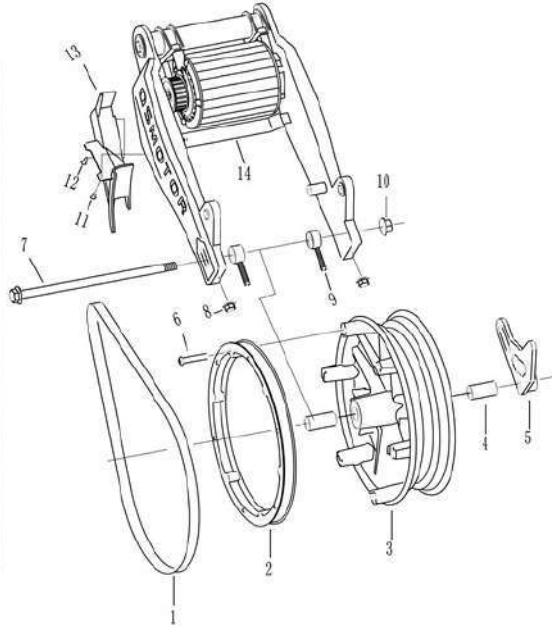


					台州市全顺电机有限公司	
标记	处数	分区	图号/文件号	签名	年, 月, 日	90中置电机
设计			标准化			阶段标记
校核			审核			重量
工艺			批准			比例
					S	kg
					共 1 页	第 1 页

QS 1kW 90 mid drive motor assemble kits(Old appearance)



序号	名称	数量	备注
1	同步带	1	
2	后同步带轮	1	
3	M12.15*10铝轮	1	
4	衬套 $\phi 12 \times 20 \times 2.5$	2	
5	碟刹支架	1	选配
6	半圆头内六角螺丝M8*40	6	
7	后轮轴 $\phi 12 \times 252$	1	
8	六角法兰自锁螺母M8	1	
9	调节器	2	千斤板
10	六角法兰自锁螺母M12	1	
11	十字大扁头螺丝M4*8	2	
12	十字大扁头自攻螺丝ST4.2*16	1	
13	同步带防护罩	1	
14	中置电机+平叉	1	



Please noted:

Optional appearance, drawing, performance curve/test report are available.
If you need more technical information, please feel free to contact us.

Controller Description:

- Item: EM50SP sine wave controller
- Net weight: 955g
- Rated current: 60A
- Boost current: 190
- Max. Power: 4320W
- Flux Weaking Ratio: 100~250%
- Max. Efficiency: 88~93%
- Degree of protection: IP67



Conversion kits for QS 2kW mid dirve hub motor

We're able to supply Controller, display, dc-dc converter, disc brake system, twist throttle, matched tire...etc.



Application for E-Motorcycle mid drive motor

QS MOTOR 2000W

Mid Drive Motor Kit Assembly



SiAECOSYS QS120 60H 2000W V3 72V Mid Drive Motor with Gearbox for Electric Motorcycle and Bike

For QS120 60H 2000W mid drive motor , it could be used for electric light motorcycle, which could be 72V 60KPH.

One set including below kits

1.1pcs X QS120 60H 2000W V3 72V Mid Drive Motor with Gearbox

QS MOTOR



Key Features

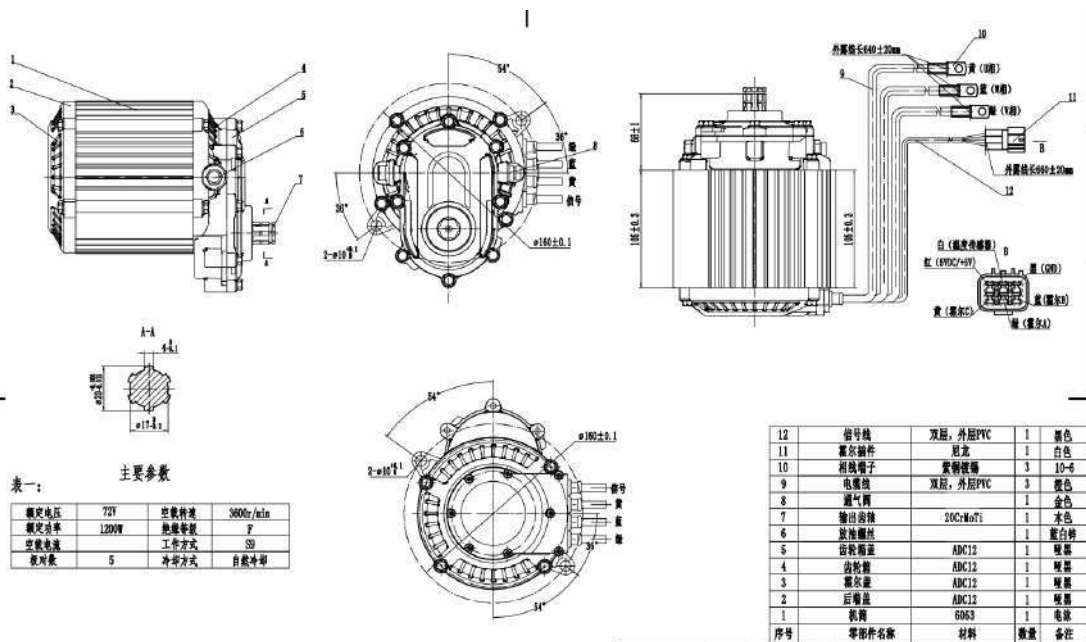
- 1) Light weight and small dimension compare to hub motor
- 2) High performance benefit from flux weakening
- 3) High efficiency during climbing, and better acceleration
- 4) Support regenerative braking

SPECIFICATION

Motor Type:	PMSM Inner Rotor Motor
Brand:	QS Motor, QSMOTOR
Motor Design:	Single axle
Magnet Height:	60mm, 5 pole pairs
Rated Power:	2000W
Rated Voltage:	72V
Rated Speed:	2800RPM (3300RPM/3900RPM/4900RPM Optional)
Max Torque:	45-51N.m
Gear Ratio:	1 : 2.35
Cooling Method:	Air cooling
Max Efficiency:	93%
Peak Battery Current:	80A (72V)
Thermic Probe:	KTY83/122
Working Temperature:	70-120°C , peak 150 °C
Hall Sensor:	Single Hall Set with waterproof connectors
Phase Wire:	8mm ² Cross Section (not include insulation layer)
Waterproof Grade:	IP66
Color:	Black
N.W./G.W.:	approx 8.5kgs
Package Dimension:	32cm*32cm*34cm/piece



Drawing



Test Report

TBD

Motor Kit with Controller

Recommend Controller : Siaecosys Programmable VOTOL EM100sp Controller

QS MOTOR



Application

