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## ZHONGHENG POWER ENERGY PRODUCT APPROVAL SPECIFICATION

MODEL NO. (产品型号) PE-P096CV-V024-S-VF

CUSTOMER (客户) \_\_\_\_\_

CUSTOMER P.N. (客户料号) \_\_\_\_\_

SAMPLE DATE (送样日期) \_\_\_\_\_

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确认 Introduced By	审核 Checked By	批准 Approved By

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# Contents

<b>1. Introduction/</b>	<b>2</b>
1.1 Scope/概述	2
1.2 References/参考文件	2
<b>2. Approvals and Standards/</b>	<b>3</b>
2.1 Compliance Standards/标准规范	3
2.2 Emissions(EMI)/传导及辐射	3
2.3 Immunity(EMS)/抗扰度	3
2.4 Insulation/绝缘	3
2.5 Dielectric Strength (Hi-POT)/耐压强度（高压）	4
2.6 Leakage Current/漏电流	4
2.7 Ground Resistance/接地阻抗	4
<b>3. General Requirements/</b>	<b>5</b>
3.1 Environmental Conditions/环境条件	5
3.2 Reliability and Life/可靠性及寿命	5
3.3 Dynamic Performance/动态特性	5
3.4 Mechanical Construction/机械结构	6
<b>4. AC Input/</b>	<b>7</b>
4.1 Ratings/额定参数	7
4.2 Input Voltage Specifications/输入电压规格	7
4.3 Input Current/输入电流	7
4.4 Input Protection/输入保护	7
<b>5. DC Output/</b>	<b>8</b>
5.1 Output Voltage Specifications/输出电压规格	8
5.2 Output Protection/输出保护	8
<b>6. Performance Curves/</b>	<b>9</b>
6.1 Input Voltage Derating/输入电压降额曲线	9
6.2 Thermal Derating/温度降额	9
<b>7. Mechanical Drawings/</b>	<b>10</b>
7.1 Product Outline/产品外观尺寸	10
7.2 Label/产品标贴	10
7.3 Package/包装	10

## 1. Introduction/

### 1.1 Scope/

This specification is for customer approval. It defines the detailed specification of Hangzhou Zhongheng Power Energy Co., Ltd LED driver product. It will be a formal document for customer and Hangzhou Zhongheng Power Energy Co., Ltd for the specified product.

该规格书为客户承认用。该文档定义了杭州中恒派威电源有限公司 LED 驱动产品的规格。该文档将作为杭州中恒派威电源有限公司与客户之间关于指定产品型号的正式文档。

### 1.2 References/

[1] Hangzhou Zhongheng Power Energy Co., Ltd Product Family Specification/中恒派威电源产品手册



## 2.5 Dielectric Strength (Hi-POT)/

Section	Parameter	Specification	Comments
2.5.1	Input-to-Output (输入-输出)	3750Vac/10mA/60s	
2.5.2	Input-Ground (输入-地)	1554Vac/5mA/60s	
2.5.3	Output- Ground (输出-地)	1554Vac/10mA/60s	

## 2.6 Leakage Current/

Section	Parameter	Specification	Condition
2.6.1	Leakage Current/漏电流	1mA max.	277Vac/60Hz

## 2.7 Ground Resistance/

Section	Parameter	Specification	Condition
2.7.1	Ground Resistance/接地阻抗	0.1Ω max.	32A, 3s

### 3. General Requirements/

#### 3.1 Environmental Conditions/

Section	Parameter	Specification	Comments
3.1.1	Maximum Case Temperature/ 大温	90°C	
3.1.2	Working Ambient Temperature Range/ 作环境温度范	-40°C to +70°C	Derating will apply for 60°C to 70°C/60-70°C 降额输出
3.1.3	Start-up Temperature/ 动温度	-40°C	
3.1.4	Maximum Altitude for Normal Operation/ 高度	3000m	Derating will apply above 2000m/ 2km 降额输出
3.1.5	Storage /	-40°C to +85°C	
3.1.6	Transport/ 输	-40°C to +70°C	
3.1.7	IP Rating/IP	IP67	
3.1.8	Operating Humidity/ 作环境 度	10 100% RH	
3.1.9	Storage Humidity/ 环境 度	5 100% RH	

#### 3.2 Reliability and Life/

Section	Parameter	Specification	Comments
3.2.1	MTBF (Calculated) / 间隔时间理论值	320,000hrs	Calculated by MIL-HDBK-217F. Measured at 220Vac input, 80% load and 25°C ambient temperature. 25°C 环境及220Vac输入与80%负载条件下测
3.2.2	Product Life/产品寿命	58,000 hours design life. /5.8 万小时设计寿命	Measured at 220Vac input, 80% load and 60°C case temperature. 60°C 温及 220Vac 输入与 80%负载条件下测
3.2.3	Maintenance & Repair/ 维修	Non field serviceable/不可现 维修	

#### 3.3 Dynamic Performance/

All measurements must be taken at the product wiring. Unless otherwise stated, all measurements are conducted at nominal output voltage and current with nominal input voltage. Steady state is considered to be less than or equal to 0.5% deviation from nominal output current.

所有测 必须在产品线路连接良好前提下，除非特别注明，所有测 在标称输入电压、标称输出电压及电流条件下进行，输出电压在 0.5%偏差内为稳态。



Comments

Parameter

# LED Driver Product Specification

4.1.1 Rated Input Voltage 額定輸入電壓 Single phase, Universal input / \_\_\_\_\_

4.1.2 Rated Input Current 額定輸入電流 Full rated/ 滿額輸入 input voltage 100Vac and 25 \_\_\_\_\_

## 5. DC Output/

### 5.1 Output Voltage Specifications/

Section	Parameter	Specification	Comments
5.1.1	Maximum Rated Current 大额定电流	4A	
5.1.2	Rated Output Voltage 额定输出电压	24V (-3%~+3%)	Defined as "Vo-rated". Measured at 10% load. /定义为 Vo-rated,10%载下测得。
5.1.3	Rated Output Power 额定输出功率	96W	
5.1.4	Efficiency/效率	87% @ 220Vac, full load	Typical value. 100% of rate output power at nominal input voltage, after the unit is thermally stabilized. 典型值。在标称输入电压下，100%额定输出功率，热机测 状态下测 。
5.1.5	Output Ripple and Noise (Peak to Peak) 输出纹 噪声(峰-峰值)	<5%Vo-rated	At rated output voltage, measured at 20MHz bandwidth and the output is paralleled with a 0.1uF ceramic capacitor and a 10uF electrolysis capacitor. Measured at full load. 在额定电压下测 ，示 器带宽 20MHz,输出端并联一个 0.1uF 陶瓷电容及一个 10uF 的电解电容下测 。满载下测得。

### 5.2 Output Protection/

Section	Parameter	Specification	Comments
5.2.1	Over Voltage Protection (OVP)	(1.1-1.5)Vo-rated	The unit will be in burst mode when OVP. It will deliver full function after fault is removed. 过压时 作在打嗝模式， 解除后，产品恢复正常 作。 v

## 6. Performance Curves/

### 6.1 Input Voltage Derating/

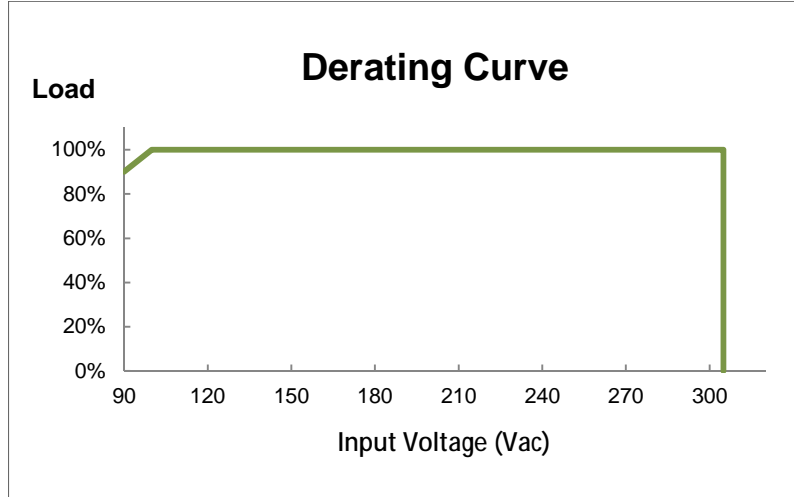


Figure 1. Input Voltage De-rating

### 6.2 Thermal Derating/

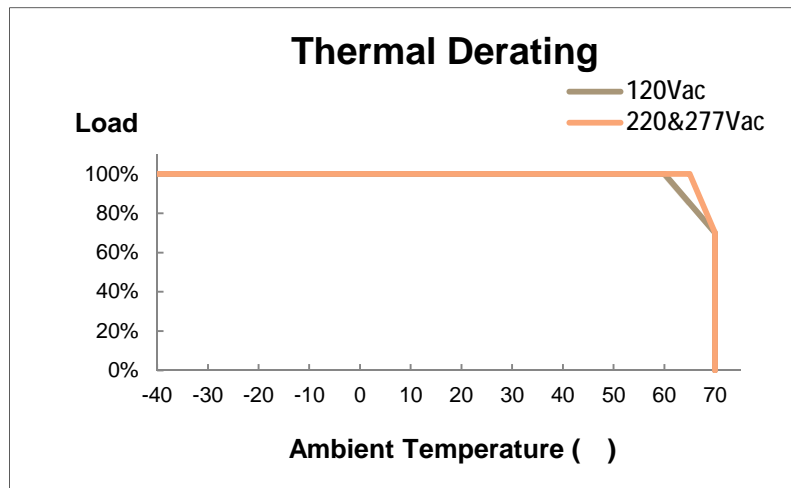


Figure 2. Temperature Derating of Output

## 7. Mechanical Drawings/

### 7.1 Product Outline/

