

## Features

- Input Voltage 90~264V AC
- Cooling by free air convection
- Efficiency up to 89.5%
- Protection: OLP, OVP, SCP
- 3 Years Warranty



## 56YEL100-x-RS AC-DC PSU Series

100W Enclosed AC/DC Power Supply (PSU)



The 56YEL100-x-RS Series is a performance-focused 100W Enclosed AC/DC Power Supply. Designed for use in applications such as network equipment and signal distribution hardware. This series is supplied with a Screw Terminal Block input connection and supports input voltages of 90~264V AC 47~63Hz.

### Models

Model	Voltage (V) DC	Rated Current	Rated Power	% Efficiency	Voltage range	Ripple and Noise mVp-p
56YEL100-05-RS	5	18	90	85	4.5~5.5	100
56YEL100-12-RS	12	8.5	102	86.5	10.2~13.8	120
56YEL100-15-RS	15	7	105	86.5	13.5~18	120
56YEL100-24-RS	24	4.5	108	88	21.6~28.8	150
56YEL100-36-RS	36	3	108	89.5	32.4~39.6	200
56YEL100-48-RS	48	2.3	110.4	89	43.2~52.8	200

Input Specifications	
Input Voltage	90-264VAC/127-370VDC
Frequency Range	47-63Hz
AC Current	2.1A/115VAC                      1.6A/230VAC
Inrush Current	Cold Start 50A/200us at 230VAC                      50Hz Cold Start 30A/200us at 115VAC 50Hz
Leakage Current	<1.5mA/240VAC

Output Specifications	
Voltage Tolerance	±2.0%                      5v
	±1.0%                      Others
Line Regulation	±0.5%
Load Regulation	±2.0%                      5v
	±1.0%                      Others
Set up Rise Time Hold up	0.5s,30ms,55ms/230VAC(at full load)                      0.5s,30ms,10ms/115VAC(at full load)

Protection	
Over Load	110%-160% Rated Output Power Hiccup mode, recovers automatically after fault condition is removed.
Over Voltage	115~140%Rated Output Voltage (56YEL75-15: 115~175%) Shut down o/p voltage, re-power on to recover.
Short Circuit	Hiccup mode, recovers automatically after fault condition is removed

Environmental Characteristics	
Working Temp	-30~+70°C (Refer to "Derating Curve")
Working Humidity	20~95% RH non-condensing
Storage Temp., Humidity	-40~+85°C, 10~95% RH non-condensing
Temp. Coefficient	±0.03%/°C (0~50°C)
Vibration	Component: 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes
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
MTBF	264.5Khrs min. MIL-HDBK-217F(25°C)
Safety Protection	Class I

Safety & EMC	
Safety Standards	UL62368-1, EN62368-1
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°C/ 70% RH
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

Notes:

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**

Size	129 x 97 x 30 mm
Weight	301g/pcs

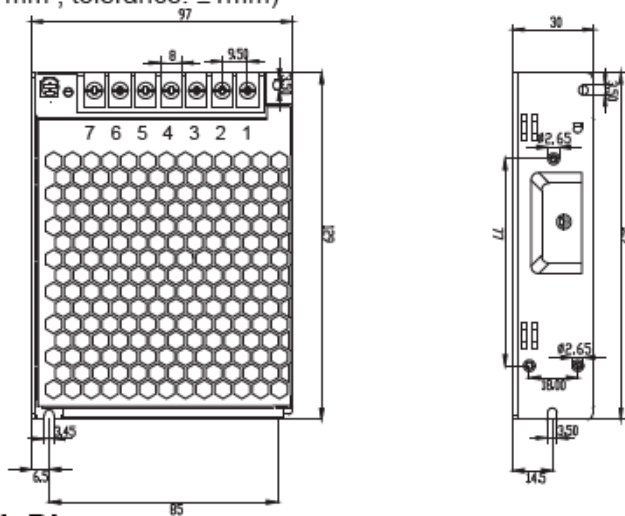
**Packaging**

Carton Size	33 x 30 x 21 cm
Master Carton Quantities	30pcs/carton

**Dimensions and Recommended Layout**

**Drawing & Label**

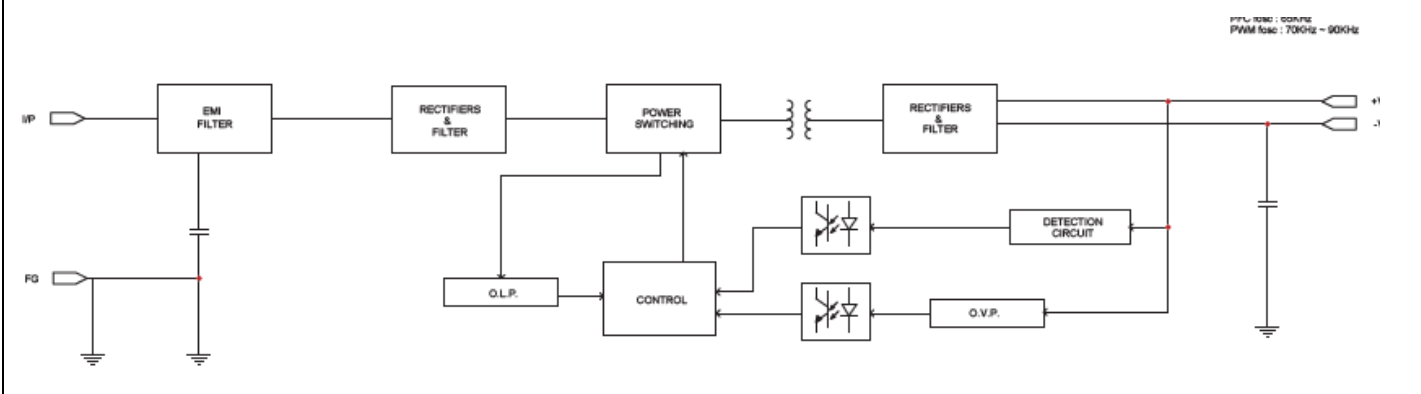
(Unit: mm , tolerance: ±1mm)



Terminal Pin No. Assignment

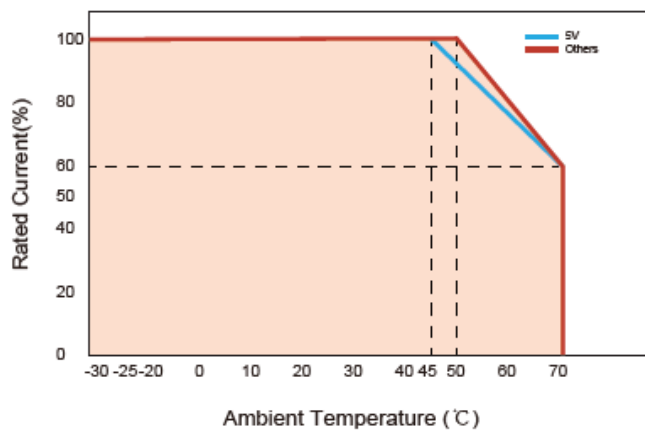
Pin No.	Assignment
1	AC/L
2	AC/N
3	PG
4	DC OUTPUT -V
5	DC OUTPUT -V
6	DC OUTPUT +V
7	DC OUTPUT +V

**Block Diagram**



Derating Curve

Derating Curve



Static Characteristics

