

## **YEL75 SERIES**

75W



YEL75 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.







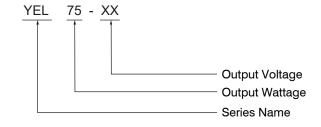


**RoHS** 

#### **Features**

- Universal AC Input/ Full Range
- High operating temperature up to 70 °C
- · Cooling by free air convection
- Withstand 5G vibration test
- Protections: Short circuit/Over load/Over voltage
- 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**



### **Model Information**

Part number	DC Voltage	Rated Current(max.)	Rated Power	Efficiency	No load power consumption	Ripple & Noise	Max Capacitive Load	Voltage ADJ Range
YEL75-5	5V	14A	70W	84%	0.5W	100mVp-p	10000uF	4.6~5.5V
YEL75-12	12V	6A	72W	87%	0.5W	120mVp-p	6000uF	10.8~13.8V
YEL75-15	15V	5A	75W	85%	0.5W	120mVp-p	5000uF	13.5~17.8V
YEL75-24	24V	3.2A	76.8W	87%	0.5W	150mVp-p	1500uF	21.6~28.8V
YEL75-36	36V	2.1A	75.6W	89%	0.5W	200mVp-p	1000uF	32.4~39.6V
YEL75-48	48V	1.6A	76.8W	89%	0.5W	200mVp-p	680uF	43.2~52.8V

File last modification time: 2025-7-11



# YEL75 SERIES

75W

# Specification

Model	Safety Model No.	YEL75-XX						
Output	Setup,Rise,Hold up Time	0.8s,35ms,60ms/230VAC(at full load)	1.0s,35ms,12ms/115VAC(at full load)					
	Voltage Tolerance	±2.0% YEL75-5/15	± 1.0% YEL75-12/24/36/48					
	Line Regulation	±0.5%						
	Load Regulation	±2.0% YEL75-5	± 1.0% YEL75-12/15/24/36/48					
	Rated Voltage Range	100-240VAC						
	Voltage Range	90-264VAC/127-370VDC						
	Frequency Range	50/60Hz						
Input	AC Current	1.6A/115VAC 0.85A/230VAC						
	Inrush Current	Cold Start 75A/500us at 230VAC 50Hz  Cold Start 40A/500us at 115VAC 50Hz						
	Leakage Current	<1.5mA/240VAC						
		110~160%Rated Output Power						
	Over Load	Rated load, the load can be automatically restored after abnormal conditions are removed.						
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.						
		115~135% YEL75-5/24/36/48	115~140% YEL75-12 115~175% YEL75-15					
	Over Voltage	Shut down o/p voltage, re-power on to rec	over.					
	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						
Ambient	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 Standards	UL62368-1, EN62368-1 approved , design to meet :BS EN62368-1,EN60335-1, EN61558-1						
Safety	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 C / 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						
	Packing	227g/pcs; 37 x 26 x 22.5 cm; 40pcs/carton						
Others	Dimension (LxWxH)	99 x 97 x 30 mm						
Outers	MTBF *	295.5Khrs min. MIL-HDBK-217F(25°C)						
	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 still 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_Test-							
	ing_of_Component_Power_Supplies_Yingjiao.pdf)							
	4. Length of set up time is measured at cold first start. Tuming ON/OFF the power supply very quickly may lead to increase of the set up time.							
	5. The ambient temperature derating of 3.5 °C/1000m with fanless models and of 5 °C/1000m with fan models for operating altitude higher than 2000m(6500ft).							
	6. MTBF of YEL75: 180khrs min.							

File last modification time: 2025-7-11

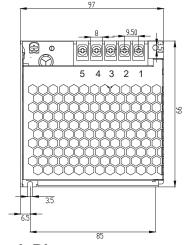


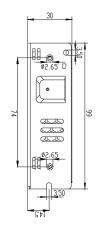
# YEL75 SERIES

75W

### **Drawing & Label**

(Unit: mm, tolerance: ±1mm)



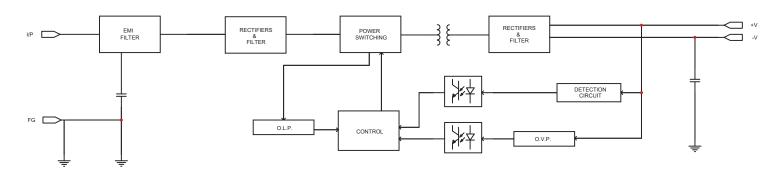


Terminal Pin No. Assignment

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

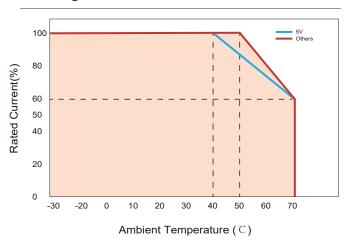
### **Block Diagram**

PFC fosc : 65KHz PWM fosc : 70KHz ~ 90KHz

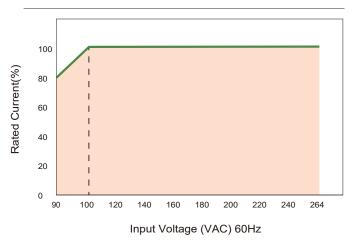


### **Engineering Data**

### **Derating Curve**



#### Static Characteristics



File last modification time: 2025-7-11