



➡ GK220SXX-15W Switching Power Supply



Wide voltage input
Isolated voltage stabilized single output
AC/DC switching power supply

• Product Feature

- ◉ Full range of voltage input
- ◉ Metal mesh shell package, good heat dissipation
- ◉ Working temperature up to +60°C
- ◉ Wide application range
- ◉ Conform to international and domestic safety regulations
- ◉ High efficiency, high life and low power consumption
- ◉ International standard pin
- ◉ Comply with RoHS instruction
- ◉ Heat dissipation mode: natural air cooling

• Product Overview

GK220SXX-15W is the latest product developed by our company, the volume is 84*58*33mm, and has the characteristics of high efficiency and low power consumption.

Products meet the requirements of green environmental protection, metal aluminum shell, with good shielding and anti-interference performance and electromagnetic compatibility, short time short circuit protection, self recovery and other functions.

• Application Area

GK220SXX-15W series power supply has OVP, OLP, OTP and other complete protection function, meet with EN62368-1, EN61558, EN60335, GB4943 and other international and domestic safety regulations, can be widely used in: Industrial control systems, industrial automation machinery, mechanical and electrical equipment, electronic instruments, electronic equipment, devices, household appliances and other fields.

• Product Brief Introduction

GK220SXX-15W series is a 15W single output power supply, the whole series provides 5V, 12V, 15V, 24V, 36V, 48V output, high output precision, with the output voltage external fine-tuning function. Suitable for 90-264VAC full range AC input, 33mm low height metal mesh shell design, not only small size, but also good heat dissipation ability, so that the whole series can operate for a long time under the ring temperature of -25°C to 60°C without fan.



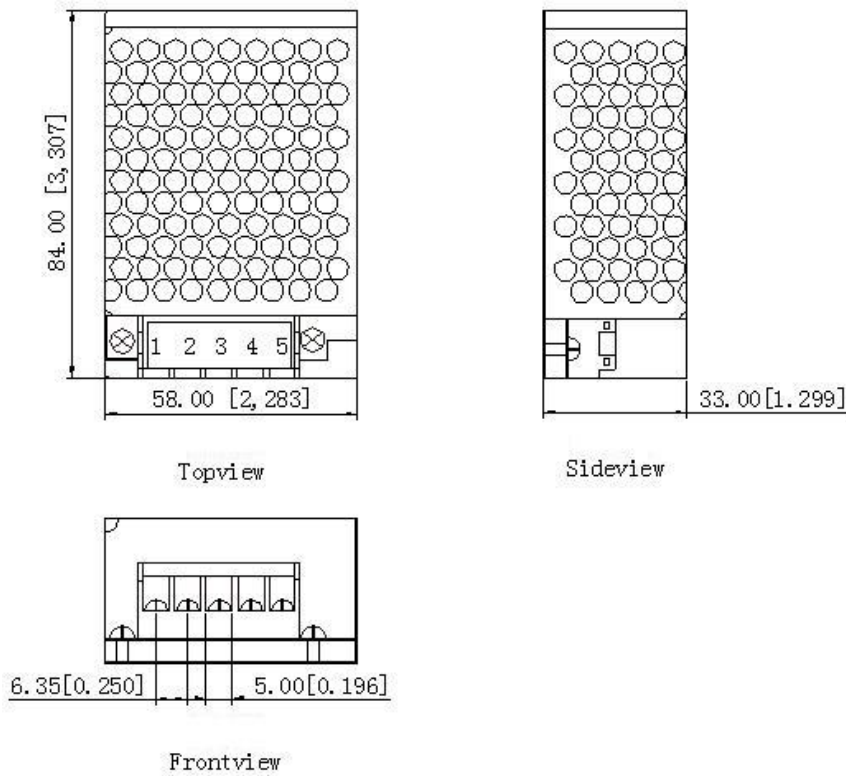
➡ GK220SXX-15W Switching Power Supply

| GK220SXX-15W | | | | | | |
|--------------|---------------|----------------|--------------------------|------------|--|----------------|
| Part No. | Input Voltage | Output Voltage | Full load output current | Efficiency | Input/Output isolation withstand voltage | Material |
| GK220S05-15W | 90VAC~264VAC | 5VDC±2% | 3A Max | ≥72.6% | 3000VAC | Aluminum shell |
| GK220S12-15W | 90VAC~264VAC | 12VDC±2% | 1.25A Max | ≥80% | 3000VAC | Aluminum shell |
| GK220S15-15W | 90VAC~264VAC | 15VDC±2% | 1A Max | ≥80% | 3000VAC | Aluminum shell |
| GK220S24-15W | 90VAC~264VAC | 24VDC±2% | 0.63A Max | ≥80% | 3000VAC | Aluminum shell |
| GK220S36-15W | 90VAC~264VAC | 36VDC±2% | 0.42A Max | ≥80% | 3000VAC | Aluminum shell |
| GK220S48-15W | 90VAC~264VAC | 48VDC±2% | 0.31A Max | ≥80% | 3000VAC | Aluminum shell |



➡ Overall dimensions and pin patterns

⊙ Metal aluminum case package



Pin Definition:

| Pin | Funcion |
|-----|--------------|
| 1 | AC/L |
| 2 | AC/N |
| 3 | FG |
| 4 | DC OUTPUT -V |
| 5 | DC OUTPUT +V |

Unit of size: mm[inch]

Unmarked tolerance: ± 0.25 [± 0.010]



Electrical Characteristics

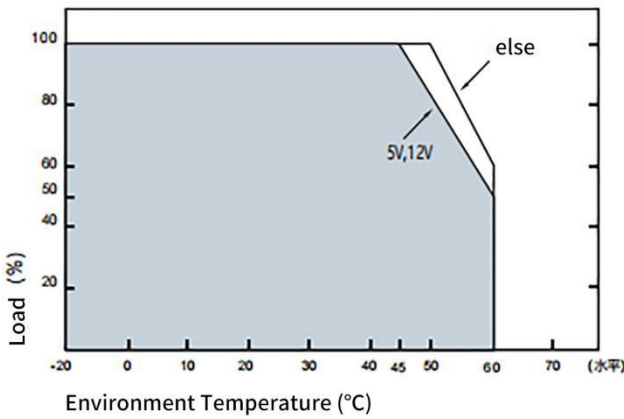
| Electrical Characteristics | | | | | |
|----------------------------|-------------|---|----------------|----------------|------|
| Item | Symbol | Condition except as otherwise herein provided $V_i, -20^{\circ}\text{C} \leq T_c \leq 60^{\circ}\text{C}$ | Limit Value | | Unit |
| | | | Min | Max | |
| Output Voltage | V_o | Full Load | $V_o - 2\%V_o$ | $V_o + 2\%V_o$ | V |
| Max Output Current | $I_{o\max}$ | - | - | P_o/U_o | A |
| Output Ripple Voltage | V_{p-p} | Full Load, V_i , BW=20MHz, Normal Temperature | | XXmV p - p | mVp |
| Voltage regulation factor | S_v | $V_{i\min}$, V_i , $V_{i\max}$, Full Load | - | 2.00 | % |
| Load regulation | S_i | V_i , $I_o = (10\% \sim 100\%)I_{o\max}$ | - | 1.00 | % |
| Efficiency | η | V_i , Full Load, Normal Temperature | 72.60 | - | % |
| Insulation Resistance | RI | Add 500VDC between the input and output points Room temperature, $t \geq 3S$ | 50 | - | MΩ |

| | | |
|-----------------------|--|--|
| EMC | Magnetic field sensitivity test Electrostatic discharge sensitivity test Radiation sensitivity test Conduction sensitivity test | GB6833.2-87 GB6833.3-87 GB6833.5-87 GB6833.6-87 |
| Temperature excursion | 0.02%/°C | |
| Frequency | 47 Hz~63 Hz (MAX) | |
| Humidness | 90% (max) | |
| Leak Current | 5mA (max) | |
| MTBF | >500,000 Hours | |

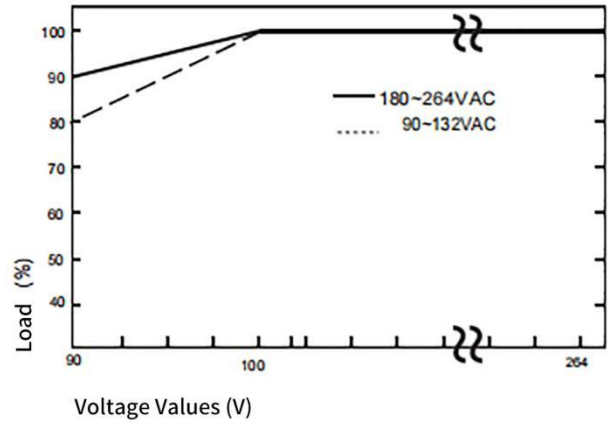


Temperature curve Efficiency curve

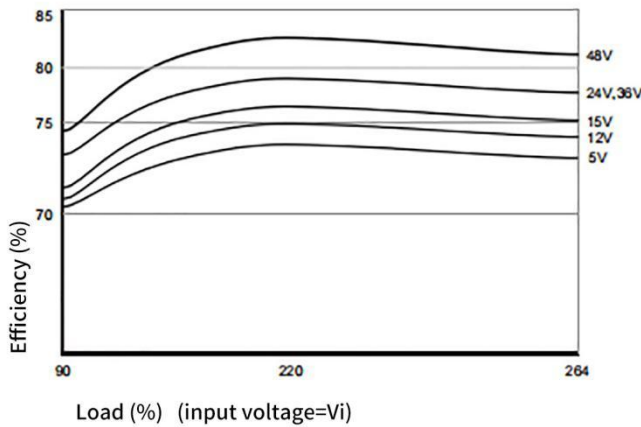
- Typical efficiency curve



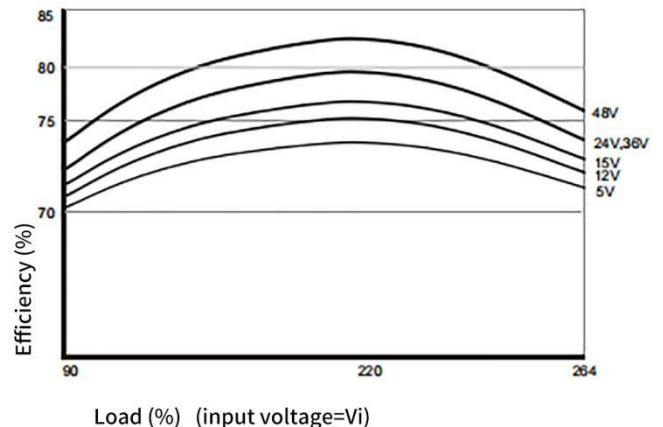
Temperature Derating Curve



Voltage Derating Curve



Efficiency/Load Graph



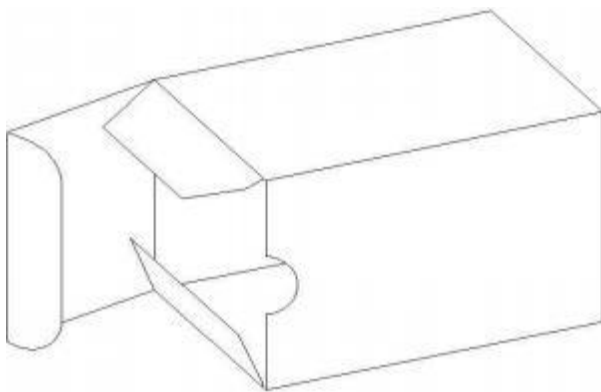
Efficiency/Input Voltage Graph



➡ Typical efficiency curve notes matters

• Packing

This series of switching power supply is packaged in an independent heat shrinkable paper box.



• Transport

The package equipped with switching power supply is allowed to be transported by any means of transport, which should avoid direct rain or snow and mechanical damage.

• Store

Switching power supply should be stored in the ambient temperature of -40 degrees ~ 85 degrees, relative humidity of 20%~90%, the surrounding environment without acid, alkaline and other harmful gases in the warehouse.

The above are the performance indicators of the product series listed in this manual. Some indicators of non-standard products may exceed the above requirements. In case of any inconsistency between the manual and the product specification documents, please refer to the specification documents.