

Model No. : ATD2K5-380S14-W
 Product Name : 2.5KW DC/DC Converter Liquid



Features

- 1 Output Power : 2.5KW
- 2 Input Voltage : 250-450VDC
- 3 Output Voltage : 14VDC
- 4 Dimensions : 268x220x75mm
- 5 Cooling System : Liquid
- 6 Protection Level : IP67
- 7 Communication Method : CAN
- 8 Enclosure: Aluminum alloy made
- 9 Software: Digital software design

2.5KW DC/DC Converter Liquid cooling System

Applications



Electric Passenger Vehicles Electric Passenger Vehicles

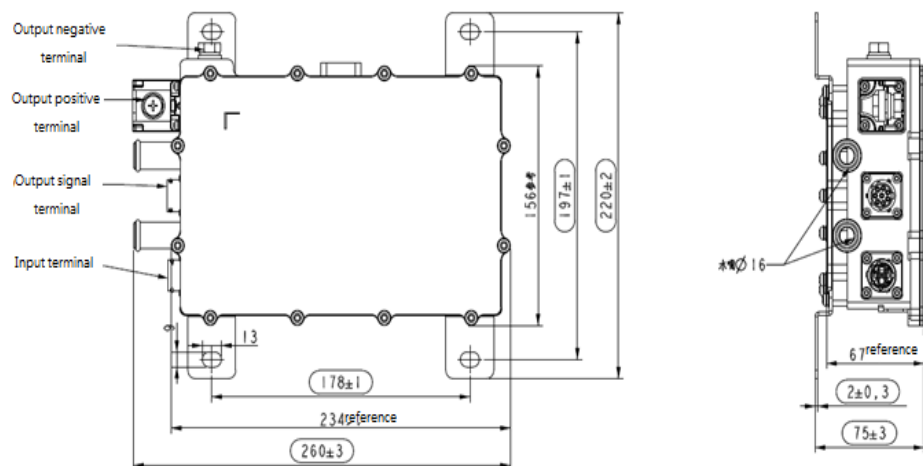
Specification

Description		Technical specifications	Remark
Operating temperature		-40~85°C	85~100°C · Can be derated to 40% of work
Rated output power		2.5KW	
Input voltage range		250 -450VDC	Optional
Output rated voltage		14VDC	9~16 Adjustable
Rated output current		175A	
Auxiliary power VCC		6-18VDC	
Efficiency		≥95%	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	2500VDC/1min 1mA max	
	Input to the outer casing	2500VDC/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	
CAN byte speed		250Kbps/500Kbps	



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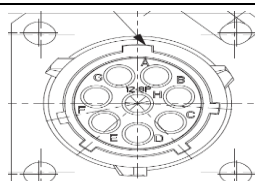
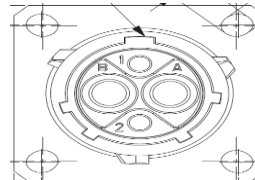
Structural parameters



Connector information (customizable)

Position	Socket model	Function	Brand	Plug model
A	RT00128PN03	Control terminal	Amphenol	RT06128SNHEC03
B	RT00122PN03	DC high voltage terminal	Amphenol	RT06122SNHEC03
C	ACTB117-C	Output positive	Connet	M8 Specification copper ear
D	M8 Bolt lock housing	Output negative	\	M8 Specification copper ear

Interface definition (for reference)

Vendor	Model	Description		Remark
Amphenol	RT00128PN03	A	CAN-H	
		B	CAN-L	
		C	KEY (Highly effective) Reserved	
		D	VCC+	
		E	GND	
		F	NC	
		G	NC	
		H	NC	
Amphenol	RT00122PN03	A	Input positive	
		B	Input negative	
		1	Interlock 1 connection 2	
		2	Interlock 2 connection 1	

