Auxiliary motor controller specification
One in one type-

Product model：

KTZ60W03F2

Technical features:
Compact design, small size and light weight;
Adopt die-cast aluminum structure
Adopt forced air cooling;
CAN-bus, DI interface, Optional Control mode;
It has control algorithm of three-phase AC asynchronous motor, permanent magnet synchronous motor and other types of motor;

Safety features:
Full electric isolation between high and low voltage;
High voltage cover opening interlock protection;
Protection level is high: IP67
High EMC level: CLASS3;
High reliability;

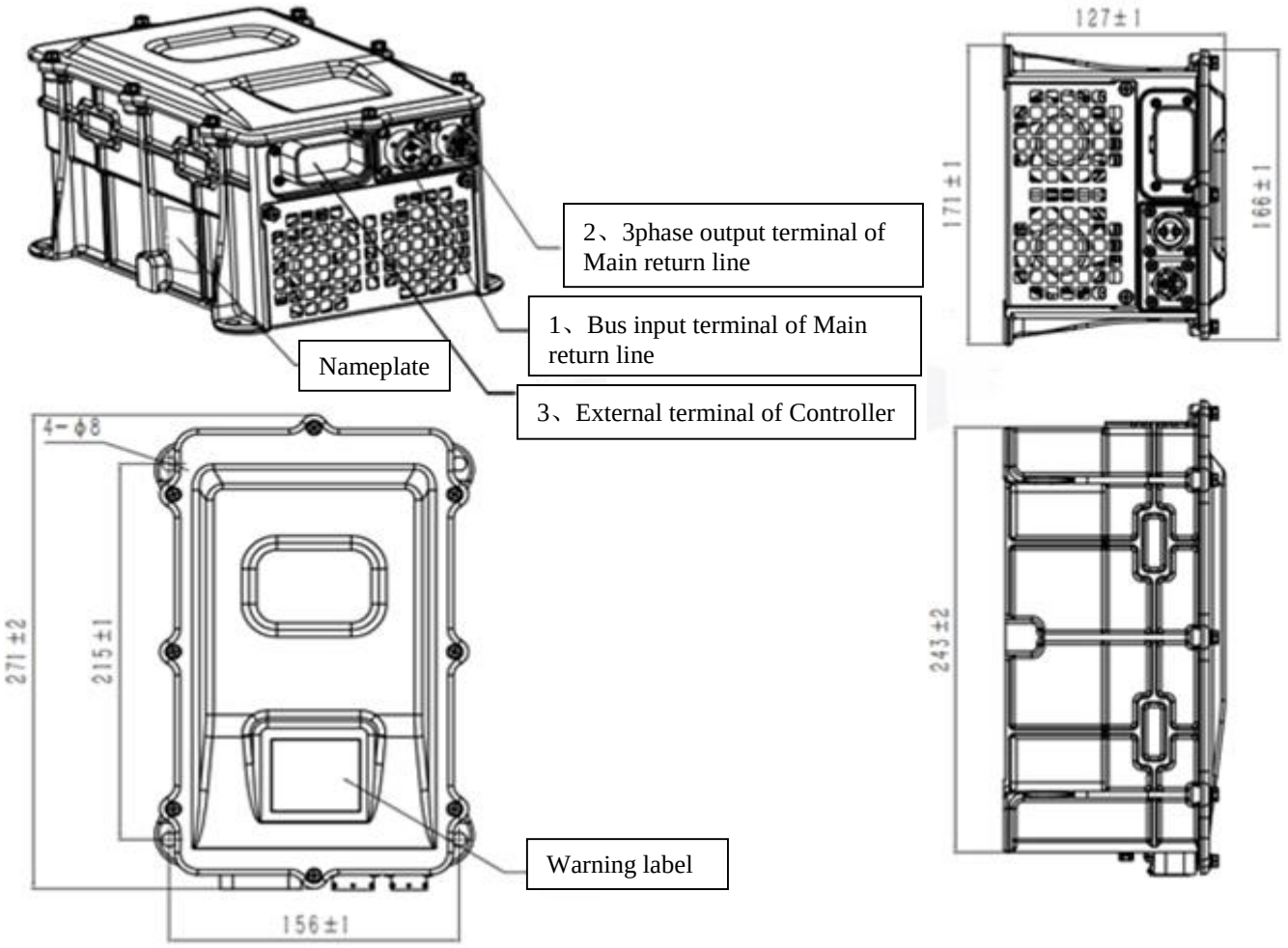
Application:
It is suitable for auxiliary parts system of pure electric or hybrid commercial vehicle and logistics vehicle. With over-voltage, under voltage, over-current, overheating, output short circuit and other fault

Main Parameters：

H-vol、L-vol Power	**KTZ60W03F2**	Unit
Low voltage range	9~32	V
High voltage range	250~750	V
High rated voltage	600	V
High minimum input voltage	250	V
Power cable specification (recommended)	2.5	mm^2
Three phase output	**KTZ60W03F2**	
Rated output current (effective value)	13	A
Maximum output current (effective value)	27.5@60s、30@30s	A
Rated output power	6	kW
Maximum output power	13	kW
Efficiency	0.97	
Ambient, mechanical	**KTZ60W03F2**	
Weight	3.5	kg
Size (length * width * height)	255*156*127	mm
Level of protection	IP67	
Cooling mode	Forced cooling	
Operating ambient temp	-40~+85	℃

Note: Low voltage range 6V~32V. Compatible with two voltage levels, low voltage 12V system, voltage range for 9V ~18V. Low voltage 24V system, voltage range to 18V ~ 32V.

Product features：



1、 Main loop terminal

1. The 23 pins on the external terminal of the controller are arranged from bottom to top. The first row corresponds to PIN1 to PIN8 from right to left, the second row corresponds to PIN9 to PIN15 from right to left, and the third row corresponds to PIN16 to PIN23 from right to left.

2. The positive and negative of the two jacks of the main circuit bus input terminal are "left negative right positive" (as shown in the figure).

3. The three jacks of the three-phase output terminal of the main circuit are corresponding: the upper right is "C" corresponding to "U", the lower bottom jack is "B" corresponding to "V", the upper left jack is "A" corresponding to "W"

1.1、Main loop terminal（External terminal of the controller）:

No.	Function	Terminal definition		Rated current	Terminal Model	Supplier
1	Bus input terminal	+		20A	C10514N1-02-3-1 G004	jonhon
		-				
2	Driver three-phase output terminal	A	W	20A	DY3F1203SNF	jonhon
		B	V			
		C	U			

1.2、Main loop terminal（External terminals）:

No.	Function	Terminal definition		Rated current	Terminal Model	Supplier
1	Bus input terminal	+		20A	C10514N1-02-1-2 G004	jonhon
		-				
2	Driver three-phase output terminal	A	W	20A	DY3T1203PNF	jonhon
		B	V			
		C	U			

2、 Control terminal and communication port

2.1、Control terminal（External terminal of the controller）:

No.	Function	Terminal Model	Supplier
3	Control signal terminal	1-1827873-0 & TE	Techo

2.2、Control terminal（User external terminals）:

Function	Terminal Model	Supplier
Control signal terminal	1-1827862-0 & TE	Techo
Matching crimp terminal	1827570-2 & TE	Techo

Define of terminals:

2.2Control signal terminal definition

Pin No.	Definition	Description
PIN 1	12V/24V+	low-voltage power supply
PIN 2	12V/24V-	Low voltage ground
PIN 3		
PIN 4		
PIN 5		
PIN 6	CAN_H_B	Link VCU
PIN 7	CAN_L_B	Link VCU
PIN 8	COM	CAN ground
PIN 9	DI1	Digital signal input 1, reserved
PIN 10	DI2	Digital signal input 2, reserved
PIN 11	COM	Digital signal enters the ground
PIN 12		
PIN 13	CAN_H_A	Monitor the debugging
PIN 14	CAN_L_A	Monitor the debugging
PIN 15	COM	CAN ground
PIN 16	DO1	Digital signal output 1, reserved
PIN 17	DO2	Digital signal output 2, reserved
PIN 18	COM	Digital signal enters the ground
PIN 19		
PIN 20	PT1+	Motor temperature signal + reserved
PIN 21	PT1-	Motor temperature signal - reserved
PIN 22	PT2+	Oil temperature signal + reserved
PIN 23	PT2-	Oil temperature signal - reserved