

REVISION	DATE ISSUED(DD/MM/YY)	DESCRIPTION	PM
V0	11/09/2021	First edition	ALISA CHEN

2 in 1 2.5kW DCDC+6.6kW OBC with inverter Mode

MODEL NO.: LWD2K5C6K6-D14C380-W

Electrical characteristics

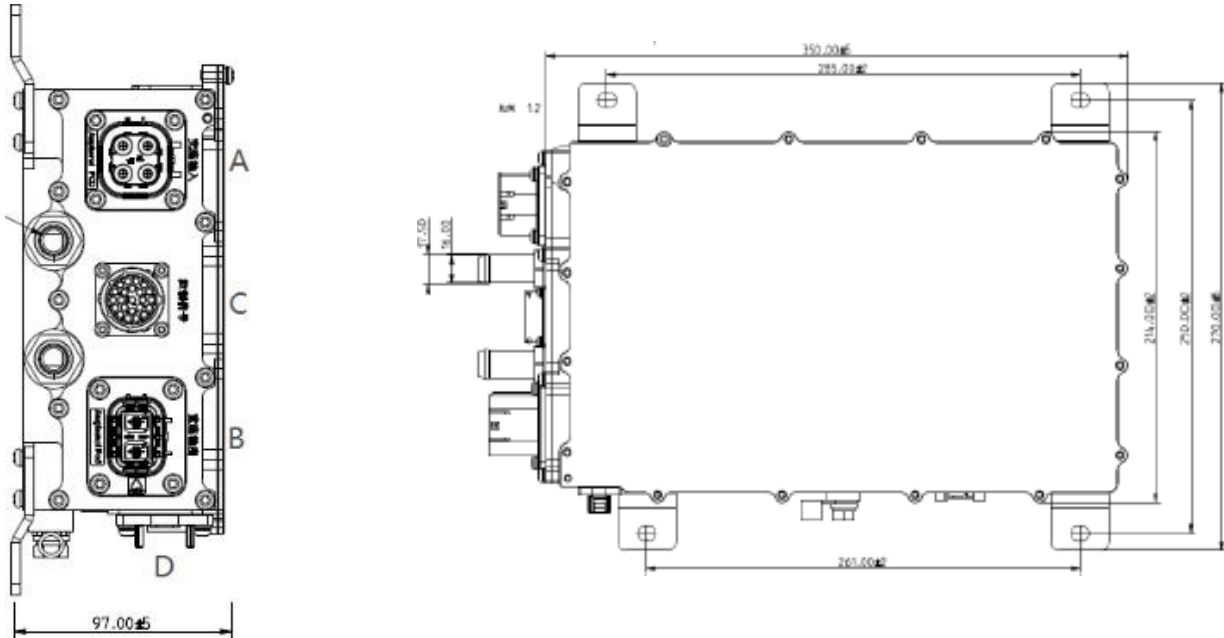
Specifications	Parameters	Remark
OBC Charging mode		
Rated output power	6.6KW	
Input voltage range	90-264VAC	
Input Current	32A Max	
Power factor	≥ 0.99 (220Vac, Fully loaded)	
Output voltage range	200-450VDC	Can be configured according to customer's actual battery
Max output current	22A	
Efficiency	$\geq 95\%$	Rated voltage
Voltage accuracy	$\pm 1\%$	
Current accuracy	$\pm 1\%$	
Inverter mode		
Input voltage range	240-450VDC	
Output voltage	220Vac($\pm 5\%$)/50Hz	
Power	6.6kVA	
Efficiency	$\geq 94\%$	
Output harmonic distortion (THDv)	$< 3\%$ (Linear load)	
Dynamic Response	60ms (Linear load)	
Leakage current protection threshold	$\leq 30\text{mA}$	
DC/DC mode		
Input voltage range	200-450VDC	
Input current range	$< 16\text{A}$ @240Vdc full load	
Efficiency	$\geq 94\%$	



Output voltage range	9-16V	
Rated output voltage	14V	
Rated output current	180A	
Rated power	2.5KW	
Peak power	3.0KW	
Voltage ripple	250mV Max	
Others		
Low voltage wake up	12Vdc&200mAmax (WAKE_UPSignal)	WakeBMS/VCU
Wake-up method	CAN、AC、CC/CP	Support scheduled charging
Communication method	CAN-BUS	
Quiescent Current	≤1mA	Consume battery current in sleep/stop state.
Protection characteristics	Input over-voltage, output over-voltage, over-temperature protection, over-current protection, Output short circuit protection, communication fault protection	
EMC characteristics	GB/T18387-2008, EN 55022	
Operating temperature	-40-85°C	
Dimensions	350x214x97mm	
Protection level	IP67	
Cooling method	Liquid cooling, flow≥6L/min	
Weight	≤9KG	

Structural Parameters

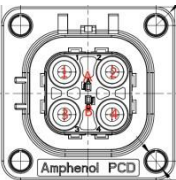
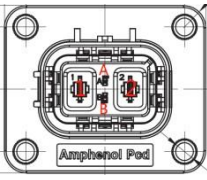
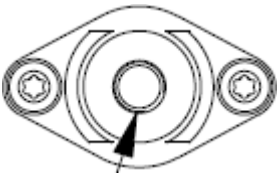
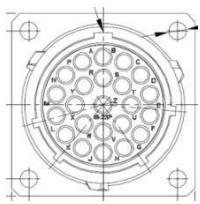
Dimensions (mm)	350x214x97mm
Weight (KG)	≤9KG



Connector Information

Position	Pinout definition	Maker	Receptacle model no.	Plug model no.
A	AC input	Amphenol	HVSL364024A	HVSL364064A106I
B	DC output	Amphenol	HVSL630022A106	HVSL630062A10610
C	Signal control	Amphenol	RT001823PN03	RT061823SNHEC03
D	Low voltage output	Guoweitong	GH01-F200-1NNB-T21	M8 specification copper lug

Connector pin definition (component side)

AC input (A)		DC output (B)			Low voltage output (D)		
							
1	FireWire	1	Output positive	+	Low voltage positive (35mm ²)		
2	NC	2	Output negative				
3	NC						
4	Zero line						
Signal control (C)							
							
A	CAN1-L	G	NTC1-	N	LOCK-	V	EN_DC
B	VCC+	H	NTC1+	P	LOCKFeedback 1	W	NC
C	EN_OBC	J	NTC2-	R	CC_OUT(Low resistance)	X	NC
D	CC	K	NTC2+	S	LOCKFeedback 2	Y	NC
E	CP	L	CAN1-H	T	CC_OUT_12V	Z	NC
F	WAKE_UP	M	LOCK+	U	GND		