

Features

- Input Voltage Range 100~240V AC
- Constant Voltage
- Safety Standards CE & RoHS
- Waterproof IP67
- Efficiency up to 92%
- Protection SCP, OLP, OVP, OTP



Certified to CE, RoHS & IEC 61347-1/IEC 61347-2-13 Standards and complies with the relevant Efficiency Regulations. These are primarily used in LED Lighting Industries and customised solutions are available upon request.

Models

Model Number	Voltage (V)	Rated Current (A)	Rated Power (W)	Efficiency (%)
91RF-60-12S	12	5	60	92

Input

Parameter	Condition	Min	Typ.	Max.	Unit.
Input (AC)	Continuous	100	230	240	Vac
Input Frequency range	Vin=100 ~ 240Vac	47	50	63	Hz
Input AC Current	Vin=240Vac /100Vac full load	0.48	0.5	0.84	A
Inrush current cold start	Vin=240Vac, full load /240Vac ,25°C	--	65	--	
Power Factor	Vin=100Vac/50Hz	0.5	--	--	PF
	Vin=240Vac/50Hz		--	--	
THD	Vin=240Vac/50Hz	--	--	--	%

Output

Parameter	Condition	Min	Typ.	Max.	Unit.
Output Range	Vin=100 ~ 240Vac	11.5	12	12.5	V
		--	5	--	A
Efficiency	Vin=230Vac, Full load	--	92%	--	%
Output Ripple	Vin=230Vac, Full load	140	160	220	mV
Over Current	Vin=100 ~ 240Vac	5	5.5	6.0	A

Note: Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope, and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolysis capacitor. (test under the condition of rated input and rated output)

Protection

Parameter	Condition
Short Circuit Protection	The input power shall decrease when the output rail short, the power supply shall have no damage, and shall self-recovery when the fault condition is removed.

Other

Parameter	Condition	Min	Typ.	Max.	Unit.
Turn On Delay Time	Continuous	0.1	0.3	0.5	S
	Vin=100 ~ 240Vac	0.1	0.3	0.5	
Output Undershoot	Vin=240Vac /100Vac full load	--	--	10	%
	Vin=240Vac, full load /240Vac ,25°C	--	--	10	
Dielectric Strength(Hi-pot)	Primary to Earth: 1500Vac 10mAMax / 60second(3second for production) Primary to Secondary:1500Vac 10mAMax/60second (3second for production) Secondary to Earth: 1500Vac 10mAMax / 60second(3second for production)				
Grounded Resistance	< 0.1Ω,32A,1Minute				
Leakage Current	1mAmax. at input 230Vac/50Hz.				
Insulation Resistance	The IR shall be at least 100MΩ when applying 500Vdc between primary and Earth.				
Reliability Requirement	The power supply shall undergo a minimum of 4 Hours burn-in test at 45±5°C under full load conditions.				
LIFE Time Qualification	The Life Time shall be at least 5 years at 45°C, Full load and nominal input condition				

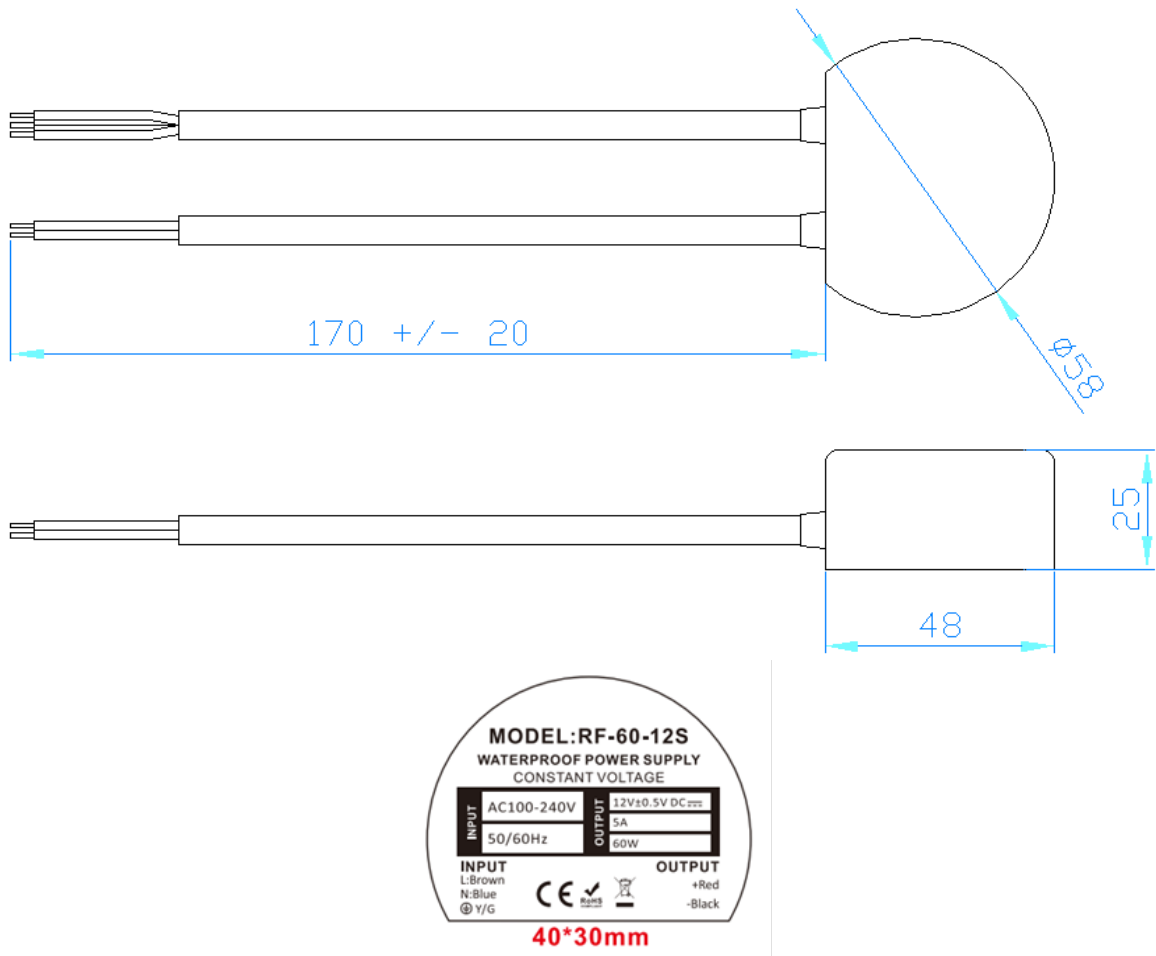
Environmental Conditions

Parameter	Condition	Min	Typ.	Max.	Unit.
Operating Temperature	Continuous	100	230	240	°C
Storage Temperature	Vin=100 ~ 240Vac	47	50	63	
Relative Humidity	Vin=240Vac /100Vac full load	0.48	0.5	0.84	% RH

CE Standards

Parameter	Standards
LVD	EN 61347-1:2015, EN 61347-2-13:2014, EN 62493:2015
EMC	EN55015, EN61547, EN61000-3-3, EN61000-3-2

Product Dimensions & Label



Input-output port

Pin No.	Pin definition	Function Description
1	L	AC live
2	N	AC null
3	G	Safe ground
4	-V	O/P Negative terminal
5	+V	O/P Positive terminal

Package

Model	Carton box			Small white box	
	size(mm)	Weight(kg)	Qty	size(mm)	Weight(kg)
1	500*260*280	13.5	100	70*32*75	0.125