



Combo 3KW DCDC Converter 11KW OBC Bidirectional Liquid Cooling Model No. ATD3KCB11KC-D14C380-W



Features

- 1 Output Power:
OBC: 11KW
DC/DC: 3KW
- 2 Input Voltage:
OBC: 304~456VAC(3 phase 4 wire)
DC/DC: 250~450VDC
- 3 Output Voltage:
OBC: 250~450VDC
DC/DC: 9~16VDC
- 4 Dimensions: 369x238x98mm
- 5 Weight: ≤12KG
- 6 Cooling System: Liquid, flow rate ≥10L/min
- 7 Ingress Protection Level: IP67
- 8 Communication Method: CAN-BUS
- 9 Enclosure: Aluminum alloy
- 10 Software: Digital software design
- 11 Inverter Function: Supported
- 12 Online Upgrade & Fault Diagnosis: Supported

Specification

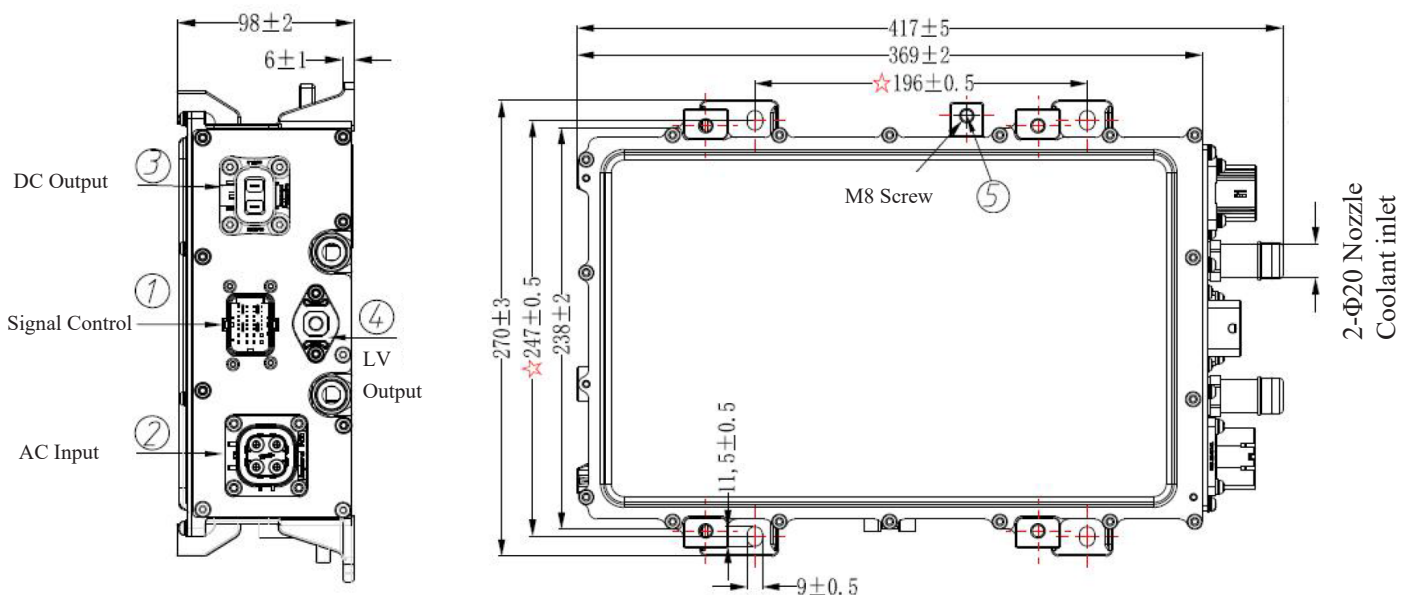
Description	Technical Specification	Remark
OBC Charging Mode		
Rated Output Power	11KW	
Input Voltage Range	304~456VAC(3 phase 4 wire)	
Input Current	32A Max	
Power Factor	≥0.99(@220VAC full load)	
Output Voltage Range	250~450VDC	Adjustable , according to battery voltage
Max Output Current	32A	
Efficiency	≥94%	Rated voltage, specific load
Voltage Accuracy	±1%	
Current Accuracy	±1%	
Inverter Mode		
Input Voltage Range	250~450VDC	
Output Voltage	220VAC(±5%, 1 phase) /50Hz	
Power	6KVA peak, 3KVA rated	
Efficiency	≥94%	Rated voltage, specific load
Output Harmonic Distortion (THDv)	<3%(Resistance load)	
Dynamic Response	60ms(Resistance load)	
Leakage Current Protection Threshold	≤30mA	



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Description	Technical Specification	Remark
DC/DC Mode		
Input Voltage Range	250~450VDC	
Input Current Range	<16A	
Efficiency	≥94%	Rated voltage, specific load
Output Voltage Range	9~16VDC	
Rated Output Voltage	14VDC	
Rated Output Current	195A	
Rated Power	2.7KW	
Peak Power	3KW	
Voltage Ripple	300mVMax	
Others		
Operating Temperature	-40~85°C	Coolant inlet temperature
Low Voltage Wakeup	200mA max , Voltage follow VCC (Wakeup signal)	Wakeup BMS/VCU
Wakeup Method	CAN, AC, DC, PP/CP, EN(Hardwire)	Support reservation charging
CAN Communication	CAN-BUS	
Quiescent Current	≤1mA	Battery current consumed in sleep/ standby mode
Protection	Input OVP, UVP, output OVP, UVP, OTP, OCP, output short circuit protection, communication fault protection	
EMC	GB/T18387-2008, EN 55022	

Structural Parameters (unit : mm)



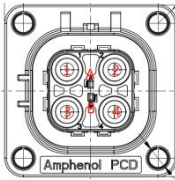
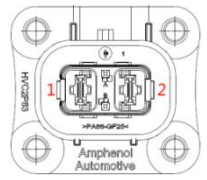
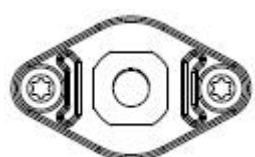
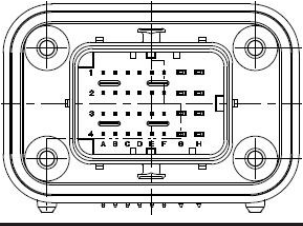


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Connector Model

Position	Function	Brand	Socket Model	Plug Model
1	Signal control	TE	2334366-2	2137299-8
2	AC Input	Amphenol	HVSL364024A	HVSL364064A106I
3	DC Output	Amphenol	HVC2P63MV406	HVC2P63FS406
4	Low voltage output +	Gvtong	GH01-F200-1ANB	M8 Copper
5	Low voltage output -	M8 Screw hole	M8 Screw hole	M8 Screw Copper

Interface Definition

AC Input(2)		DC Output(3)		Low Voltage Output(4)	
					
1	L1/single phase	1	Output +	+	LV Output +
2	L2	2	Output -		
3	L3	A	HVIL_IN		
4	Neutral line	B	HVIL_OUT		
A	(HVIL_IN)				
B	(HVIL_OUT)				
	GND connect with housing				
Signal Control(1)					
					
1A	CAN 1-H	2A	Wakeup	3A	NTC1 +
1B	CAN 1-L	2B	PP_OUT (low resistance)	3B	NTC2 +
1C	EN_OBC	2C	EN_Inverter	3C	NC
1D	EN_DC	2D	NC	3D	NTC 1&2 -
1E	PP	2E	NC	3E	Lock feedback 1
1F	CP	2F	NC	3F	Lock feedback 2
1G	VCC +	2G	NC	3G	Lock +
1H	GND	2H	NC	3H	Lock -
				4A	HVIL_IN
				4B	HVIL_OUT
				4C	CAN 2-H(reserved)
				4D	CAN 2-L(reserved)
				4E	NC
				4F	NC
				4G	NC
				4H	NC