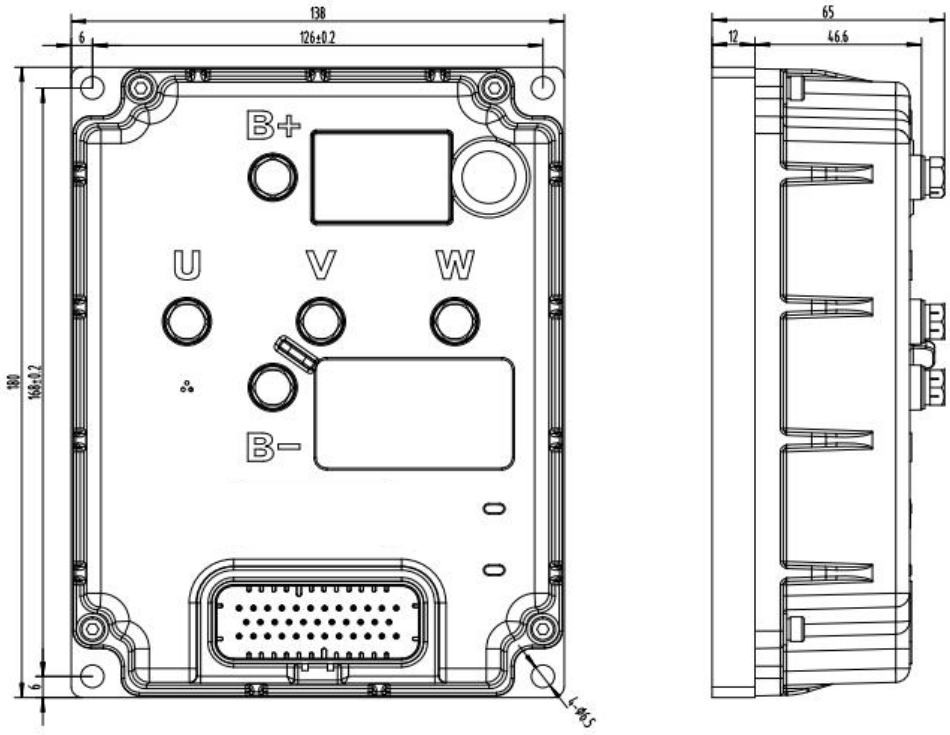
SPECIFICATION FOR INVERTER

N1

1. Product Model & Specification

Product Model	Rated Voltage	Peak Current (2min)	Rated Current (60min)	Protection Grade
SZ7230	24V	220A	110A	IP67
	36/48V	180A	90A	IP67
SZ9224	24V	320A	160A	IP67
	36/48V	280A	140A	IP67
	36/48V	320A	140A	IP67
	80V	200A	100A	IP67

2. Outline Dimension



3. Application

SZ7230/SZ9224 inverter is a inverter used to control ACIM, BLDC and PMSM. It is used in various battery-powered material handling trucks in the continuous power range from 2 kW to 5 kW. Typical applications include, without limitation, intercom trucks and pallet trucks, stackers, low-level pickup trucks, small balance trucks, and aerial equipment.

4. Interface Function

4.1. Installation and matching cable of SZ7230/SZ9224 inverter

4.1.1. Power Line Cable Selection

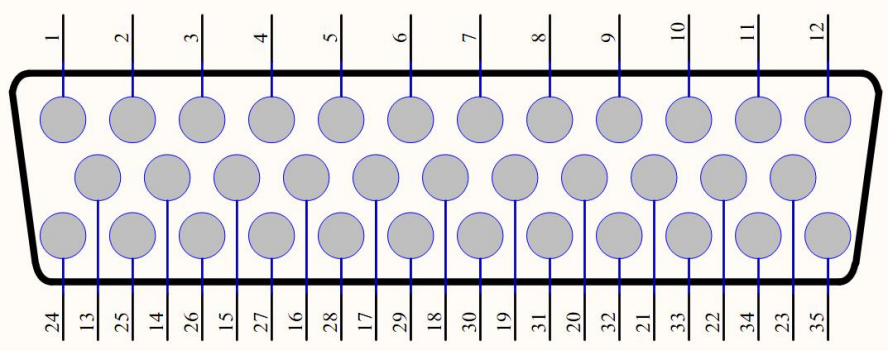
The 20-25mm^2 cable is recommended for dual drive inverter.

The size of the screw is M6*20, and the installation torque of the screw is 6N±1N.

4.1.2. Wiring Function

No.	Definition
B+	The positive pole of the power supply. It is generally connected to the output of the main contactor.
B-	The negative pole. It is connected to the negative pole of the battery.
U	Connect to the U phase of the oil pump motor
V	Connect to the V phase of the oil pump motor.
W	Connect to the W phase of the oil pump motor

4.1.3. Plug-in Terminals and Pin Definition:



The connector model AMPSEAL-35P(P/n-1-776163-1) and the plug model (P/n-1-776164-1)

SZ9224 Interface definition			
Interface NO.	**Function**	**Interface NO.**	**Function**
1	Reserved (AN1)	19	Reserved (SW2)
2	Reserved (AN2)	20	Reserved (SW3)
3	Reserved (AN3)	21	Reserved (SW5)
4	Reserved (AN4)	22	Pump temperature sensor
5	Encoder cathode	23	Reserved (SW8)
6	Driving high side (contactor coil)	24	Motor speed encoder C
7	Reserved (AN6)	25	Speed encoder positive 5V output
8	Reserved (AN5)	26	Reserved (CAN-120Ω+)
9	GND	27	CAN_L
10	Stroboscope lamp	28	CAN_H
11	GND	29	Brake coil
12	Motor 1 (contactor coil)	30	Reserved (Drive 3)
13	Motor speed encoder B	31	Reserved (Drive 4)
14	Motor speed encoder A	32	Reserved (SW4)
15	Reserved (CAN-120Ω-)	33	Reserved (SW6)
16	Reserved (CAN shield)	34	Reserved (SW7)
17	Reserved (5V output)	35	Reserved (12V)
18	KSI key input		

5. Other

Programming Platform:

IDE:STM32CubeIDE 1.5.0

Design Standards:

EMC standard: EN12895:2015

Safety Standards:

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

Applicable Motor:

ACIM / PMSM / BLDC