

SPECIFICATION FOR INVERTER

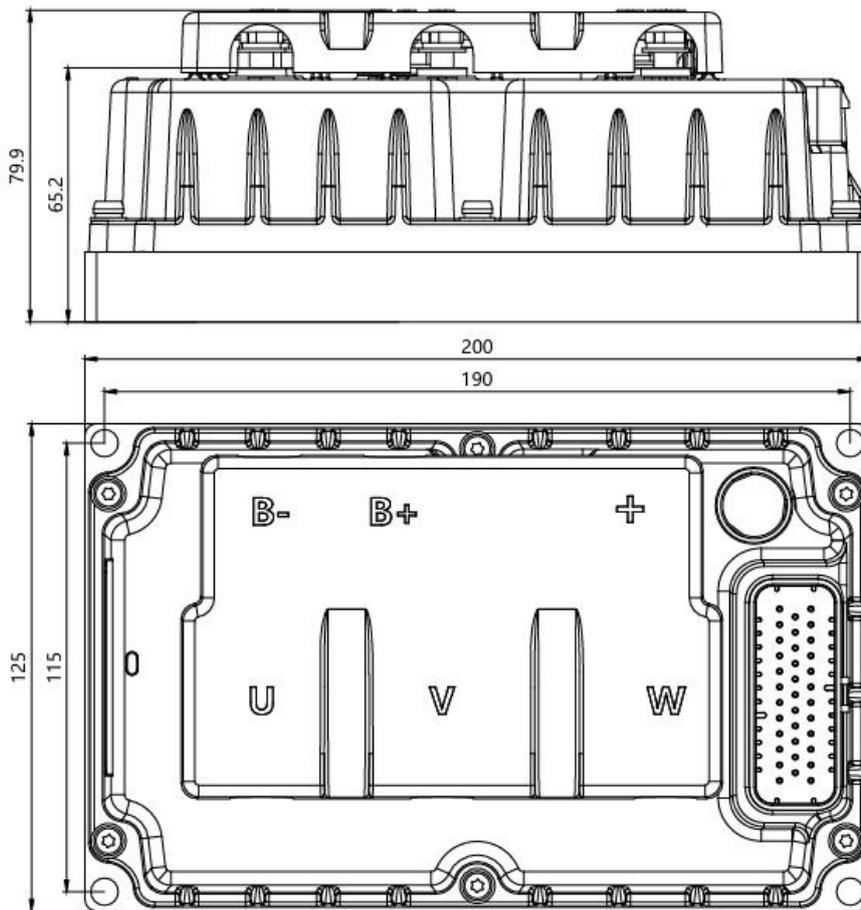
SZ8940-EC13



1. Product Model & Specification

SZ8940-EC13			
Rated Voltage	96 V	Communication protocol	CAN
Suitable Motor Power	30 kW	Undervoltage protection	Software adjustable
Maximum currents	400 A	IP class	IP67
Product Weight	2.1 kg	Operating temperature	-25°C~65°C
Mounting dimensions	200×125×72.2 mm	Application	Two-wheel Electric Motorcycle, Three-wheel Electric Motorcycle, etc.

2. Outline Dimension



3. Interface Function

3.1. Inverter Installation and Matching Cable

3.1.1. Power Cable Selection

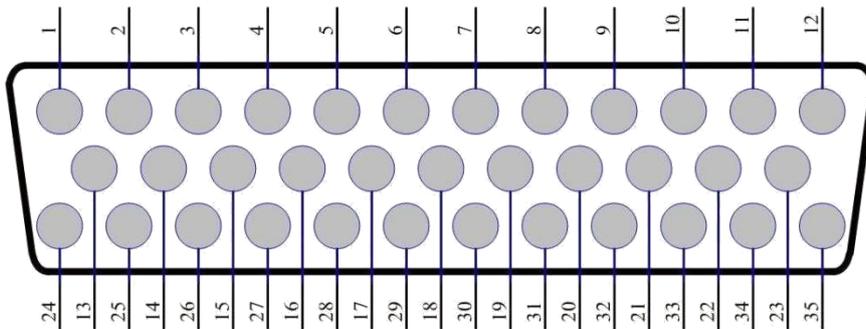
Recommended matching cable size: 25-35 square millimeters.

Screw size M6*20, the installation torque for the screws is $7\text{ N} \pm 1.4\text{ N}$.

3.1.2. Wiring Definition

No.	Definition
B+	The positive terminal of the power supply is generally connected to the output terminal of the main contactor.
B-	Power supply negative terminal, connected to the negative terminal of the storage battery
U	Connect the U-phase of the motor.
V	Connect the V-phase of the motor.
W	Connect the W-phase of the motor.

3.1.3. Terminal Model and Pin Definition



Connector model: AMPSEAL-35P(P/n-1-776163-1), Plug type: (P/n-1-776164-1)

Terminal No.	Function	Voltage Range	Terminal No.	Function	Voltage Range
1	Throttle Signal Input	0-5V	19	Grounding	0V
2	Digital Signals/Analog Signals	Reserved	20	Digital Signals	
3	Cruise Switch	Low effective	21	12V Power Output	12V
4	Motor Temperature	KTY84-130	22	CAN-H	/
5	Grounding	0V	23	CAN-L	/

6	Grounding	0V	24	P Gear	Low effective
7	Grounding	0V	25	Magnetic Encoder A	0/5V
8	Side Stand Power	5V	26	Digital Signals/Analog Signals	Reserved
9	Throttle Power	5V	27	R Gear	Low effective
10	Electric Door Lock	96V	28	Magnetic Encoder PWM	0/5V
11	Contacto Coil Power Supply Positive	96V	29	Magnetic Encoder B	0/5V
12	Contacto Coil Negative	0V	30	Low-active	Low effective
13	Rotation Signal-Analog Signals	0-5V	31	High-active	72V
14	2nd Gear Forward	Low effective	32	1st Gear Forward	Low effective
15	Anti-theft Switch	Low effective	33	Magnetic Encoder Power Supply 5V+	5V
16	SPORT Gear	Low effective	34	RX	0/3.3V
17	Magnetic Encoder Z	0/5V	35	TX	0/3.3V
18	Side Stand Signal	Low effective	/		

4. Other

4.1. Design Standard:

EMC standard: EN12895:2015

4.2.Safety Standards:

EN1175-1:1998+A1:2020 、 EN (ISO) 13849-1 、 UL 583

4.3. Application Drive motor range:

PMSM