



## ► 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.



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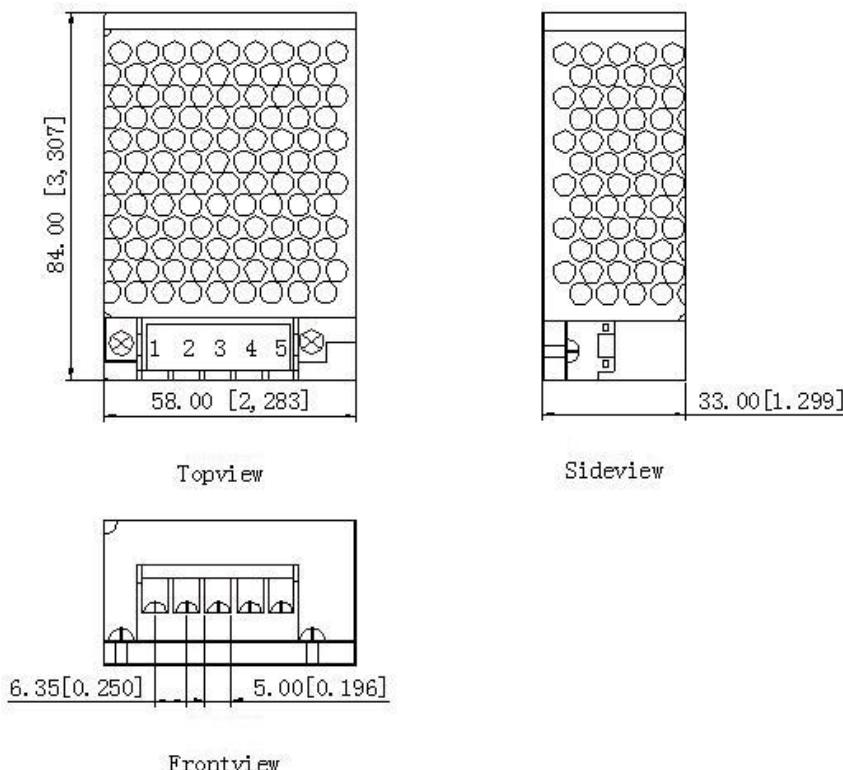
GK220SXX-15W

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

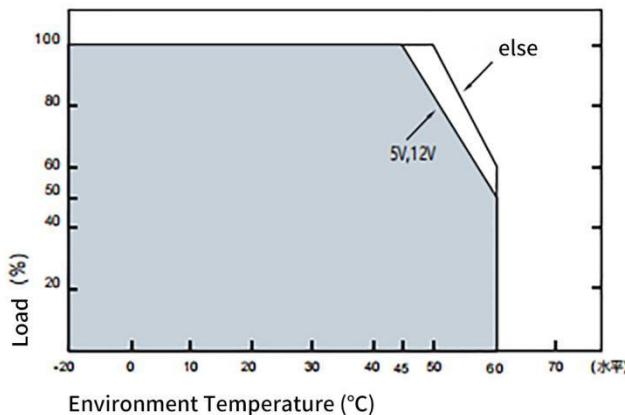
Electrical Characteristics					
Item	Symbol	Condition except as otherwise herein provided $V_i, -20^\circ C \leq T_c \leq 60^\circ C$	Limit Value		Unit
			Min	Max	
Output Voltage	$V_o$	Full Load	$V_o-2\%V_o$	$V_o+2\%V_o$	V
Max Output Current	$I_{omax}$	-	-	$P_o/U_o$	A
Output Ripple Voltage	$V_{p-p}$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

EMC	Magnetic field sensitivity test	GB6833.2-87
	Electrostatic discharge sensitivity test	GB6833.3-87
	Radiation sensitivity test	GB6833.5-87
	Conduction sensitivity test	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	

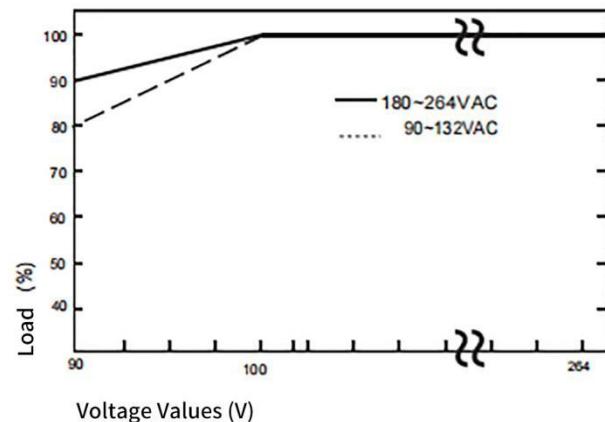


➡ Temperature curve  
Efficiency curve

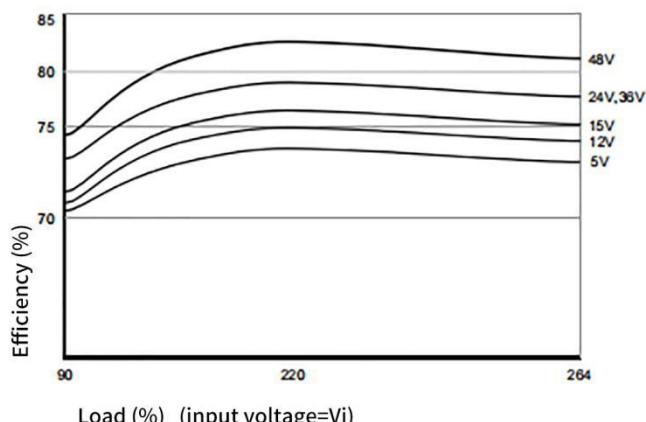
- Typical efficiency curve



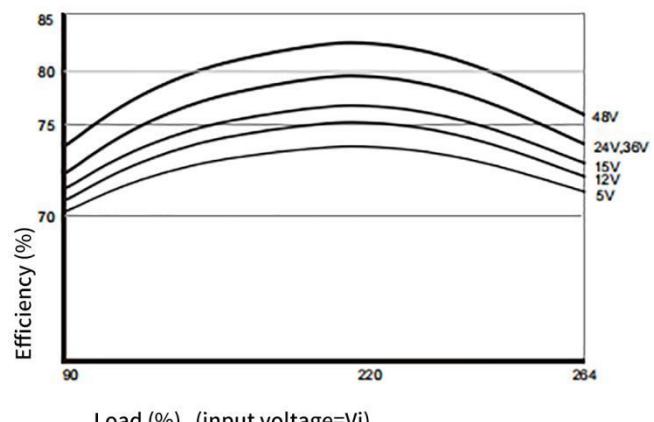
Temperature Derating Curve



Voltage Derating Curve



Efficiency/Load Graph



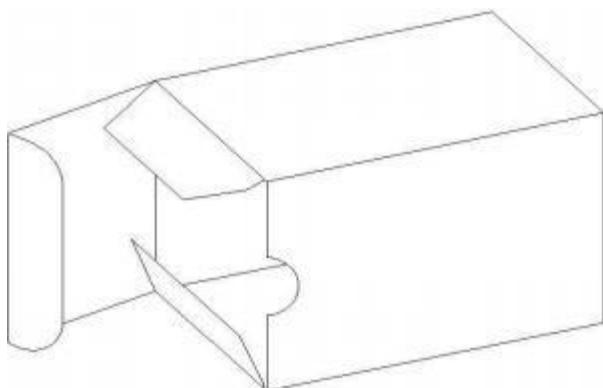
Efficiency/Input Voltage Graph



### ➡ 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.