

JWDK 整机工控电源系列--100W 三路输出

JWDK Switching Power Supply Series--100W Triple Output

典型性能 Typical Performance

- ◆外形尺寸：200*98*40 (mm)
Dimension: 200*98*40 (mm)
- ◆宽输入电压范围 (2: 1 输入电压范围)
Wide range input voltage (2: 1 range input voltage)
- ◆高效率、高功率密度、低纹波
High efficiency、High power density、Low ripple & noise
- ◆105°C长寿命电解电容
105°C long life electrolytic capacitors
- ◆高可靠性、三年保修
High reliability、three-year warranty
- ◆安规：EN60950
Ann rules: EN60950



输入特性 Input Features

| | | |
|-------------------------------|---|---|
| 输入电压范围 Input voltage range | 标称 24V Nominal voltage 24V 标称 48V Nominal voltage 48V 标称 110V Nominal voltage 110V | 18~36VDC 36~72VDC 72~144VDC |
|-------------------------------|---|---|

输出特性 Output Features

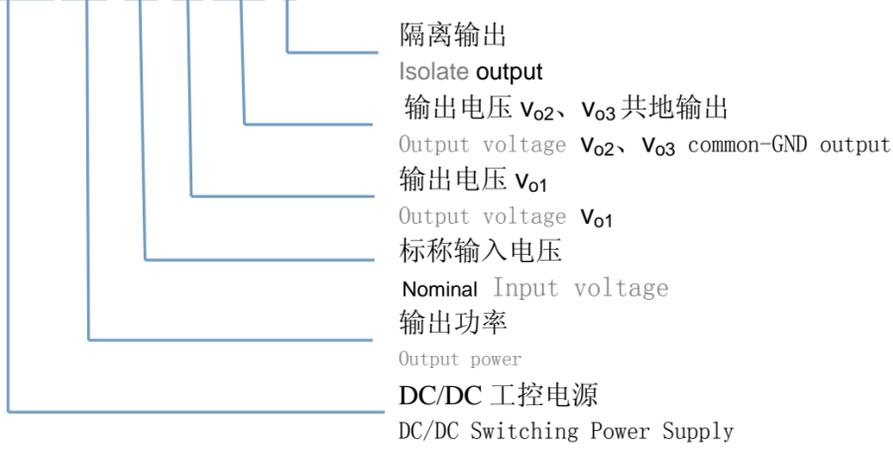
| | | |
|--------------------------------------|--|---|
| 输出电压精度 Voltage tolerance | 标称电压 Nominal voltage | $V_{O1} \cong \pm 1\%$ (3.3V、5V $\cong \pm 2\%$), V_{O2} 、 $V_{O3} \cong \pm 5\%$ |
| 电压调整率 Line regulation (full load) | 输入电压从低端到高端变化 Change of input voltage from low end to high end | $V_{O1} \cong \pm 0.5\%$ V_{O2} 、 $V_{O3} \cong \pm 1.5\%$ |
| 负载调整率 Load regul | 20%~100%负载变化 20%~100% Load change | $V_{O1} \cong \pm 0.5\%$, $V_{O2} \cong \pm 3\%$, $V_{O3} \cong \pm 5\%$ |
| 纹波噪声 Ripple&Noise | 20M 带宽 20M Bandwidth | $\cong 1\%$ |
| 温度系数 Temperature coefficient | | $\pm 0.02\%/^{\circ}\text{C}$ |
| 过功率保护 Output overload Protection | | 115~150%额定电流, 自恢复 115~150% rated output power, auto recovery |
| 短路保护 Short Circuit Protection | | 长期, 自恢复 Long-term, auto recovery |
| 效率 Efficiency | 输入标称电压、满载 Input rated voltage、full load | 80% (典型值) 80% (typical) |
| 过冲幅度 Overshoot | 25%额定负载变化 25% rated load change | $\cong 25\mu\text{S}$ |
| 启动时间 Rise time | 输入标称电压、满载 Input rated voltage、full load | 800mS (典型值) 800ms (typical) |
| 保持时间 Hold up time | 输入标称电压、满载 Input rated voltage、full load | 30mS (典型值) 30ms (typical) |

一般特性 General Features

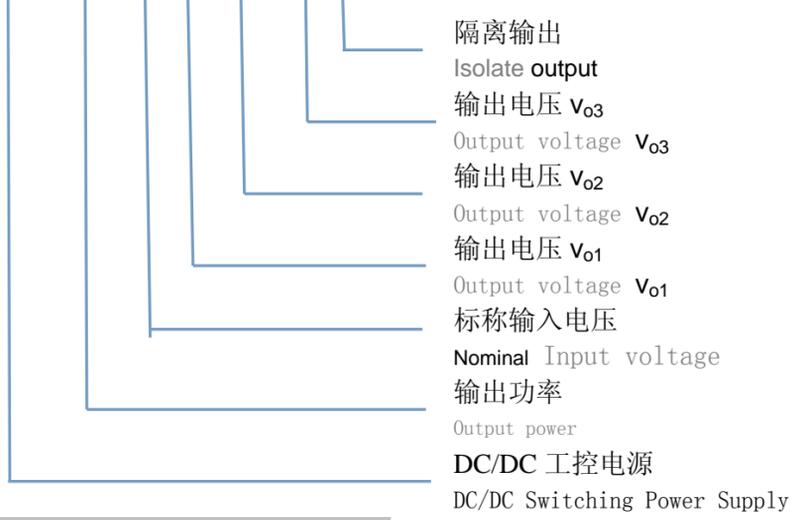
| | | |
|-------------------------------|--|-------------------------------------|
| 隔离耐压 Withstand voltage | 输入对输出、输入对地 I/P-O/P、I/P-F/G 输出对地 O/P -F/G 输出对输出 (隔离) O/P-O/P((1分钟, 漏电流 $\cong 5\text{mA}$) (1 Minute leakage current) $\cong 5\text{mA}$) | 1500VAC 500VAC 500VDC |
| 绝缘电阻 Isolation resistance | 500V | $\cong 50\text{M}\Omega$ |
| MTBF | 环境 25°C Environment 25°C | 2.0×10^5 Hrs |
| 工作温度 Operating temperature | 55°C以上降额使用 Above 55°C derating make | -25°C~70°C (-40°C~70°C) |
| 储存温度 Storage temperature | | -40°C~85°C |
| 工作相对湿度 Operating humidity | 无凝露及结冰现象 (non condensing) | 10%~90%RH |
| 储存相对湿度 Storage humidity | 无凝露及结冰现象 (non condensing) | 5%~95%RH |
| 冷却方式 Cooling method | | 自然冷却 Convection |

命名方式 Naming Rules

JWDK100- 24 S5 D12 I



JWDK100- 24 S5 S12 S24 I



产品选型 Product Selection Table

| 产品型号 Model No. | 输入电压 Input voltage V_{in} | 输出电压 Output voltage V_O | 输出电流 Output current I_O | 输出电压精度 Output voltage tolerance | 纹波噪声 R&N $V_{(P-P)mV}$ | 效率 Efficiency |
|---------------------|-----------------------------------|---------------------------------|---------------------------------|---------------------------------------|------------------------------|------------------|
| JWDK100-24S5D5I | 18~36V | + 5V | 3.0~15.0A | ±2% | 100mV | 80% |
| | | +5V | 0.4~4.0A | ±5% | 100mV | |
| | | -5V | 0.12~1.0A | ±5% | 100mV | |
| JWDK100-24S5D12I | | +5V | 2.0~10.0A | ±2% | 100mV | 83% |
| | | +12V | 0.4~4.0A | ±6% | 120mV | |
| | | -12V | 0.1~0.5A | ±5% | 120mV | |
| JWDK100-24S5D15I | | + 5V | 2.0~10.0A | ±2% | 100mV | 84% |
| | | + 15V | 0.4~ 3.0A | ±5% | 150mV | |
| | | -15V | 0.1~0.5A | ±5% | 150mV | |
| JWDK100-24S12D5I | | +12V | 1.0~7.0A | ±1% | 120mV | 81% |
| | +5V | 0.2~2.0A | ±5% | 100mV | | |
| | -5V | 0.1~ 1.0A | ±5% | 100mV | | |
| JWDK100-24S24D5I | +24V | 0.2~3.5A | ±1% | 200mV | 83% | |
| | +5V | 0.2~ 2.0A | ±5% | 100mV | | |
| | -5V | 0.1~1.0A | ±5% | 100mV | | |
| JWDK100-24S5S12S24I | +5V | 2.0~10.0A | ±2% | 100mV | 84% | |
| | +12V | 0.1~0.6A | ±5% | 120mV | | |
| | +24V | 0.4~2.0A | ±5% | 200mV | | |
| JWDK100-24S5S12S-5I | + 5V | 0.6~5.0A | ±2% | 100mV | 81% | |
| | +12V | 0.1~ 1.5A | ±5% | 120mV | | |
| | -5V | 0.1~1.0A | ±5% | 100mV | | |
| JWDK100-48S5D5I | | + 5V | 3.0~15.0A | ±2% | 100mV | 80% |
| | | +5V | 0.4~4.0A | ±5% | 100mV | |
| | | -5V | 0.12~1.0A | ±5% | 100mV | |
| | | +5V | 2.0~10.0A | ±2% | 100mV | |

| | | | | | | |
|---------------------|--------|----------|-----------|-----------|-------|-------|
| JWDK100-48S5D12I | 36~72V | +12V | 0.4~4.0A | ±6% | 120mV | 83% |
| | | -12V | 0.1~0.5A | ±5% | 120mV | |
| JWDK100-48S5D15I | | +5V | 2.0~10.0A | ±2% | 100mV | 84% |
| | | +15V | 0.4~3.0A | ±5% | 150mV | |
| | | -15V | 0.1~0.5A | ±5% | 150mV | |
| JWDK100-48S12D5I | | +12V | 1.0~7.0A | ±1% | 120mV | 81% |
| | | +5V | 0.2~2.0A | ±5% | 100mV | |
| | | -5V | 0.1~1.0A | ±5% | 100mV | |
| JWDK100-48S24D5I | | +24V | 0.2~3.5A | ±1% | 200mV | 83% |
| | | +5V | 0.2~2.0A | ±5% | 100mV | |
| | | -5V | 0.1~1.0A | ±5% | 100mV | |
| JWDK100-48S5S12S24I | | +5V | 2.0~10.0A | ±2% | 100mV | 84% |
| | | +12V | 0.1~0.6A | ±5% | 120mV | |
| | | +24V | 0.4~2.0A | ±5% | 200mV | |
| JWDK100-48S5S12S-5I | | +5V | 0.6~5.0A | ±2% | 100mV | 81% |
| | | +12V | 0.1~1.5A | ±5% | 120mV | |
| | | -5V | 0.1~1.0A | ±5% | 100mV | |
| JWDK100-48S5D5I | | 66~160V | +5V | 3.0~15.0A | ±2% | 100mV |
| | +5V | | 0.4~4.0A | ±5% | 100mV | |
| | -5V | | 0.12~1.0A | ±5% | 100mV | |
| JWDK100-48S5D12I | +5V | | 2.0~10.0A | ±2% | 100mV | 83% |
| | +12V | | 0.4~4.0A | ±6% | 120mV | |
| | -12V | | 0.1~0.5A | ±5% | 120mV | |
| JWDK100-48S5D15I | +5V | | 2.0~10.0A | ±2% | 100mV | 84% |
| | +15V | | 0.4~3.0A | ±5% | 150mV | |
| | -15V | | 0.1~0.5A | ±5% | 150mV | |
| JWDK100-48S12D5I | +12V | | 1.0~7.0A | ±1% | 120mV | 81% |
| | +5V | | 0.2~2.0A | ±5% | 100mV | |
| | -5V | | 0.1~1.0A | ±5% | 100mV | |
| JWDK100-48S24D5I | +24V | | 0.2~3.5A | ±1% | 200mV | 83% |
| | +5V | | 0.2~2.0A | ±5% | 100mV | |
| | -5V | | 0.1~1.0A | ±5% | 100mV | |
| JWDK100-48S5S12S24I | +5V | | 2.0~10.0A | ±2% | 100mV | 84% |
| | +12V | | 0.1~0.6A | ±5% | 120mV | |
| | +24V | | 0.4~2.0A | ±5% | 200mV | |
| JWDK100-48S5S12S-5I | +5V | 0.6~5.0A | ±2% | 100mV | 81% | |
| | +12V | 0.1~1.5A | ±5% | 120mV | | |
| | -5V | 0.1~1.0A | ±5% | 100mV | | |

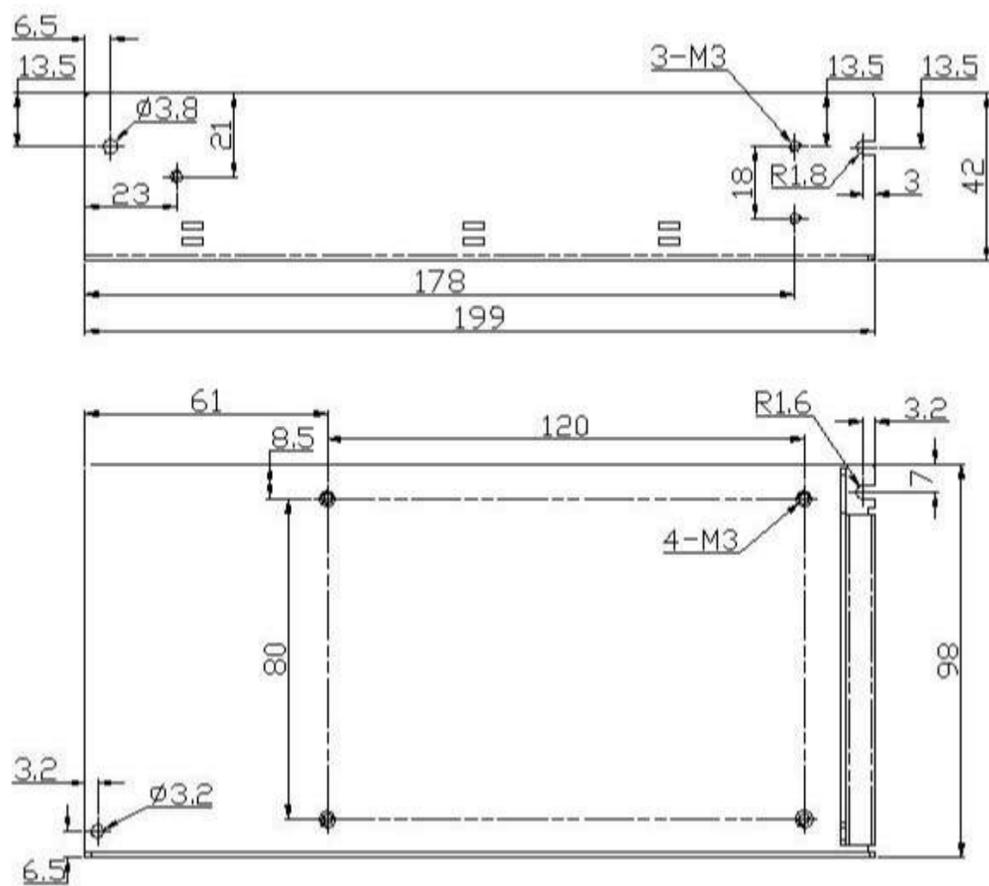
注：1、纹波噪声测试方法：使用一根12”双绞线，在终端并联0.1uF和47uF电容，在20MHz带宽下测试。

2、因篇幅有限，以上只是部分产品列表，若需列表以外产品，请与本公司销售部联系。

Note: 1、Ripple & noise are measured at 20MHz of bandwidth by using a 12”twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor

2、Due to space limitations, the above list is only for some products, If other than a list of products, please contact the Company's sales department.

安装尺寸图 Mechanical Data



注：电源安装尺寸如与选型手册不符，请以实物尺寸为准。

Note: Power mechanical data does not match with the hand book, Please refer to product size.