

DESCRIPTION

# HDP-O-60 Series 60 Watt Open Frame Power Supply

#### Features

- Universal AC input / Full range
- High efficiency, low power consumption
- No Load Power Consumption ≤0.5W
- Output protections: SCP/OVP/OLP
- Wide operating ambient temperature (-25°C~70°C)
- All using 105°C long life electrolytic capacitors
- 100%full load burn-in test
- · 3 year warranty

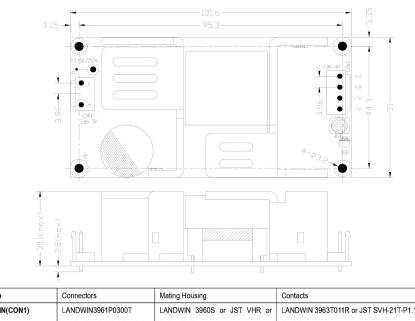


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Specifications		HDP-O-60-5		HDP-O-60-	-12 I	HDP-O-60-15	HDP-O-60-24	HDP-O-60-48	
OUTPUT	DC Output		5.0V		12.0V		15.0V	24.0V	48.0V
	Rated Current		8.0A		4.5A	:	3.6A	2.5A	1.25A
	Ripple and Noise (NOTE 1)	0 ~ 70°C	<50mV		<120mV		<120mV	<120mV	<240mV
		-25°C ~ 0°C	<200mV		<300mV		<300mV	<300mV	<360mV
	Voltage ADJ. Range		4.5 ~ 5.5V		11.2 ~ 13.4V		13.8 ~ 16.5V	22.2 ~ 27.9V	45.0 ~ 53.2V
	Voltage Accuracy		±3.0%						
	Line Regulation		±0.5%						
	Load Regulation		±2.0%						
	Set-up Time		≤ 1.0S (230Vac Input, Full load)						
	Hold up Time		≥ 20mS (230Vac input, Full load)						
	Temperature Coefficient		±0.03%/°C						
	Overshoot and Undershoot		< 5.0%						
INPUT	Voltage Range (NOTE 2)		90Vac ~ 264Vac, 127Vdc ~ 370Vdc						
	Frequency Range		47Hz – 63Hz						
	Efficiency (Typical)	115Vac input	79%		83%	8	34%	87%	85%
		230Vac input	82%		85%	8	35%	87%	88%
	AC Current (Max.)		< 1.5A						
	Inrush Current (Typical)		< 30A@120Vac < 60A@230Vac Cold Start						
	Leakage Current		≤ 0.25mA						
PROTECTION	Over Load		105% ~ 180% of rated output current, hiccup mode, auto recovery						
	Over Voltage		110% ~ 150% of rated output voltage, constant voltage						
	Shorted Circuit		Long-term mode, auto recovery						
ENVIRONMENT	Operating Amb. Temp. & Hum.		-20°C ~ 70°C; 20% ~ 90%RH No Condensing (refer to the derating curve)						
	Storage Temp. & Hum.		-40°C ~ 85°C; 10% ~ 95%RH No Condensing						
SAFETY & EMC	Safety Standards		UL60950-1; EN60950-1:2006						
(NOTE 3)	Withstand Voltage		Primary – Secondary: 3.0KVac; ≤10mA						
	Isolation Resistance		≥100M ohms						
	EMI Conduction & Radiation		Compliance to EN55022 (CISPR22) Class B						
	Harmonic Current		Compliance to EN61000-3-2, -3						
	EMS Immunity		Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, light industry level, criteria A						
OTHERS	MTBF (MIL-HDBK-217F)		More than 200,000Hrs (25°C, Full load)						
	Dimension (L*W*H)		101.6 x 50.8 x 30 mm						
	Packing		60PCS/CTN, 12KGS, 0.024CBM						
	Cooling Method		Cooling by free air convection						
NOTE	2. Measured at 2	0MHz of bandy	pecially mentioned are measured at 230Vac input, rated load and 25°C of ambient temperature of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 10uF parallel capacitor d a component which will be installed into final equipment. The equipment must be re–confirmed that it still meets EMC directive						

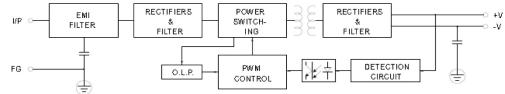


# Mechanical Specification Unit: mm (Tolerance is ±1mm)



ltem	Connectors	Mating Housing	Contacts	
AC IN(CON1)	LANDWIN3961P0300T	LANDWIN 3960S or JST VHR or	LANDWIN 3963T011R or JST SVH-21T-P1.1	
	=Molex53520-0320(Central	Molex 51144	Or Molex 50539	
	Pin removed)			
DC OUT(CON2)	LANDWIN 3961P0400T			
	=Molex53520-0420			

### Block Diagram



### **Derating Curve**

