YINGJIAO

YEL100 SERIES
100W

YEL100 series are designed with lower profile housing and for wide range AC input from 90VAC to 264VAC.

In addition to the high efficiency,Delivering an extremely low no load power consumption. the design of metallic mesh case enhances the heat dissipation.

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

CB IEC62368-1 c UL us UL62368-1 CE UKCA RoHS

Features

- Universal AC Input/ Full Range
- High operating temperature up to 70℃
- Cooling by free air convection
- Withstand 5G vibration test
- Protections: Short circuit/Over load/Over voltage/Over temperature
- High efficiency, long life and high reliability
- LED indicator for power on
- Over voltage category II
- 100% full load burn-in test
- Three years warranty

Model Description

YEL 100 - XX

- XX: Output Voltage
- 100: Output Wattage
- YEL: Series Name

Model Information

Part number	DC Voltage	Rated Current(max.)	Rated Power	Efficiency	No load power consumption	Ripple & Noise	Max Capacitive Load	Voltage ADJ Range
YEL100-5	5V	18A	90W	85%	0.5W	100mVp-p	6800uF	4.75~5.5V
YEL100-12	12V	8.5A	102W	86.5%	0.5W	120mVp-p	3300uF	11.4~13.8V
YEL100-15	15V	7A	105W	86%	0.5W	120mVp-p	2200uF	13.5~18V
YEL100-24	24V	4.5A	108W	88%	0.5W	150mVp-p	1000uF	21.6~28.8V
YEL100-36	36V	3A	108W	88.5%	0.5W	200mVp-p	470uF	32.4~39.6V
YEL100-48	48V	2.3A	110.4W	89%	0.7W	200mVp-p	220uF	43.2~52.8V

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Specification

Model	**Safety Model No.**	**YEL100-XX**	
Output	**Setup,Rise,Hold up Time**	1.0s,70ms,55ms/230VAC(at full load)	1.0s,70ms,10ms/115VAC(at full load)
	Voltage Tolerance	±2.0% YEL100-5/12	± 1.0% YEL100-15/24/36/48
	Line Regulation	±0.5%	
	Load Regulation	±1.5% YEL100-5/12	± 1.0% YEL100-15/24/36/48
Input	**Rated Voltage Range**	100-240VAC	
	Voltage Range	90-264VAC/127-370VDC	
	Frequency Range	50/60Hz	
	AC Current	2.1A/115VAC 1.6A/230VAC	
	Inrush Current	Cold Start 85A/1000us at 230VAC 50Hz	Cold Start 45A/1000us at 115VAC 50Hz
	Leakage Current	<1.5mA/240VAC	
Protection	**Over Load**	110~160%Rated Output Power	
		Hiccup mode, recovers automatically after fault condition is removed.	
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.	
	Over Voltage	115~135%Rated Output Voltage	
		Shut down o/p voltage, re-power on to recover.	
Ambient	**Working TEMP.**	-30 ~ +70℃(Please refer to “Derating Curve”section)	
	Working Humidity	20 ~ 95%RH Non-condensing	
	Storage TEMP. Humidity	-40 ~ +85℃,10 ~ 95%RH Non-condensing	
	TEMP. Coefficient	±0.03%/(0 ~ 50℃) on load output	
	Vibration	Component: 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes	
	Safety Protection	Class I	
	Over Voltage Category	OVC II / According to BS EN/EN61558, BS EN/EN50178,BS EN/EN60664-1,BS EN/EN62477-1;altitude up to 2000 meters	
Safety	**Safety Standards**	UL62368-1, EN62368-1 approved , design to meet :BS EN62368-1,EN60335-1, EN61558-1	
	Withstand Voltage	I/P-O/P:3KVAC/1min I/P-FG:2KVAC/1min O/P-FG:0.5KVAC/1min	
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH	
EMC	**EMC EMISSION**	Compliance to BS EN/EN55032 (CISPR32) Class B,BS EN/EN55035 BS EN/EN61000-3-2, BS EN/EN61000-3-3	
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-11 Criteria B, BS EN/EN61000-4-2,3,4,5,6,8 Criteria A	
Others	**Packing**	301g/pcs; 33 x 30 x 21 cm; 30pcs/carton	
	Dimension (LxWxH)	129 x 97 x 30 mm	
	MTBF	264.5Khrs min. MIL-HDBK-217F(25℃)	
	Housing material	Aluminium / steel	
Note	1.All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2.Ripple&noise are measured at 20MHz of bandwidth by using a 12” twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it stil meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies”. (as available on https://yingjiao.com/wp-content/uploads/2025/06/EMI_Testing_of_Component_Power_Supplies_Yingjiao.pdf) 4. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time. 5.The ambient temperature derating of 3.5 ℃/1000m with fanless models and of 5 ℃/1000m with fan models for operating altitude higher than 2000m(6500ft).		

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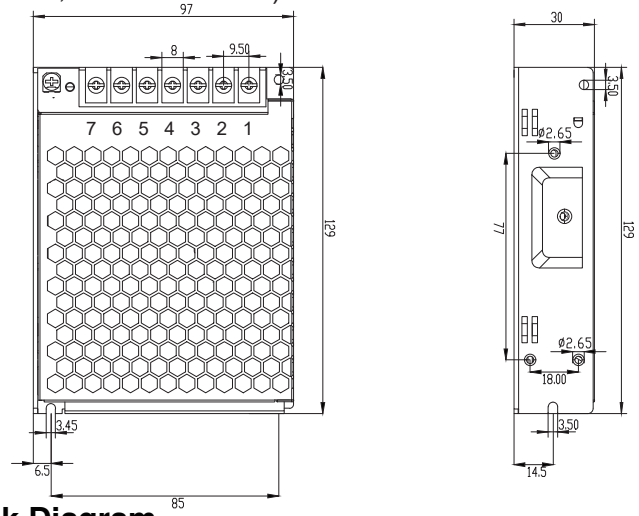
Drawing & Label

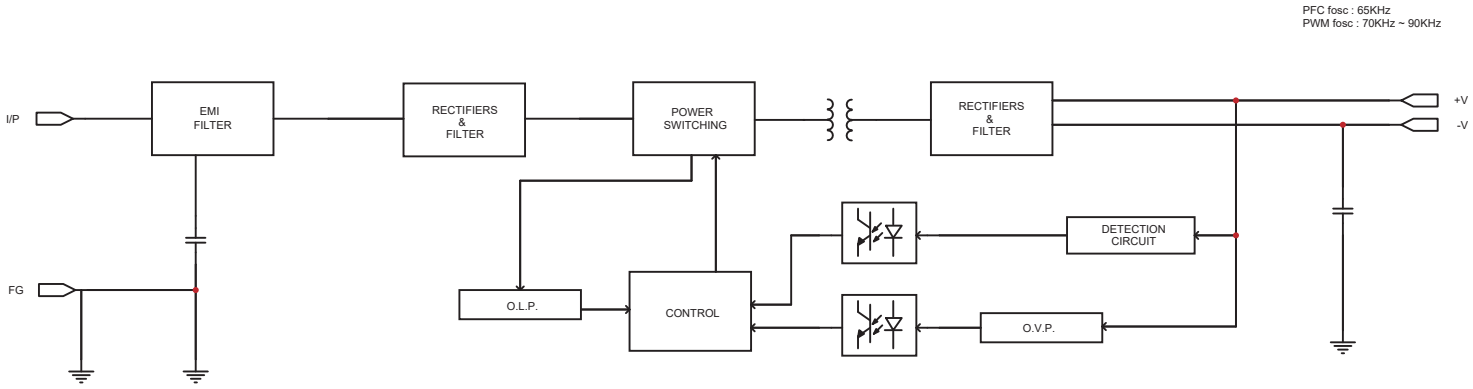
(Unit: mm , tolerance: ±1mm)



Terminal Pin No. Assignment

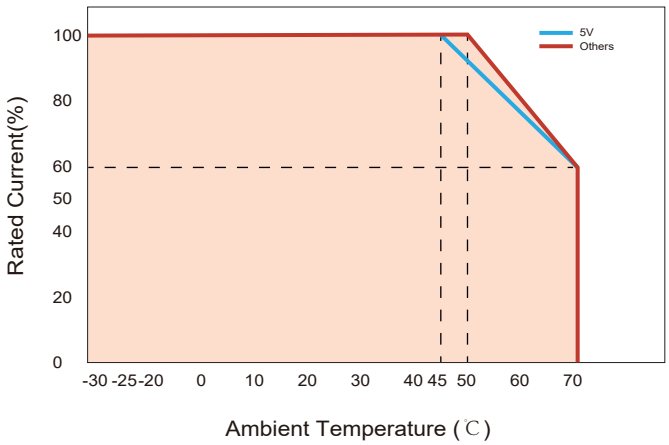
Pin No.	Assignment
1	AC/L
2	AC/N
3	PG
4	DC OUTPUT -V
5	DC OUTPUT -V
6	DC OUTPUT +V
7	DC OUTPUT +V

Block Diagram

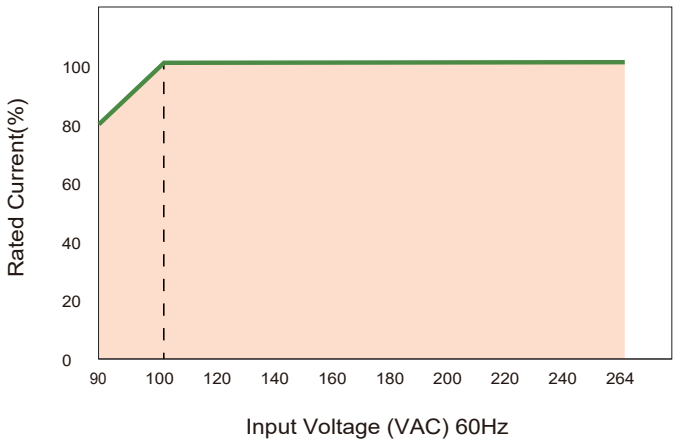


Engineering Data

Derating Curve



Static Characteristics



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