




# YEL600 SERIES 600W



YEL series are designed with lower profile housing and for wide range AC input from 90VAC to 264VAC.

The series withstand 300VAC surge input for 5 second and operate for the temperature up to 70 °C.

The good performance can be used for industrial automation & control systems, varied equipments etc.

## Features



Universal AC Input/ Full Range



Forced air cooling by built-in DC fan



High operating temperature up to 70 °C



Higher Efficiency



Protection:Short Circuit/Overload/  
Over Voltage/Over Temperature



Three Years Warranty

## Model Information

Yingjiao Part Number	DC Voltage	Rated Current	Rated Power	VOLTAGE ADJ.RANGE
YEL600-12	12V	50A	600W	11.4~13.2V
YEL600-15	15V	40A	600W	13.5~18V
YEL600-24	24V	25A	600W	22.8~26.4V
YEL600-27	27V	22.2A	599.4W	25.65~29.7V
YEL600-36	36V	16.6A	597.6W	34.2~39.6V
YEL600-48	48V	12.5A	600W	45.6~52.8V

## Input

VOLTAGE RANGE	90-132VAC/180-305VAC by switch 240-370VDC(switch on 230VAC)
FREQUENCY RANGE	47-63Hz
EFFICIENCY(Typ.)	90% YEL600-12
	90% YEL600-15
	91% YEL600-24
	91% YEL600-27
	92% YEL600-36
	92% YEL600-48
	93% YEL600-60
AC CURRENT(Typ.)	16A/115VAC
	8A/230VAC
	35A/115VAC
INRUSH CURRENT(Typ.)	60A/230VAC
LEAKAGE CURRENT	<2mA/240VAC

## Output

RIPPLE & NOISE(max.)	200mVp-p	YEL600-12	
	200mVp-p	YEL600-15	
	240mVp-p	YEL600-24	
	270mVp-p	YEL600-27	
	360mVp-p	YEL600-36	
	360mVp-p	YEL600-48	
VOLTAGE TOLERANCE	480mVp-p	YEL600-60	
	±1.5%	YEL600-12	
	±1.0%	YEL600-15	
	±1.0%	YEL600-24	
	±1.0%	YEL600-27	
	±1.0%	YEL600-36	
LINE REGULATION	±1.0%	YEL600-48	
	±1.0%	YEL600-60	
	±0.5%		
	LOAD REGULATION	±1.0%	YEL600-12
		±0.5%	YEL600-15
		±0.5%	YEL600-24
±0.5%		YEL600-27	
±0.5%		YEL600-36	
±0.5%		YEL600-48	
SETUP,RISE TIME	±0.5%	YEL600-60	
	1300ms, 50ms/230VAC at full load		
HOLD UP TIME (Typ.)	3000ms, 50ms/115VAC at full load		
	20ms/230VAC at full load		
	16ms/115VAC at full load		

## Protection

OVER LOAD	105%-150% Rated Output Power Constant current limiting, unit will shutdown after 3 sec, re-power on to recover
OVER VOLTAGE	12V:13.8~16.2V 15V:18~21V 24V:27.6~32.4V 36V:41.4~48.6V 48V:55.2~64.8V Protection type : Shut down o/p voltage, re-power on to recover
OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover

## Environment

WORKING TEMP.	-30 °C to +70 °C (Refer to "Derating Curve")
Working Humidity	20 ~ 90% RH Non-Condensing
STORAGE TEMP, HUMIDITY	-40°C ~ +85°C, 10 ~ 95% RH non-condensing
TEMP. COEFFICIENT	± 0.03%/°C(0~50°C)
VIBRATION	10~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y,Z axes
OVER VOLTAGE CATEGORY	III; According to BS EN/EN61558, BS EN/EN50178, BS EN/EN60664-1, BS EN/EN62477-1; altitude up to 2000 meters.
MTBF	1533.4K hrs min. Telcordia SR-332 (Bellcore);

## SAFETY & EMC

SAFETY STANDARDS	BS EN/EN62368-1, BS EN/EN61558-1
WITHSTAND VOLTAGE	I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/ 500VDC/25 °C/70% RH
EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3,
EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11,BS EN/EN55035

## Note

- 1.All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- 2.Ripple&noise are measured from peak to peak with band width limit of 20MHz(0.1uf and 47uf /50V parallel capacitor under DC output full load, AC nominal input 25 °C ambient temperature).
- 3.Derating may be needed under low input voltages. Please check the derating curve for more details.
- 4.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
- 5.The ambient temperature derating of 5°C/1000m is needed for operating altitude greater than 2000m(6500ft).

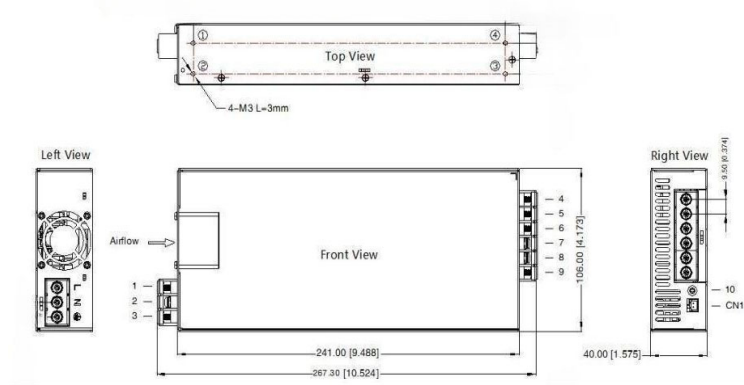
## Dimensions & Weight

Length:	241mm/9.48in
Width:	106mm/4.17in
Height:	40mm/1.57in
Weight:	850g

## Packing

Carton Size:	54 × 30 x 24 CM
	21.26 x 11.81 x9.45 in
Master Carton Quantities:	9pcs/Carton

## Dimensions and Installation



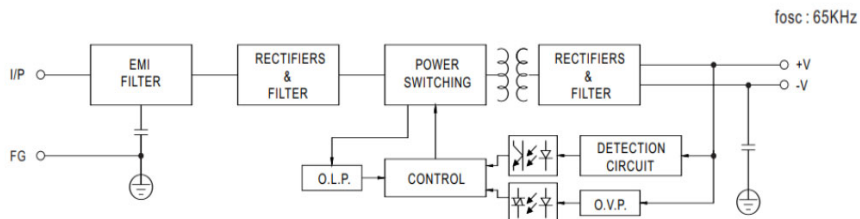
### Input

No.	Description
1	AC/L
2	AC/N
3	FG $\perp$

### Output :

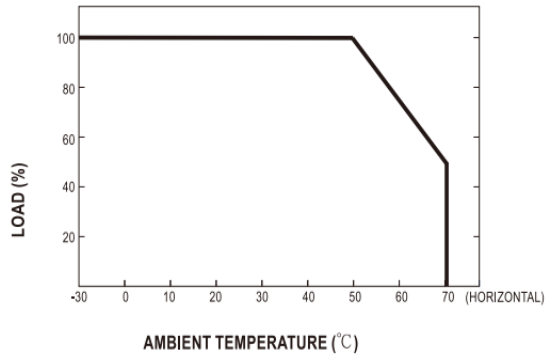
No.	Description
4-6	DC OUTPUT -V
7-9	DC OUTPUT +V

## Block Diagram



## Deduction curve and temperature

---



## Minus output and input voltage curves

---

