

KRS Series

KGCOMP
PRODUCTS

Models

General Specification

Block Diagram

Operation Manual



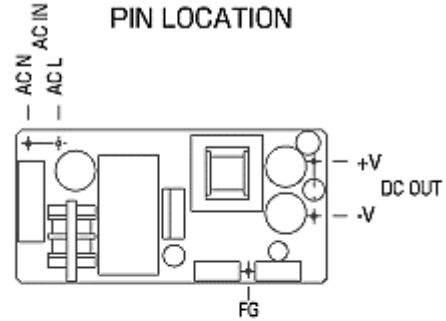
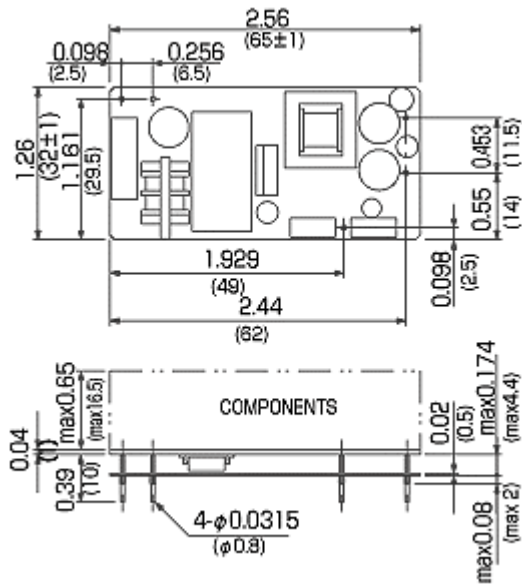
2 years
Warranty

Features

- UNIVERSAL INPUT 100VAC to 230 VAC
- 85VAC to 264VAC
- SUPER SMALL SIZE
- OVER CURRENT PROTECTION

Safety





Specification

• @

	MODEL	KRS10F-05	KRS10F-12	KRS10F-15	KRS10F-24
Input Specification	AC Input Voltage	100V 230V	100V 230V	100V 230V	100V 230V
	Output Voltage	5	12	15	24
	Output Current	2.0 2.0	0.84 1.0	0.67 0.8	0.42 0.5
	Efficiency	74%	79%	81%	82%
	Inrush Current 100V			10A	
	Inrush Current 230V			26A	
	Input Current (TYP)			0.22-0.15A typ	
	Output Voltage Adjustment Range			No	
	Ripple and Noise (mV)	150	150	150	200
	Input Regulation (mV)	20	20	20	20
Output Specification	Load Regulation (mV)	50	50	50	50
	Temperature Coefficient			0.02%/ deg C	
	Drift			0.5%+15mV (8Hours after 1Hour warm-up)	
	Hold-Up Time 100V			11mS	
	230V			120mS	
	Start-Up Time 100V			190mS	
Start-Up Time 230V			185mS		
Other Function	Over Current Protection	Works Over 105% of rating and recovers automatically			
	Remote Sensing	Not Provided			

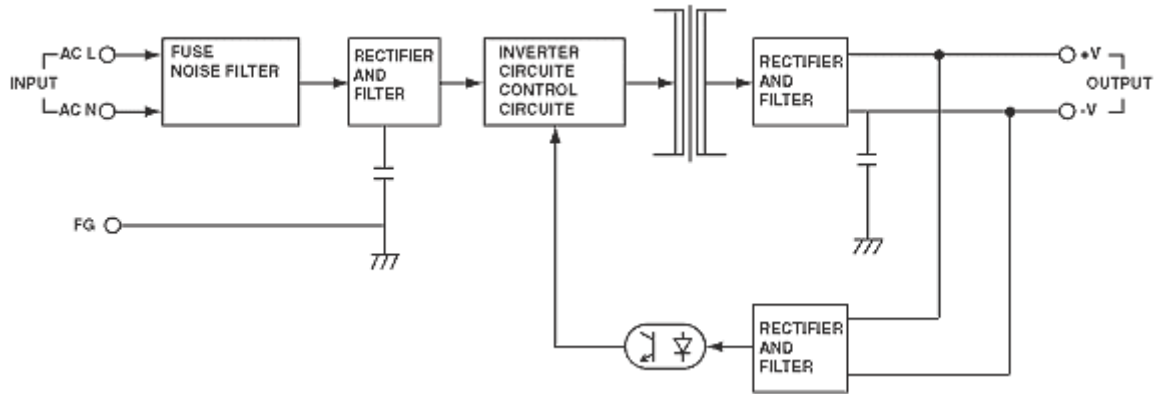
Models

Type	MODEL	Output Voltage (V)	Output Current(A)		Efficiency(%)TYP	Dimensions (WxHxD mm)
			AC100V	AC230V		
10W	KRS10F-05	5	2.0	2.0	74	65x21x32 see drawing
	KRS10F-12	12	0.84	1.0	79	
	KRS10F-15	15	0.65	0.8	81	
	KRS10F-24	24	0.42	0.5	82	

GENERAL SPECIFICATION

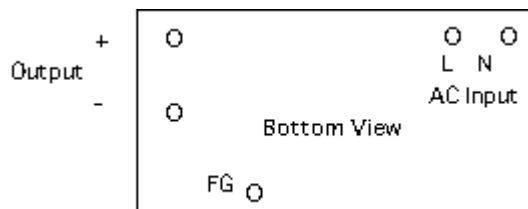
Input Specification	AC Input	AC 100V - 230V (85VAC-264VAC)
	Frequency	50/60Hz (47~63Hz)
General Specification	Operating Temperature	-10 to 70 deg C
	Storage Temperature	-20 to 85 deg C
	Humidity Operating	20~85%Rh
	Isolation Resistance Primary-Secondary-earth DC500V	More than 100Mohm
	Prim-Case DC500V	More than 100Mohm
	Sec-Case DC500V	More than 100MOhm
	Isolation Voltage Prim-Sec Cut off current10mA	3000 VAC
	Prim-Case Cut off current 10mA	2000 VAC
	Sec-Cas Cut off current 10mA	500 VAC
	Leakage Current Vin 115V 60Hz	Lower than 0.75mA
Environment	Vibration	10-55HZ 1min X,Y and Z axis 30minute each
	Impact	20G (X,Y and Z axis each)
Safety	UL 60950 THIRD EDITION, CAN/CSA C22.2, No.60950-00 THIRD EDITION	

Block Diagram



Operation Manual

1. Pin Description

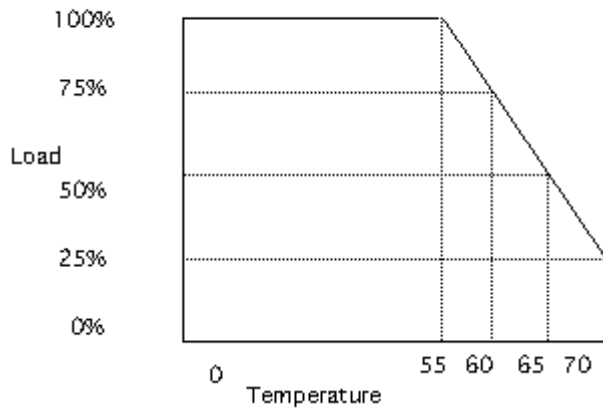


2. Overcurrent Protection

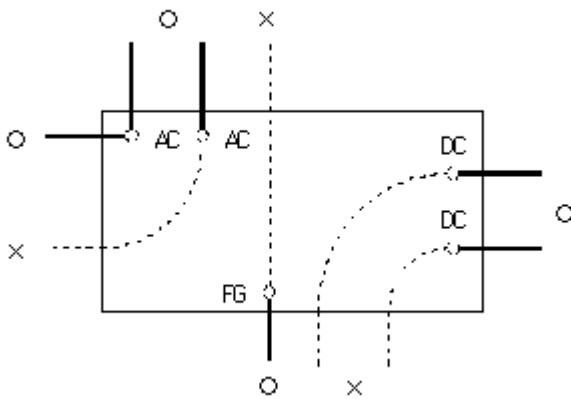
If output current exceeds the rated output of the power supply, the overcurrent protection will activate and output voltage will drop. The power supply will function normally once the overcurrent condition has been removed. Do not use in overcurrent condition or short mode. Using too large of capacitor (10,000 uF) on your load may prevent the power supply from providing the rated output voltage. Please consider load capacitance in your application.

3. Operation Temperature and Output Capability

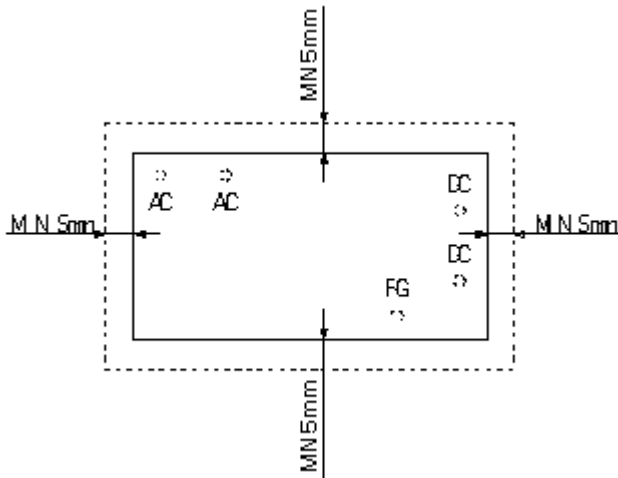
The range of temperature over which a power supply can be operated safely is critical to the overall life of the power supply. Operate the power supply in safe ambient condition by considering the necessary convection or forced air cooling requirement.



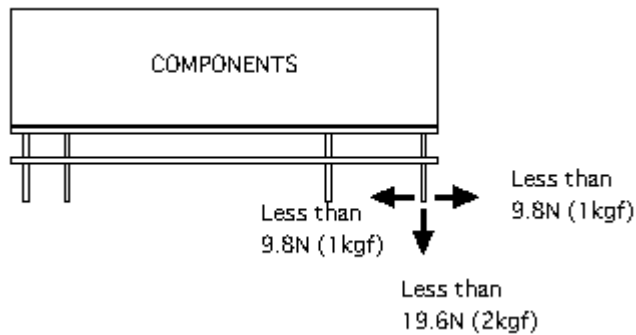
4. Installation Method



Avoid laying out the AC input line pattern directly beneath the power supply as it will increase the line conducted noise. Make sure to leave ample distance between the line pattern underneath the unit because the output noise may increase. Separate the pattern layout from the unit.



When installing the components or laying out the pattern around the unit, maintain a distance of 5mm or more. If this distance can not be kept, insert an insulation sheet between them.



When too much stress is applied on the input/output/FG pins of the unit, the internal connection may be weakened. Avoid applying stress of more than 9.8N (1kg) on the pins horizontally and more than 19.6N (2kg) vertically. When additional stress is expected to be put on the input/output pins because of vibration or impact, fix the unit to PCB using silicone rubber or another fixing method to hold stationary. This will reduce the stress onto the input/output pins.

Warranty

KAGA Components offers a three year warranty and we will repair or replace the power supply at no charge to the customer, provided the power supply has not been determined damaged or defective as a direct result of misuse or mishandling by the user.

6.Others

These power supplies are our standard products and designed for general purpose applications. They are not designed for use in life support systems, equipment used in hazardous environments, or nuclear control systems.