

Part Name : Switching Mode Power Supply
品 名 : 开关电源
Customer Part No.:
客 户 型 号 :
THMC Part No.: B600A024S
惠 高 型 号 :

SPECIFICATIONS

产 品 规 格 书

Received Signature Column 签 收 栏

2024-10-30

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天津光电惠高电子有限公司

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1. Features 产品特点:

- 1.1. Universal AC input / Full range.
国际通用全电压范围输入
- 1.2. Built-in active PFC function
内置主动 PFC 功能
- 1.3. High efficiency up to 95%
效率高达 95%
- 1.4. Protections: Short circuit / Overload / Over voltage / Over temperature
保护种类: 短路/过负载/过电压/过温度
- 1.5. Cooling: Convection cooled or force cooling
冷却方式: 自然冷却或强制风冷
- 1.6. Isolated output
隔离输出
- 1.7. High withstand voltage/High power density
高耐压/高功率密度
- 1.8. Outline Shape: 1U /Compact type
外形结构紧凑, 小型化
- 1.9. Safety standards: IEC62368-1, EN62368-1, Design conformity IEC60601-1, EN60601-1
安全标准: IEC62368-1, EN62368-1, 设计符合 IEC60601-1, EN60601-1
- 1.10. Application area: Industrial/ Medical treatment.
应用领域: 工业/医疗

2. Electrical specifications 电气规格:

2.1. Input requirement 输入要求:

2.1.1. Input voltage 输入电压	AC 90V~264V
2.1.2. Input frequency 输入频率	50/60Hz
2.1.3. Power factor (Typical) 功率因数(典型)	0.98 / 115VAC; 0.95 / 230VAC
2.1.4. No load input Power 空载功率	0.5W / 230VAC Remote off, Standby power no load Remote 关闭, 辅电空载
2.1.5. Efficiency (Typical) 效率(典型)	95%/230VAC Standby power no load, fanless 辅电空载, 无风扇
2.1.6. Input current (Typical) 输入电流(典型)	5.8A / 115VAC; 2.8A / 230VAC
2.1.7. Max inrush current 最大浪涌电流	20A / 115VAC, 40A / 230VAC Cold start 冷启动
2.1.8. Max leakage current 最大漏电流	0.1mA / 264VAC

2.2. Output characteristics 输出特性:

2.2.1. Output voltage(Typical) 输出电压(典型)	Main	24VDC
	Standby	12VDC
2.2.2. Rated current 额定电流	Main	25A, force cooling (13CFM) 风冷 8.3A, Convection cooled 自然冷却
	Standby	0.5A, fanless 无风扇
2.2.3. Rated power 额定功率	600W, force cooling (13CFM) 风冷 200W, Convection cooled 自然冷却	
2.2.4. Line regulation 输入调整率	1%	
2.2.5. Load Regulation 负载调整率	1%	
2.2.6. Over/Undershoot 过冲	5% max	

2.2.7. Max ripple & noise 最大纹波和噪声	Main	1% Vpk-pk, 20 MHz bandwidth, 测试线挂接 4.7uF 电解电容+104 独石电容
	Standby	2% Vpk-pk, 20 MHz bandwidth, 测试线挂接 4.7uF 电解电容+104 独石电容
2.2.8.Set up time(Typical) 启动时间(典型)	0.5S at full load 满载	
2.2.9.Rise time(Typical) 上升时间(典型)	15mS at full load 满载	
2.2.10.Hold up time(Typical) 保持时间(典型)	15mS at full load 满载 输出电压跌落至 90%	
2.2.11.Remote voltage range 遥控电压范围	0-1V Remote off, 3-15V Remote on	

2.3. Functional characteristics 功能特性:

2.3.1.Over voltage protection 过电压保护	115-135% Vnom Self-locking, recycle input to reset 自锁, 断开输入复位	
2.3.2.Over current protection 过电流保护	Main	≥105% trigger Continuous trip and restart(hiccup mode) 连续跳闸和重启(打嗝模式)
	Standby	≥120% trigger Continuous trip and restart(hiccup mode) 连续跳闸和重启(打嗝模式)
2.3.3.Short circuit protection 短路保护	Continuous trip and restart(hiccup mode) 连续跳闸和重启(打嗝模式)	
2.3.4.Over temperature protection 过温保护	Self-recovery 自恢复	
2.3.5.Remote control 遥控	Possible 可以实现	

3. Safety & EMC安全和电磁兼容

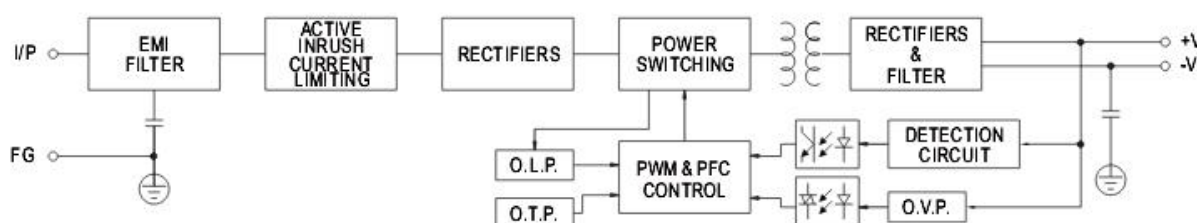
3.1. Safety standards 安全标准	CB Repot	IEC62368-1:2018
	EN	EN62368-1:2014/A11:2017
	cTUVus	UL62368-1 & CAN/CSA C22.2 No. 62368-1
	CE	LVD & EMC
	Equipment Protection Class	Class I & Class II
3.2. Withstand voltage 耐电压	Input 输入-FG 外壳地/PE 大地: 1.5kVAC 1Min 分钟 Input 输入-Output 输出:4.0kV AC 1Min 分钟 Output 输出-FG 外壳地/PE 大地: 1.5kVAC 1Min 分钟	
3.3. Insulation resistance 绝缘电阻	Output 输出-FG 外壳地/PE 大地: 100MΩ Min @DC500V	
3.4. EMI 电磁干扰	Conducted	EN55011/EN55032 Class B
	Radiated	EN55011/EN55032 Class B
3.5. Harmonic current 谐波电流	EN61000-3-2 Class A	
3.6. Voltage flicker 电压闪烁测试	EN61000-3-3 Class A	
3.7. ESD immunity 静电放电扰度	EN61000-4-2, Level 4, Criteria A	
3.8. Radiated immunity 辐射抗扰度	EN61000-4-3, Level 3, Criteria A	
3.9. EFT/Burst 脉冲群抗扰度	EN61000-4-4, Level 4, Criteria A	
3.10. Surge 浪涌	EN61000-4-5, Level 3, Criteria A	
3.11. Conducted immunity 传导抗扰度	EN61000-4-6, Level 3, Criteria A	
3.12. Dips & interruptions 瞬跌与中断	EN61000-4-11 0% 0.5cycle Perf Criteria A (600W load) 0% 1cycle Perf Criteria A (300W load)	

4. Environmental requirement 环境要求:

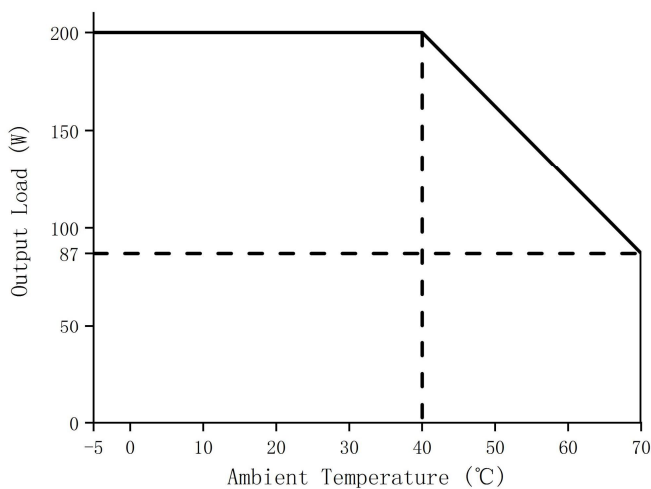
4.1. Operating temperature 工作温度	-20~+70°C See derating curve for details 详见降额曲线
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4.2. Storage temperature 保存温度	-40~+85°C
4.3. Operating humidity 工作湿度	20-90% RH, Non-condensing 无冷凝
4.4. Storage humidity 保存湿度	10-95% RH, Non-condensing 无冷凝
4.5. Cooling 冷却方式	Convection cooled or force cooling 自然冷却或风冷
4.6. Operating Altitude 工作海拔要求	2000m
4.7.Shock (In package)冲击 (包装)	30g Peak, half-sine, 6 axis
4.8. Vibration 耐震性	At no operating,10-55Hz(Sweep for 1min) 19.6m/s ² Constant,X,Y,Z 1hour each 在不工作时, 10-55Hz(扫描 1 分钟) 固定加速度 19.6m/s ² , X,Y,Z 三个方向各 1 小时

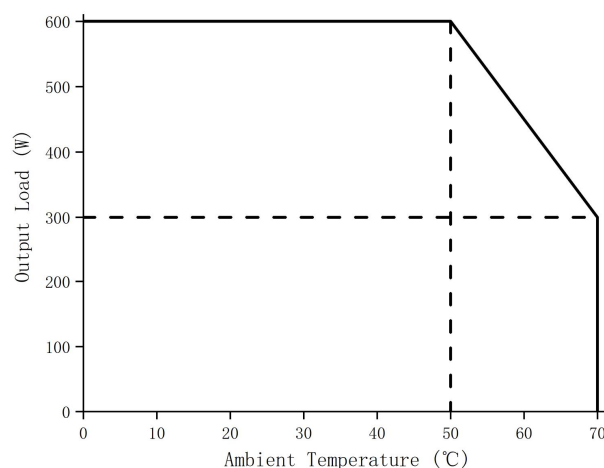
5. Block diagram 方框图



6. Derating curve 降额曲线



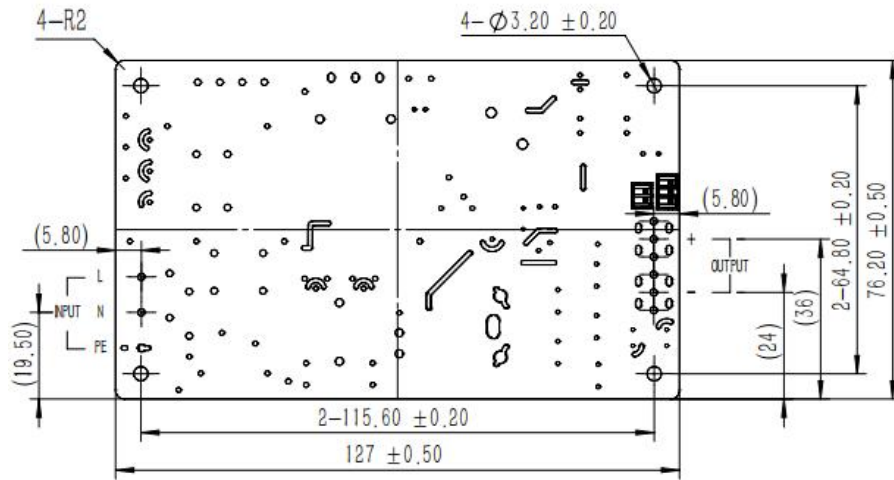
Convection cooled



force cooling (13CFM)

7. Mechanical Specification 机械尺寸:

7.1 Outline dimensions 外形尺寸(Unit 单位: mm)



7.2. Input logic connector pinouts 端口说明

INPUT CONNECTOR J1	
1	LINE
2	NEUTRAL

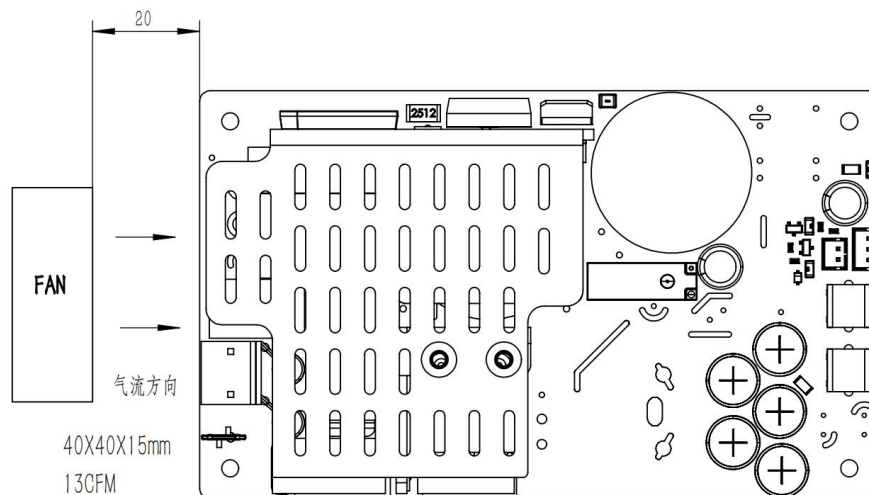
FAN CONNECTOR J3	
1	FAN+
2	FAN-

OUTPUT CONNECTOR J2	
1	OUT+
2	OUT-

FAN CONNECTOR J3	
1	Remote
2	Standby+
3	Standby-





9. Standard Mounting method 标准安装方法:

9.1. Fan 风扇



10. Name Plate 标识和铭牌:

<p align="center">B600A024S Specifications 产品规格书</p>	<p>File No.文件号 CB24080</p>	<p>Version 版本: 0.7</p>	<p>Page No.页号: 5 — 5</p>
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	<p>Huigao Magnetics</p>	<p>Switching Power Supply</p>
		<p>MODEL: B600A024S INPUT: 100-240 VAC 7.0A 50-60 Hz OUTPUT: 24V === 25.0A(13CFM Fan) 24V === 8.3A(Air Cooling)</p>
<p>Tianjin Huigao Magnetics Co., Ltd. No.6 Taishan Road, Hexi District, Tianjin</p>		
		<p>Made in CHINA</p>

11.Packing methods 包装方法:

<p>Drafted 拟制: 王海政</p>	<p>Checked 审核: 黎晓丹</p>	<p>Approved 批准: 刘晓莉</p>
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