

FEATURES

- 3 Year Warranty
- Fixed Switching Frequency
- LED Indicator for Power On
- 100% Full Load Burn-In Tested
- Universal AC Input / Full Range
- Remote ON/OFF Control (Optional)
- Built-In Active PFC Function, PF > 0.93
- Built-In Constant Current Limiting Circuit
- Short Circuit, Overload, Over Voltage, and Over Temperature Protected



SPECIFICATIONS: PSSP150 Series

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

INPUT SPECIFICATIONS

Input Voltage Range (See Note 5)	85 ~ 264VAC (120 ~ 370VDC)
Input Frequency	47 to 63Hz
AC Current (typical)	2.5A @ 115VAC 1.2A @ 230VAC
Inrush Current (typical)	Cold Start 40A @ 230VAC
Leakage Current	< 2mA @ 240VAC
Power Factor (typical)	PF > 0.93 @ 230VAC PF > 0.98 @ 115VAC and full load
Remote ON/OFF Control (Option)	CN1: 4~10VDC Power On, < 0 ~ 0.8VDC Power Off

OUTPUT SPECIFICATIONS

Output Voltage	See Table
Output Power	See Table
Voltage Tolerance (See Note 3)	3.3V - 15V outputs: 2.0%; 24V - 48V outputs: 1.0%
Voltage Adjustment Range	See Table
Line Regulation	0.5%
Load Regulation	3.3V - 7.5V outputs: 1.0%; 12V - 48V outputs: 0.5%
Output Current	See Table
Ripple & Noise (max) (See Note 2)	3.3V - 15V outputs: 100mVp-p; 24V & 27V outputs: 150mVp-p; 48V output: 250mVp-p
Setup, Rise Time	600ms, 30ms @ full load
Hold Up Time (typical)	20ms @ full load
Temperature Coefficient	±0.05%/°C (0 ~ 50°C)

PROTECTION

Overload Protection	105 ~ 150% rated output power Protection Type: Constant current limiting; recovers automatically after fault condition is removed
Over Voltage	See Table Protection Type: Shutdown output voltage, re-power on to recover.
Over Temperature	95°C ±5°C (TSW1: detect on heatsink of power transistor) Protection Type: Shutdown output voltage; recovers automatically after temperature goes down.

GENERAL SPECIFICATIONS

Switching Frequency	PFC: 67KHz PWM: 134KHz
Efficiency (typical)	See Table
Withstand Voltage	3000VAC (Input to Output), 1500VAC (Input to FG), 500VAC (Output to FG)
Isolation Resistance	100MΩ/500DC (Input to Output, Input to FG, and Output to FG)

ENVIRONMENTAL SPECIFICATIONS

Working Temperature	-10°C to +60°C (refer to output load derating curve)
Storage Temperature	-20°C to +85°C
Working Humidity	20 ~ 90% RH non-condensing
Storage Humidity	10 ~ 95% RH
Vibration	10 ~ 500Hz, 2G 10min./1 cycle, 60min each along X, Y, Z axes.
MTBF	191,200 hours min. @ 25°C (MIL-HDBK-217F)

PHYSICAL SPECIFICATIONS

Weight	760 grams
Dimensions	199(L) x 99(W) x 50(H) mm
Warranty	3 years

SAFETY & EMC

Safety Standards	UL60950-1, TUV EN60950-1 approved
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

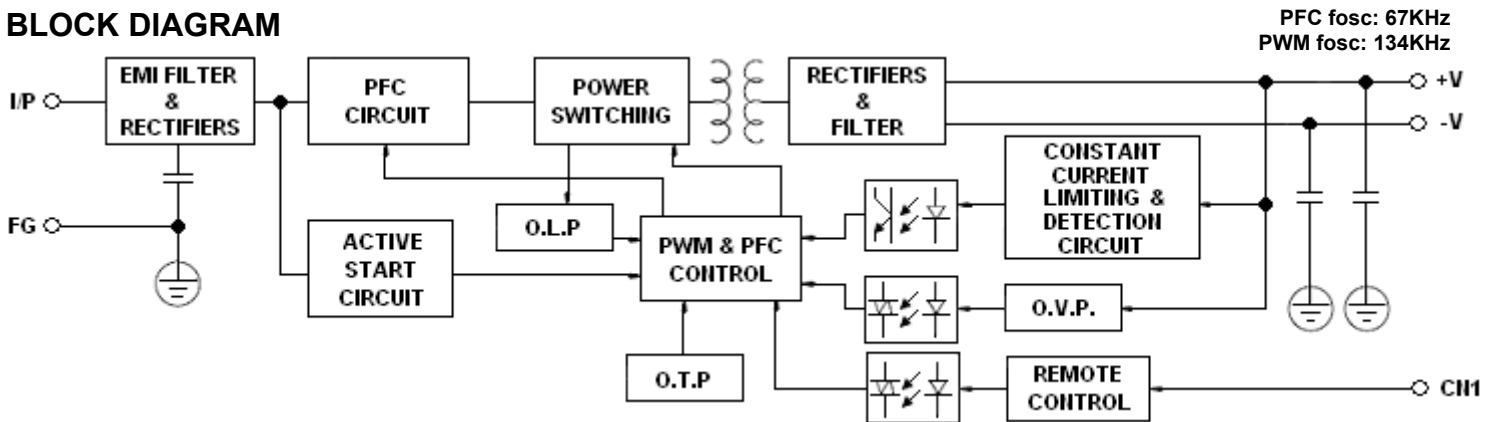
OUTPUT VOLTAGE / CURRENT RATING CHART

Model Number	Input Voltage	Output Voltage	Voltage Adjust. Range	Over Voltage Protection	Output Current	Output Power	Efficiency
PSSP-150-3.3	85 ~ 264 VAC (120 ~ 370 VDC)	3.3 VDC	3.14 ~ 3.63V	3.63 ~ 4.46V	30A	99W	67%
PSSP-150-5		5 VDC	4.75 ~ 5.5V	5.5 ~ 6.75V	30A	150W	75%
PSSP-150-7.5		7.5 VDC	7.13 ~ 8.25V	8.25 ~ 10.13V	20A	150W	79%
PSSP-150-12		12 VDC	11.4 ~ 13.2V	13.2 ~ 16.2V	12.5A	150W	80%
PSSP-150-13.5		13.5 VDC	12.8 ~ 14.9V	14.85 ~ 18.2V	11.2A	151.2W	80%
PSSP-150-15		15 VDC	14.3 ~ 16.5V	16.5 ~ 20.25V	10A	150W	81%
PSSP-150-24		24 VDC	22.8 ~ 26.4V	26.4 ~ 32.4V	6.3A	150W	83%
PSSP-150-27		27VDC	25.7 ~ 29.7V	29.7 ~ 36.45V	5.6A	151.2W	84%
PSSP-150-48		48 VDC	45.6 ~ 52.8V	52.8 ~ 64.8V	3.2A	153.6W	84%

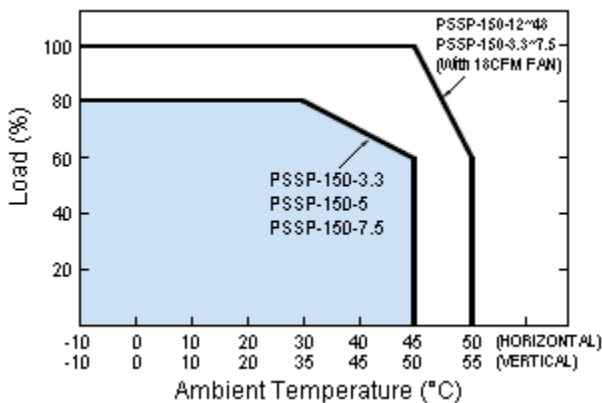
NOTES

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load, and 25°C ambient temperature.
2. Ripple & noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerances include set up tolerance, line regulation, and load regulation.
4. The power supply is considered a component, which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
5. Derating may be needed under low input voltages. Please check the derating curve for more details.

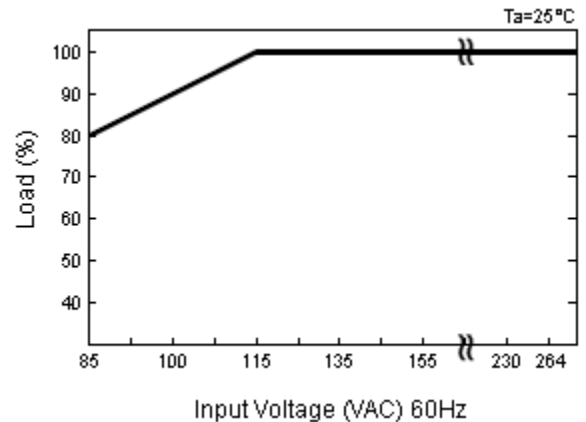
BLOCK DIAGRAM



DERATING CURVE

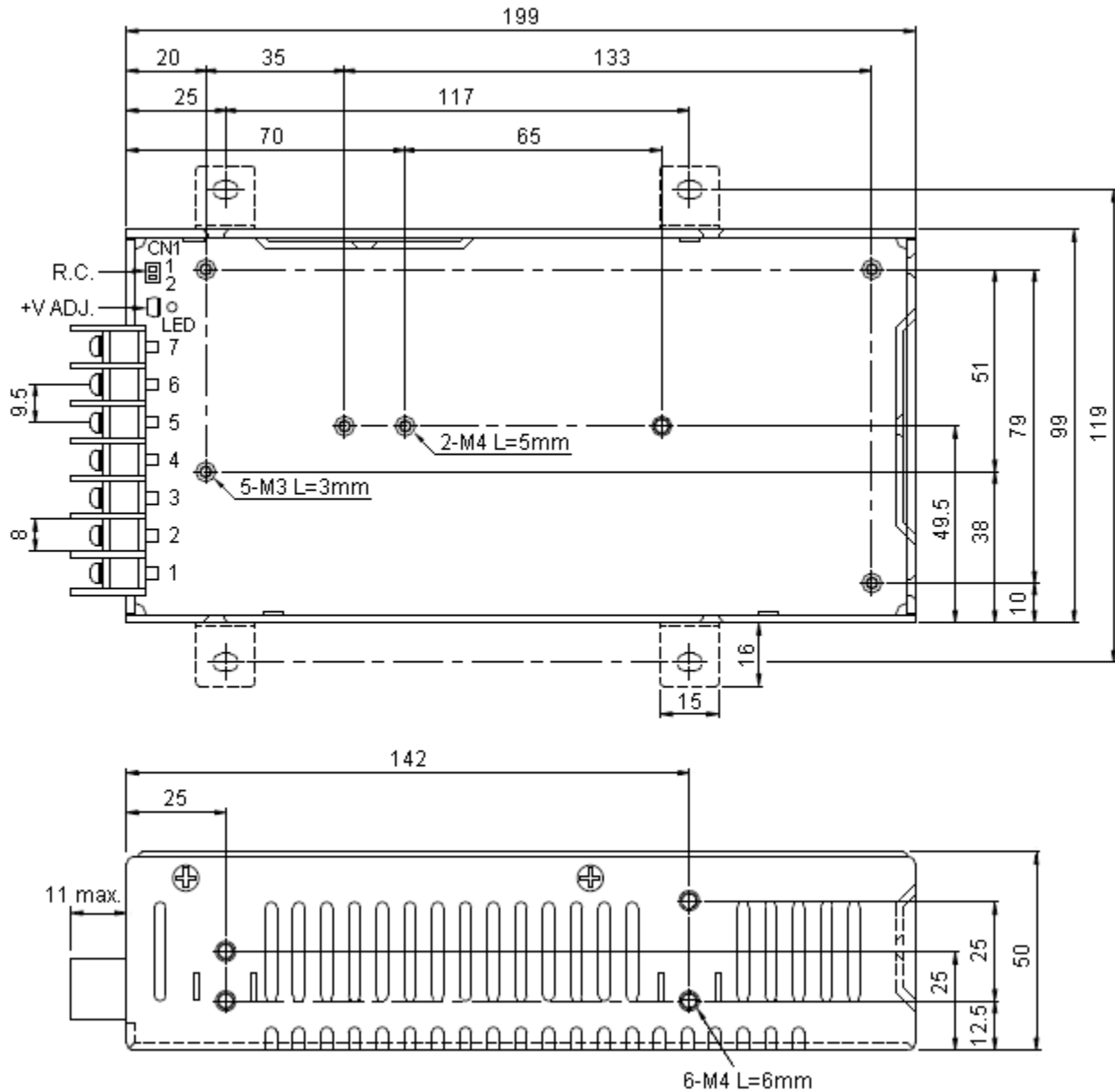


OUTPUT DERATING VS INPUT VOLTAGE



MECHANICAL DRAWING

Unit: mm



Terminal Pin No. Assignment

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

Remote ON/OFF (CN1): JST S2B-XH or equivalent (optional)

Pin No.	Assignment	Mating Housing	Terminal
1	RC+	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2	RC-		