



22KW On Board Charger Bidirectional Liquid

Model No. Table

Model No.	OBC		Inverter Mode	
	Output Voltage Range(Vdc)	Current In/Output Max(A)	Input Voltage Range(Vdc)	Output Voltage (Vac)
ATCB22KC-380S380W	200-470	32 / 64	250-470	220(±5%) Single-phase
ATCB22KC-380S750W	500-850	32 / 38	500-850	
Output Voltage Range	Can be configured according to the customer's actual battery requirements.			
			Features	
			1 Rated Output Power(KW) : 22 2 Input Voltage : 3-phase 304~456VAC (3 phase ,4 wires) 1-phase 85~265VAC 3 Dimensions : 370x252x183mm 4 Cooling System:Liquid, flow rate ≥ 12L/min 5 IP Rating : IP67&6K9K 6 Communication Method: CAN-BUS 7 Enclosure: Aluminum alloy made 8 Software: Digital software design	

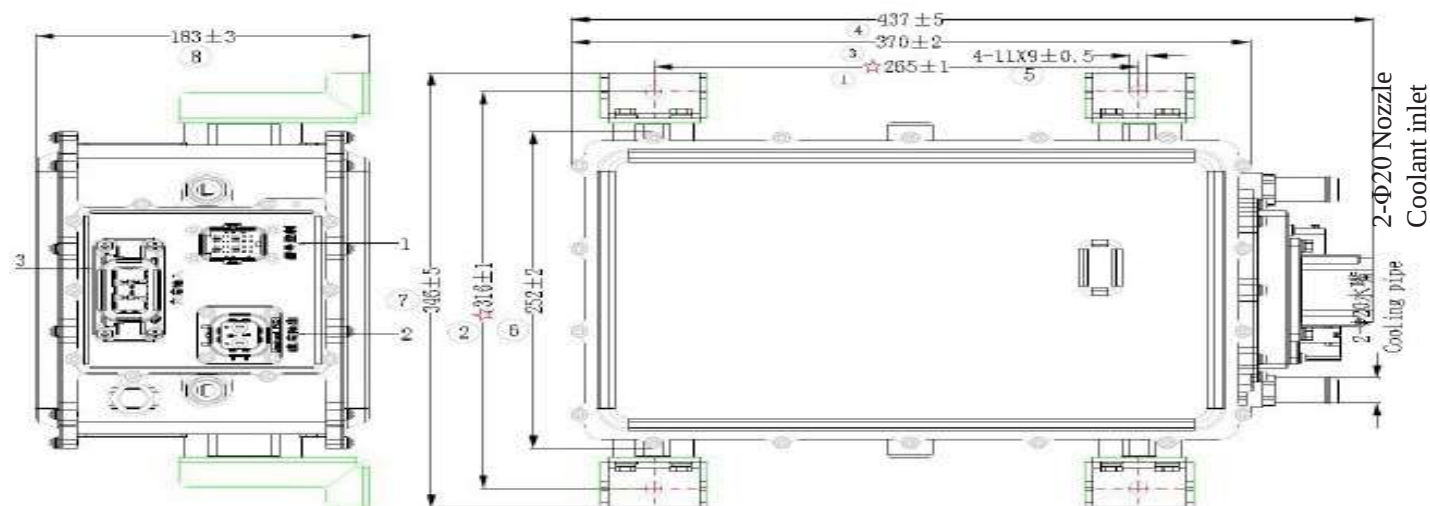
Specification

Description	Technical specifications	Remark
OBC Charging mode		
Rated output power	22KW	
Input voltage range	3-phase 304~456VAC (L-L,3 phase ,4 wires)	Single Phase Input 85~265VAC
Power factor	≥ 0.99 (220Vac, full load)	
Efficiency	$\geq 94\%$	Rated voltage and Specific Load
Voltage accuracy	$\pm 1\%$	
Current accuracy	$\pm 3\%$	
Inverter mode		
Power	6kVA (1-phase)	
Efficiency	$\geq 94\%$	Rated voltage and specific load
Output Harmonic Distortion (THDv)	$< 3\%$ (Resistance load)	
Dynamic Response	60ms (Resistance load)	
Others		
Operating temperature	-40-85°C	Coolant inlet temperature
Low-voltage power supply	9-32V	
Low voltage wake-up	24Vdc&200mAmax (WAKE_UP signal)	Wake up BMS/VCUU, VCC
Wake-up mode	PP/CP, CAN , EN (hardwire enable)	Support reservation charging



Communication mode	CAN-BUS	Sleep mode/ consume
Static Current	≤ 1mA	batter current at stop status
Protection	Input OVP, UVP, output OVP, UVP, OTP, OCP, output short circuit protection, communication fault protection Input overvoltage/undervoltage protection, output overvoltage/undervoltage protection, overtemperature protection, overcurrent protection, output short-circuit protection, and communication fault protection.	
EMC characteristics	GB/T 18387-2008, EN 55022	

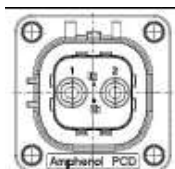
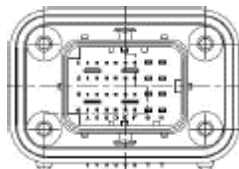
Structural Parameters (unit : mm)



Connector Table

Item	Position	Receptacle model no.	Pinout definition	Maker	Plug model no.
1	1	2334366-2	Signal control	TE	2137299-8
2	2	HVSL362022A	DC output	Amphenol	HVSL362062A116I
3	3	HVC5P63MV105	AC input	Amphenol	HVC5P63FS106

**Interface definition**

AC input (3)		DC output (2)		Signal control (1)							
											
1	Line 1/1-phase	1	Output +	1A	CAN1-H	2A	WAKE_UP	3A	(NTC1+)	4A	HVIL_IN
2	Line 2	2	Output -	1B	CAN1-L	2B	PP_OUT	3B	(NTC2+)	4B	HVIL_OUT
3	Line 3	A	HVIL_IN	1C	EN_OBC	2C	EN_inverter	3C	(NTC3+)	4C	CAN2-H
4	Neutral	B	HVIL_OUT	1D	NC	2D	NC	3D	(NTC-)	4D	CAN2-L
5	PE			1E	PP	2E	NC	3E	(LOCK_FB1)	4E	(EN_L)
6	HVIL_IN			1F	CP	2F	NC	3F	(LOCK_FB2)	4F	NC
7	HVIL_OUT			1G	VCC+	2G	NC	3G	(LOCK+)	4G	NC
				1H	GND	2H	NC	3H	(LOCK-)	4H	NC