




# YEL150 SERIES 150W



   RoHS

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



Cooling by free air convection



High operating temperature up to 70 °C



Higher Efficiency



Protection: Short Circuit/Overload/  
Over Voltage



Three Years Warranty

## Model Information

Yingjiao Part Number	DC Voltage	Rated Current	Rated Power	VOLTAGE ADJ.RANGE
YEL150-5	5V	22A	110W	4.5~5.5V
YEL150-12	12V	12.5A	150W	10.2~13.8V
YEL150-15	15V	10A	150W	13.5~18V
YEL150-24	24V	6.5A	156W	21.6~28.8V
YEL150-36	36V	4.3A	154.8W	32.4~39.6V
YEL150-48	48V	3.3A	158.4W	43.2~52.8V

## Input

VOLTAGE RANGE	90-264VAC/127-370VDC
FREQUENCY RANGE	47-63Hz
EFFICIENCY(Typ.)	85% YEL150-5
	87.5% YEL150-12
	89.0% YEL150-15
	89% YEL150-24
	89% YEL150-36
	90% YEL150-48
AC CURRENT(Typ.)	3A/115VAC
	1.7A/230VAC
INRUSH CURRENT(Typ.)	COLD START 60A/230VAC
LEAKAGE CURRENT	<0.75mA/240VAC

## Output

RIPPLE & NOISE(max.)	100mVp-p	YEL150-5
	150mVp-p	YEL150-12
	150mVp-p	YEL150-15
	200mVp-p	YEL150-24
	200mVp-p	YEL150-36
	200mVp-p	YEL150-48
VOLTAGE TOLERANCE	±2.0%	YEL150-5
	±1.0%	YEL150-12
	±1.0%	YEL150-15
	±1.0%	YEL150-24
	±1.0%	YEL150-36
	±1.0%	YEL150-48
LINE REGULATION	±0.5%	
LOAD REGULATION	±1.0%	YEL150-5
	±0.5%	YEL150-12
	±0.5%	YEL150-15
	±0.5%	YEL150-24
	±0.5%	YEL150-36
	±0.5%	YEL150-48
SETUP,RISE TIME	500ms, 30ms/230VAC at full load	
	500ms, 30ms/115VAC at full load	
HOLD UP TIME (Typ.)	40ms/230VAC at full load	
	35ms/115VAC at full load	

## Protection

OVER LOAD	110%-140% Rated Output Power
	Protection type: Hiccup mode, recovers automatically after fault condition is removed
OVER VOLTAGE	5V:5.75~6.75V
	12V:13.8~16.2V
	15V:18.75~21.75V
	24V:28.8~33.6V
	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-BS EN/EN62477-1; altitude up to 2000 meters.
MTBF	2707.7K 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:1.25KVAC
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-
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).

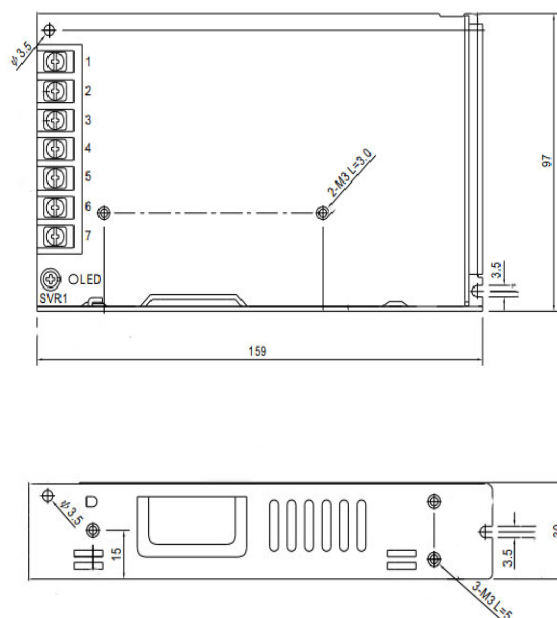
## Dimensions & Weight

Length:	159mm/6.25in
Width:	97mm/3.22in
Height:	30mm/1.18in
Weight:	480g

## Packing

Carton Size:	36 × 31.5 × 17.5 CM
	14.17 × 12.40 × 6.89 in
Master Carton Quantities:	30pcs/Carton

## Dimensions and Installation



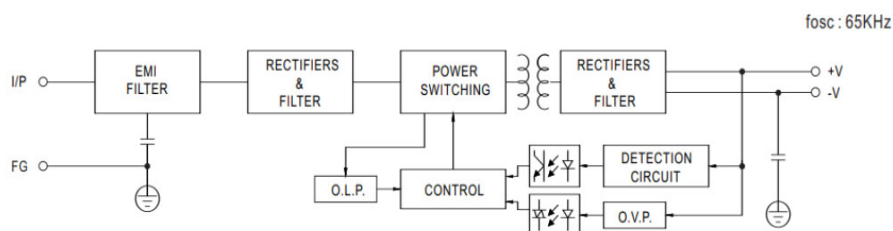
### Input

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

### Output

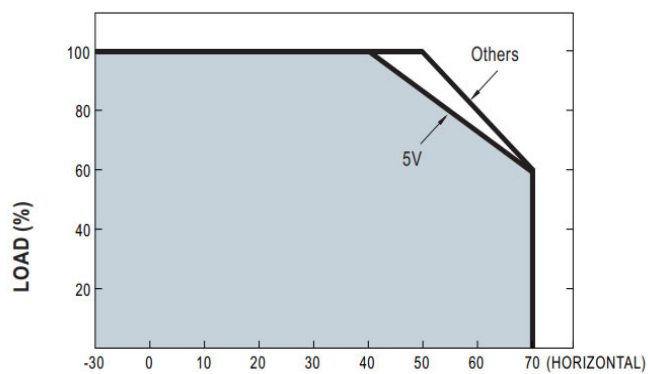
No.	Description
4,5	DC OUTPUT -V
6,7	DC OUTPUT +V

## Block Diagram



## Deduction curve and temperature

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## Minus output and input voltage curves

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