

■ Features :

- Universal AC input / Full range
- Low leakage current<0.5mA
- Protections:Short circuit/Over load/Over voltage/Over temperature
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 100KHz
- Low cost
- High reliability
- 2 years warranty

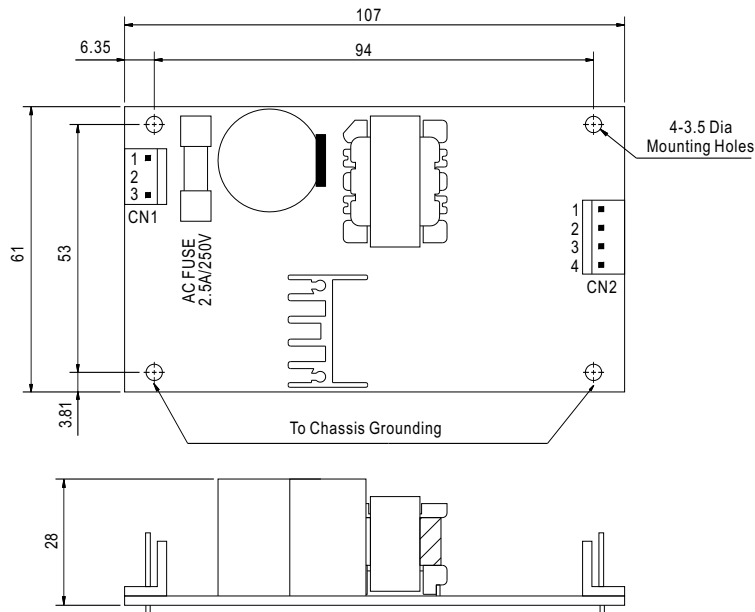


SPECIFICATION

MODEL	PD-25A		PD-25B		PD-2505		PD-2512		PD-2515		
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2
	DC VOLTAGE	5V	12V	5V	24V	5V	-5V	12V	-12V	15V	-15V
	RATED CURRENT	2.1A	1.2A	1.2A	0.8A	2.5A	2.5A	1A	1A	0.8A	0.8A
	CURRENT RANGE	0.2 ~ 2.5A	0.1 ~ 1.5A	0.2 ~ 2A	0.1 ~ 1A	0.1 ~ 3A	0.1 ~ 2.5A	0.1 ~ 1.2A	0.1 ~ 1.2A	0.1 ~ 1A	0.1 ~ 1A
	RATED POWER	25W		25.2W		25W		24W		24W	
	RIPPLE & NOISE (max.) Note.2	50mVp-p	150mVp-p	50mVp-p	200mVp-p	50mVp-p	50mVp-p	50mVp-p	50mVp-p	50mVp-p	50mVp-p
	VOLTAGE TOLERANCE Note.3	±2.0%	±6.0%	±2.0%	±6.0%	±6.0%	±6.0%	±4.0%	±4.0%	±4.0%	±4.0%
	LINE REGULATION	±0.5%	±2.0%	±0.5%	±2.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±4.0%	±1.0%	±4.0%	±4.0%	±4.0%	±3.0%	±3.0%	±3.0%	±3.0%
	SETUP, RISE TIME	250ms, 50ms/230VAC		250ms, 30ms/115VAC at full load							
HOLD TIME (Typ.)	100ms/230VAC		16ms/115VAC at full load								
INPUT	VOLTAGE RANGE	85 ~ 264VAC		120 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY(Typ.)	71%		77%		73%		74%		75%	
	AC CURRENT (Typ.)	0.65A/115VAC		0.4A/230VAC							
	INRUSH CURRENT (Typ.)	COLD START 32A									
	LEAKAGE CURRENT	<0.5mA / 240VAC									
PROTECTION	OVER LOAD	Above 105% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed									
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16.2V	5.75 ~ 6.75V	27.6 ~ 32.4V	5.75 ~ 6.75V	-5.75 ~ -6.75V	13.8 ~ 16.2V	-13.8 ~ -16.2V	17.3 ~ 20.3V	-17.3 ~ -20.3V
	OVER TEMPERATURE	Tj 135°C typically (U1) Detect on main control IC Protection type : Shut down o/p voltage, recovers automatically after temperature goes down									
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)									
	WORKING HUMIDITY	20 ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C) ON CH1 output									
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes									
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 Approved									
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC									
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC									
	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, Light industry level, criteria A									
OTHERS	MTBF	507.9Khrs min. MIL-HDBK-217F (25°C)									
	DIMENSION	107*61*28mm (L*W*H)									
	PACKING	0.15Kg; 96pcs/15.9Kg/1.3CUFT									
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>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.</p>										

■ Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 41791-03 or equivalent

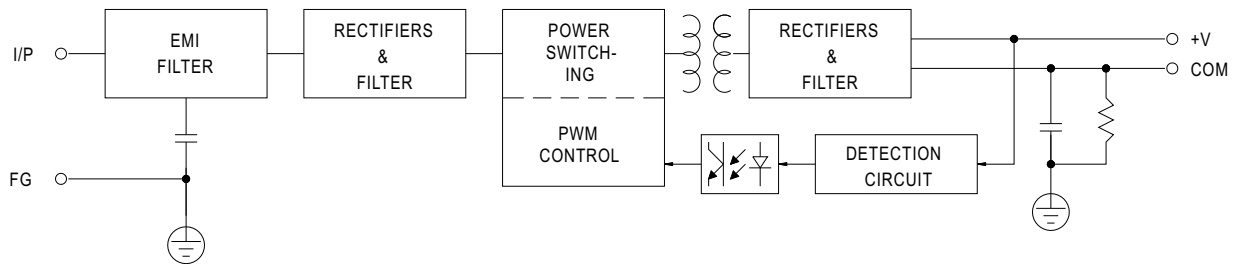
Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	Molex 2139 or equivalent	Molex 2478 or equivalent
2	No Pin		
3	AC/N		

DC Output Connector (CN2) : Molex 41791-04 or equivalent

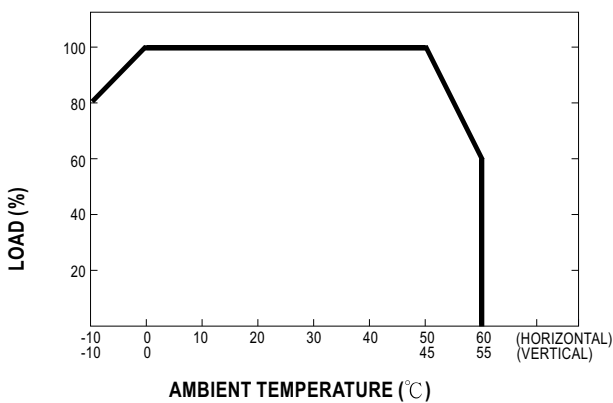
Pin No.	Assignment	Mating Housing	Terminal
1	V1	Molex 2139 or equivalent	Molex 2478 or equivalent
2,3	COM		
4	V2		

■ Block Diagram

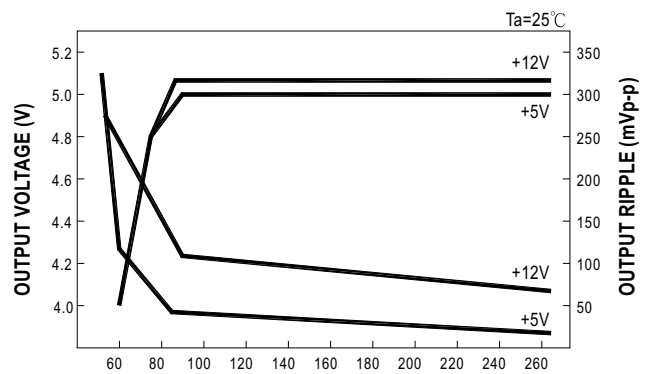
fosc : 100KHz



■ Output Derating



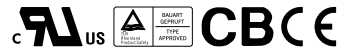
■ Static Characteristics (A)





■ Features :

- Universal AC input / Full range
- Low leakage current < 0.5mA
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 65KHz
- 2 years warranty

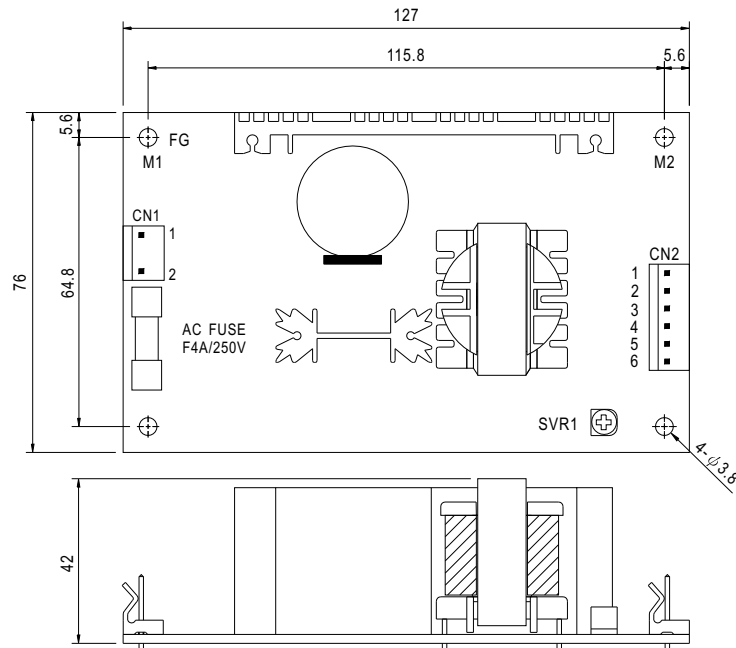


SPECIFICATION

MODEL		PD-65A		PD-65B	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2
	DC VOLTAGE	5V	12V	5V	24V
	RATED CURRENT	5.5A	2.8A	3.5A	2A
	CURRENT RANGE	0.4 ~ 7A	0.2 ~ 3.2A	0.4 ~ 6A	0.2 ~ 2.6A
	RATED POWER	61.1W		65.5W	
	OUTPUT POWER (max.)	Rated output power for convection; 72W with 18CFM min. Forced air			
	RIPPLE & NOISE (max.) Note.2	50mVp-p		120mVp-p	
	VOLTAGE ADJ. RANGE	CH1:4.75 ~ 5.5V		CH1:4.75 ~ 5.5V	
	VOLTAGE TOLERANCE Note.3	±4.0%	±7.0%	±4.0%	±7.0%
	LINE REGULATION	±1.0%	±2.0%	±1.0%	±2.0%
	LOAD REGULATION	±3.0%	±4.0%	±3.0%	±4.0%
	SETUP, RISE TIME	800ms, 20ms at full load			
HOLD UP TIME (Typ.)	60ms at full load				
INPUT	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 440Hz			
	EFFICIENCY(Typ.)	78%		81%	
	AC CURRENT (Typ.)	1.5A/115VAC 0.9A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC 40A/230VAC			
	LEAKAGE CURRENT	<0.75mA			
PROTECTION	OVERLOAD	73 ~ 105W rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed.			
	OVER VOLTAGE	CH1: 5.75 ~ 6.75VDC on CH1 Protection type : Hiccup mode, recovers automatically after fault condition is removed.			
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.04%/°C (0 ~ 50°C) on +5V output			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes			
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 Approved			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC			
	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, EN55024, Light industry level, criteria A			
OTHERS	MTBF	288.1K hrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	127*76*42mm (L*W*H)			
	PACKING	0.24Kg; 54pcs/15Kg/1.35CUFT			
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>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.</p> <p>5. Mounting holes M1 and M2 should be grounded for EMI purposes.</p>				

Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 5277-02 or equivalent

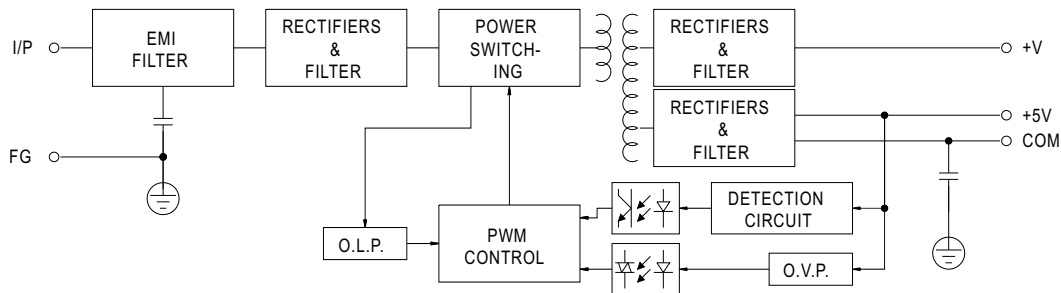
Pin No.	Assignment	Mating Housing	Terminal
1	AC/N	Molex 5195 or equivalent	Molex 5194 or equivalent
2	AC/L		

DC Output Connector (CN2) : Molex 5273-06 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	+V	Molex 5195 or equivalent	Molex 5194 or equivalent
2,3	+5V		
4,5	COM		
6	NC		

Block Diagram

fosc : 65KHz



Derating Curve

Output Derating VS Input Voltage

