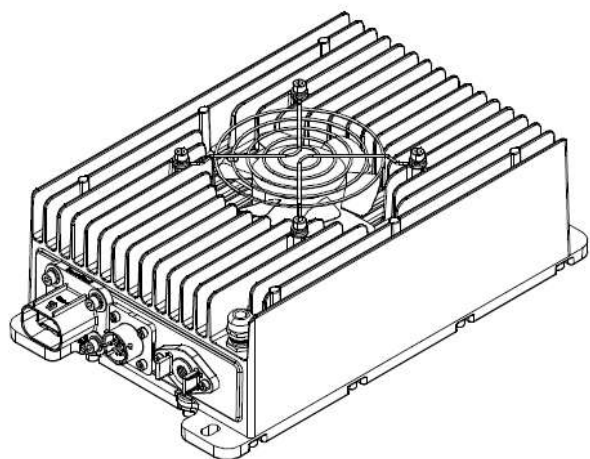


3.3KW On Board Charger Fan Cooled System

Product Portfolio

Items	Model No.	Input Voltage Range(Vac)	Rated Output (Vdc/A)	Output Voltage Range(Vdc)	Output Current Range(A)
1	ATRC3K3-24100F	90-265	24/100	0-36	0-100
2	ATRC3K3-4860F	90-265	48/60	0-68	0-60
3	ATRC3K3-7245F	90-265	72/45	0-95	0-45
4	ATRC3K3-10830F	90-265	108/30	0-140	0-30
5	ATRC3K3-14422F	90-265	144/22	0-200	0-22
6	ATRC3K3-36009F	90-265	360/9	0-500	0-10
7	ATRC3K3-54006F	90-265	540/6	0-720	0-6

The model no. will be added +I for charge mode IEC, +S for charge mode SAE



Features

- 1 Output Power(KW): 3.3
- 2 Input Voltage Range (VAC): 90~265
- 3 Isolated: supported
- 4 Dimensions(mm): 291.2 x 168 x 92.6
- 5 Weight(KG): $\leq 6.5 \pm 0.5$
- 6 Cooling System: Fan
- 7 Protection Level: IP67
- 8 Communication Method: CAN-BUS SAE J1939
- 9 Enclosure: Aluminum alloy
- 10 Software: Digital software design
- 11 Online Upgrade & Fault Diagnosis: Supported

Specification

Description	Technical Specification	Remark
Input Voltage Frequency(Hz)	45~65	
Rated Input Voltage Frequency(Hz)	50 / 60	PLEASE REQUEST WHEN PLACE ORDER
Initiation Inrush Current(A)	≤ 16	
Input Power Factor	≥ 0.99 (@380Vin, Pomax)	
Voltage Regulation Accuracy(%)	± 1	
Current Regulation Accuracy(%)	$\pm 0.5A$ ($I_o \leq 10A$) & $\leq \pm 5\%$ ($I_o > 10A$)	
Output Response Time(mS)	≤ 200	
Efficiency	$\geq 93\%$	Rated voltage
Low Voltage Wakeup	200mA max (wakeup signal)	
Wakeup Method	PP/CP, EN(hardwire)	
Quiescent Current(mA)	≤ 2	Battery current will be consumed in sleep/standby mode



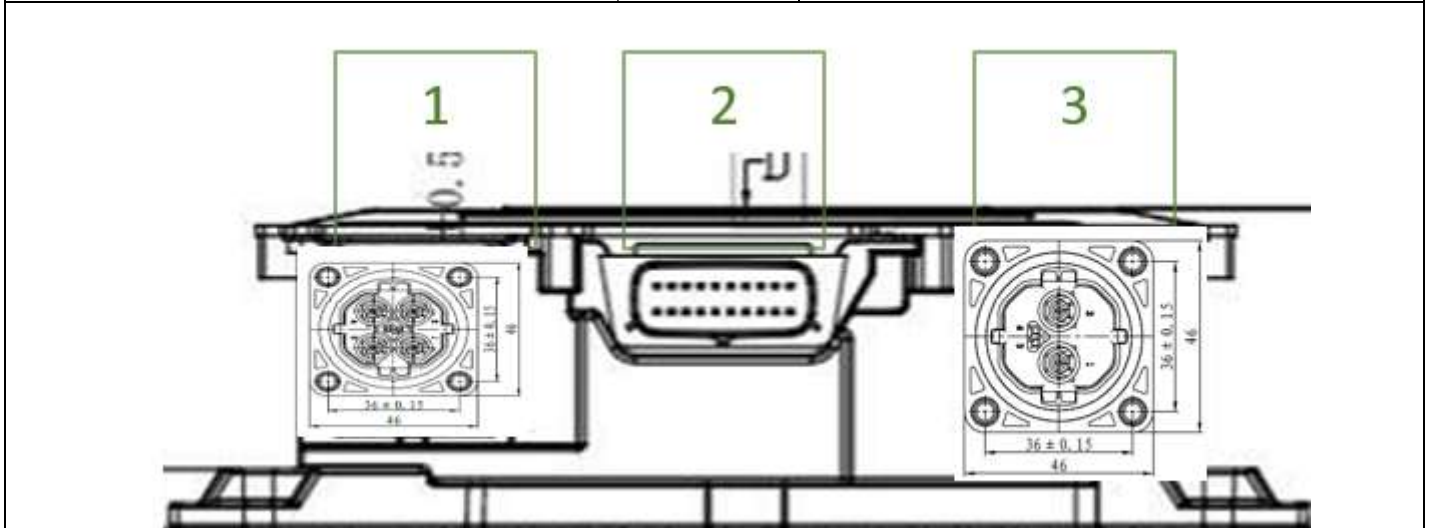
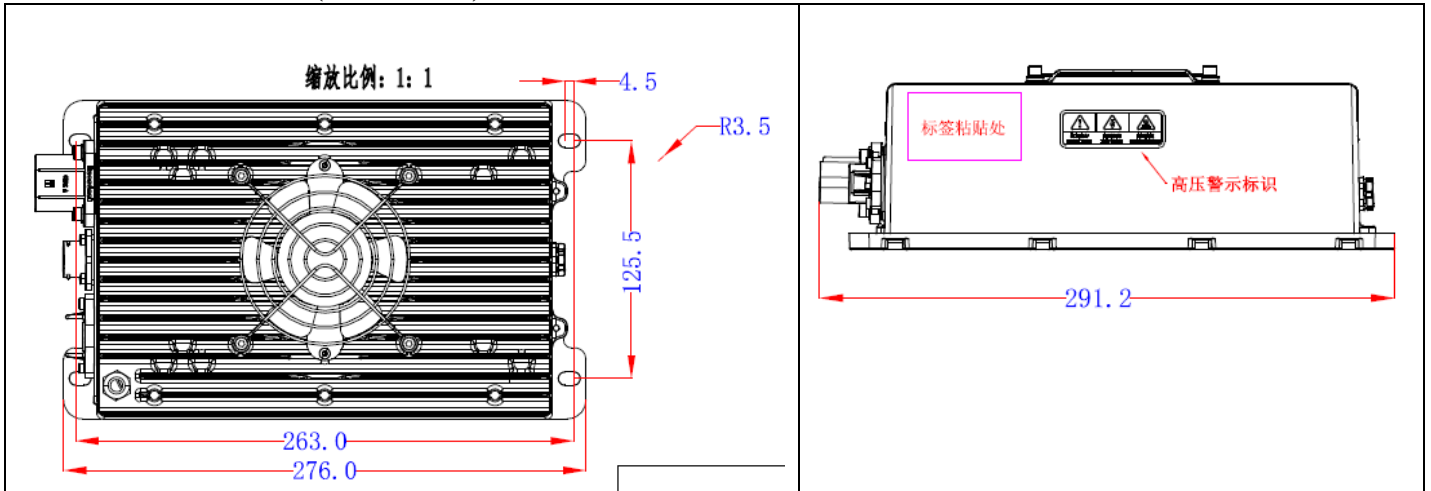
Operating Environment

The operating environment conditions of this assembly are as follows:

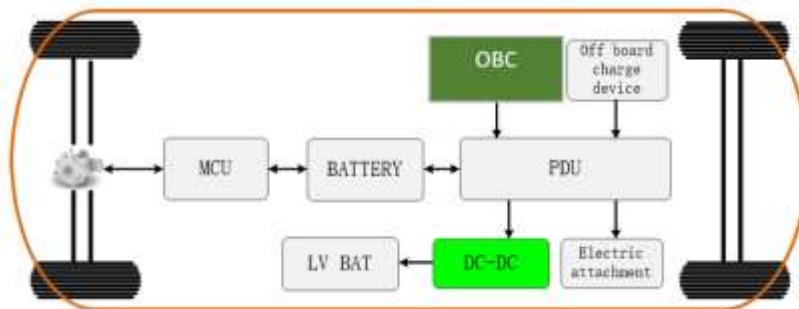
Items	Descriptions		Remark
1.	Operating Temperature(°C)	-40~65	The power will be derated when the temperature exceeds 65°C
2.	Storage Temperature(°C)	-40~95	
3.	relative humidity(%RH)	5~95	No condensation, no frost
4.	Protection level	IP67	
5.	Cooling method	Fan	
6.	Vibration level	ISO 16750-3,2012 (E)	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.	Dielectric strength	Primary edge - Secondary edge 2000VAC	Primary edge , Secondary edge-Housing edge 1500VAC
10.	Durability	GB/T 24347-2009	
11.	Insulation resistance	Primary edge - Secondary edge $\geq 50M\Omega$	
12.	Harmonic Current	GB/T 17625.1-2003 6.7.3.1	
13.	Altitude(M)Max	3000	GB/T16935.1-2008
14.	Impact Resistance	GB/T T15139-1994 6.5	
15.	Fall	Wiring harness according to QC/T417.1-2001 Housing according to GB/T 2423.8-1995	Appearance, structure and performance are normal
16.	Protection Characteristics	Input OVP/UVP, output OVP/UVP, input anti-reverse connection, output short circuit protection, OCP, OTP	
17.	Over/under voltage protection	The system can automatically recover from both input over/under voltage shutdown and output over/under voltage shutdown.	
18.	Output reverse connection and short circuit protection	The device shuts down when the output is short-circuited or reverse-connected, but it can self-recover.	
19.	Over-temperature protection	When the heat sink temperature exceeds 75°C, the output power is reduced; when the temperature exceeds 95°C, the circuit is disconnected; the charger resumes output power when the charging temperature returns to below 85°C.	
20.	Electromagnetic immunity	GB/T 18487.3_11.3.1	
21.	Electromagnetic disturbance	GB/T 18487.3_11.3.2	



Structural Parameters (unit : mm)



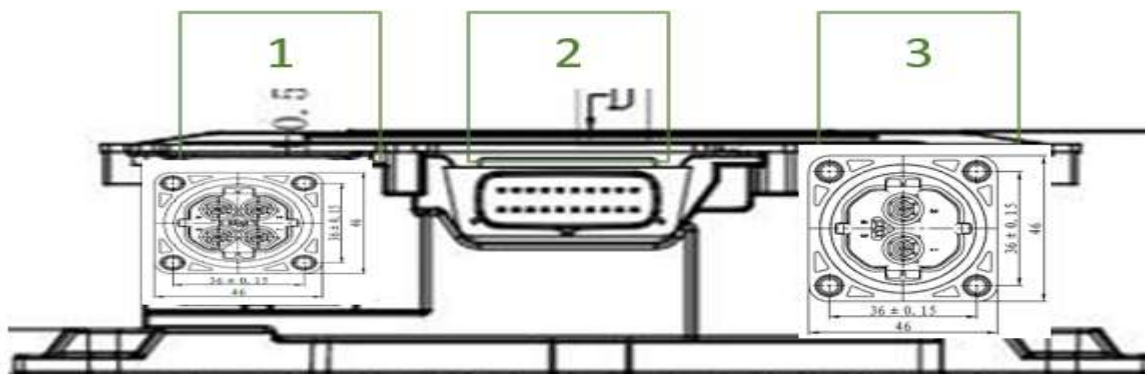
The connectors will be modified after the control parameter has been confirmed.



WIRING DIAGRAM

- **Item 1:** Signal control connects to the VCU or BMS.
- **Item 2:** AC/DC input connects to the charging inlet.
- **Item 3:** DC output connects to the PDU.

Note: The enclosure must be securely mounted onto the vehicle bracket and keep flat position.



Connector Table

No.	Model NO.	Definition				
1	REL-Z4PAH-4-A 25A 4MM2 CABLE KEY A HVIL: WITH	1	Mains Phase L1_3 WIRES	AC INPUT 		
		2	Mains EARTH			
		3	Mains Phase L2 or NEUTRAL			
		4	N/C			
		A	INTERLOCK+			
		B	INTERLOCK-			
		Brand or Maker			Recodeal	
		PLUG Model No.			REL-T4PAH-4-A	
2	1-776228-1	1	K31-Batt Neg			
		2	K30-Batt Pos			
		3	CAN L			
		4	CAN H			
		5	CAN Shield			
		6	N/A			
		7	HVIL+			
		8	HVIL-			
		9	N/A			
		10	CAN2L(inside can for debug)			
		9-15	N/A			
		16	K15- Ignition			
		17	CAN2H(inside can for debug)			
		18-23	N/A			
		Factory			TE	
		Cable side			770680-1	
3	REL-Z2PAH-10-A 60A 10MM2 CABLE KEY A HVIL: WITH	1	DC Output +			
		2	DC Output -			
		3	INTERLOCK+			
		4	INTERLOCK-			
		Brand or Maker			Recodeal	
		PLUG Model No.			REL-T2PAH-10-A	