YINGJIAO®

YEL100 SERIES 100W

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 ℃.

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 ℃
- Higher Efficiency/Low Power Dissipation
- Protection:Short Circuit/Overload/ Over Voltage
- Three Years Warranty

Model Information

Yingjiao Part Number	DC Voltage	Rated Current	Rated Power	VOLTAGE ADJ.RANGE
YEL100-5	5V	18A	90W	4.5~5.5V
YEL100-12	12V	8.5A	102W	10.2~13.8V
YEL100-15	15V	7A	105W	13.5~18V
YEL100-24	24V	4.5A	108W	21.6~28.8V
YEL100-36	36V	2.8A	100.8W	32.4~39.6V
YEL100-48	48V	2.3A	110.4W	43.2~52.8V

Input

VOLTAGE RANGE	90-264VAC/127-370VDC	
FREQUENCY RANGE	47-63Hz	
EFFICIENCY(Typ.)	86%	YEL100-5
	88%	YEL100-12
	88.5%	YEL100-15
	90%	YEL100-24
	90.5%	YEL100-36
	91.0%	YEL100-48
AC CURRENT(Typ.)	1.9A/115VAC	
	1.2A/230VAC	
INRUSH CURRENT(Typ.)	COLD START 50A/230VAC	
LEAKAGE CURRENT	<0.75mA/240VAC	

Output

RIPPLE & NOSE(max.)	100mVp-p	YEL100-5
	120mVp-p	YEL100-12
	120mVp-p	YEL100-15
	150mVp-p	YEL100-24
	200mVp-p	YEL100-36
	200mVp-p	YEL100-48
VOLTAGE TOLERANCE	±1.0%	YEL100-5
	±0.5%	YEL100-12
	±0.5%	YEL100-15
	±0.5%	YEL100-24
	±0.5%	YEL100-36
	±0.5%	YEL100-48
LINE REGULATION	±0.5%	
LOAD REGULATION	±1.0%	YEL100-5
	±0.5%	YEL100-12
	±0.5%	YEL100-15
	±0.5%	YEL100-24
	±0.5%	YEL100-36
	±0.5%	YEL100-48
SETUP,RISE TIME	500ms, 30ms/230VAC at full load	
	500ms, 30ms/115VAC at full load	
HOLD UP TIME (Typ.)	55ms/230VAC at full load	
	10ms/115VAC at full load	

Protection

OVER LOAD	110%-150% 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

Environment

WORKING TEMP.	-30 ℃ to +70 ℃ (Refer to "Derating Curve")
Working Humidity	20 ~ 90% RH Non-Condensing
STORAGE TEMP, HUMIDITY	-40℃ ~+85℃,10 ~ 95% RH non-condensing
TEMP. COEFFICIENT	± 0.03%/℃(0~50℃)
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	3348.9K 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/EN61000-3-2,-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℃ 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 ℃ 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℃/1000m is needed for operating altitude greater than 2000m(6500ft).

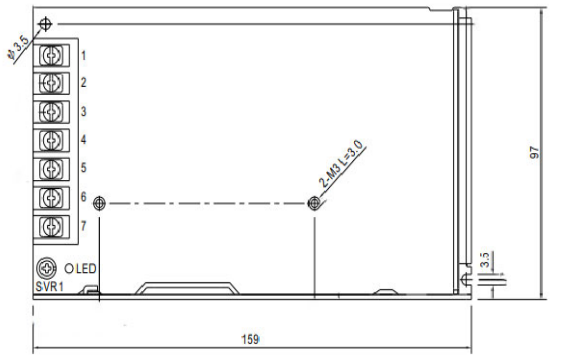
Dimensions & Weight

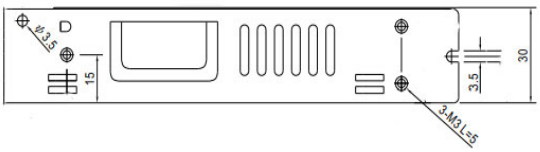
Length:	129mm/3.89in
Width:	97mm/3.22in
Height:	30mm/1.18n
Weight:	340g

Packing

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

Dimensions and Installation





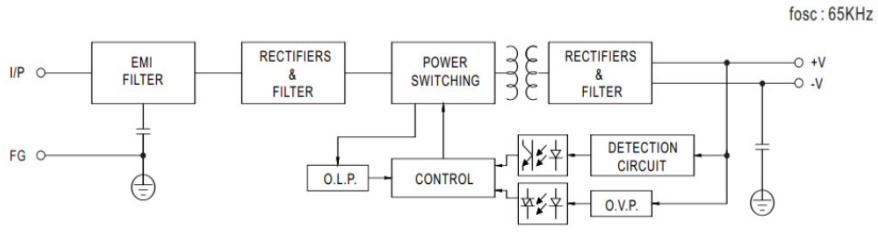
Input

No.	Description
1	AC/L
2	AC/N
3	FG ⏚

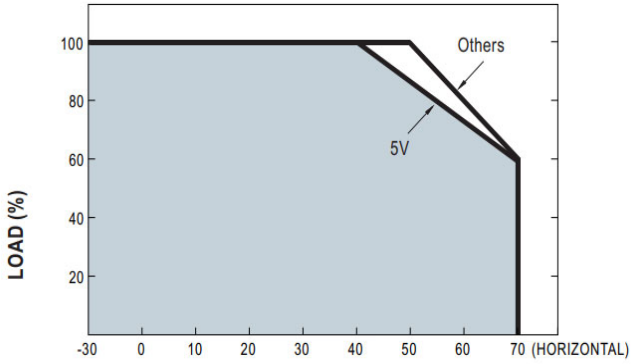
Output

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

Block Diagram



Deduction curve and temperature



Minus output and input voltage curves