



Combo 3KW DCDC Converter 11KW OBC Bidirectional Model No. ATD3KCB11K-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 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

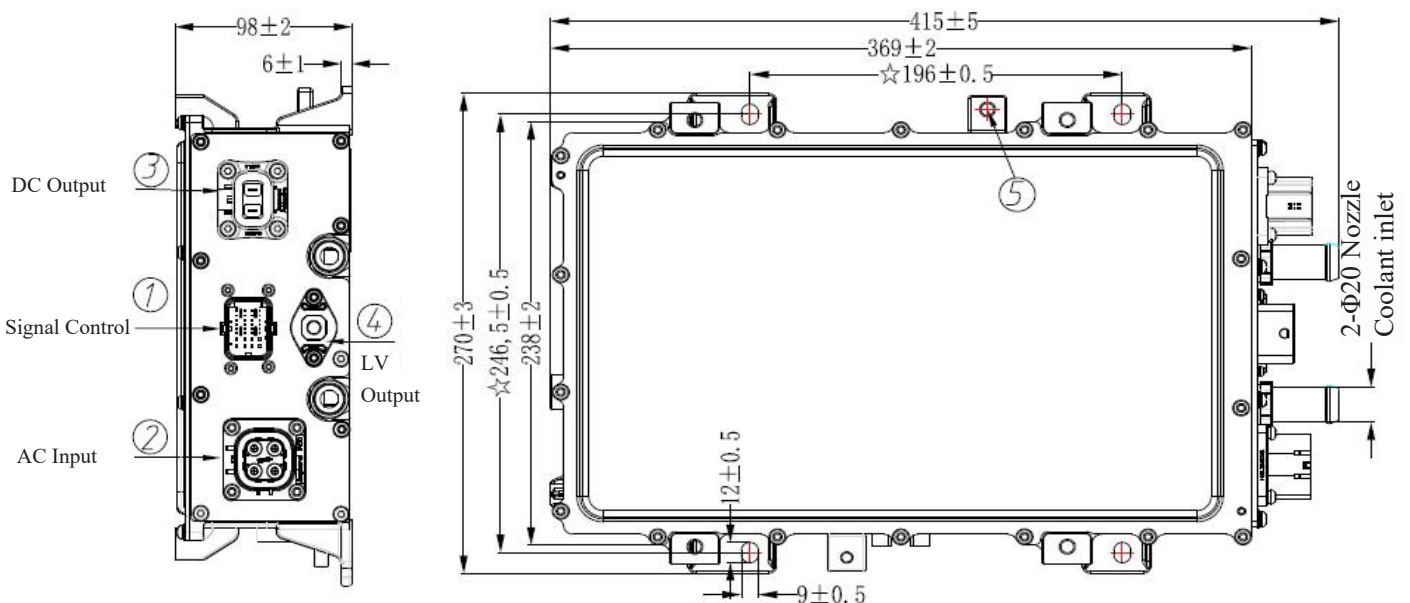
Description	Technical Specification	Remark
OBC Charging Mode		
Rated Output Power	11KW	
Input Voltage Range	304~456VAC(3 phase 4 wire)	1 phase input: 176~264VAC
Input Current	32A Max	
Power Factor	≥0.99(@220VAC full load)	
Output Voltage Range	250~450VDC	Adjustable
Max Output Current	32A	
Efficiency	≥94%	Rated voltage
Voltage Accuracy	±1%	
Current Accuracy	±1%	
Inverter Mode		
Input Voltage Range	250~450VDC	
Output Voltage	220VAC(±5%, 1 phase)	
Power	6KVA(1 phase)	
Efficiency	≥94%	
Output Harmonic Distortion (THDv)	<3%(linear load)	
Dynamic Response	60ms(linear 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(@240VDC full load)	
Efficiency	≥94%	
Output Voltage Range	9~16VDC	
Rated Output Voltage	13.8VDC	
Rated Output Current	218A	
Rated Power	3KW	
Peak Power	3.6KW	
Voltage Ripple	300mV Max	
Others		
Operating Temperature	-40~85°C	Coolant inlet temperature
Low Voltage Wakeup	12VDC&200mA max (Wakeup signal)	Wakeup BMS/VCU
Wakeup Method	CAN, AC, HVDC, PP/CP, EN(Hardwire)	Support reservation charging
CAN Communication	CAN-BUS	
Quiescent Current	≤1mA	Battery current will be 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)



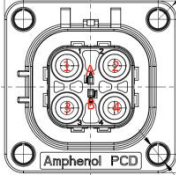
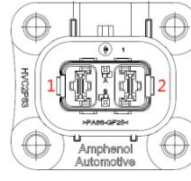
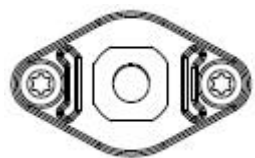
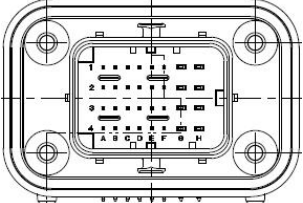


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Connector Model

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-F200-1NNB-T21	M8 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	B	HVIL_OUT				
A	HVIL_IN						
B	HVIL_OUT						
	Ground to chassis						
Signal Control(1)							
							
1A	CAN 1-H	2A	Wakeup	3A	NTC1 +	4A	HVIL_IN
1B	CAN 1-L	2B	PP_OUT (low resistance)	3B	NTC2 +	4B	HVIL_OUT
1C	EN_OBC	2C	EN_Inverter	3C	NTC3 +	4C	CAN 2-H(reserved)
1D	EN_DC	2D	NC	3D	NTC 1 & 2 & 3 -	4D	CAN 2-L(reserved)
1E	PP	2E	NC	3E	Lock feedback 1	4E	NC
1F	CP	2F	NC	3F	Lock feedback 2	4F	NC
1G	VCC +	2G	NC	3G	Lock +	4G	NC
1H	GND	2H	NC	3H	Lock -	4H	NC