

KEY FEATURES

- Enclosed Switching Power Supply
- Universal Input: 90-264 VAC
- Single Output
- 5 VDC to 48 VDC Output
- Din Rail Kit For Optional
- 3-Year Product Warranty

60W SERIES



ELECTRICAL SPECIFICATIONS

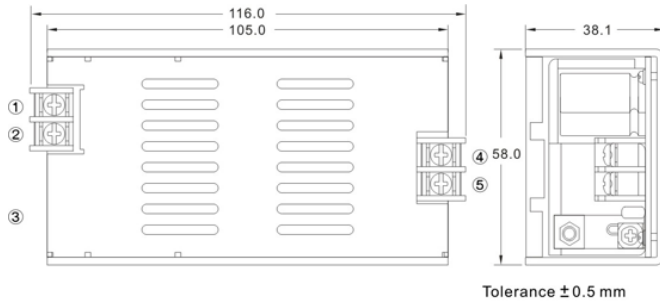
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No.		FSP060HWVS005E	FSP060HWVS009E	FSP060HWVS012E	FSP060HWVS015E	FSP060HWVS024E	FSP060HWVS048E
Max Output Wattage (W)		50W	60W	60W	60W	60W	60W
Input	Voltage	90-264 VAC or 120-370 VDC					
	Frequency (Hz)	47-63 Hz					
	Current (Full load)	2 A max. (115 VAC) / 1 A max. (230 VAC)					
	Inrush Current (<2ms)	30 A max. (115 VAC) / 50 A max. (230 VAC)					
	Leakage Current	0.5 mA max.					
Output	Voltage (V.DC.)	5V	9V	12V	15V	24V	48V
	Voltage Accuracy	±2%					
	Current (mA) max	10,000	6,660	5,000	4,000	2,500	1,250
	Line Regulation (LL-HL) (typ.)	±1%					
	Load Regulation (5-100%) (typ.)	±1%					
	Minimum Load	1%					
	Maximum Capacitive Load (at 230VAC)	470-23,000µF depending on model					
	Ripple	<0.2% Vout +40mV max (Vp-p)					
	Noise	<0.5% Vout +50mV max (Vp-p)					
	Efficiency (at 230V)	82%	84%	86%	86%	86%	86%
	Trim	±10%					
	Hold-up Time	10 ms min.					
Protection	Over Power Protection	Auto recovery					
	Over Voltage Protection	Zener diode clamp					
	Short Circuit Protection	Auto recovery					
Isolation	Input-Output (V.AC)	3000VAC or 4242VDC					
	Input-FG (V.AC)	1500V					
	Output-FG (V.AC)	500V					
Environment	Operating Temperature	-40°C...+70°C (with derating)					
	Storage Temperature	-50°C...+85°C					
	Temperature coefficient	±0.02%/°C					
	Humidity	95% RH					
	MTBF	>130,000 h @ 25°C (MIL-HDBK-217F)					
	Vibration	10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes.					
Physical	Dimension (L x W x H)	4.13 x 2.28 x 1.5 Inches (105.0 x 58.0 x 38.1 mm) Tolerance ±0.5 mm					
	Weight	260 g					
	Cooling Method	Free air convection					
Safety	Agency Approvals	CE, UL60950					
EMC	EMI (Conducted & Radiated Emission)	EN 55032 class B					
	EMS (Noise Immunity)	EN 55024					

NOTE

1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. Strongly recommend to conduct this test with DC Voltage. If customer wishes to test with AC Voltage, please disconnect all Y-Capacitors within power supply.

MECHANICAL DIMENSION (Top View)



PIN#	Single
1	AC IN (N)
2	AC IN (L)
3	FG
4	+DC OUT
5	-DC OUT

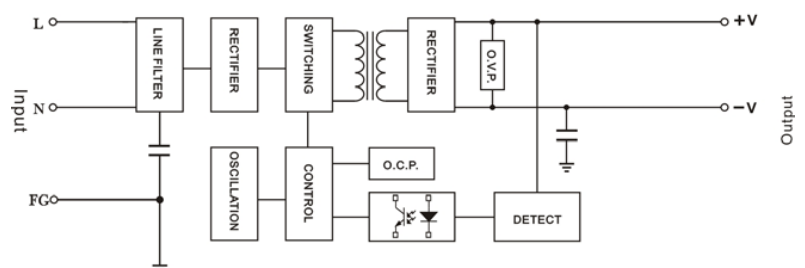
ASSEMBLY INSTRUCTIONS

*U Case T=2.5mm

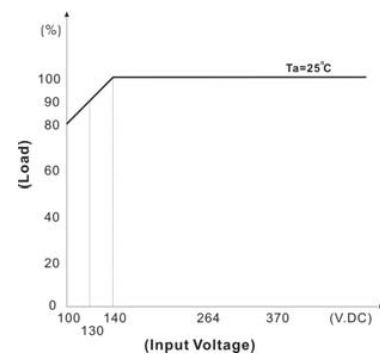
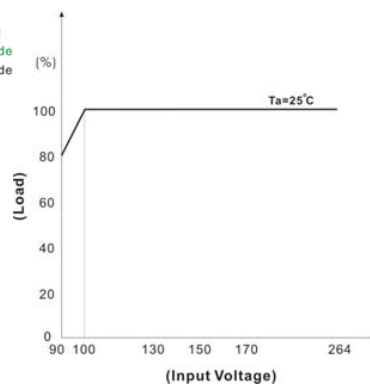
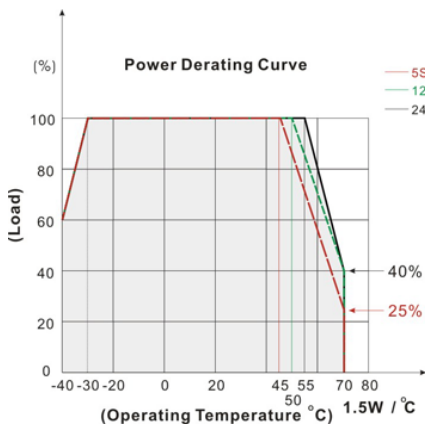
Customer is advised to screw into the threads no more than 2.5mm

BLOCK DIAGRAM

Single Output



DERATING

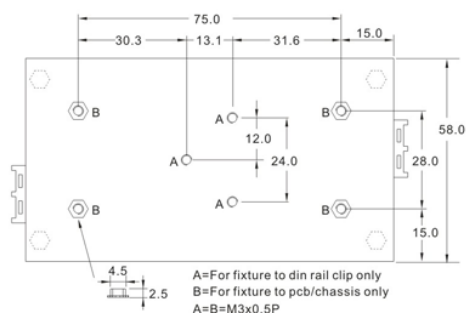
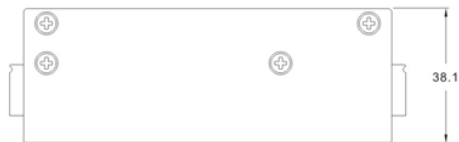
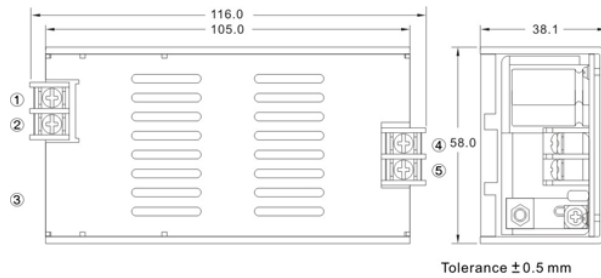


Din Rail Kit

DRK



PIN#	Single
1	AC IN (N)
2	AC IN (L)
3	FG
4	+DC OUT
5	-DC OUT



Din Accessory

