

Model No. : AR-40K-380S380/540-W-AR01
Product Name : 40KW ON BOARD CHARGER(AC/DC)



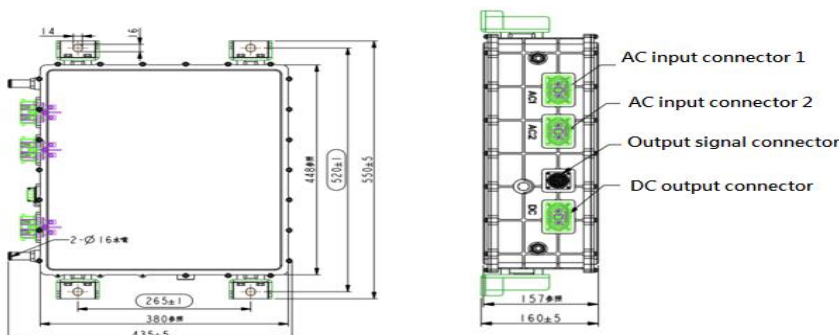
Features

- 1 Output Power : 40KW
- 2 Input Voltage : 304~456VAC(three phrase)/220±15%VAC
- 3 Output Voltage : 250~450VDC/420~650VDC
- 4 Dimensions : 550x443x180mm
- 5 Cooling System : Water
- 6 Protection Level : IP67
- 7 Communication Method : CAN
- 8 Small size, light weight and stable performance
- 9 Full digital software design, redundant protection

Specification

Description		Technical specifications	Remark
Environmental characteristics	Operating temperature	-40~85°C	Working Long Time
	Vibration/noise	Meet the QC/T 895-2011 standard	
	Salt spray test	Meet the QB/T 2423.17-2008 standard	
Output power		Three phrase 40KW/ Single phrase 6.6KW	
Maximum input current		Three phrase 63A/ Single phrase 32A	
Input voltage range		Three phrase 304~456VAC (line-line voltage · three phase four wire system) Single phrase 175~265VAC	
Output voltage range		250-450VDC/400~650VDC	
Output current accuracy		±0.5%	
Activation method		CP/CC/Hard line enable	
Low voltage input specification		13.8VDC(4Amax)/27VDC(2Amax)	External low voltage supplies power to OBC.
Low voltage input power		30W	
Maximum output current		Three phrase 128A/85A Single phrase 20A/14A	
Output current accuracy		±3%	Half load or more
Efficiency		≥95%	Rated voltage Full load
Other protection features		Input over-voltage, output over-voltage, over-temperature protection, over-current protection, output short-circuit protection, reverse battery protection, communication fault protection, internal fault protection.	
Over temperature protection		When the coolant temperature exceeds 65 °C, the output current decreases linearly, and drops to 20% of the rated current when it reaches 85 °C.	
Insulation strength	Output to the outer casing	2800VDC /60S 10mA Max	
	Input to the outer casing	2121VAC /60S 10mA Max	
	Input to output	3000VAC /60S 10mA Max	
Insulation resistance	Input to output	≥ 20MΩ	
	Input to the outer casing	≥ 20MΩ	
Electromagnetic compatibility	Radiation emission	GBT 18387 : 2008, EN 55022 C ClassB	
	Conducted emission	GBT 18387 : 2008, EN 55022 C ClassB	
	Radiation immunity	GBT 18387 : 2008, EN 55022 C ClassB	

Structural parameters




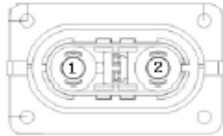
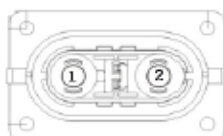
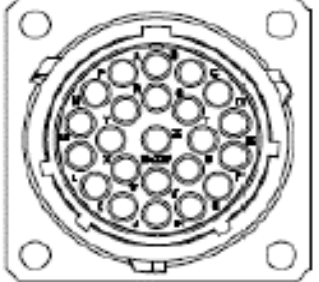


Model No. : AR-40K-380S380/540-W-AR01
Product Name : 40KW ON BOARD CHARGER(AC/DC)

Connector model

Position	Socket model	Function	Brand	Plug model
A	YGC998-EV-S(2+2)R/II	AC input 1	Yong gui	YGC998-EV-P(2+2)PA/II
B	YGC998-EV-S(2+2)R/III	AC input 2	Yong gui	YGC998-EV-P(2+2)PA/III
C	YGC998-EV-S(2+2)R/I	DC output	Yong gui	YGC998-EV-P(2+2)PA/I
D	RT001823PN03	Control terminal	Amphenol	RT061823SNHEC03

Interface definition

Vendor	Model	Description			Remark
Yong gui	AC input 1 YGC998-EV-S(2+2)R/II	1	L1	Live Wire 1	
		2	L2	Live Wire 2	
Yong gui	AC input 2 YGC998-EV-S(2+2)R/III	1	L3	Live Wire 3	
		2	N	Naught Wire	
Yong gui	DC output YGC998-EV-S(2+2)R/I	1	VOUT+	Output positive	
		2	VOUT-	Output negative	
Amphenol	Control terminal (RT001823PN03)	A	NTC1-	Temperature sensor 1 negative	
		B	NTC1+	Temperature sensor 1 positive	
		C	VCC+	Normal input positive	
		D	VCC-	Normal input negative	
		E	CAHN1	CAN1 High	
		F	CANH2	CAN2 High	
		G	CANL1	CAN1 Low	
		H	CANL2	CAN2 Low	
		J	NTC2-	Temperature sensor 1 negative	
		K	NTC2+	Temperature sensor 1	
		L	WAKE_UP	Output wake-up signal	
		M	CAN-G	CAN shielding ground	
		N	LOCK FB2	Electronic lock feedback 2	
		P	EN_L	Host selection (active low)	
R	CC_OUT	CC status output / low level enable signal			
S	LOCK+	Electronic lock power supply positive			
T	LOCK-	Electronic lock power supply negative			



Model No. : AR-40K-380S380/540-W-AR01

Product Name : 40KW ON BOARD CHARGER(AC/DC)

		U	LOCK FB1	Electronic lock feedback 1	
		V	CC		
		W	CP		
		X	VCU_EN	Hardwire wake-up signal	
		Y	VCC+	Normal input positive	
		Z	VCC-	Normal input negative	

