

## JG-100KB/150KB lighting box power supply

### 1. 产品特性 Product description



- ★ 176Vac-264Vac 电压输入
- ★ Input voltage 176Vac-264Vac
- ★ 全方位保护: OVP/OCP/SHORT 等
- ★ Protection functions :short circuit/OCP/OVP
- ★ 长寿命及器件低应力设计
- ★ Long Life and Low Stress Design of Devices
- ★ 工作范围广-25℃~60℃
- ★ Work range:-25℃~70℃(refer to derating curve)
- ★ 恒压恒流设计模式
- ★ Constant voltage and constant current design mode
- ★ 线性调整率≤0.5%
- ★ Linear adjustment rate ≤0.5%
- ★ 2 年质保
- ★ 2 year warranty

### 2. 产品应用 Product application

照明亮化、楼宇照明美化、广告标识、宣传标牌等

Lighting, building lighting beautification, advertising signs, publicity signs, etc.

### 3. 型号列表 Model list

型号 Model	额定功率 Rated power	输出电流 Output Current	输出电压 Output Voltage	效率* Eff	输入电压 Input Voltage	安规认证 Attestation	尺寸 Size (mm)
JG-100KB-12	100W	12.5A	12Vdc	85%	200-240Vac	CE	232*53*20
JG-100KB-24	100W	6.25A	24Vdc	86%	200-240Vac	CE	232*53*20
JG-100KB-48	100W	2.1A	48Vdc	88%	200-240Vac	CE	232*53*20
JG-150KB-12	150W	16.7A	12Vdc	85%	200-240Vac	CE	232*53*20
JG-150KB-24	150W	8.3A	24Vdc	86%	200-240Vac	CE	232*53*20
JG-150KB-48	150W	3.1A	48Vdc	88%	200-240Vac	CE	232*53*20

\*输出电流出厂设定值为最大值。

The factory set value of output current is the maximum value.

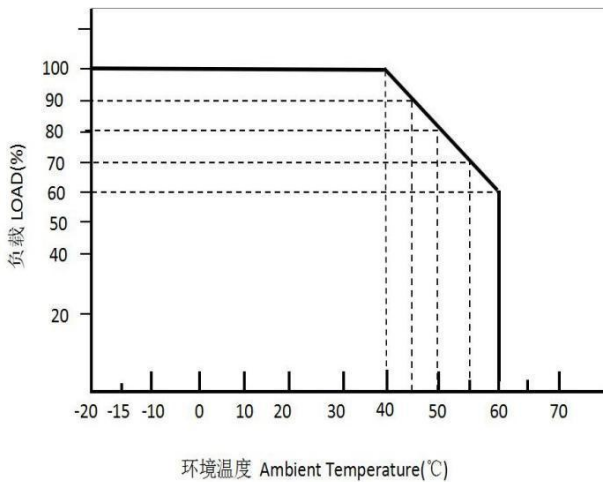
\*效率在 220Vac 输入满载条件下测试。

Efficiency was tested at 220Vac input full load.

## 4. 性能曲线 Performance curve

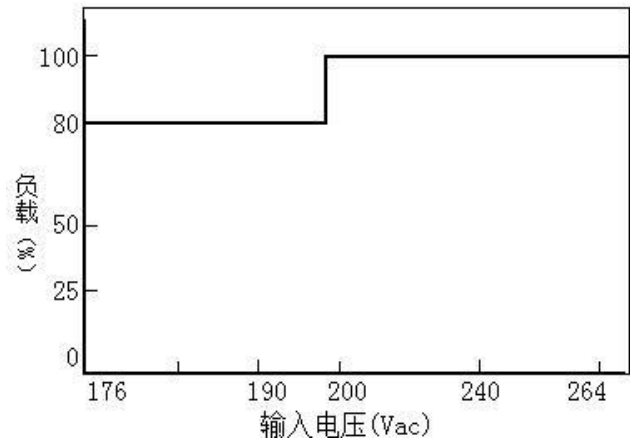
负载温度降额曲线

Load temperature derating curve



静态特性曲线

Static characteristic curve



\*环境温度在 50℃后需降额使用（降低带载条件），在 60℃环境温度下，带载为满载的 80%。

The ambient temperature should be derated after 50℃ (reduce the load condition). At 60℃, the load is 80% of the full load.

## 5. 电气性能 Behaviour of electricity

参数 Parameter		规格 Specifications
输入特性 Input characteristics	电压范围 voltage range	200~240Vac
	频率范围 Frequency range	47~63Hz
	功率因数 Power factor	>0.5@ 220Vac&Max load
	输入电流 Input current	2.5Amax@230Vac&Max load
	突入电流 <sup>②</sup> Inrush current ②	50A max , 1.2ms @230Vac 25℃
	漏电流 Leakage current	1.0mA max @230Vac 50Hz
输出特性 Output characteristic	恒压精度 voltage accuracy	±1%
	纹波电流 (Ip-Ip) Ripple current (Ip-Ip)	300mVmax
	启动时间 start time	2.0s max@220Vac&满载
	输出过冲 Output overshoot	<10%Io-max
	负载调整率	±2%

	Load adjustment rate	
	线性调整率 Linear adjustment rate	±0.5%
保护功能 Protection function	过压保护 OVP	1.2Lo~1.7Lomax, 打嗝状态, 故障解除后, 产品恢复正常工作 1.2Lo~1.7Lomax, hiccup condition, after the fault is removed, the product returns to normal operation.
	输入欠压 under voltage protection	无损伤, 欠压解除可自恢复 No damage, under-voltage relief can restore itself.
	短路保护 Short circuit	短路无损伤, 短路解除可自恢复 The short circuit has no damage, and the short circuit can be released automatically.
	过功率保护 OCP/OPP	110~150% rated
环境 Environment	工作环境 Working environment	-25°C~+70°C (Ta) <sup>③</sup>
	存储环境 Storage environment	-40°C~+85°C; 5%RH~90%RH 不凝固 (No solidification)
	防护等级 protect	IP20
	振动测试 Vibration test	10~500Hz, 5G 12 分钟/周期, X/Y/Z 轴各 72 分钟 10 ~ 500 Hz, 5g 12 minutes/cycle, X/Y/Z axis 72 minutes each
其它 Other	防雷 lightning protection	差模: 1kV; 共模: 2kV Differential mode: 1kV; Common mode: 2kV
	耐压 Hi-Pot	输入-输出 1500Vac, 输入-地 1500Vac, 输出-地 500Vac AC-DC 1.5KVac; AC-GND 1.5KVac; DC-GND 0.5KVdc
	MTBF <sup>④</sup>	≥100,000H (Ta=25°C, 220Vac, 80%Load)
	使用寿命 Service life	≥50,000H (Tc=75°C, 220Vac, 80%Load)
	最大壳温 Max shell temperature	90°Cmax
机械 Mechanical	尺寸/Size	232*53*20mm (L×W×H)
	安装孔距 Mounting hole	25mm

备注:

①除非特殊指定, 所有测试均在 25°C 室温环境下测得。 Test at room temperature at 25°C

②持续时间从 10%峰值电流上升沿到 10%峰值电流下降沿。 Duration from 10% peak current rising edge to 10% peak current falling edge.

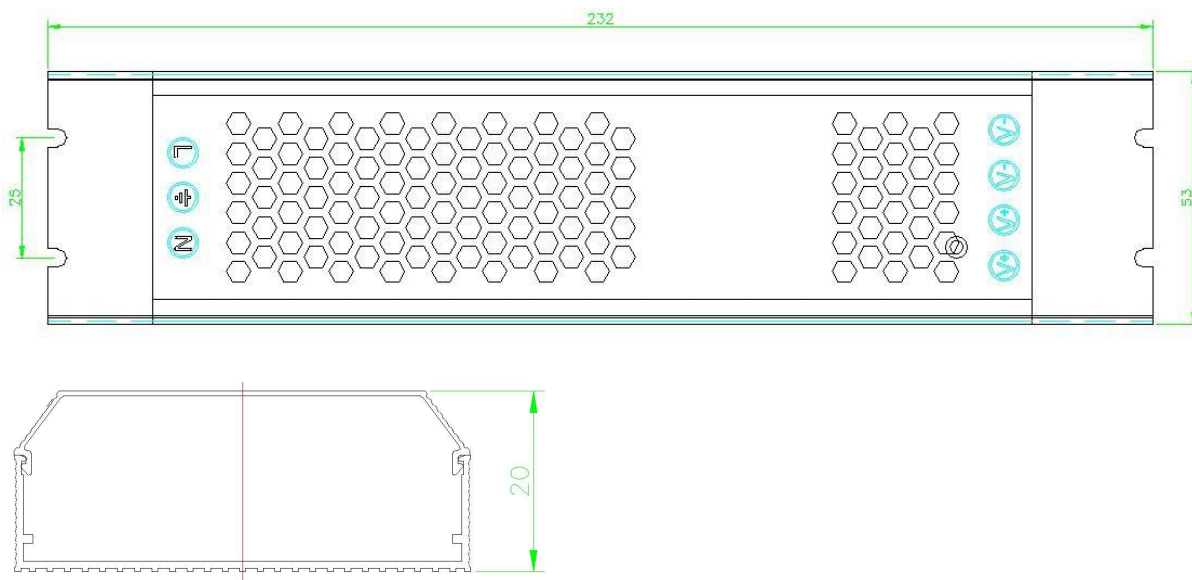
③Tc 即机壳温度, Ta 即环境温度。 Tc is the casing temperature and Ta is the ambient temperature.

④MTBF 根据 MIL-HDBK-217F 计算。

## 6. 安规及电磁兼容 Safety Regulations and Electromagnetic Compatibility

安规及 EMC 目录	标准
UL	UL817 UL1012
CE	EN60950 EN55032 EN55024
CCC	GB4943 GB9254
Conducted Emissions 传导	EN55032
Radiated Emissions 辐射	EN55032
Harmonics 谐波	EN61000-3-2
Voltage Fluctuations & Flicker 电压闪变	EN 61000-3-3
ESD 静电放电	EN 61000-4-2
RFF 射频磁场抗干扰	EN 61000-4-3
EFT 快速瞬变脉冲测试	EN 61000-4-4
Surge 浪涌	EN 61000-4-5
CRF 传导性射频扰动测试	EN 61000-4-6
Power Frequency Magnetic Field Test 工频磁场抗扰度测试	EN 61000-4-8
Voltage Dips 电压跌落	EN 61000-4-11
Hi-pot 高压	EN 60950

## 7. 机构特性 Institutional characteristics



## 8. 版本历史 Version history

版本 Version	修改内容 Modify content	发行日期 Issuing date
V: 01	First Release	2020.07.07