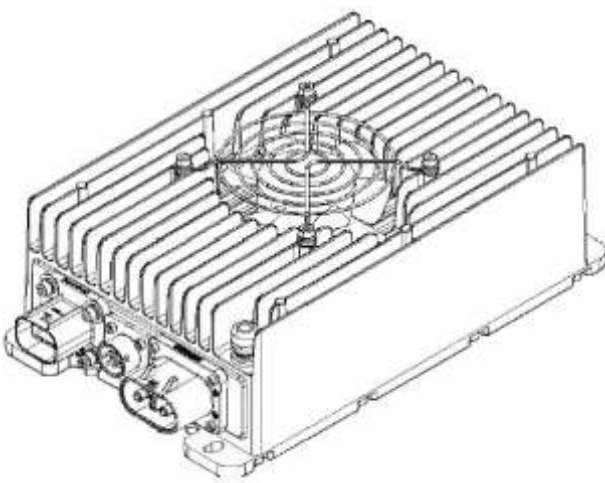


Input DC 240-360V Output 1.8KW DC/DC Converter Fan Model No. ATRD1K8-307S14F

	Features 1 Output Power: 1.8KW 2 Input Voltage Range(VDC): 240-360 3 Rated input Voltage(VDC):307 4 Output Voltage Range(VDC): 0~16 5 Rated Output Voltage(VDC): 14 6 Output Current Continuous(A): 110 7 Dimensions(mm): 292 x 168 x 93 8 Weight(KG): $\leq 3.5 \pm 0.3$ 9 Cooling System: Fan 10 IP Rating: IP67 11 CAN compatibility: CAN2.0 B SAE J1939 12 Enclosure: Aluminum alloy 13 Isolated: Supported 14 Software: Digital software design 15 Online Upgrade & Fault Diagnosis: Supported
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Specification

Description		Remark
Input Voltage Range (VDC)	240-360	
Rated Input Voltage (VDC)	307	Adjusted as per requirement
Output Voltage Range(VDC)	0-16	
Rated Output Voltage(VDC)	14 $\pm$ 0.2	Adjusted as per requirement
Output current continuous(A)	110	
Output current(A) Max.	128@30min	150A@30sec(2.1KW)
Efficiency	$\geq 92\%$	Rated input voltage, load $> 30\%$
Output Voltage Ripple	$\leq 200\text{mVp-p}$	
Output Voltage Accuracy	$\pm 1\%$	
Output Load Regulation	$\pm 2\%$	
Output Line Regulation	$\pm 2\%$	
Communication Method	ISO 11898-2	
Quiescent Current	$< 100 \mu\text{A}$	Battery current will be consumed in sleep/standby mode
Isolation	supported	

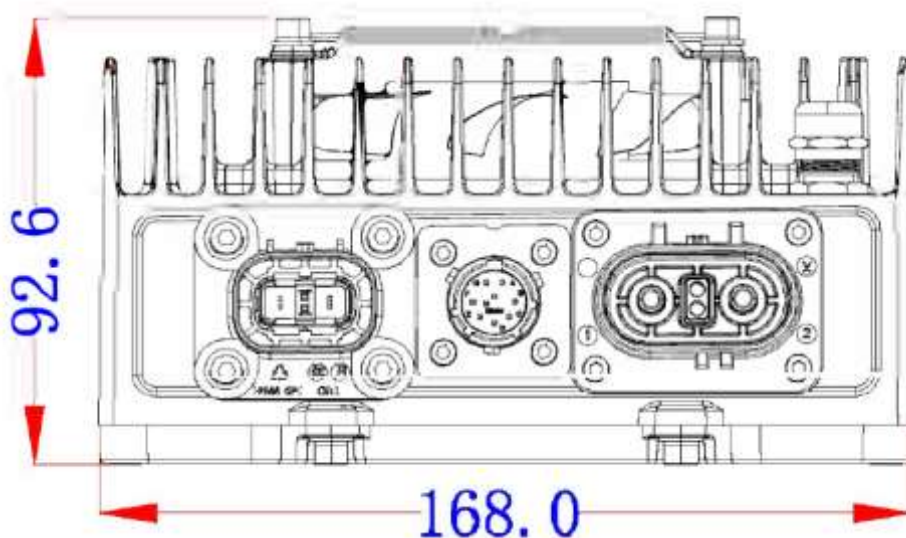
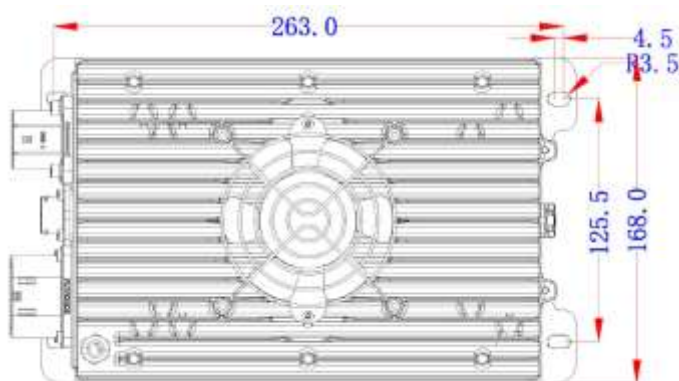
Operating Environment

The operating environment conditions of this assembly are as follows:

Items	Descriptions		Remark
1.	Operating Temperature($^{\circ}\text{C}$)	-40~85	The power will be derated when the temperature exceeds 65°C
2.	Storage Temperature($^{\circ}\text{C}$)	-40~95	
3.	relative humidity(%RH)	5~95	No condensation, no frost



4.	Protection level	IP67	
5.	Cooling method	Fan	
6.	Vibration level	ISO 16750-3,2012 (E)	After X,Y,Z three directions of sweep frequency vibration testing, no damage for parts , no loose for fastening piece
7.	Noise level(dB)	<60	
8.	Salt spray level	GB/T 2423.17	
9.	Altitude(M)Max	3000	GB/T16935.1-2008
10.	Fall	Wiring harness according to QC/T417.1-2001 Housing according to GB/T 2423.8-1995	Appearance, structure and performance are normal
11.	Protection Characteristics	OTP& OVP & UVP& SCP	
12.	Electromagnetic immunity	GB/T17619-1998 chap4	
13.	Electromagnetic disturbance	GB18655-2002chap 12 chap14	

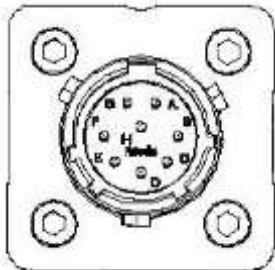
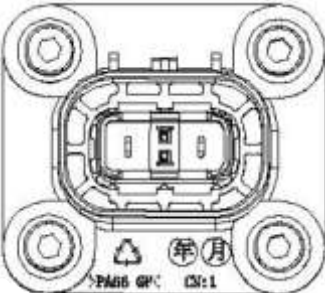
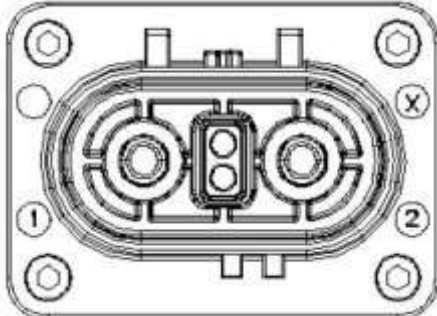




Connector Model

Position	Function	Brand	Socket Model	Plug Model
1	Signal control	Huzheng	FPT20N21208PN	FPT60N21208SN
2	HV DC input	Recodeal	RED-T2PAH-2.5-A	RED-Z2PAH-2.5-A
3	Output +	Huzheng	FHV221268CX-UM61J	FHV601268CX-35U02J
4	Output -			

Interface Definition

Signal Control(1)		HV DC Input(2)		Output Positive(3)	
					
A	CAN L	1	Input +	1	Output +
B	CAN H	A	HVIL_IN	2	Output -
C	12V+ Enable	2	Input -		
D	12V-OUT	B	HVIL_OUT		
E	HVIL				
F	HVIL				