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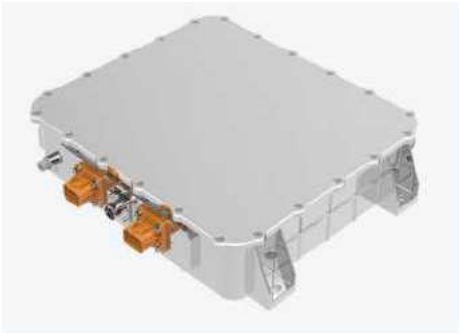
50KW – 10KW DC/DC Converter Bidirectional liquid
Model No. ATRDB50KS10K-360S736W



Features

1. Input Power(KW): 50
2. Input Voltage Range(VDC): 200-500
3. Input Current Range(A): 100-250
4. HV Bus Voltage Range(VDC): 550-850
5. Nominal HV Bus Voltage(VDC): 736
6. HV Current Range(A): 14-18
7. Cooling System: Liquid
8. IP Rating: IP67
9. CAN compatibility: CAN2.0 B
10. Enclosure: Aluminum alloy
11. Isolated: Non Supported
12. Software: Digital software design
13. Online Upgrade & Fault Diagnosis: Supported

Specification

Description		Remark
Efficiency	≥97%	Rated input voltage, load＞30%
Output Voltage Accuracy	±1%	
Communication Method	CAN 2.0 BUS	
Isolation	Non supported	

Operating Environment

The operating environment conditions of this assembly are as follows:

Items	Descriptions		Remark
1.	Operating Temperature(℃)	-40~85	The power will be derated when the temperature exceeds 65℃
2.	Storage Temperature(℃)	-40~95	
3.	relative humidity(%RH)	5～95	No condensation, no frost
4.	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
5.	Noise level(dB)	< 60	
6.	Salt spray level	GB/T 2423.17	
7.	Altitude(M)Max	3000	GB/T16935.1-2008
8.	Fall	Wiring harness according to QC/T417.1-2001 Housing according to GB/T 2423.8-1995	Appearance, structure and performance are normal

Version: V0.0 Date: 2026/06/15
File No.: SDCB-Q033--0

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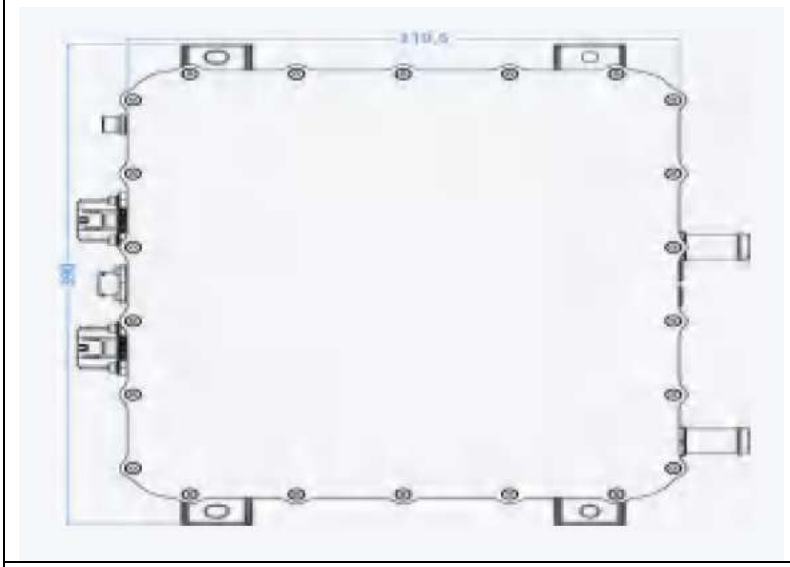
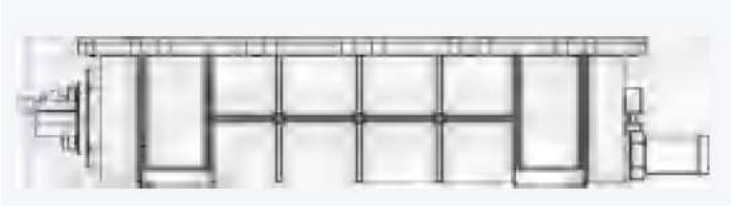
9.	Protection Characteristics	Input OVP/UVP, output OVP/UVP, input anti-reverse connection, output short circuit protection, OCP, OTP	
10.	Electromagnetic immunity	GB/T17619-1998 chap4	
11.	Electromagnetic disturbance	GB18655-2002chap 12 chap14	





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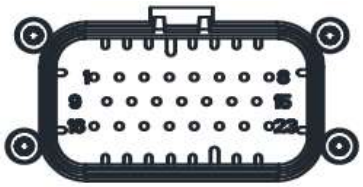
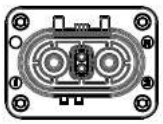
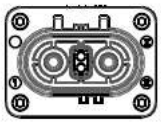
Connector Model: Adjustable as per requirement Connector Model

Position	Function	Brand	Socket Model	Plug Model
1	Signal control	TBD		
2	HV DC input			
3	HV BUS Output			
4				

Interface Definition

Signal Control(1)		HV DC Input(2)		HV BUS Output (3)	
					
1	CANH	1	INPUT + 20MM2	1	OUTPUT + 20MM2
2	CANL	2	INPUT – 20MM2	2	OUTPUT – 20MM2
3	Enable(out)	3	HVIL +	3	HVIL +
4	GND	4	HVIL -	4	HVIL -
5	TBD				
6	TBD				
7	WAKEUP IN				
8	BAT+				
9	BAT-				

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File No.: SDCB-Q033--0