



Model No. : AR-1K5-540/380S14-A-AR01
Product Name : 1.5KW DC/DC Converter System



1.5KW DC/DC Converter Fan cooling System
1.5KW DC/DC Converter Module Only

Features

- 1 Output Power : 1.5KW
- 2 Input Voltage : 250~450VDC/400~750VDC
- 3 Output Voltage : 13.8VDC
- 4 Dimensions : 335x185x120mm
- 5 Cooling System : Fan
- 6 Protection Level : IP67 (Except for fans)
- 7 Communication Method : CAN
- 8 Enclosure: Aluminum alloy made
- 9 Software: Digital software design

Applications



Electric Passenger Vehicles Electric Commercial Vehicles

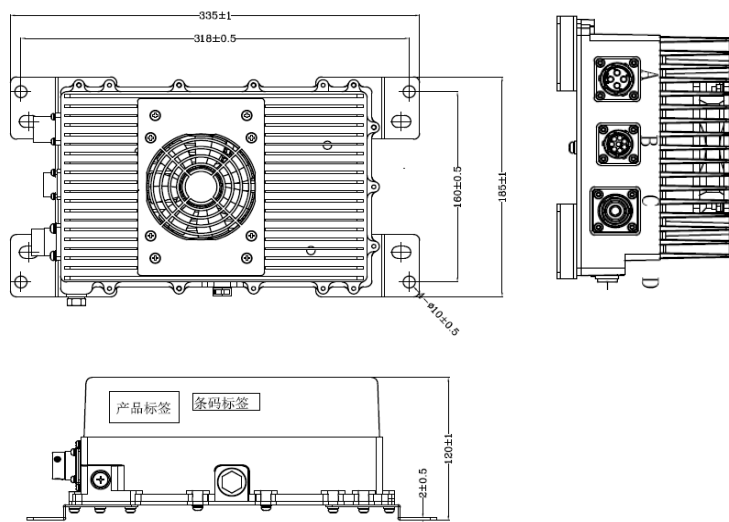
Specification

Description		Technical specifications	Remark
Operating temperature		-40~85°C	85~100°C · Can be derated to 40% of work
Rated output power		1.5KW (continuous operation at full load)	Peak power 1.8KW
Input voltage range		250~450VDC/400~750VDC	
Output rated voltage		13.8VDC	12~16 Adjustable
Rated output current		108A	
Auxiliary power VCC		9~18VDC	
Efficiency		≥ 94%	Rated voltage Full load
Output voltage ripple		≤ 500mV _{PK-PK}	
Protection characteristics		Input over-voltage, output over-voltage, input anti-reverse connection, output over-current and short-circuit protection, over-temperature self-recovery	
Over temperature protection		The bottom plate temperature reaches 85 °C and starts derating output. The temperature exceeds 100 °C, shutting down; the temperature is lower than 95 °C, which can be self-recovery.	
Dielectric strength	Input to output	3000VDC/1min 1mA max	
	Input to the outer casing	3000VDC/1min 1mA max	
Insulation resistance	Input to output	≥ 20MΩ	
	Input to the outer casing	≥ 20MΩ	
Battery compatibility	Radiation emission	GB/T 18655-2010 Class 3	
	Conducted emission	GB/T 18655-2010 Class 3	
	Static immunity	GB/T 19951-2005	Air discharge : 15KV · Contact discharge 8KV
	Radiation immunity	GB/T 18655-2010 Class 3	
	High current injection	GB/T 17619-1998	
	Fast burst immunity	GB/T 17626.4-2008 1KV	



Model No. : AR-1K5-540/380S14-A-AR01
 Product Name : 1.5KW DC/DC Converter System

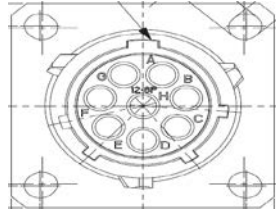
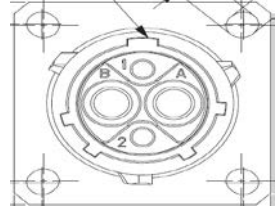
Structural parameters



Connector model

Position	Socket model	Function	Brand	Plug model
A	RT00122PN03	DC input	Amphenol	RT06122SNHEC03
B	RT00128PN03	Control terminal	Amphenol	RT06128SNHEC03
C	RTHP0141PN-H1	Output positive	Amphenol	RTHP6141SNH-25PS2
D	M8 bolt	Output negative	\	M8 Screw

Interface definition

Vendor	Model	Description		Remark
Amphenol	RT00128PN03	A	NC	
		B	CANL	
		C	CANH	
		D	Shielded wire	
		E	GND	
		F	NC	
		G	NC	
		H	Enable	
Amphenol	RT00122PN03	A	Input positive	
		B	Input negative	
		1	Interlock 1 connection 2	
		2	Interlock 2 connection 1	
Amphenol	RTHP0141PN-H1	+	Output positive	