储存式交流变频电源

AC Power Source

使

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书

User’s Manual

校验及校正声明 CHECK AND REGULATION STATEMENT

本公司特别声明，本手册所列的仪器设备完全符合本公司一般目录上所标称的规范和特性。本仪器在出厂前已经通过本公司厂内校验，校验的程序和步骤是符合电子检验中心的规范和标准。

We specially announce that the specifications and features of the listed instrument and equipment in this manual entirely compliance with the one listed in our general directory. The instrument already has passed our check before leaving our factory and the checking procedures measure up to the regulations and standards of the Electronics Testing Center.

产品品质保证 Quality Warranty

本公司保证所生产制造的新品仪器均经过严格的品质确认，同时保证在出厂一年内，如有发现产品的施工瑕疵或零件故障，本公司负责免费给予修复。但是如果使用者有自行更改电路、功能、或进行修理仪器及零件或外箱损坏等情况，本公司恕不提供免费保修服务。

本保证不含本仪器的附属设备等非我公司所生产的附件。

在一年的保修期内，请将故障机组送回本公司维修中心或本公司指定的经销商处，本公司会予以妥善修护。

如果本机组在非正常的使用下、或人为疏忽、或非人力可控制下发生故障，例如地震、水灾、暴动、或火灾等非人力可控制的因素，本公司不予免费保修服务。

We grantee that all of our new instruments have passed strict quality control and meanwhile grantee that we will be responsible for granting free repair within one year after the instrument leaving our factory if it has any defects or spares failure. But we will not provide any free warranty services if the reasons as the user change the electric circuit, function or repair the instrument and spare parts without permission, or the external box damaged, etc.

The accessories of this machine, which do not produced by our company are out of this warranty.

Please send the fault instrument set back to our maintenance center or our assigned agents

within the one-year warranty, we will repair it properly.

We will not provide free warranty service if the failure is caused by incorrect employment, or negligence, or out of human control ability, such as earthquake, flood, riot, and fire or other non-human control factors.

（本公司遵循可持续发展战略，保留对本说明书的内容进行改进不予先通知的权力）

(Following the strategy of the sustainable development, we hold the authority of the modification for contents of the manual and without informing prior to it.)

第一章　　安全规定
CHAPTER Ⅰ SAFETY REQUIREMENT

使用前应该注意的规定和事项！！！The regulations and items should be noticed before use!!!

安全标志 Safety Signs

 高电压警告符号。Symbol of Hi-voltage Warning

 高压危险符号。Symbol of Danger Hi-voltage

 机体接地符号。Symbol of Machinery Grounding

 接地符号 Grounding Symbol

1.1　安全须知 Safety Instructions

- 使用本交流变频电源以前,请先了解本机所使用和相关的安全标志,以策安全.For safety reasons, please read the safety signs which are used in the machine before using our AC variable frequency power supply.
- 在开启本机的输入电源开关前,请先选择正确的输入电压规格.

lease select the correct standard input voltage before turning on the input power switcher of this machine.

为防止意外伤害或死亡发生,在搬移和使用机器时,请务必先观察清楚,然后再进行操作.

To prevent causing accidental injury or death, please observe the machine condition carefully before using or moving.

1.2　维护和保养 Maintenance

使用者的维护 User’s Maintenance

为了防止触电的发生,请不要掀开仪器的盖子。本仪器内部所有的零件绝对不需使用者维护。如果仪器有异常情况发生，请寻求我公司或其指定的经销商给予维护。所附的线路和方块图只供参考之用。

To avoid getting an electric shock, please do not open the cover of the instrument. All of the internal spare parts of the instrument do not need the maintenance from the user. If there are any errors, please refer to our company

or our assigned agents. The attached circuit drawings or block diagrams are only for reference.

定期维护 Schedule Maintenance

交流电源供应器、输入电源线各相关附件等每年至少要仔细检验和校验一次，以保护使用者的安全和仪器的精确性。

To protect the safety and the accuracy of the instrument, the flowing items should be examined and check carefully at least one time per annum: AC power supply, input power cords and other relative auxiliaries.

使用者的修改 User’s Modification

用者不得自行更改机器的线路或零件，如被更改，机器保证期则自动失效并且我公司不负责任。使用未经本公司认可的零件或附件也不给予保证。如发现送回检修的机器被更改，我公司会将机器的电路或零件修复回原来设计的状态，并收取修护费用。

User does not allowed to change the circuit or the spare parts of the machine, or, the guarantee would became invalid automatically and we are irresponsible for it, even the spare parts or the accessories recognized by our company. The electric circuit or spare parts of the machine, which are sent back for overhauling and has been modified will be restored to the original condition and charged for the repairing.

第二章　　安装要点

CHAPTER Ⅱ KEY POINTS TO INSTALLATION

本章主要介绍产品的拆封、检查、使用前的准备、和储存等的规则。

This chapter will introduce the rules of product unpacking, examination, preparation of pre-use and storage, etc.

2.1　拆封和检查 Unpacking and Examination

1. 打开交流变频电源的包装,请检查随机附件,附件包括使用说明书一本、合格证一份。Unpack the AC variable frequency power supply and check the enclosed attachments which include manual and certification.
2. 本产品包装在一个用珍珠棉保护的包装箱内,客户如果收到包装箱有破损时,请检查机器的外观是否有无变形、刮伤、或面板损坏等。The product is sealed in a packing case which is protected by pearl brocade. If there are any

damages with the packing case, please check the machine whether the exterior deformation, scratch, or panel damaged, etc.

3. 如果有损坏，请立即通知我公司或其经销商。并请保留包装箱和珍珠棉。我们的服务中心会帮您修护或更换新机。在未通知我公司或其经销商前，请勿立即退回产品。Please inform us or our agents immediately if there are any damages and keep the packing case and the pearl brocade. Our service center will maintain it or replace a new one for you, but please do not return it without informing us or our agents.

2.2 使用前的准备 Preparation before Use

输入电压的需求和选择 Demand for the Input Voltage and Selection

标准系列的交流变频电源使用单相 220V±10%/50Hz±10%/三相 380V±10%/50Hz±10%三相的电源。在开启机器的电源开关以前,请先确认电源的选择,同时必须使用正规的保险丝(出厂以配),保险丝使用规格已标示在仪器的背板上。The power applied to the HX1000 series AC variable frequency power supply, for single phase is 220V ±10%/50Hz±10%, for tri-phase is 380V±10%/50Hz±10%. Please select the proper power before turn on the power switcher of the machine, and use standard fuse (original) at the same time. The specification for the use of fuse has been presented in the backboard of the machine.

更换保险丝前，必须先关闭输入电源，以避免危险。Input power must be turned off for avoiding danger before changing the fuse.

输入电源的要求 Input Requirement

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在接上输入电源之前，必须先确认电源线上的地线已经接妥，同时也将地线接在机体的接地端子上。仪器上的电源插头只能插在带有地线的电源插座上。如果使用延长线，必须注意是否带有接地线。本交流变频电源使用三芯电源线。当电缆线插到具有地线的插座时，即已完成机体接地。

Please make sure the grounding wire of the power cord has been connected to the earth meanwhile to the earth terminal of the instrument. The power plug of the instrument only can be plugged in the socket with grounding wire. Please be sure the extension line with grounding wire if use extension cord. This AC variable frequency power supply applies to tri-core power cord. The grounding

is finished when the power cable is plugged in an earthing socket.

使用的周围环境条件 Application Circumstances

1、温　度：0℃-40℃　Temperature: 0℃-40℃

2、相对湿度 Relative Humidity：在 10 至 90%之间 Between 10—90%

3、高　度 Height：在海拔 2000 公尺以下。Below 2000 meters altitude.

4、安装场所无严重影响本机的气体，蒸气、化学性沉积、灰尘、污垢及其它爆炸性和浸蚀介质；

In the installation sites, there is no gas which can affect the machine badly, steam, chemical deposition, dust, dirt and other explosive and etching medium.

5、安装场所应无严重振动或颠簸。No violently vibration or shake in installation sites.

2.3 储存和运输 Storage and Shipment

周围环境 Circumstances

标准系列的交流变频电源可以在下列的条件上储存和运输:HX1000 series AC variable frequency power supply can be stored and shipped by the flowing conditions:

周围温度 Temp……-20℃到 to 55℃

高度 Height……7620 公尺 meters

本机必须避免温度的急剧变化，温度急剧变化可能会使水气凝结於体内部。This instrument must avoid the temperature extreme change for drastic changes in temperature may cause water vapor condensing on the inside.

包装方式 Packing

原始包装 Original Packing

请保留所有的原始包装材料来包装，如果机器必须回厂维修，请用原来的包装材料包装。并请先于我公司的维修中心联络。送修时，请务必将电源线等全部的附件一起送回，请注明故障现象和原因。另外，请在包装注明“易碎品”请小心搬运。

Please keep all of the original packing materials and packing the instrument if it must be send back to us for repairing and contact with our maintenance center before sending. All of the accessories including the power cord must be returned with the instrument and demonstrate the error performance and reasons. In addition, please marked the packing with

the label read as fragile handle with care.

其它包装 Other Packing

如果无法找到原始包装材料来包装，请按照下列说明包装：

If the original packing materials are lost, please packing follow below items:

1、先用气泡袋或珍珠棉将机器包妥。

Packing the instrument with bubble plastic bag or pearl brocade first.

2、再将机器置於可以承受 150Kg 的多层纸箱包装。

Then packing it by putting it in a multi-layer box which can withstand 150 KG.

3、机器的周围必须使用可防震的材料填充，厚度大约为 70 到 100mm。

Shockproof materials must be filled around the instrument and the thickness is about 70 to 100mm.

4、妥善密封箱体。

Seal box properly.

5、注明“易碎品”请小心搬运。

Marked as fragile handle with care.

第三章　特性及容量

CHAPTER Ⅲ FEATURES AND CAPACITY

产品特点：

- 输出频率:40Hz-500Hz 连续可调（特殊频率可定制）；
- 输出相电压:抵挡 1V-150VAC、高档 151V-300VAC、自动挡 1V-300V，线电压 1V-520V（特殊电压可定制）；
- 电压、频率、电流、功率、功率因数表头采用 4 位数字 LED 显示，简单、易读、高解析度；
- 电压(V)、频率(Hz)、电流(A)、功率(W)、功率因数（P）四视窗同时量测、显示、无需切换；
- 无幅射干扰,含谐波成份小,并经特殊处理,不产生干扰，纯净、稳定的正弦波输出；
- 输出状态下可调整电压、频率、高低档切换无需停机，满足不同电压在线测试；
- 容量大、体积小、重量轻、效率高、静音装置、可靠度高；
- 提供世界各国标准电压、频率、模拟测试各种用电产品；
- 超载能力强，瞬间电流可承受 3 倍的额定电流；
- 具过电流、过高温、过电压、短路、瞬间断电保护及警告装置；
- 适合电阻性、电容性、电感性及其它非线性负载使用。

应用范围：

- ATE 自动化测试、家电、电机、电动工具、开关电源、电源适配器、UPS、信息通信、光伏、灯具、电子变压器、电子元器件、低压配电、航空航天、国防军工等行业领域。

Product features:

Output frequency: 40hz-500hz continuously adjustable (special frequency can be customized);

Output phase voltage: withstand 1v-150vac, high-grade 151v-300vac, automatic gear 1v-300v, line voltage 1v-520v (special voltage can be customized);

Voltage, frequency, current, power, power factor meter adopts 4-digit LED display, simple, easy to read and high resolution;

Voltage (V), frequency (Hz), current (a), power (W) and power factor (P) can be measured and displayed simultaneously without switching;

No radiation interference, small harmonic component, and special treatment, no interference, pure and stable sine wave output;

Under the output state, the voltage, frequency, high and low gear switching can be adjusted without shutdown, which can meet the online test of different voltages;

Large capacity, small size, light weight, high efficiency, silent device, high reliability;

Provide standard voltage, frequency, analog test of all kinds of electric products in theworld;

Strong overload capacity, instantaneous current can withstand 3 times of rated current;

With over-current, over-temperature, over-voltage, short-circuit, instantaneous power-off protection and warning devices;

It is suitable for resistive, capacitive, inductive and other nonlinear loads.

Application range:

Ate automation testing, home appliances, motors, power tools, switching power supply, power adapter, UPS, information communication, photovoltaic, lamps, electronic transformers, electronic components, low-voltage power distribution, aerospace, national defense and military industry and other industries.

储存式单相变频电源

series single phase programmable variable frequency power supply.

容量 Power		3KVA	5KVA	10KVA	15KVA	20KVA	30KVA	45KVA
制作方式 Working		SPWM(正弦脉宽调制)						
输入 INPUT								
相数 Phase		1φ2W		3φ4W				
电压 Voltage		220V±10%		380V±10%				
频率 Frequency		47Hz - 63Hz						
输出 OUTPUT								
相数 Phase		1φ2W						
相电压 Voltage		抵挡 1-150VAC ， 高档 151V-300V, 自动挡 1-300VAC						
频率 Frequency		40-500Hz(0.01Step)						
最大电流 Maximum Current	L=120V	25A	42A	84A	126A	168A	252A	378A
	H=240V	12.5A	21A	42A	63A	84A	126A	189A
负载稳压率 Load Regulation		1%						
波形失真 T.H.D		2%(低档 120V,高档 240V,带阻性负载)						
频率稳定度 Fre Regulation		0.01%						
显示 LED Display		电压 Vrms、电流 Arms、频率 Fre、功率 Wattage、功率因数 PF						
电压解析度 Voltage Resolution		0.01V						
频率解析度 Fre Resolution		0.01Hz						
电流解析度 Current Resolution		0.001A		0.01A			0.1A	
存储 Memory		M1 (V_F_A）、M2 (V_F_A）、M3 (V_F_A)、M4 (V_F_A)、M5 (V_F_A)						
限流设定 I-LIM Set		O-Max Current						
输出保护 Protection		过流 Over Current 过温 Over Temp 过载 Over Load 短路 Short Circuit						
重量(Kg)		40	50	80	100	130	200	280
体积 W×H×D(mm)		425*620 含脚轮*430		480*760 含脚轮*700			600*800 含脚轮*900	
运行环境 Environment		0-40℃ 20-80%RH						

容量 Power	50KVA	75KVA	100KVA	150KVA
制作方式 Working	SPWM(正弦脉宽调制)			

输入 INPUT					
相数 Phase		3φ4W			
电压 Voltage		380V±10%			
频率 Frequency		47Hz - 63Hz			
输出 OUTPUT					
相数 Phase		1φ2W			
相电压 Voltage		抵挡 1-150VAC ， 高档 151V-300V, 自动挡 1-300VAC			
频率 Frequency		40-500Hz(0.01Step)			
最大电流 Maximum Current	L=120V	420A	630A	840A	1250A
	H=240V	210A	315A	420A	625A
负载稳压率 Load Regulation		1%			
波形失真 T.H.D		2%(低档 120V,高档 240V,带纯阻性负载)			
频率稳定度 Fre Regulation		0.01%			
显示 LED Display		电压 Vrms、电流 Arms、频率 Fre、功率 Wattage、功率因数 PF			
电压解析度 Voltage Resolution		0.01V			
频率解析度 Fre Resolution		0.01Hz			
电流解析度 Current Resolution		0.1A			1A
存储 Memory		M1 (V_F_A）、M2 (V_F_A）、M3 (V_F_A)、M4 (V_F_A)、M5 (V_F_A)			
限流设定 I-LIM Set		O-Max Current			
输出保护 Output Protection		过流 Over Current 过温 Over Temp 过载 Over Load 短路 Short Circuit			
重量(Kg)		320	380	430	600
体积 W×H×D(mm)			750*1040 含脚轮*1040		
运行环境 Environment		0-40℃ 20-80%RH			

储存式三相变频电源 series Tri-phase programmable variable frequency power

容量 Power		6KVA	9KVA	12KVA	15KVA	20KVA
制作方式 Working		SPWM(正弦脉宽调制)				
输入 INPUT						
相数 Phase		1φ2W			3φ4W	
电压 Voltage		220V±10%			380V±10%	
频率 Frequency		47Hz - 63Hz				
输出 OUTPUT						
相数 Phase		3φ4W				
相电压 Voltage		抵挡 1-150V ， 高档 151V-300V, 自动挡 1-300V（线电压 1-520V）				
频率 Frequency		40-500Hz(0.01Step)				
最大电流 Maximum Current	L=120V	16.8A	25A	33A	42A	56A
	H=240V	8.4A	12.5A	17A	21A	28A
负载稳压率 Load Regulation		1%				
波形失真 T.H.D		2%(低档 120V,高档 240V,带阻性负载)				
频率稳定度 Fre Regulation		0.01%				
显示 LED Display		电压 Vrms、电流 Arms、频率 Fre、功率 Wattage、功率因数 PF				
电压解析度 Voltage Resolution		0.01V				
频率解析度 Fre Resolution		0.01Hz				
电流解析度 Current Resolution		0.01A				
存储 Memory		M1 (V_F_A）、M2 (V_F_A）、M3 (V_F_A)、M4 (V_F_A)、M5 (V_F_A)				
限流设定 I-LIM Set		O-Max Current				
输出保护 Protection		过流 Over Current 过温 Over Temp 过载 Over Load 短路 Short Circuit				
重量(Kg)		80	90	100	120	160
体积 W×H×D(mm)		480*760 含脚轮*700		550*800 含脚轮*700		
运行环境 Environment		0-40℃ 20-80%RH				

supply.

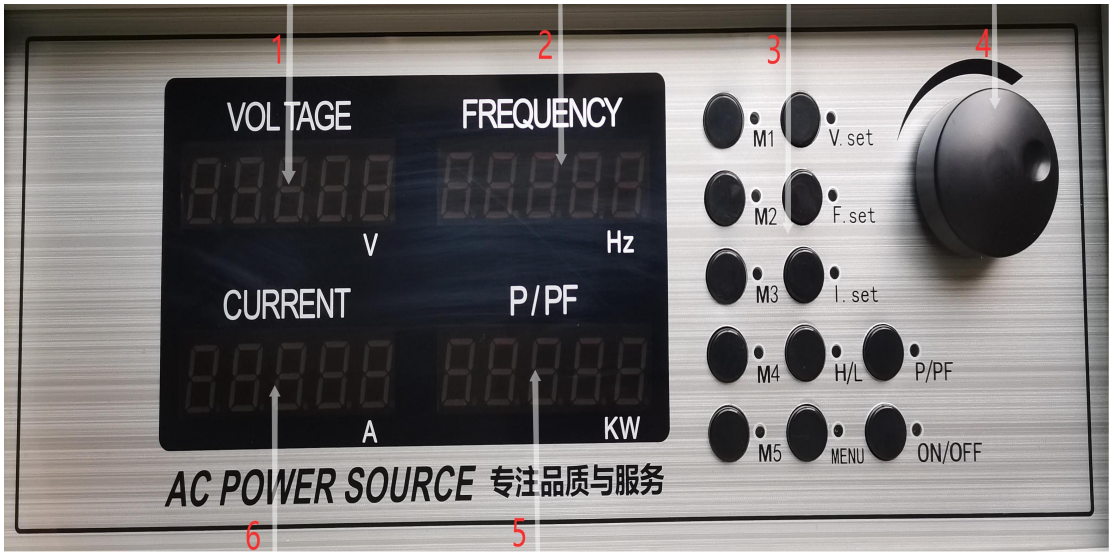
容量 Power		30KVA	60KVA	100KVA	150KVA	300KVA	450KVA
制作方式 Working		SPWM(正弦脉宽调制)					
输入 INPUT							
相数 Phase		3φ4W					
电压 Voltage		380V±10%					
频率 Frequency		47Hz - 63Hz					
输出 OUTPUT							
相数 Phase		3φ4W					
电压 Voltage		抵挡 1-150V ， 高档 151V-300V, 自动挡 1-300V（线电压 1-520V）					
频率 Frequency		40-500Hz(0.01Step)					
最大电流 Maximum Current	L=120V	84A	168A	278A	420A	840A	1250A
	H=240V	42A	84A	139A	210A	420A	625A
负载稳压率 Load Regulation		1%					
波形失真 T.H.D		2%(低档 120V,高档 240V,带纯阻性负载)					
频率稳定度 Fre Regulation		0.01%					
显示 LED Display		电压 Vrms、电流 Arms、频率 Fre、功率 Wattage、功率因数 PF					
电压解析度 Voltage Resolution		0.01V					
频率解析度 Fre Resolution		0.01Hz					
电流解析度 Current Resolution		0.01A	0.1A				1A
存储 Memory		M1 (V_F_A）、M2 (V_F_A）、M3 (V_F_A)、M4 (V_F_A)、M5 (V_F_A)					
限流设定 I-LIM Set		O-Max Current					
输出保护 Output Protection		过流 Over Current 过温 Over Temp 过载 Over Load 短路 Short Circuit					
重量(Kg)		200	300	450	600	1000	1600
体积 W×H×D(mm)		730*1040 含脚轮*1040		1200*1600 含脚轮*1500		1500*1800 含脚轮*1800	定制机箱
运行环境 Environment		0-40℃ 20-80%RH					

第四章　　技术规范
CHAPTER Ⅳ TECHNICAL SPECIFICATION

4.1 操作面板说明 Direction for Operation Panel

储存式单相 3KVA-150KVA 三相 6KVA-450KVA 操作面板说明

The guide to operation panels for series single phase 0.5KVA-20KVA and tri-phase 6KVA-20KVA.



1. 电压显示表 Voltage Display：数位 RMS 值数位电表 Digital voltmeter with digital RMS value.
2. 频率显示表 Frequency Display：数位电表 Digital voltmeter
3. 按键操作指示区 Operating keys display area
4. 旋钮操作键 Knob operation key
5. 电流显示表 Current Display：数位 RMS 值数位电表 Digital voltmeter with digital RMS value
6. 功率/功率因数表显示表 P/PF Display：数位有功功率电表 Digital active power voltmeter

4.2 后面板说明 The guide to back panel

标准系列单相 10KVA-20KVA 接线板说明

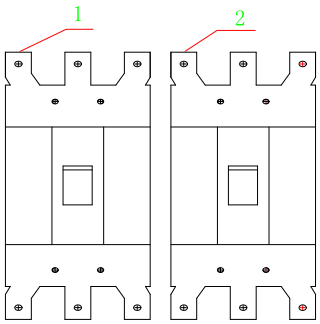
The guide to grounding panel for HX1000 series single phase 10KVA-20KVA.

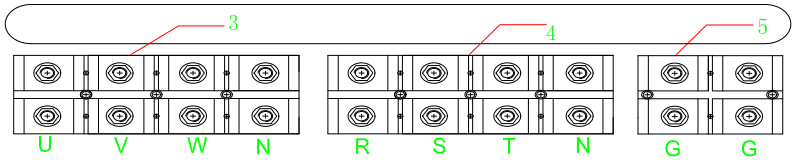
1、出接线排（L-火线、N-零线、G-地线）Output line contact bank(L-Live wire, N-Null line, G-Grounding)

2、入接线排（L-火线、N-零线、G-地线）Input line contact bank(L-Live wire, N-Null line, G-Grounding)

标准系列三相 30KVA-450KVA 接线板说明

The guide to grounding panel for HX1000 series tri-phase 30KVA-450KVA.





1、输出无熔丝开关 non-fuse output switcher

2、输入无熔丝开关 non-fuse input switcher

3、出接线排（U-U 相、V-V 相、W-W 相、N-零线、G-地线）Output line contact bank（U-U phase、V-V phase、W-W phase、N-null line、G-Grounding）

4、入接线排（R-R 相、S-S 相、T-T 相、N-零线、G-地线）Input line contact bank（R-R phase、S-S phase、T-T phase、N-null line、G-Grounding）

第五章　操作方法

CHAPTER V　OPERATION GUIDE

1 、接线前请确认输入电源是否为本机所需之电源，所有开关应置于 OFF 位置。接线请按标签对应接牢。Make sure connect to the required power of the instrument and all switchers in the position OFF. Please follow the tags to make the connection well.

2、开机前请确认所有接线是否正确。

Please make sure all connections in a right way before the operation.

3、开机(POWER ON) 时电压表、频率表会显示其机型、版本后，CPU 会呼叫关机前的最后设定值，因为每次离开各项设定状态后，该设定值已被记忆于本机之 EEPROM 内。

Press the POWER ON button, the screen will show the model and version, then CPU will refer to the last setting because the setting value will be memorized in the EEPROM each time after leaving each setting mode.

4、电压设定 Voltage setting

在OFF/ON 待机或输出状态下按VSET键和”旋钮 “键可进行电压数值的调整。在输出模式下，低档电压可设定范围为0 ～ 150V 时，高档电压可设定范围为0 ～ 300V； 若要将电压调至低档以上，记得将电压切换成档才可调整否则电压会以低档的最高电压显示。(首先按VSET键选择电压设定后灯长亮，在选择旋钮键后，每向下按一下后移动一个显示值位置，显示位置的数字会一直闪动，在通过调节旋钮方向来调节数值的大小，也可一直旋动旋钮来调节数值大小）。调节到设定值后按VSET键确定设定值，若持续约 4 秒没有更改电压设定值时则电压表会闪一下，并会记忆变更后的新电压值输出显示后自动离开设定画面。

变化量: 旋钮每旋动一格调节数字一位，旋钮每按一下调节显示一位。

In the off / on standby or output mode, press Vset key and "knob" key to adjust the voltage value. In the output mode, when the low range voltage can be set to 0-150V, the high-grade voltage can be set to 0-300V; if you want to adjust the voltage above the low gear, remember to switch the voltage to the gear, otherwise the voltage will be displayed with the highest voltage of the low gear. (first, press Vset to select the voltage. After setting the voltage, the light will be on for a long time. After selecting the knob key, the number of the display position will always flash when

you move a position of the display value after you press it down once. You can adjust the value size by adjusting the direction of the knob, or you can always turn the knob to adjust the value size). After adjusting to the set value, press the Vset key to determine the setting value. If the voltage setting value is not changed for about 4 seconds, the voltmeter will flash once, and the new voltage value after the change will be memorized, and the output will automatically leave the setting screen.

Variation: each time the knob is rotated, a digit is adjusted, and a digit is displayed when the knob is pressed.

5、频率设定 Frequency Setting

在OFF/ON 待机或输出状态下按FSET 和旋钮键可进行频率数值的调整。在45 ～ 500HZ范围内，细调时的变化量为0.01HZ/STEP， (其它与电压设定方式相同)。

Press fset and knob key in off / on standby or output mode to adjust the frequency value. In the range of 45-500hz, the variation of fine tuning is 0.01hz/step (others are the same as voltage setting mode).

6、电压高低切换H/L High and Low Voltage Switch

电压高 / 低切换键，低档输出时，输出额定电流较大，高档输出时，输出额定电流减半（参考第三章 产品规格书）。切换高 / 低档并不会影响电压设定值，但若是在输出 ON 时作切换会使输出产生短暂断电(至少20mS)，应尽量避免。不合理之切换将不被Model Version接受(如电压设定为300V时欲切换为低档)。

The switch keys of high or low voltage. In low output mode, the output rated current is higher and in high output mode, the output rated current is halved(reference to chapter Ⅲ product specification).High/low switch does not influence the setting voltage value, but it will cause short electrical outage (at least 20mS) if make the switch on the output ON mode. Try to avoid it. Improper switch will not be accepted by Model Version (such as switch to low mode in the setting 300V voltage).

7、 电流限制设定 Current Limiting Setting

在RESET 待机或输出的状态下按一下ASET和 旋钮键可显示预先设定电流限制值，若再按一下旋钮键可进行数值的调整，若于4 秒内未更动电流限制设定时会自动跳离电流限制设定画面，而回到原先设定画面。

输出电流超过设定值时，输出停止、OUTPUT/RESET的LED闪烁。

In the reset standby or output state, press aset and knob key once to display the preset current limit value. If the knob key is pressed again, the value can be adjusted. If the current limit setting is not changed within 4 seconds, it will automatically jump out of the current limit setting screen and return to the original setting screen.

When the output current exceeds the set value, the output stops and the output / reset LED flashes.

8、P / PF 选择键 Option key

随时可按 P / PF 选择键，选择欲观察功率表或功率因数表。(灯亮为功率，灯不亮为功率因数）

Press P / PF to chose the key any time, but the choice should base on power meter or power factor meter.

9、ON/OFF 键

可切换输出之 ON / OFF 状态，ON/OFF灯亮时表示有输出，灯熄表示无输出。而输出异常时会将输出转为OFF 状态，ON/OFF LED 指示灯闪烁，若按第一下可解除蜂鸣器警报(Alarm)，按第二下可重置错误讯息，再按第三下才能恢复输出。

The on / off state of the output can be switched. When the on / off light is on, it means there is output, and when the light is off, it means no output. When the output is abnormal, the output will be turned to off state, and the on / off led will flash. If you press the first button, the buzzer alarm will be relieved; if you press the second button, you can reset the error message; and then press the third time to restore the output.

10、M1、M2、M3、M4、M5 五组记忆模式可储存电压、电流、频率的设定状态于任一组记忆模式内。若要记忆 / 持续压住M1、M2、M3 、M4、M5任一键三秒以上即可储存于该记忆内，若要呼叫 / 按一下M1、M2、M3、M4、M5任一键即可呼叫已储存的记忆模式。

M1, M2, m3, M4 and M5 memory modes can store the set state of voltage, current and frequency in any group of memory modes. If you want to remember / press any key M1, M2, m3, M4, M5 for more than three seconds, you can save it in the memory. If you want to call / press any key M1, M2, m3, M4, M5, you can call the stored memory mode.

11. MENU（系统）键。

停止状态下按 MENU 键试进入系统， BUS-波特率， ADD-ID 地址，DLY-启动时间，PLC-通讯协议选择，（通过飞梭来调节需要的值。）

Press the MENU key in the stopped state to try entering the system, including BUS baud rate, ADD-ID address, DLY start time, PLC communication protocol selection, and adjust the required values through the shuttle

11、将负载接于输出端子，一切无误后打开电源输出开关。

Connect load to output terminal, turn on the power output switcher after all things done correctly.

12、本机附有过载或短路保护装置，在过载或短路时保护电路立即启动（切断输出电源，蜂鸣器有警报声和报警指示灯亮，此时报警示为正常状况）。先将输出开关 OFF，检查是否超载使用。（如有时，请将负载减少）重新复位（ALARM 声音，指示切断）一切又恢复正常状况，即可开始继续使用。

The overload or short circuit protecting device will start immediately when overloading or short circuit happen (cut off the output power, buzzer is humming and alarm indicator is lighting). Turn off the output switcher, checking if overloading (if it does, please lighten it). Reset, all come back to normal and can work again.

13、若有过载或输出短路时，机器报警后请勿立即按复位按钮，应先将输出开关断开后再复位，否则影响机器寿命。重新打开输出开关前，请检查负载是否无误。

If overload or short circuit, please do not press RESET immediately after alarm. The correct operation is that turn off the switcher before reset, or impact the machine life. Make sure the load is right before turn on the switcher again.

14、本机如有其它状况无法排除请告知本公司，将派员处理。

Please inform us if there are any other situations cannot be handled, we

will send technician to deal with.

第六章　附录资料

CHAPTER Ⅵ APPENDIX

6.1 故障检修

Troubleshooting

1、现象：无电压输出，面板各显示灯全部不亮。

Phenomenon: No voltage output, all the panel indicators are out.

原因：无电源输入

Reason: No power supply input

排除：　A、查开关是否开启　　b、查保险丝是否熔断。

C、输入电源是否正确插入电源插座或停电。

Clean:　A. Make sure the switcher is turned on.　B. Make sure the fuse is not fused.

C. Make sure input cord is plugged in socket correctly or check whether the power is out.

2、现象：无电压输出，频率表显示正常，电压显示“0”并有蜂鸣器声音

Phenomenon: No voltage output but the frequency meter is working. Voltage turns into 0 with humming.

原因：A：过载或负载异常 b. 负载起动电流过大

Reason: A. Overload or abnormal load. B. Load with over starting current.

排除：切断开关，按 RESET，减轻或检查负载后，打开输出开关即可。

Clean: Turn off the switcher, press RESET, turn on the output switcher after lightening or checking loading.

3、如有无法排除的故障，请通知本公司维修部，将为你们做良好的售后服务。

Please inform our maintenance center if there are any obstacles cannot be cleaned. We will provide excellent after-service.

6.2 产品维护

Product Maintenance

1、本产品质量保证期为十二个月，在此期间出现的故障均可免费保修。The product assurance is twelve months and free warranty for the malfunction in this period.

2、超过质量保修期，只收取维修成本费。

We only charge for the maintenance costs if the assurance is invalid.

3、长期跟踪与服务，并为客户建立档案.Establishing client files for long term tracking service.

4、可承接批量和特殊规格定做。Big volume and special specification orders are available.

产品合格证

Product Certification

编　号 NO.　　：_____

型　号 Model　：_____

容　量 Capacity：_____

质检员 OQC　　：_____

出厂日期

Manufacture Date：

修卡 Warranty

型号 Model		**制　造　编 Serial NO.**	
购机日期 Purchase Date		**发　标　号码 NO.**	
客户名称 Client		**电话 Tel**	
客户地址 Client Address		**邮编 Posecode**	

尊敬的客户：Dear clients:

感谢你购买本公司产品，自购机之日起，凭本保修卡及有效购机发票，享受免费保修十二个月。Thanks for selecting our product, We grantee free warranty for twelve months after purchasing with this warranty card and valid purchasing invoice.

当你购买产品后，请详细填写保修卡内容，并将复印件寄回本公司，我公司将为您建立用户档案，随时提供跟踪服务。Please fill in the warranty card in details after purchasing and send us one copy , we will establish the user file for providing tracking service any time.