

100W Triple Output with PFC Function

TP100 series



- Universal AC input
- Built-in active PFC function, PF >0.94
- Protections: Short circuit / Overload / Over voltage
- Fixed switching frequency at 100KHz
- Free air cooling convection



Model Number	Output Volts	Output Amps	Ripple & Noise	Load Reg	Volt Tolerance	Min Load
TRIPLE OUTPUT						
TP100-A	5 Volts(DC)	10 Amps	100mVpk-pk	±3.0%	±3.0%	3.0~15Amps
	12 Volts(DC)	4.0 Amps	120mVpk-pk	±6.0%	±7.0%	0.4~5.0Amps
	-5 Volts(DC)	0.6 Amps	100mVpk-pk	±4.0%	±6.0%	0~1.0Amps
TP100-B	5 Volts(DC)	10 Amps	100mVpk-pk	±3.0%	±3.0%	3.0~15Amps
	12 Volts(DC)	4.0 Amps	120mVpk-pk	±6.0%	±6.0%	0.4~5.0Amps
	-12 Volts(DC)	0.6 Amps	100mVpk-pk	±4.0%	±6.0%	0~1.0Amps
TP100-C	5 Volts(DC)	10 Amps	100mVpk-pk	±3.0%	±3.0%	3.0~15Amps
	15 Volts(DC)	3.0 Amps	150mVpk-pk	±6.0%	+10,-6%	0.4~4.0Amps
	-15 Volts(DC)	0.6Amps	100mVpk-pk	±4.0%	±6.0%	0~1.0Amps
TP100-D	5 Volts(DC)	10 Amps	100mVpk-pk	±3.0%	±3.0%	3.0~15Amps
	24 Volts(DC)	2.0 Amps	150mVpk-pk	±6.0%	±8.0%	0.4~3.0Amps
	12 Volts(DC)	0.6 Amps	100mVpk-pk	±4.0%	±6.0%	0~1.0Amps

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INPUT SPECIFICATIONS

Input Voltage Range (Note 3)	90-264VAC / 127-370 Volts(DC)
Frequency Range	47- 63 Hz
Inrush Current, typ: (cold start)	≤ 40Amps @ 230VAC
Input Current	1.5 Amps max @ 115VAC 0.75 Amps max @ 230VAC
Leakage current	< 3.5mA / 240 VAC
Power Factor @ FL	PF > 0.94/230VAC >0.98/115VAC

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	±1.0%
Load Regulation	See Selection Chart
Voltage Tolerance (Note 2)	See Selection Chart
Ripple/Noise (Note 1)	See Selection Chart
Hold Up Time @ FL	24mS/230VAC, 24mS/115VAC
Setup, Rise Time @ FL	800mS, 60mS/230VAC 800mS, 60mS/115VAC
Over Voltage Protection	5Volts(DC) only: 5.75~6.75Volts(DC) Shutdown o/p voltage, re-power
Over Current Protection	105~150% rated output power Shutdown o/p voltage, auto recover
Over Temperature Protection	95°C ±5°C (TSW1) Shutdown o/p voltage, auto recover
DC Voltage Adjust	5Volts(DC) only: 4.5~5.5Volts(DC)

GENERAL SPECIFICATIONS

Safety	UL60950-1 TUV EN60950-1 approved
Insulation Resistance	≥ 100MΩ / 500Volts(DC)
EMI	Compliance to EN55022 (CISPR22) Class B
Harmonic Current	Compliance to EN61000-3-2,-3

Efficiency	77% typ.
Isolation	3000VAC Input - Output 1500VAC Input - Ground 500VAC Output - Ground 1min
EMS	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024 light industry level, criteria A

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-10°C to +60°C (See Derate Curve)
Storage Temperature	-20°C to +85°C, 10~95% RH
Relative Humidity	20 to +90% RH non cond
Temperature Coefficient	±0.03% / °C (0-50°C)
MTBF	170.1KHrs min, MIL-HDBK-217F (25°C)
Vibration	10~500Hz, 2G10min./1cycle, period for 60min. each along X, Y, Z axes

PHYSICAL SPECIFICATIONS

Size	
Millimeters	199 x 99 x 50
Inches	7.84" x 3.90" x 1.97"
Weight	27.28 oz (830g)

NOTE

1. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47 uf parallel capacitor.
2. Tolerance: includes set up tolerance, line regulation and load regulation.
3. Derating may be needed under low input voltages. Please check the derating curve for more details.

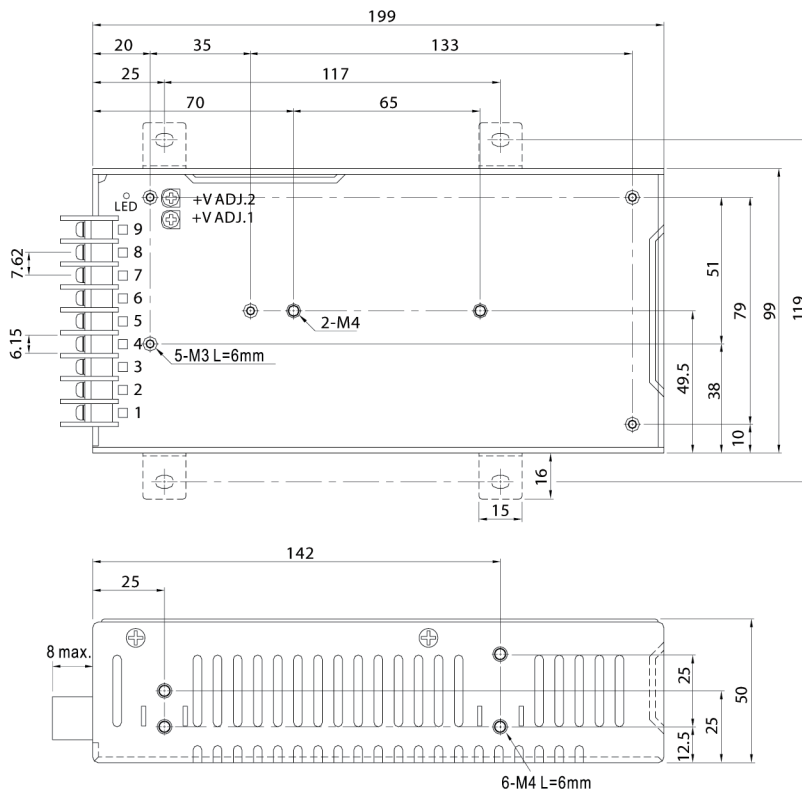
All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

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Mechanical Specification

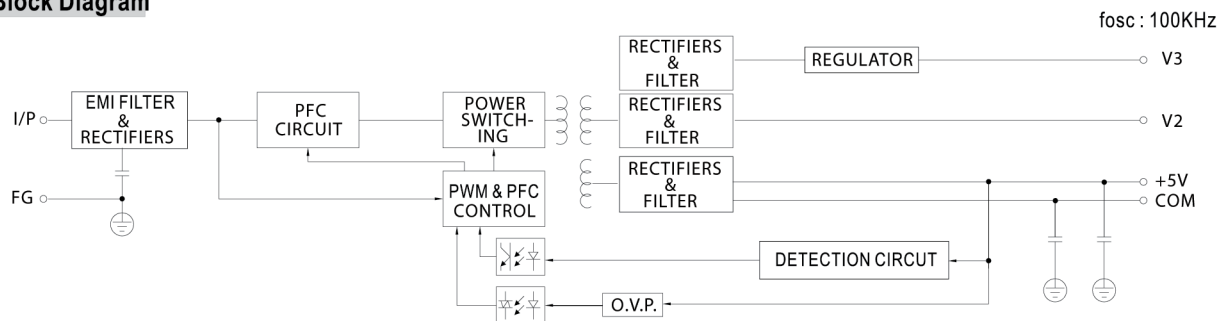
Case No. 916A Unit:mm



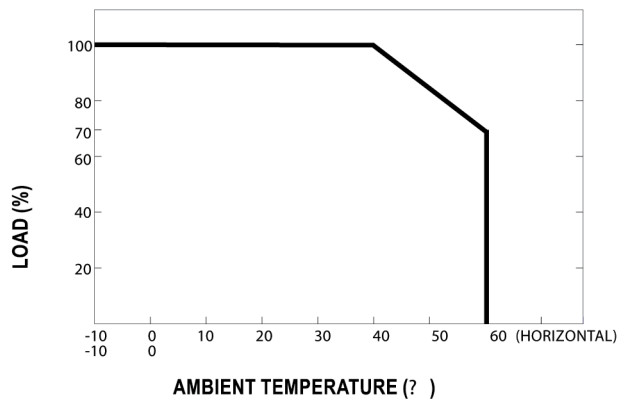
Terminal Pin No. Assignment :

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	DC OUTPUT V2
2	AC/N	6,7	DC OUTPUT V1
3	FG $\perp$	8,9	DC OUTPUT COM
4	DC OUTPUT V3		

Block Diagram



■ Derating Curve



■ Output Derating VS Input Voltage

