

Features

- Input Voltage 90~264V AC
- Cooling by free air convection
- Efficiency up to 89%
- Protection: OLP, OVP, SCP
- Years Warranty



56YEL75-xx-RS AC-DC PSU Series

75W Enclosed AC/DC Power Supply (PSU)



The 56YEL75-xx-RS Series is a consistent and high-performing 75W Enclosed AC/DC Power Supply. Designed for use in applications such as embedded electronics and control equipment. 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
56YEL75-05-RS	5	14	70	84	4.6~5.5	100
56YEL75-12-RS	12	6	72	87	10.8~13.8	120
56YEL75-15-RS	15	5	75	85	13.5~17.8	120
56YEL75-24-RS	24	3.2	76.8	87	21.6~28.8	150
56YEL75-36-RS	36	2.1	75.6	89	32.4~39.6	200
56YEL75-48-RS	48	1.6	76.8	89	43.2~52.8	200

Input Specifications

Input Voltage	90-264VAC/127-370VDC	
Frequency Range	47-63Hz	
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	

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	0.8s,35ms,60ms/230VAC(at full load)	1.0s,35ms,12ms/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	295.5Khrs 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).

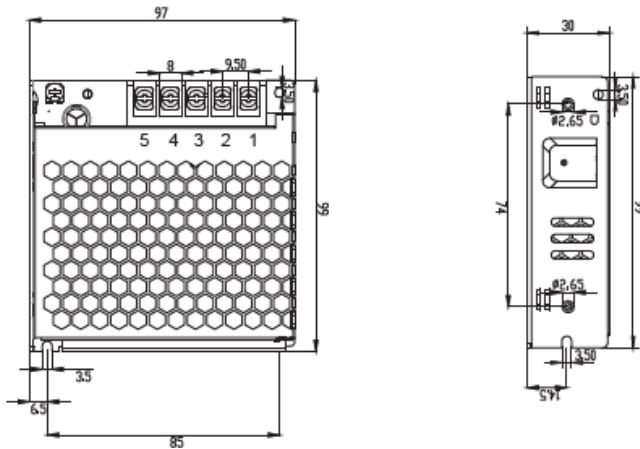
Dimensions & Weight	
Size	99 x 97 x 30 mm
Weight	227g/pcs

Packaging	
Carton Size	37 x 26 x 22.5 cm
Master Carton Quantities	40pcs/carton

Dimensions and Recommended Layout

Drawing & Label

(Unit: mm , tolerance: ±1mm)

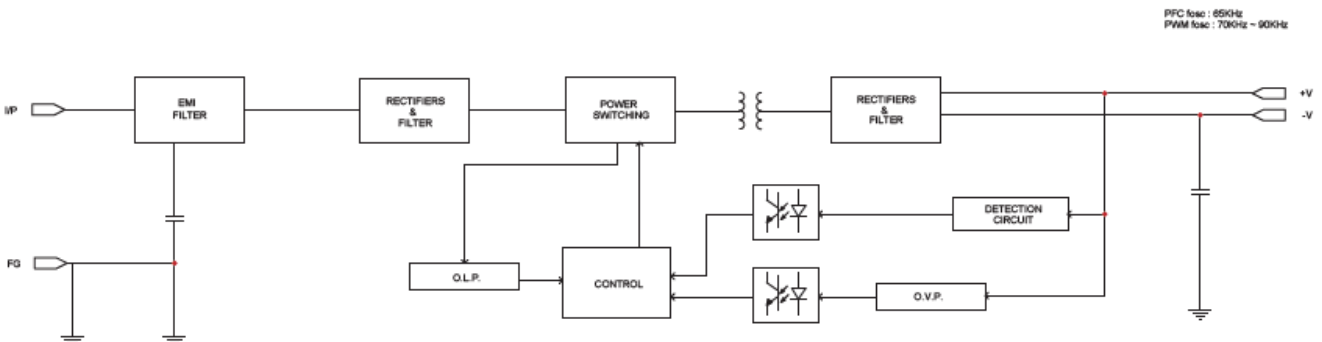


Terminal Pin No. Assignment

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

Block Diagram

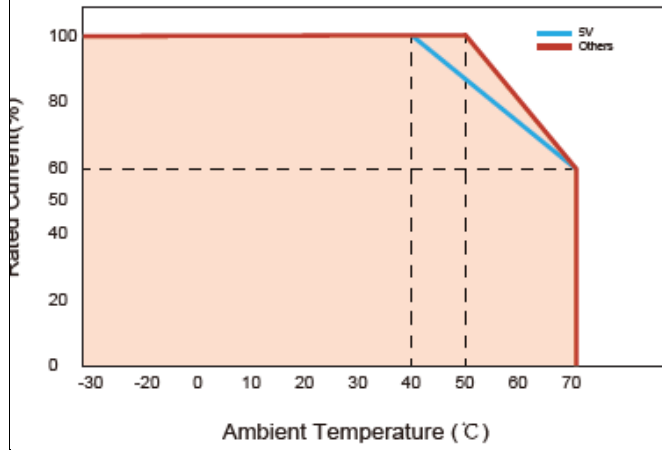
Block Diagram



Derating Curve

Engineering Data

Derating Curve



Static Characteristics

