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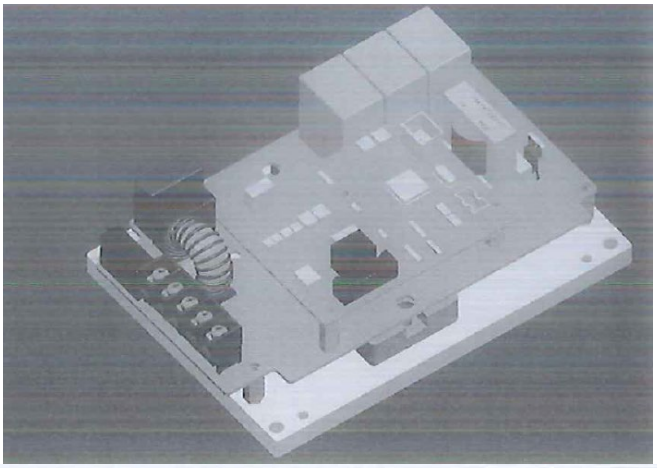
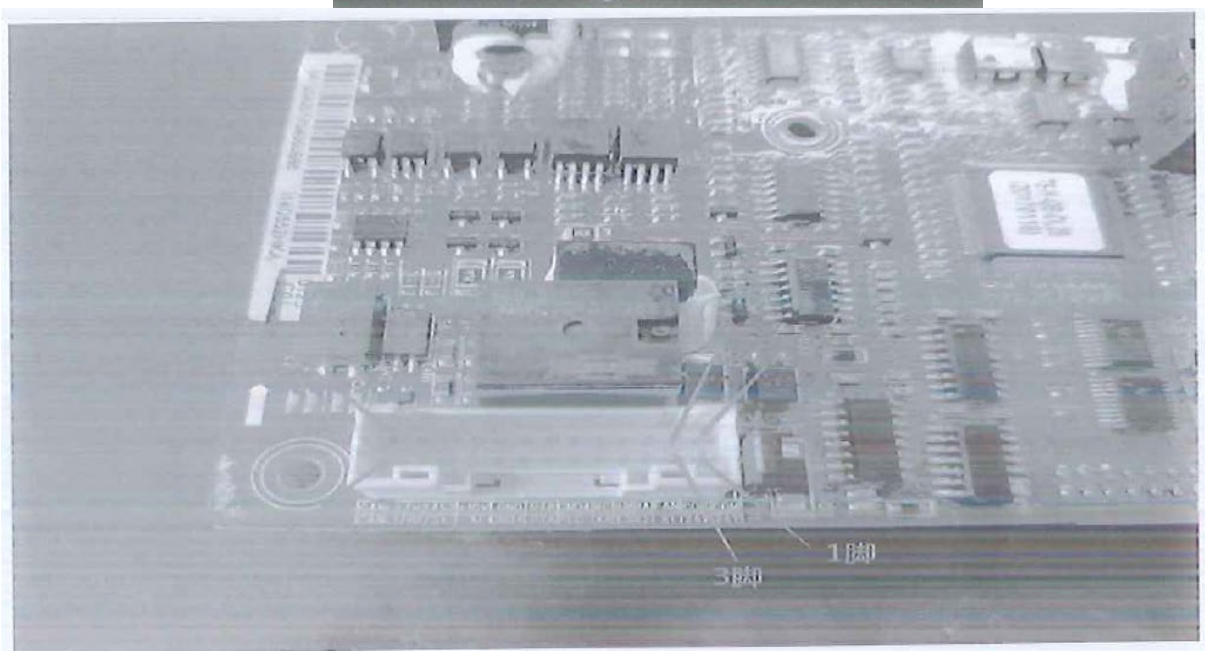
7.5KW DC/AC Auxiliary Inverter Module

Model No. ATM7K5-540S24M-V6H4D7.5G

Specifications





Weight:≤ 1.4KG

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1 Product reference standards:

☐ Comply with GB/T18488.1-2015 "Technical conditions for motors and controllers for electric vehicles"

☐ Comply with GBT 18655-2010 Vehicles, ships and internal combustion engines Radio disturbance characteristics Limits and measurement methods for protecting on-board receivers

☐ Comply with GB/T18488.2-2015 "Test methods for motors and controllers for electric vehicles"

☐ Comply with GB4942.2-1993 "Protection levels for low-voltage electrical enclosures"

2 Basic technical parameters of the product

project	Specifications	Remark
DC supply voltage range	DC 350V—750V	
Controller communication mode	CAN 2.0	Support: 250kbps/500kbps
System low voltage control power supply	Scope：DC 9-36V	The low voltage power platform (12V or 24V) must be specified in the supplementary agreement
Precharge circuit	Controller comes with pre-charge	
Low voltage power consumption	≤12W	Rated operating conditions
Heat dissipation	0.2KW	Rated operating conditions
dimensions	185*132*66	mm
Controller weight	1.4	kg

2.1 Specific technical specifications:

DC/AC Control Module：

name	Performance parameters	Remark
Rated power (kW)	7.5KW	
Peak power (kW)	12KW	
Applicable motor	Permanent magnet synchronous motor/three-phase AC asynchronous motor	
Rated output current	17A	
Peak output current	26A	60S
efficiency	≥93%	Rated operating conditions

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Overload capacity	150% 1 minute; 180% 10 seconds; 200% 0.5 second intervals 10 minutes	Inverse time characteristics
Speed control range	1:100	Open loop speed mode
Other features	CAN control, hard-wire control, CAN/hard-wire switching control, speed control, speed limit, torque limit, self-learning, fault reset, and host computer software functions.	
Protection function	Over-temperature, overload, phase short circuit, over-current, over-voltage, under-voltage, phase loss, stall, load sudden change during operation, etc., can be stopped immediately to protect the main body from damage.	

3.Product use conditions

3.1 Operating environment and storage environment

☐ Working environment temperature: -40℃～+55℃

☐ Operating relative humidity: 5%～95%, no condensation allowed

☐ Altitude: Maximum working altitude 4000 meters

☐ Allowable storage environment temperature: -40℃～+85℃

☐ Allowable storage relative humidity: 5%～95%, no condensation allowed

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4. Product performance description

4. 1 Low voltage interface definition

	Pin No.	Client interface definition	Controller side definition	Remark)
Control harness interface X3 Client plug-in WY20-J12-TE plug	1	Hardwire Enable	X1	High effective (operation signal
	2	spare	X2	Reserved (Low Active)
	5	ON gear 12V+/24V+	X3	High effective (key signal
	4	GND	VIN-	Compatible with 12V, 24V

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	3	PT100+	PTA	Temperature detection optional
	12	PT100-	PTA-GND	
	6	Pressure switch signal	AI	Reserve
	7	Pressure switch signal ground	VIN-	Reserve
	9	Vehicle CAN H	CANH	No 120Ω terminal resistor
	10	Vehicle CAN L	CANL	
	11	ACC gear 12V+/24V+	VIN+, fan positive	Compatible with 12V, 24V

Remark:

1. X3 is the key signal;
2. Support CAN and hard-line control (CAN control gives priority to (autonomous switching) hard-line control, the specific control strategy shall prevail);
3. The cooling fan is controlled by software. RH3 outputs a low battery signal. The motor runs and the fan starts. The motor stops and the fan stops after 30 seconds;
4. Low is effective (0≤U≤1V), high is effective (9≤U≤36V);
5. The hardware is compatible with 12V or 24V. The fan needs to distinguish between 12V and 24V.

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Dimension: