

Characteristic

1. Suitable for new energy vehicle application.
2. Equipped with over-voltage, under-voltage, over-current, short-circuit and over-temperature protection.
3. Support CAN bus communication.

Serial model	Voltage platform	Type of cooling	Weight	
OD-CA-2A1A-72Y	72Vdc	Air Cooling	≤4.5kg	

Charger electrical parameters

输入参数 Input parameters

输入电压 Input voltage	90-264VAC
频率 Frequency	47-63HZ
输入电流 Input current	10Amax
功率因数 Power factor	≥0.98 (半载以上 More than half load)
待机功耗 Standby power consumption	≤5w
启动冲击电流 Starting impulse current	1.5 times the maximum input current

输出参数 Output parameters

输出电压 Output voltage	50-100Vdc
输出电流 Output Current	0-24A
输出功率 Output power	2000W@220VAC；1000W@110VAC
恒压精度 Constant voltage accuracy	±1%
恒流精度 Constant current accuracy	±2%
最高效率 Maximum efficiency	≥94%
关闭响应时间 Off response time	The current drops below 10% within 300ms and to 0A within 500ms.

保护参数 Protection parameters

输入欠压保护 Input under-voltage protection	90Vac±2
输入过压保护 Input over-voltage protection	264Vac±2
输出欠压保护 Output under-voltage protection	≤45Vdc
输出过压保护 Output over-voltage protection	≥105Vdc
输出过流保护 Output over-current protection	≥ maximum current stop output
输出短路保护 Output short-circuit protection	Stop output and recover after troubleshooting
过热保护 Overheat protection	The internal power of the charger starts to decrease at 85℃, and the charger is shut down at 90℃.

DC/DC 转换器电气参数 DC/DC converter electrical parameters

输入参数 Input parameters

输入电压 Input voltage	50-100Vdc
输入电流 Input current	24Amax

输出参数 Output parameters

输出电压 Output voltage	9-16Vdc
额定输出电流 Rated output current	72A
峰值电流 Peak current	86A
额定功率 Rated Power	1000W
峰值功率 Peak power	1200W for 6 minutes
电压调整率 Voltage adjustment rate	≤1%
负载调整率 Load adjustment rate	≤1%
电压控制精度 Voltage control accuracy	≤1%
电流控制精度 Current control accuracy	≤2%
最高效率 Maximum efficiency	≥94%
纹波电压系数 Ripple voltage coefficient	≤2%@ rated working status

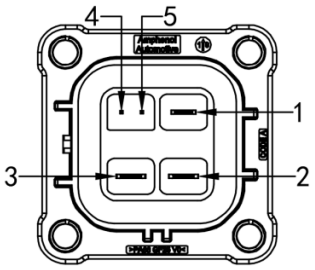
保护参数 Protection parameters

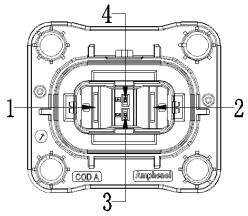
输入欠压保护 Input under-voltage protection	≤45
输入过压保护 Input over-voltage protection	≥105
输出欠压保护 Output under-voltage protection	7±1V, return to work after voltage ≥ 9±0.2V
输出过压保护 Output over-voltage protection	16±0.5V, return to normal operation after voltage ≥14±0.2V
输出过流保护 Output over-current protection	Stop output when> 48A
输出短路保护 Output short-circuit protection	Self-recovery after troubleshooting
过热保护 Overheat protection	The internal temperature starts to reduce the power at 90℃, and turned off at 105℃. After the temperature drops, it will recover automatically.

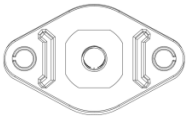
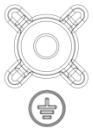
安全参数 Safety parameters

接地电阻 Ground resistance	≤100mΩ@25A/AC
输入绝缘 Input insulation	20MΩ@500VDC
输出绝缘 Output insulation	20MΩ@500VDC
输入耐压 Input withstand voltage	漏电流 Leakage current≤20mA@1500VAC 3s
输出耐压 Output withstand voltage	漏电流 Leakage current≤15mA@1500VAC 3s
输入对输出耐压 Input-to-output withstand voltage	漏电流 Leakage current≤15mA@1500VAC 3s

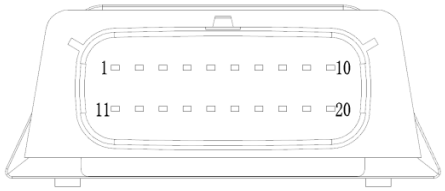
接口定义 Interface Definition

接口名称 Interface name	交流输入 AC input	连接器型号 Connector model	插座 Socket	HVC3PG63MV106-S02(安费诺)
			插头 Plug	HVC3PG63FS102(安费诺)
端子序号 Terminal No.	线径 Wire diameter	功能定义 Function definition		
1	2.5mm2	PE		
2	2.5mm2	N		
3	2.5mm2	L		
4、5	0.35-0.5mm2	高压互锁 High-voltage interlock		

接口名称 Interface name	高压直流 High Voltage DC	连接器型号 Connector model	插座 Socket	2PG63MV106-S02(安费诺)
			插头 Plug	2PG63FS104(安费诺)
端子序号 Terminal No.	线径 Wire diameter	功能定义 Function definition		
1	4mm2	共正 Copositive		
2	4mm2	共负 Conegative		
3、4	0.35-0.5mm2	高压互锁 High-voltage interlock		

接口名称 Interface name	型号 Model	定义 Definition	备注 Remarks	图示 Figure
DC/DC 输出正极 DC/DC output +		DC+	M8	
DC/DC 输出负极 DC/DC output -	外壳 Shell	DC-	M8	

接口名称 Interface name	信号控制 Signal control	连接器型号 Connector model	插座 Socket	348302001(莫仕 Molex)
			插头 Plug	334722006(莫仕 Molex)
端子序号 Terminal No.	功能定义 Function definition	功能描述 Functional description		
1	Temp 1-1	慢充插座温度传感器 1-1 Slow charge socket temperature sensor 1-1		
2	Temp 1-2	慢充插座温度传感器 1-2 Slow charge socket temperature sensor 1-2		
3	Temp 2-1	慢充插座温度传感器 2-1 Slow charge socket temperature sensor 2-1		
4	Temp 2-2	慢充插座温度传感器 2-2 Slow charge socket temperature sensor 2-2		
5	CC	充电连接确认 Charging connection confirmation		
6	CP	充电连接引导 Charging Connection Guide		
7	KL30	常电输入正 Constant power input +		
8	E LOCK+	电子锁驱动+ Electronic lock drive +		
9	/	/		
10	Wake-up In	输入唤醒 Wake-up In		
11	CANH	CAN 通讯高 CAN communication high		
12	CANL	CAN 通讯低 CAN communication low		
13	HVIL+	高压互锁+ High-voltage interlock+		
14	HVIL-	高压互锁- High-voltage interlock-		
15	E LOCK FB+	电子锁反馈信号+ Electronic lock feedback signal +		
16	E LOCK FB-	电子锁反馈信号- Electronic lock feedback signal-		
17	KL31	地 GND		
18	E LOCK-	电子锁驱动- Electronic lock drive-		
19	/	/		
20	/	/		



安装尺寸 Assembly dimensions

