

# YEL200 SERIES 200W



® CE KRoHS

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  $^{\circ}$ 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  $^{\circ}\!\text{C}$ 



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.RANG
YEL200-5	5V	40A	200W	4.5~5.5V
YEL200-12	12V	17A	204W	10.2~13.8V
YEL200-15	15V	14A	210W	13.5~18V
YEL200-24	24V	8.8A	211.4W	21.6~28.8V
YEL200-36	36V	5.9A	212.4W	32.4~39.6V
YEL200-48	48V	4.4A	211.2W	43.2~52.8V

# Input

VOLTAGE RANGE	90-264VAC/127-370VDC
FREQUENCY RANGE	47-63Hz
EFFICIENCY(Typ.)	87% YEL200-5
	87.5% YEL200-12
	88% YEL200-15
	89.5% YEL200-24
	89.5% YEL200-36
	90% YEL200-48
AC CURRENT(Typ.)	4A/115VAC
	2.2A/230VAC
INRUSH CURRENT(Typ.)	COLD START 60A/230VAC
LEAKAGE CURRENT	<2mA/240VAC



# Output

RIPPLE & NOSE(max.)	150mVp-p	YEL200-5	
	150mVp-p	YEL200-12	
	150mVp-p	YEL200-15	
	150mVp-p	YEL200-24	
	200mVp-p	YEL200-36	
	200mVp-p	YEL200-48	
VOLTAGE TOLERANCE	±3.0%	YEL200-5	
	±1.5%	YEL200-12	
	±1.0%	YEL200-15	
	±1.0%	YEL200-24	
	±1.0%	YEL200-36	
	±1.0%	YEL200-48	
LINE REGULATION	±0.5%		
LOAD REGULATION	±2.0%	YEL200-5	
	±1.0%	YEL200-12	
	±0.5%	YEL200-15	
	±0.5%	YEL200-24	
	±0.5%	YEL200-36	
	±0.5%	YEL200-48	
SETUP,RISE TIME	500ms, 30ms/230\	/AC at full load	
	500ms, 30ms/115V	AC at full load	
HOLD UP TIME (Typ.)	40ms/230VAC at f	ull load	
	35ms/115VAC at fu	III load	



# **Protection**

OVER LOAD	110%-140% Rated Output Power
	5-36V Hiccup mode, recovers automatically after fault condition is removed
	48V Shut down and latch off o/p voltage, re-power on to recover.
OVER VOLTAGE	5V:5.75~6.75V
	12V:13.8~16.2V
	15V:18~21V
	24V:28.8~33.6V
	36V:41.4~46.8V
	48V:55.2~64.8V
	5-36V Hiccup mode, recovers automatically after fault condition is removed
	48V Shut down and latch off o/p voltage, re-power on to recover.
OVER TEMPERATURE	5-36V Hiccup mode, recovers automatically after fault condition is removed
	48V Shut down and latch off 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	2346.6K 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**

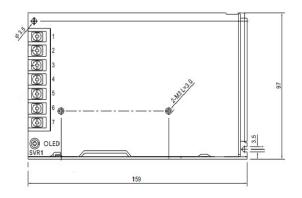
Length:	215mm/8.64in	
Width:	115mm/4.53in	
Height:	30mm/1.18in	
Weight:	660g	

#### **Packing**

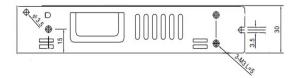
Carton Size:	38 × 19.5 x 26 CM
	14.96 x 7.68 x10.24 in
Master Carton Quantities:	15pcs/Carton



### **Dimensions and Installation**



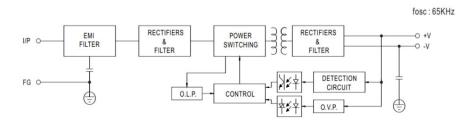
Input	
No.	Description
1	AC/L
2	AC/N
3	FG ±



#### Output:

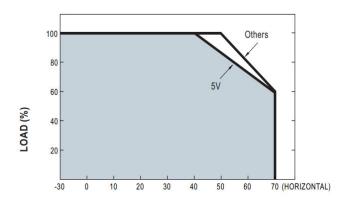
No.	Description
4-6	DC OUTPUT -V
7-9	DC OUTPUT +V

# **Block Diagram**





# **Deduction curve and temperature**



# Minus output and input voltage curves

